UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Fiscal Year Ended September 30, 2023

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Transition Period From _____ To _____

Commission File Number 001-13836

JOHNSON CONTROLS INTERNATIONAL PLC

(Exact name of registrant as specified in its charter)

Ireland	**98-0390500**
(Jurisdiction of Incorporation)	(I.R.S. Employer Identification No.)
One Albert Quay, Cork, Ireland, T12 X8N6	**(353) 21-423-5000**
(Address of Principal Executive Offices and Postal Code)	(Registrant's Telephone Number)

Securities Registered Pursuant to Section 12(b) of the Exchange Act:

Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered	Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered
Ordinary Shares, Par Value $0.01	JCI	New York Stock Exchange	4.250% Senior Notes due 2035	JCI35	New York Stock Exchange
3.625% Senior Notes due 2024	JCI24A	New York Stock Exchange	6.000% Notes due 2036	JCI36A	New York Stock Exchange
1.375% Notes due 2025	JCI25A	New York Stock Exchange	5.70% Senior Notes due 2041	JCI41B	New York Stock Exchange
3.900% Notes due 2026	JCI26A	New York Stock Exchange	5.250% Senior Notes due 2041	JCI41C	New York Stock Exchange
0.375% Senior Notes due 2027	JCI27	New York Stock Exchange	4.625% Senior Notes due 2044	JCI44A	New York Stock Exchange
3.000% Senior Notes due 2028	JCI28	New York Stock Exchange	5.125% Notes due 2045	JCI45B	New York Stock Exchange
1.750% Senior Notes due 2030	JCI30	New York Stock Exchange	6.950% Debentures due December 1, 2045	JCI45A	New York Stock Exchange
2.000% Sustainability-Linked Senior Notes due 2031	JCI31	New York Stock Exchange	4.500% Senior Notes due 2047	JCI47	New York Stock Exchange
1.000% Senior Notes due 2032	JCI32	New York Stock Exchange	4.950% Senior Notes due 2064	JCI64A	New York Stock Exchange
4.900% Senior Notes due 2032	JCI32A	New York Stock Exchange			

Securities Registered Pursuant to Section 12(g) of the Exchange Act: **None**

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☑ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☑	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report ☑

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

As of March 31, 2023, the aggregate market value of Johnson Controls International plc Common Stock held by non-affiliates of the registrant was approximately $41.2 billion based on the closing sales price as reported on the New York Stock Exchange. As of November 30, 2023, 680,673,839 ordinary shares, par value $0.01 per share, were outstanding.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☑

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive Proxy Statement to be delivered to shareholders in connection with the annual general meeting of shareholders to be held on March 13, 2024 are incorporated by reference into Part III.

JOHNSON CONTROLS INTERNATIONAL PLC

Index to Annual Report on Form 10-K

Year Ended September 30, 2023

CAUTIONARY STATEMENTS FOR FORWARD-LOOKING INFORMATION

Unless otherwise indicated, references to "Johnson Controls," the "Company," "we," "our" and "us" in this Annual Report on Form 10-K refer to Johnson Controls International plc and its consolidated subsidiaries.

The Company has made statements in this document that are forward-looking and therefore are subject to risks and uncertainties. All statements in this document other than statements of historical fact are, or could be, "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. In this document, statements regarding the Company's future financial position, sales, costs, earnings, cash flows, other measures of results of operations, synergies and integration opportunities, capital expenditures, debt levels and market outlook are forward-looking statements. Words such as "may," "will," "expect," "intend," "estimate," "anticipate," "believe," "should," "forecast," "project" or "plan" and terms of similar meaning are also generally intended to identify forward-looking statements. However, the absence of these words does not mean that a statement is not forward-looking. The Company cautions that these statements are subject to numerous important risks, uncertainties, assumptions and other factors, some of which are beyond the Company's control, that could cause the Company's actual results to differ materially from those expressed or implied by such forward-looking statements, including, among others, risks related to: The Company's ability to develop or acquire new products and technologies that achieve market acceptance and meet applicable quality and regulatory requirements; the ability to manage general economic, business and capital market conditions, including the impact of recessions, economic downturns and global price inflation; fluctuations in the cost and availability of public and private financing for our customers; the ability to innovate and adapt to emerging technologies, ideas and trends in the marketplace, including the incorporation of technologies such as artificial intelligence; the ability to manage macroeconomic and geopolitical volatility, including shortages impacting the availability of raw materials and component products and the conflicts between Russia and Ukraine and Israel and Hamas; managing the risks and impacts of potential and actual security breaches, cyberattacks, privacy breaches or data breaches, including business, service, or operational disruptions, the unauthorized access to or disclosure of data, financial loss, reputational damage, increased response and remediation costs, legal, and regulatory proceedings or other unfavorable outcomes; our ability to remediate our material weakness; maintaining and improving the capacity, reliability and security of the Company's enterprise information technology infrastructure; the ability to manage the lifecycle cybersecurity risk in the development, deployment and operation of the Company's digital platforms and services; changes to laws or policies governing foreign trade, including economic sanctions, tariffs, foreign exchange and capital controls, import/export controls or other trade restrictions; fluctuations in currency exchange rates; changes or uncertainty in laws, regulations, rates, policies, or interpretations that impact the Company's business operations or tax status; the ability to adapt to global climate change, climate change regulation and successfully meet the Company's public sustainability commitments; the outcome of litigation and governmental proceedings; the risk of infringement or expiration of intellectual property rights; the Company's ability to manage disruptions caused by catastrophic or geopolitical events, such as natural disasters, armed conflict, political change, climate change, pandemics and outbreaks of contagious diseases and other adverse public health developments; the ability of the Company to drive organizational improvement; any delay or inability of the Company to realize the expected benefits and synergies of recent portfolio transactions; the ability to hire and retain senior management and other key personnel; the tax treatment of recent portfolio transactions; significant transaction costs and/or unknown liabilities associated with such transactions; labor shortages, work stoppages, union negotiations, labor disputes and other matters associated with the labor force; and the cancellation of or changes to commercial arrangements. A detailed discussion of risks related to Johnson Controls' business is included in the section entitled "Risk Factors" (refer to Part I, Item 1A, of this Annual Report on Form 10-K). The forward-looking statements included in this document are made only as of the date of this document, unless otherwise specified, and, except as required by law, Johnson Controls assumes no obligation, and disclaims any obligation, to update such statements to reflect events or circumstances occurring after the date of this document.

PART I

ITEM 1 BUSINESS

General

Johnson Controls International plc, headquartered in Cork, Ireland, is a global leader in smart, healthy and sustainable buildings, serving a wide range of customers in more than 150 countries. The Company's products, services, systems and solutions advance the safety, comfort and intelligence of spaces to serve people, places and the planet. The Company is committed to helping its customers win and creating greater value for all of its stakeholders through its strategic focus on buildings.

Johnson Controls was originally incorporated in the state of Wisconsin in 1885 as Johnson Electric Service Company to manufacture, install and service automatic temperature regulation systems for buildings and was renamed Johnson Controls,

Inc. in 1974. In 2005, Johnson Controls acquired York International, a global supplier of heating, ventilating and air-conditioning ("HVAC") and refrigeration equipment and services. In 2014, Johnson Controls acquired Air Distribution Technologies, Inc., one of the largest independent providers of air distribution and ventilation products in North America. In 2015, Johnson Controls formed a joint venture with Hitachi to expand its building related product offerings. In 2016, Johnson Controls, Inc. and Tyco International plc ("Tyco") completed their combination (the "Merger"), combining Johnson Controls' portfolio of building efficiency solutions with Tyco's portfolio of fire and security solutions. Following the Merger, Tyco changed its name to "Johnson Controls International plc."

In 2016, the Company completed the spin-off of its automotive business into Adient plc, an independent, publicly traded company. In 2019, the Company closed the sale of its Power Solutions business, completing the Company's transformation into a pure-play building technologies and solutions provider.

The Company is a global leader in engineering, manufacturing and commissioning building products and systems, including residential and commercial HVAC equipment, industrial refrigeration systems, controls, security systems, fire-detection systems and fire-suppression solutions. The Company further serves customers by providing technical services, including maintenance, management, repair, retrofit and replacement of equipment (in the HVAC, industrial refrigeration, security and fire-protection space), and energy-management consulting. The Company's OpenBlue digital software platform enables enterprises to better manage their physical spaces by combining the Company's building products and services with cutting-edge technology and digital capabilities to enable data-driven "smart building" services and solutions. The Company partners with customers by leveraging its broad product portfolio and digital capabilities powered by OpenBlue, together with its direct channel service and solutions capabilities, to deliver outcome-based solutions across the lifecycle of a building that address customers' needs to improve energy efficiency, enhance security, create healthy environments and reduce greenhouse gas emissions.

Business Segments

The Company conducts its business through four business segments:

- *Building Solutions North America* which operates in the United States and Canada;
- *Building Solutions EMEA/LA* which operates in Europe, the Middle East, Africa and Latin America;
- *Building Solutions Asia Pacific* which operates in Asia Pacific; and
- *Global Products* which operates worldwide and includes the Johnson Controls-Hitachi joint venture.

The Building Solutions segments:

- Design, sell, install and service HVAC, controls, building management, refrigeration, integrated electronic security and integrated fire-detection and suppression systems; and
- Provide energy-efficiency solutions and technical services, including data-driven "smart building" solutions as well as inspection, scheduled maintenance, and repair and replacement of mechanical and controls systems.

The Global Products segment designs, manufactures and sells:

- HVAC equipment, controls software and software services for residential and commercial applications;
- Refrigeration equipment and controls;
- Fire protection and suppression; and
- Security products, including intrusion security, anti-theft devices, access control, and video surveillance and management systems.

The Company's segments provide products and services to commercial, institutional, industrial, data center, governmental and residential customers.

For more information on the Company's segments, refer to Note 19, "Segment Information," of the notes to consolidated financial statements.

Products, Systems, Services and Solutions

The Company sells and installs its commercial HVAC equipment and systems, control systems, security systems, fire-detection and fire suppression systems, equipment and services primarily through its extensive direct channel, consisting of a global network of sales and service offices. Significant sales are also generated through global third-party channels, such as

distributors of air-conditioning, controls, security and fire-detection and suppression products. The Company's large base of current customers leads to significant repeat business for the maintenance, retrofit and replacement markets. The Company is also able to leverage its installed base to generate sales for its service business. Trusted building brands, such as YORK®, Hitachi Air Conditioning, Metasys®, Ansul, Ruskin®, Titus®, Frick®, FM:Systems®, PENN®, Sabroe®, Silent-Aire®, Simplex® and Grinnell®, together with the breadth and depth of the products, systems and solutions offered by the Company, give it what it believes to be the most diverse portfolio in the building technology industry.

The Company has developed software platforms, including on-premises platforms and cloud-based software services, and integrated its products and services with digital capabilities to provide data-driven solutions to create smarter, safer and more sustainable buildings. The Company's OpenBlue platform enables enterprises to better manage their physical spaces delivering sustainability, new occupant experiences, safety and security by combining the Company's building expertise with cutting-edge technology, including artificial intelligence and machine learning-powered service solutions such as remote diagnostics, predictive maintenance, workplace management, compliance monitoring and advanced risk assessments. The Company leverages its digital and data-driven products and services to offer integrated and customizable solutions focused on delivering outcomes to customers, including OpenBlue Buildings-as-a-Service, OpenBlue Net Zero Buildings-as-a-Service and OpenBlue Healthy Buildings. These services are generally designed to generate recurring revenue for the Company as it supports its customers in achieving their desired outcomes.

In fiscal 2023, products and systems accounted for 76% of sales and services accounted for 24% of sales.

Competition

The Company conducts its operations through a significant number of individual contracts that are either negotiated or awarded on a competitive basis. Key factors in the award of contracts include system and service performance, quality, price, design, reputation, technology, application engineering capability, availability of financing and construction or project management expertise. Competitors for HVAC equipment, security, fire-detection, fire suppression and controls in the residential and non-residential marketplace include many local, regional, national and international providers. Larger competitors include Honeywell International, Inc.; Siemens Smart Infrastructure, an operating group of Siemens AG; Schneider Electric SA; Carrier Global Corporation; Trane Technologies plc; Daikin Industries, Ltd.; Lennox International, Inc.; GC Midea Holding Co, Ltd. and Gree Electric Appliances, Inc. In addition, the Company competes in a highly fragmented building services market. The Company also faces competition from a diverse range of established companies, start-ups and other emerging entrants to the buildings industry in the areas of digital services, software as a service and the Internet of Things. The loss of any individual contract or customer would not have a material adverse effect on the Company.

Business Strategy

The Company's business strategy is to sustain and expand its position as a leader in smart and sustainable building solutions by offering a full spectrum of products and solutions for customer buildings across the globe. The Company's core strategy remains focused on creating growth platforms, driving operational improvements and creating a high-performance culture. The Company has strong positions in attractive and growing end-markets across HVAC, controls, fire, security and services, enhanced by its comprehensive product portfolio and substantial installed base. The Company believes that it is well positioned to capitalize on the emerging and prevalent trends in the buildings industry, including sustainability, healthy buildings/indoor environmental quality and smart buildings. To capitalize on these trends, the Company remains focused on maintaining leading positions in delivering building products, systems and solutions, as well as enabling growth through digital, to develop and leverage new digital technologies and capabilities into outcomes powered by its OpenBlue software platform. In furtherance of these goals, the Company has three strategic priorities:

Capitalize on Key Growth Vectors: Sustainability, healthy buildings/indoor environmental quality and smart buildings represent key growth opportunities for the Company. The Company seeks to leverage its existing portfolio breadth and investments in product development, combined with the expansion of its digital products and capabilities powered by OpenBlue, to offer differentiated solutions and innovative deal structures to help customers achieve their objectives. The Company intends to expand its capabilities by investing in products and technologies, as well as expanding its partnerships, to power innovation that will allow it to provide differentiated services that are tailored to its customers' desired outcomes.

Accelerate in High Growth Digital Services, Regions and Verticals: The Company is focused on transforming its large service business through digital technology, further enabled by the Company's installed base, domain expertise and global coverage. The Company is focused on developing and deploying connected equipment, systems and controls that will support the provision of digital services and solutions. The Company further intends to expand its presence in high growth regions and

invest in high growth verticals within the markets it serves, including healthcare, commercial offices/campus, education and data centers.

Sustain a High-Performance, Customer-Centric Culture: The Company recognizes that developing talent and creating positive customer experiences is central to accomplishing its business strategies. The Company is investing in its talent to build a diverse workforce that is digital capable, solutions oriented and focused on continuous learning and growth. The Company aims to leverage its talent capabilities and training to create a customer-focused culture to drive customer loyalty and decisions.

To realize these priorities, the Company is leveraging its technology leadership, comprehensive product portfolio, global presence, substantial installed base and strong channels to monetize the lifecycle opportunities of install, service, retrofit and replacement which are established and delivered by the Company's direct field businesses and third-party channels across the globe. The Company is augmenting its strategic priorities with disciplined execution, productivity enhancements and sustainable cost management to create a path to realize expanded margins and enhanced profitability.

Backlog

The Company's backlog is applicable to its sales of systems and services. At September 30, 2023, the backlog was $13.6 billion, of which $12.1 billion was attributable to the building solutions (field) business. The backlog amount outstanding at any given time is not necessarily indicative of the amount of revenue to be earned in the upcoming fiscal year.

At September 30, 2023, remaining performance obligations were $19.6 billion, which is $6.0 billion higher than the Company's backlog of $13.6 billion. Differences between the Company's remaining performance obligations and backlog are primarily due to the following:

- Remaining performance obligations include large, multi-purpose contracts including services to be performed over the initial term of the building contract (typically 25 to 35 years) versus backlog which includes only the lifecycle period of the contract (approximately five years);
- Remaining performance obligations exclude certain customer contracts with a term of one year or less and contracts that are cancellable without substantial penalty versus backlog which includes short-term and cancellable contracts; and
- Remaining performance obligations include the full remaining term of service contracts with substantial termination penalties versus backlog which includes one year for all outstanding service contracts.

The Company believes backlog is a useful measure of evaluating the Company's operational performance and relationship to total orders.

Raw Materials

Raw materials used by the Company's businesses in connection with their operations include steel, aluminum, brass, copper, polypropylene and certain flurochemicals used in fire suppression agents. The Company also uses semiconductors and other electronic components in the manufacture of its products. During fiscal 2022 and portions of fiscal 2023, the Company experienced material cost increases due to global inflation, supply chain disruptions, labor shortages, increased demand and other regulatory and macroeconomic factors. The collective impact of these trends were favorable to revenue due to increased demand and price increases to offset inflation, while negatively impacting margins due to supply chain disruptions and cost pressures. However, throughout fiscal 2023, the Company experienced improved margins as supply chain disruptions eased and higher priced backlog was converted to sales, as discussed in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations. Although the Company has experienced recent improvement in its supply chain, the Company could experience further disruptions, shortages and price inflation in the future, the effect of which will depend on the Company's ability to successfully mitigate and offset the impact of these events. In fiscal 2024, commodity prices and availability could fluctuate throughout the year and could significantly affect the Company's results of operations. For a more detailed description of the risks related to the availability of raw materials, components and commodities, see Item 1A. Risk Factors.

Intellectual Property

Generally, the Company seeks statutory protection for strategic or financially important intellectual property developed in connection with its business. The Company protects its intellectual property investments in a variety of ways. The Company works actively in the U.S. and internationally to ensure the enforcement of copyright, trademark, trade secret, and other

protections that apply to the Company's products, services, software, solutions, and branding. Certain intellectual property, where appropriate, is protected by contracts, licenses, confidentiality or other agreements.

The Company owns numerous U.S. and non-U.S. patents (and their respective counterparts), the more important of which cover those technologies and inventions embodied in current products or which are used in the manufacture of those products. Internal development allows the Company to maintain competitive advantages that come from product differentiation and closer technical control over its products and services. While the Company believes patents are important to its business operations and in the aggregate constitute a valuable asset, no single patent, or group of patents, is critical to the success of the business. The Company, from time to time, grants licenses under its patents and technology and receives licenses under patents and technology of others.

The Company’s trademarks, certain of which are material to its business, are registered or otherwise legally protected in the U.S. and many non-U.S. countries where products and services of the Company are sold. The Company, from time to time, becomes involved in trademark licensing transactions.

Most works of authorship produced for the Company, such as computer programs, catalogs and sales literature, carry appropriate notices indicating the Company’s claim to copyright protection under U.S. law and appropriate international treaties.

Environmental, Health and Safety Matters

Laws addressing the protection of the environment and workers’ safety and health govern the Company’s ongoing global operations. They generally provide for civil and criminal penalties, as well as injunctive and remedial relief, for noncompliance or require remediation of sites where Company-related materials have been released into the environment.

A portion of the Company’s products consume energy and use refrigerants. Increased public awareness and concern regarding global climate change has resulted in more regulations designed to reduce greenhouse gas emissions. These regulations tend to be implemented under global, national and sub-national climate objectives or policies, and target the global warming potential (“GWP”) of refrigerants, equipment energy efficiency, and the combustion of fossil fuels as a heating source. The Company continues to invest in its product portfolio to meet emerging emissions regulations and standards.

The Company has expended substantial resources globally, both financial and managerial, to comply with environmental laws and worker safety laws and maintains procedures designed to foster and ensure compliance. Certain of the Company’s businesses are, or have been, engaged in the handling or use of substances that may impact workplace health and safety or the environment. The Company is committed to protecting its workers and the environment against the risks associated with these substances.

The Company’s operations and facilities have been, and in the future may become, the subject of formal or informal enforcement actions or proceedings for noncompliance with environmental laws and worker safety laws or for the remediation of Company-related substances released into the environment. Such matters typically are resolved with regulatory authorities through commitments to compliance, abatement or remediation programs and, in some cases, payment of penalties. In addition, governments in the United States and internationally have increasingly been regulating perfluorooctane sulfonate ("PFOS"), perfluorooctanoic acid ("PFOA"), and/or other per- and poly-fluoroalkyl substances ("PFAS"), which are contained in certain of the Company's firefighting foam products. These regulations include declining emission standards and limits set as to the presence of certain compounds. See Note 21, "Commitments and Contingencies," of the notes to consolidated financial statements for further discussion of environmental matters.

Government Regulation and Supervision

The Company's operations are subject to numerous federal, state and local laws and regulations, both within and outside the United States, in areas such as consumer protection, government contracts, international trade, environmental protection, labor and employment, tax, licensing and others. For example, most U.S. states and non-U.S. jurisdictions in which the Company operates have licensing laws directed specifically toward the alarm and fire suppression industries. The Company's security businesses currently rely extensively upon the use of wireline and wireless telephone service to communicate signals. Wireline and wireless telephone companies in the U.S. are regulated by the federal and state governments. In addition, government regulation of fire safety codes can impact the Company's fire businesses. The Company’s businesses may also be affected by changes in governmental regulation of refrigerants, PFAS, energy efficiency standards, noise regulation and product safety regulations, including changes related to hydro fluorocarbons/emissions reduction efforts, energy conservation standards and the regulation of fluorinated gases. These and other laws and regulations impact the manner in which the Company conducts its

business, and changes in legislation or government policies can affect the Company's worldwide operations, both favorably and unfavorably. For a more detailed description of the various laws and regulations that affect the Company's business, see Item 1A. Risk Factors.

Regulatory Capital Expenditures

The Company's efforts to comply with numerous federal, state and local laws and regulations applicable to its business and products often results in capital expenditures. The Company makes capital expenditures to design and upgrade its fire and security products to comply with or exceed standards applicable to the alarm, fire suppression and security industries. The Company also makes capital expenditures to meet or exceed energy efficiency standards and comply with applicable regulations, including the regulation of refrigerants, hydro fluorocarbons/emissions reduction efforts and the regulation of fluorinated gasses, particularly with respect to the Company's HVAC products and solutions. The Company's ongoing environmental compliance program also results in capital expenditures. Regulatory and environmental considerations are a part of all significant capital expenditure decisions; however, expenditures in fiscal 2023 related solely to regulatory compliance were not material. It is management's expectation that the amount of any future capital expenditures related to compliance with any individual regulation or grouping of related regulations will not have a material adverse effect on the Company's financial results or competitive position in any one year. See Note 21, "Commitments and Contingencies," of the notes to consolidated financial statements for further discussion of environmental matters.

Human Capital Management

Overview and Governance

The development of a High-Performance Culture enables the Company to achieve its purpose to build smarter, healthier, and more sustainable tomorrows. The Company's strategic drivers provide the direction that guides its workforce toward a culture of continuous improvement and innovation to exceed customers' expectations and provide solutions for global challenges in the building systems industry.

The responsibility to develop and maintain a High-Performance Culture is owned, embedded and executed throughout the Company. The Chief Human Resources Officer ("CHRO") is responsible for establishing the Company's strategy to drive a High-Performance Culture and ensuring its execution across the Company. The Compensation and Talent Development Committee of the Board of Directors is the primary overseer of the Company's High-Performance Culture strategy and execution, ensuring that the Company presents an employee value proposition that supports retention and the attraction of external talent. The Governance and Sustainability Committee is the primary overseer of employee health and safety. The Chief Executive Officer ("CEO"), the CHRO, the General Counsel, the Vice President of Global Environment Health & Safety, the Vice President of Diversity, Equity and Inclusion and other senior leaders within the Company are responsible for the execution of the strategy and engage with the Compensation and Talent Development Committee, the Governance and Sustainability Committee and the full Board of Directors on the critical components driving the Company's High-Performance Culture, including discussions of future of work, human capital trends, processes and practices, diversity, equity and inclusion, health and safety, talent development, succession planning, and talent and culture best practices. Key components driving the Company's High-Performance Culture include:

Health and Safety

Health and Wellness, Safety and Environment are the three pillars of the Company's Zero Harm vision. The Company's health and safety programs are designed around global standards with appropriate variations addressing multiple jurisdictions and regulations, specific hazards and unique working environments of the Company's manufacturing, service and install, and headquarter operations.

The Company requires each of its locations to perform regular safety audits to ensure proper safety policies, program procedures, analyses and training are in place. In addition, the Company engages an independent third-party conformity assessment and certification vendor to audit selected operations for adherence to its global health and safety standards. Safety culture and values-based safety initiatives have been deployed within the Company to sustain and further enhance performance.

The Company utilizes a mixture of leading and lagging indicators to assess the health and safety performance of its operations. Lagging indicators include the OSHA Total Recordable Incident Rate ("TRIR") and the Lost Time (or Lost Workday) Incident Rate ("LTIR") based upon the number of incidents per 100 employees (or per 200,000 work hours). In fiscal 2023, the Company had a TRIR of 0.37 and a LTIR of 0.12.

Diversity, Equity and Inclusion

The Company is dedicated to creating a workplace where diversity is celebrated, where every employee feels included and valued, and where equitable practices are the norm. By prioritizing diversity, equity, and inclusion, the Company aims to foster a culture of innovation, collaboration, and respect that drives its success in the global marketplace. Diversity, Equity, and Inclusion ("DEI") is a core component of the Company's strategy to drive a High-Performance Culture, recognized as adding value to the Company's creation and delivery of innovative high performing products and enabling solutions to its customers' toughest problems. The Company has recently elevated its focus on 'equity' to further enable all employees to have access to the opportunities, resources, support and networks they need to develop and succeed. The Company empowers employees to take an active role in creating a culture that values uniqueness, celebrates creativity and drives innovation. The Company encourages employees to enable an inclusive culture through active participation in Business Resource Groups ("BRGs") - employee-led voluntary organizations of people with similar interests, experiences, or demographic characteristics. The Company continues to increase participation in its BRG chapters worldwide across nine categories: African American, Asia Pacific, LGBTQ+, Emerging Leaders, Hispanic, Disabilities, Veterans, Women and Sustainability. In 2023, the Company established BRGs focused on Wellness and Caregiving in response to feedback through its Voice of the Employee events. Each BRG is open to all employees and sponsored and supported by senior leaders across the enterprise. The Company's BRG structure includes monthly learning series, an active recruitment platform, an innovation hub, community engagement and feedback sessions. The Company also engages BRGs to support the acquisition and development of diverse talent internally and externally.

As a world leader in building technologies, the Company is committed to enabling employees to bring their authentic selves to work each day, which in turn adds value, fosters creativity, and inspires change across the organization. The Company recognizes that it is its people that make the Company exceptional. The Company has developed robust policies and strategies to support this vision in its operations and its communities, including strategies addressing social impact and employee experience. The Company is committed to the implementation of its DEI mission, vision and roadmap including a focus on employee experience, business resource groups, learning and development and external impact.

The Company recognizes that fostering a diverse, equitable, and inclusive environment requires ongoing commitment, accountability, and continuous improvement. The Company regularly assesses its progress, recognizes employee contributions, and holds leaders accountable for driving DEI initiatives. The Company also creates mechanisms for open dialogue and feedback from employees to ensure that everyone's voices are heard.

The Company has implemented several measures that focus on ensuring accountabilities exist for fostering a diverse, equitable and inclusive environment:

- **Diversity Objectives:** The CEO and other senior leaders have diversity and inclusion objectives in their annual performance goals.

- **Attracting Diverse Talent:** BRGs are instrumental in positively impacting the attraction of diverse talent to the Company. BRGs support these efforts through external engagement and support of talent acquisition sourcing initiatives. The Company's global flagship Future Leaders Internship Program continues to expand the diversity of its outreach and focus on the skills needed to advance the Company's growth initiatives.

- **Honoring Employee Contributions:** The Company's Diversity Distinction Awards serve as a recognition and encouragement for workforce contributions to the Company's DEI efforts. Awarded to eight employees three times per year, the nomination driven Diversity Distinction Awards have become a highly regarded recognition of employee's contribution to the progress of the Company's DEI journey.

Talent Development

To maintain a High-Performance Culture, the Company must ensure the continued development and advancement of its employees. The Company has adopted a continual improvement approach to talent development, working to support employees' growth while defining the skills and capabilities the organization will need in future years. To assess current enterprise capabilities and define future needs, strategic talent reviews and succession planning occur on a planned cadence annually – globally and across all business areas. The Company continues to provide opportunities for its employees to grow their careers, with approximately half of open management positions filled internally during fiscal year 2023.

The Company believes that high performance is an outcome of an employee's ability to change, adapt, and grow their capabilities throughout their career. This talent development approach includes self and multi-rater assessments, functional and

leadership competency models, providing employees a personalized approach to their development planning and skill acquisition. The Company emphasizes real-life, real-time learning that enables each employee to meet the demands of challenging and changing work and focuses on reinforcing key principles that are designed to support an individual's effectiveness in his or her current job and in their future development. The Company provides technical and leadership training to employees, customers and suppliers who work for or with the Company's products and services.

The Company's focus on employee development has been structured over the last several years through programs designed to imbed essential skills with employees and reinforce strategic goals aligning with the Company's culture, including:

- **Digital Transformation:** In support of Company's growth strategy, the Company is investing in developing digital leadership with personalized and targeted training programs designed to create digitally capable leaders, salespersons, engineers and technicians.

- **Diversity and Inclusion:** The Company has developed a structured diversity and inclusion training curriculum across the levels and stages of individuals' careers to develop and align employees with the Company's diversity and inclusion strategy and values. In fiscal year 2023, the Company expanded the diversity curriculum, adding new training programs to develop careers of under-represented talent and a toolkit for managers to guide their self-led inclusion efforts.

- **Organizational Engagement:** The Company periodically measures the engagement of its employees using a quarterly pulse survey. In fiscal 2023, the survey was launched and conducted three times. The engagement survey provides managers with their own data dashboard to view their own engagement results and can be utilized by managers at all levels to understand how to improve the Company's culture and employee engagement. Managers are provided with resources to interpret their results and plan their actions following each survey.

In fiscal 2023, the Company offered a robust curriculum of over 197,000 activities that were completed by employees, consisting of videos, courses, e-learning, documentation, articles and books, including over 4,000 active (in person or virtual) learning courses. In fiscal 2023, over 1.26 million learning activities were completed by approximately 86,300 employees. The total learning hours consumed by employees was 1.22 million hours, averaging almost 14 hours per employee including time invested in formal learning and standard time invested in self-paced reading or video consumption.

Employee Population and Demographics

As of September 30, 2023, the Company employed approximately 100,000 people worldwide, of which approximately 37,000 were employed in the United States and approximately 63,000 were outside the United States. Approximately 22,000 employees are covered by collective bargaining agreements or works councils and the Company believes that its relations with its labor unions are generally positive.

Employee Diversity as of September 30, 2023

	Male	Female	Minority [1]
Total employees	76%	24%	32%
Managers	79%	21%	22%

[1] Male and female data represents all employees globally. Minority data represents U.S. employees only.

Seasonal Factors

Certain of the Company's sales are seasonal as the demand for residential air conditioning equipment and services generally increases in the summer months. This seasonality is mitigated by the other products and services provided by the Company that have no material seasonal effect.

Research and Development Expenditures

Refer to Note 1, "Summary of Significant Accounting Policies," of the notes to consolidated financial statements for research and development expenditures. The Company has committed to invest a substantial portion of its new product research and development in climate-related innovation to develop sustainable products and services. The Company invests in enhancements to the capabilities of its product lines and services to support its strategy, meet consumer preferences and achieve regulatory compliance. This includes investments in the development of the Company's OpenBlue platform and related service offerings, digital product capabilities, energy efficient products, and low GWP refrigerants and technology.

Available Information

The Company's filings with the U.S. Securities and Exchange Commission ("SEC"), including annual reports on Form 10-K, quarterly reports on Form 10-Q, definitive proxy statements on Schedule 14A, current reports on Form 8-K, and any amendments to those reports filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, are made available free of charge through the Investor Relations section of the Company's Internet website at http://www.johnsoncontrols.com as soon as reasonably practicable after the Company electronically files such material with, or furnishes it to, the SEC. Copies of any materials the Company files with the SEC can also be obtained free of charge through the SEC's website at http://www.sec.gov. The Company also makes available, free of charge, its Code of Ethics, Corporate Governance Guidelines, Board of Directors committee charters and other information related to the Company on the Company's Internet website or in printed form upon request. The Company is not including the information contained on the Company's website as a part of, or incorporating it by reference into, this Annual Report on Form 10-K.

ITEM 1A RISK FACTORS

Provided below is a cautionary discussion of what we believe to be the most important risk factors applicable to the Company. Discussion of these factors is incorporated by reference into and considered an integral part of Part II, Item 7, "Management's Discussion and Analysis of Financial Conditions and Results of Operations." The disclosure of a risk should not be interpreted to imply that such risk has not already materialized. Additional risks not currently known to the Company or that the Company currently believes are immaterial may also impair the Company's business, financial condition, results of operations and cash flows.

Risks Related to Our Business Operations

Our future growth is dependent upon our ability to develop or acquire new products and technologies that achieve market acceptance with acceptable margins.

Our future success depends on our ability to develop or acquire, manufacture and bring competitive, and increasingly complex, products and services to market quickly and cost-effectively. Our ability to develop or acquire new products, services and technologies requires the investment of significant resources. These acquisitions and development efforts divert resources from other potential investments in our businesses, and they may not lead to the development of new technologies, products or services on a timely basis. Further, we must continue to effectively adapt our products and services to a changing technological and regulatory environment to drive growth and defend against disruption caused by competitors, regulators or other external forces impacting our business and operations. If we are unable to be agile and responsive to disruption in the development of new products, services and technologies, including technologies such as artificial intelligence and machine learning, our business, financial condition, results of operations and cash flows could be adversely affected.

Moreover, as we introduce new products, we may be unable to detect and correct defects in the design of a product or in its application to a specified use, which could result in loss of sales or delays in market acceptance. Even after introduction, new or enhanced products may not satisfy customer preferences and product failures may cause customers to reject our products. Further, as we integrate emerging and rapidly evolving technologies such as artificial intelligence and machine learning into our products and services, we may not be able to anticipate or identify vulnerabilities, design flaws or security threats resulting from the use of such technology and develop adequate protection measures. As a result, these products may not achieve market acceptance and our brand image could suffer. We must also attract, develop and retain individuals with the requisite technical expertise and understanding of customers' needs to develop new technologies and introduce new products, particularly as we increase investment in our digital services and solutions business and our OpenBlue software platform. The laws and regulations applicable to our products, and our customers' product and service needs, change from time to time, and regulatory changes may render our products and technologies noncompliant or result in new or enhanced regulatory scrutiny. In addition, the markets for our products, services and technologies may not develop or grow as we anticipate. The failure of our technology, products or services to gain market acceptance due to more attractive offerings by our competitors, the introduction

of new competitors to the market with new or innovative product offerings or the failure to address any of the above factors could significantly reduce our revenues, increase our operating costs or otherwise materially and adversely affect our business, financial condition, results of operations and cash flows.

Failure to achieve and maintain a high level of product and service quality could damage our reputation with customers and negatively impact our results.

Product and service quality issues could harm customer confidence in our company and our brands. If certain of our product and service offerings do not meet applicable safety standards or our customers' expectations regarding quality, safety or performance, we could experience lost sales and increased costs and we could be exposed to legal, financial and reputational risks. In addition, when our products fail to perform as expected, we are exposed to warranty, product liability, personal injury and other claims. We have experienced such quality issues in the past and may experience such issues in the future.

We cannot be certain that our quality controls and procedures will reveal defects in our products or their raw materials, which may not become apparent until after the products have been placed in use in the market. Accordingly, there is a risk that products will have defects, which could require a product recall or field corrective action. Such remedial actions can be expensive to implement and may damage our reputation, customer relationships and market share. We have conducted product recalls and field corrective actions in the past and may do so again in the future.

In many jurisdictions, product liability claims are not limited to any specified amount of recovery. If any such claims or contribution requests or requirements exceed our available insurance or if there is a product recall, there could be an adverse impact on our results of operations. In addition, a recall or claim could require us to review some or all of our product portfolio to assess whether similar issues are present in other products, which could result in a significant disruption to our business and which could have a further adverse impact on our business, financial condition, results of operations and cash flows. There can be no assurance that we will not experience any material warranty or product liability claims in the future, that we will not incur significant costs to defend such claims or that we will have adequate reserves to cover any recall, repair and replacement costs.

Failure to increase organizational effectiveness through organizational improvements may reduce our profitability or adversely impact our business.

Our results of operations, financial condition and cash flows are dependent upon our ability to drive organizational improvement. We seek to drive improvements through a variety of actions, including restructuring and integration activities, digital transformation, business portfolio reviews, productivity initiatives, functionalization, executive management changes, and business and operating model assessments. Risks associated with these actions include delays in execution, additional unexpected costs, realization of fewer than estimated productivity improvements, increased change fatigue, organizational strain and adverse effects on employee morale. We may not realize the full operational or financial benefits we expect, the recognition of these benefits may be delayed, and these actions may potentially disrupt our operations. In addition, our failure to effectively manage organizational changes may lead to increased attrition and harm our ability to attract and retain key talent.

Cybersecurity incidents impacting our IT systems and digital products could disrupt business operations, result in the loss of critical and confidential information, and materially and adversely affect our reputation and results of operations.

We rely upon the capacity, reliability and security of our IT and data security infrastructure and our ability to expand and continually update this infrastructure in response to the changing needs of our business. As we implement new systems or integrate existing systems, they may not perform as expected. We also face the challenge of supporting our older systems, which are vulnerable to increased risks, including the risk of further security breaches, system failures and disruptions, and implementing necessary upgrades. In addition, certain of our employees work remotely at times, which increases our vulnerability to cybersecurity and other IT risks. If we experience a problem with the functioning of an important IT system as a result of increased burdens placed on our IT infrastructure or a security breach of our IT systems, the resulting disruptions could have a material adverse effect on our business.

Global cybersecurity threats and incidents can range from uncoordinated individual attempts to gain unauthorized access to IT systems to sophisticated and targeted measures known as advanced persistent threats directed at the Company, its products, its customers and/or its third-party service providers, including cloud providers. These threats and incidents originate from many sources globally and include malware that takes the form of computer viruses, ransomware, worms, Trojan horses, spyware, adware, scareware, rogue software, and programs that act against the computer user. Techniques used to obtain unauthorized access to, or to sabotage, IT systems or networks are constantly evolving and may not be recognized until launched against a

target. We and third parties we utilize as vendors to support our business and operations have experienced, and expect to continue to experience, these types of threats and incidents. We and our third-party service providers have experienced and expect to continue to experience threats from sophisticated nation-state actors and organized criminal groups who engage in attacks (including advanced persistent threat intrusions) that add to the risks to our IT systems (including our cloud services providers' systems), internal networks, our customers' systems and the information that they store and process. Our customers, including the U.S. government, are increasingly requiring cybersecurity protections and mandating cybersecurity standards in our products, and we may incur additional costs to comply with such demands. We deploy countermeasures to deter, prevent, detect, respond to and mitigate these threats, including identity and access controls, data protection, vulnerability assessments, product software designs which we believe are less susceptible to cyber-attacks, monitoring of our IT networks and systems, maintenance of backup and protective systems and the incorporation of cybersecurity design throughout the lifecycle of our products. Despite these efforts, the Company has experienced, and will likely continue to experience, attacks and resulting breaches or breakdowns of the Company's, or its third-party service providers', databases or systems. Cybersecurity incidents, depending on their nature and scope, have resulted, and may in the future result, in the misappropriation, destruction, corruption or unavailability of critical data and confidential or proprietary information (our own or that of third parties) and the disruption of business operations. Such incidents have remained, and could in the future remain, undetected for an extended period of time, and the losses arising from such incidents could exceed our available insurance coverage for such matters. In addition, security breaches impacting our IT systems have in certain cases resulted in, and in the future could result in, a risk of loss or unauthorized disclosure or theft of information, which could lead to enforcement actions, litigation, regulatory or governmental audits, investigations and possible liability.

An increasing number of our products, services and technologies, including our OpenBlue software platform, are delivered with digital capabilities and accompanying interconnected device networks, which include sensors, data, building management systems and advanced computing and analytics capabilities. If we are unable to manage the lifecycle cybersecurity risk in development, deployment and operation of our digital platforms and services, they could become susceptible to cybersecurity incidents and lead to third-party claims that our product failures have caused damages to our customers. This risk is enhanced by the increasingly connected nature of our products and the role they play in managing building systems.

During the fourth quarter of fiscal 2023, we experienced a cybersecurity incident that disrupted portions of our internal information technology infrastructure and applications consisting of unauthorized access by a third party, exfiltration of data and the deployment of ransomware, which in turn caused disruptions and limitation of access to portions of our business applications that support aspects of our operations and corporate functions. As a result of this incident, we experienced disruptions to our normal operations which had an adverse impact on our financial performance, as discussed in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations. We have and may continue to incur significant costs in connection with the cybersecurity incident and any future cybersecurity incidents, including infrastructure investments or remediation efforts. Further, we could experience other additional consequences in the future as a result of the incident, including, reputational damage, exposure to legal claims or enforcement actions and fines levied by governmental organizations, which in turn could materially and adversely affect our results of operations. In addition, limitations on our ability to analyze and investigate the incident due to limitations on the availability of historical logs and other forensic data may impact our ability to identify all of the impacts and root causes of the cybersecurity incident. There can be no assurance that additional unauthorized access or cyber incidents will not occur or that we will not suffer material losses in the future. Unauthorized access or cyber incidents could occur more frequently and on a more significant scale to those we have suffered to date. We could also experience similar consequences as a result of future cybersecurity incidents. Other potential consequences of future cybersecurity incidents could include the theft of intellectual property and the diminution in the value of our investment in research, development and engineering, which in turn could materially and adversely affect our competitiveness and results of operations.

We identified a material weakness in our internal control over financial reporting which, if not remediated appropriately or timely, could result in the loss of investor confidence and adversely impact our business operations and our stock price.

As a result of the cybersecurity incident experienced beginning in September 2023, and as disclosed in Part II, Item 9A of this report, we have identified a material weakness in our internal control over financial reporting related to not maintaining sufficient information technology ("IT") controls to prevent or detect, on a timely basis, unauthorized access to certain of the Company's financial reporting systems. Accordingly, management concluded that our internal control over financial reporting was not effective as of September 30, 2023. If we are unable to remediate the material weakness, or if we are otherwise unable to maintain effective internal control over financial reporting, then our ability to record, process and report financial information accurately, and to prepare financial statements within required time periods, could be adversely affected. If our financial statements are not accurate, investors may not have a complete understanding of our operations. Likewise, if our financial statements are not filed on a timely basis, we could be in violation of covenants contained in the agreements governing our debt

and other borrowings. We could also be subject to sanctions or investigations by the stock exchange on which our shares are listed, the SEC or other regulatory authorities, which could result in a material adverse effect on our business. These outcomes could subject us to litigation, civil or criminal investigations or enforcement actions requiring the expenditure of financial resources and diversion of management time, could negatively affect investor confidence in the accuracy and completeness of our financial statements and could also adversely impact our stock price and our access to the capital markets. Moreover, while we are implementing measures designed to help ensure that control deficiencies contributing to the material weakness are remediated as soon as possible, these measures will result in additional costs, including third-party expenditures engaging security specialists and implementing certain new IT access, security and recovery measures, and such costs could adversely affect our results of operations, financial condition and cash flows.

Data privacy, identity protection and information security compliance may require significant resources and presents certain risks.

We collect, store, have access to and otherwise process certain confidential or sensitive data, including proprietary business information, customer data, personal data or other information that is subject to privacy and security laws, regulations and/or customer-imposed controls. Despite our efforts to protect such data, our business and our products may be vulnerable to security incidents, theft, misplaced or lost data, programming errors, or errors that could potentially lead to compromising such data, improper use of our products, systems, software solutions or networks, unauthorized access, use, disclosure, modification or destruction of information, defective products, production downtimes and operational disruptions. During the fourth quarter of fiscal 2023, we experienced a cybersecurity event consisting of unauthorized access, data exfiltration and deployment of ransomware by a third party to a portion of our internal IT infrastructure. We are currently in the process of analyzing the data accessed, exfiltrated or otherwise impacted during the cybersecurity incident. The actual or perceived risk of theft, loss, fraudulent use or misuse of customer, employee or other data as a result of the cybersecurity incident, as well as non-compliance with applicable industry standards or our contractual or other legal obligations or privacy and information security policies regarding such data, could result in costs, fines, litigation or regulatory actions. We could face similar consequences in the future if we, our suppliers, channel partners, customers or other third parties experience the actual or perceived risk of theft, loss, fraudulent use or misuse of data, including as a result of employee error or malfeasance, or as a result of the imaging, software, security and other products we incorporate into our products. Such an event could lead customers to select the products and services of our competitors. Both the cybersecurity incident and similar future incidents could harm our reputation, cause unfavorable publicity or otherwise adversely affect certain potential customers' perception of the security and reliability of our services as well as our credibility and reputation, which could result in lost sales.

In addition, we operate in an environment in which there are different and potentially conflicting data privacy laws in effect in the various U.S. states and foreign jurisdictions in which we operate and we must understand and comply with each law and standard in each of these jurisdictions while ensuring the data is secure. For example, proposed regulations restricting the use of biometric security technology could impact the products and solutions offered by our security business. Government enforcement actions can be costly and interrupt the regular operation of our business, and violations of data privacy laws can result in fines, reputational damage and civil lawsuits, any of which may adversely affect our business, reputation and financial statements.

Some of our contracts do not contain limitations of liability, and even where they do, there can be no assurance that limitations of liability in our contracts are sufficient to protect us from liabilities, damages, or claims related to our data privacy and security obligations. While we maintain general liability insurance coverage and coverage for errors or omissions, such coverage might not be adequate or otherwise protect us from liabilities or damages with respect to claims alleging compromises of customer data, that such coverage will continue to be available to us on acceptable terms or at all, or that such coverage will pay future claims. The successful assertion of one or more large claims against us that exceeds our available insurance coverage, or results in changes to our insurance policies (including premium increases or the imposition of large deductible or co-insurance requirements), could have an adverse effect on our business.

Infringement or expiration of our intellectual property rights, or allegations that we have infringed upon the intellectual property rights of third parties, could negatively affect us.

We rely on a combination of trademarks, trade secrets, patents, copyrights, know-how, confidentiality provisions and licensing arrangements to establish and protect our proprietary rights. We cannot guarantee, however, that the steps we have taken to protect our intellectual property will be adequate to prevent infringement of our rights or misappropriation or theft of our technology, trade secrets or know-how. For example, effective patent, trademark, copyright and trade secret protection may be unavailable or limited in some of the countries in which we operate. In addition, while we generally enter into confidentiality agreements with our employees and third parties to protect our trade secrets, know-how, business strategy and other proprietary information, such confidentiality agreements could be breached or otherwise may not provide meaningful protection for our

trade secrets and know-how related to the design, manufacture or operation of our products. From time to time we resort to litigation to protect our intellectual property rights. Such proceedings can be burdensome and costly, and we may not prevail. Further, adequate remedies may not be available in the event of an unauthorized use or disclosure of our trade secrets and manufacturing expertise. Finally, for those products in our portfolio that rely on patent protection, once a patent has expired, the product is generally open to competition. Products under patent protection usually generate significantly higher revenues than those not protected by patents. If we fail to successfully enforce our intellectual property rights, our competitive position could suffer, which could harm our business, financial condition, results of operations and cash flows.

In addition, we are, from time to time, subject to claims of intellectual property infringement by third parties, including practicing entities and non-practicing entities. Regardless of the merit of such claims, responding to infringement claims can be expensive and time-consuming. The litigation process is subject to inherent uncertainties, and we may not prevail in litigation matters regardless of the merits of our position. Intellectual property lawsuits or claims may become extremely disruptive if the plaintiffs succeed in blocking the trade of our products and services and they may have a material adverse effect on our business, financial condition, results of operations and cash flows.

We rely on our global direct installation channel for a significant portion of our revenue. Failure to maintain and grow the installed base resulting from direct channel sales could adversely affect our business.

Unlike many of our competitors, we rely on a direct sales channel for a substantial portion of our revenue. The direct channel provides for the installation of fire and security solutions, and HVAC equipment manufactured by us. This represents a significant distribution channel for our products, creates a large installed base of our fire and security solutions and HVAC equipment, and creates opportunities for longer term service and monitoring revenue. If we are unable to maintain or grow this installation business, whether due to changes in economic conditions, a failure to anticipate changing customer needs, a failure to introduce innovative or technologically advanced solutions, or for any other reason, our installation revenue could decline, which could in turn adversely impact our product pull-through and our ability to grow service and monitoring revenue.

Global climate change and related regulations could negatively affect our business.

The effects of climate change create financial risks to our business. For example, the effects of climate change could disrupt our operations by impacting the availability and cost of materials needed for manufacturing, exacerbate existing risks to our supply chain and increase insurance and other operating costs. These factors may impact our decisions to construct new facilities or maintain existing facilities in areas most prone to physical climate risks. We could also face indirect financial risks passed through the supply chain and disruptions that could result in increased prices for our products and the resources needed to produce them.

Increased public awareness and concern regarding global climate change has resulted in more regulations designed to reduce greenhouse gas emissions. These regulations tend to be implemented under global, national and sub-national climate objectives or policies, and target the global warming potential (“GWP”) of refrigerants, equipment energy efficiency, and the combustion of fossil fuels as a heating source. Many of our products consume energy and use refrigerants. Regulations which seek to reduce greenhouse gas emissions present a risk to our global products business, predominantly our HVAC business, if we do not adequately prepare our product portfolio. As a result, we have and may be in the future required to make increased research and development and other capital expenditures to improve our product portfolio in order to meet new regulations and standards. Further, our customers and the markets we serve may impose emissions or other environmental standards through regulation, market-based emissions policies or consumer preference that we may not be able to timely meet due to the required level of capital investment or technological advancement. While we have been committed to continuous improvements to our product portfolio to meet and exceed anticipated regulations and preferences, there can be no assurance that our commitments will be successful, that our products will be accepted by the market, that proposed regulation or deregulation will not have a negative competitive impact or that economic returns will reflect our investments in new product development.

We are subject to emerging and competing climate regulations. There continues to be a lack of consistent climate legislation, which creates economic and regulatory uncertainty. Such regulatory uncertainty extends to incentives, which if discontinued, could adversely impact the demand for energy efficient buildings, and could increase costs of compliance. These factors may impact the demand for our products, obsolescence of our products and our results of operations.

Failure to achieve our public sustainability commitments could negatively affect our reputation and business.

As of the date of this filing, we have made several public commitments regarding our intended reduction of carbon emissions, including commitments to achieve net zero carbon emissions by 2040 and the establishment of science-based targets to reduce carbon emissions from our operations and the operations of our customers. Although we intend to meet these commitments, we

may be required to expend significant resources to do so, which could increase our operational costs. Further, there can be no assurance of the extent to which any of our commitments will be achieved, or that any future investments we make in furtherance of achieving such targets and goals will meet investor expectations or any binding or non-binding legal standards regarding sustainability performance. Moreover, we may determine that it is in the best interest of our company and our shareholders to prioritize other business, social, governance or sustainable investments over the achievement of our current commitments based on economic, regulatory and social factors, business strategy or pressure from investors, activist groups or other stakeholders. If we are unable to meet these commitments, then we could incur adverse publicity and reaction from investors, activist groups and other stakeholders, which could adversely impact the perception of our brand and our products and services by current and potential customers, as well as investors, which could in turn adversely impact our financial condition and results of operations.

The ability of suppliers to deliver raw materials, parts and components to our manufacturing facilities, and our ability to manufacture and deliver services without disruption, could affect our results of operations.

We use a wide range of materials (primarily steel, copper and aluminum) and components (including semiconductors and other electronic components) in the global production of our products, which come from numerous suppliers around the world. Because not all of our business arrangements provide for guaranteed supply and some key parts may be available only from a single supplier or a limited group of suppliers, we are subject to supply and pricing risk. Our operations and those of our suppliers are subject to disruption for a variety of reasons, including supplier plant shutdowns or slowdowns, transportation delays, work stoppages, labor relations, labor shortages, global geopolitical instability, price inflation, governmental regulatory and enforcement actions, intellectual property claims against suppliers, financial issues such as supplier bankruptcy, information technology failures, and hazards such as fire, earthquakes, flooding, or other natural disasters. For example, during 2022 and 2023 we were impacted by the following supply chain issues, due to economic, political and other factors largely beyond our control: increased input material costs and component shortages; supply chain disruptions and delays and cost inflation. In addition, some of our subcontractors have experienced supply chain and labor disruptions, which have and could in the future impact our ability to timely complete projects and convert our backlog. Such disruptions have and could in the future interrupt our ability to manufacture or obtain certain products and components, thereby adversely impacting our ability to provide products to customers, convert our backlog into revenue and realize expected profit margins. We could experience the reoccurrence of similar or new disruptions in the future, the effect of which will depend on our ability to successfully mitigate and offset the impact of these disruptions. Any significant disruption could materially and adversely affect our business, financial condition, results of operations and cash flows.

Material supply shortages and delays in deliveries, along with other factors such as price inflation, can also result in increased pricing. While many of our customers permit quarterly or other periodic adjustments to pricing based on changes in component prices and other factors, we may bear the risk of price increases that occur between any such repricing or, if such repricing is not permitted, during the balance of the term of the particular customer contract. The inability to timely convert our backlog due to supply chain disruptions subjects us to pricing risk due to cost inflation occurring between the generation of backlog and its conversion into revenue. If we are unable to effectively manage the impacts of price inflation and timely convert our backlog, our results of operations, financial condition and cash flows could materially and adversely be affected.

Our business success depends on attracting and retaining qualified personnel.

Our ability to sustain and grow our business requires us to hire, retain and develop a high-performance, customer-centric and diverse management team and workforce. Continuous efficient and timely customer service, customer support and customer intimacy are essential to enabling customer loyalty and driving our financial results. Our growth strategies require that we pivot to new talent capability investments and build the workforce of the future, with an emphasis on developing skills in digital and consultative, outcome-based selling. Failure to ensure that we have the leadership and talent capacity with the necessary skillset and experience could impede our ability to deliver our growth objectives, execute our strategic plan and effectively transition our leadership. Any unplanned turnover or inability to attract and retain key employees could have a negative effect on our results of operations.

Our ability to convert backlog into revenue requires us to maintain a labor force that is sufficiently large enough to support our manufacturing operations to meet customer demand, as well as provide on-site services and project support for our customers. This includes recruiting, hiring and retaining skilled trade workers to support our direct channel field businesses. We have in the past, and could in the future, experience shortages for skilled or unskilled labor. The impacts of such labor shortages could limit our ability to convert backlog into revenue and negatively impact our results of operations.

A material disruption of our operations due to catastrophic or geopolitical events, particularly at our monitoring and/or manufacturing facilities, could materially and adversely affect our business.

If our operations, particularly at our monitoring facilities and/or manufacturing facilities, were to be disrupted as a result of significant equipment failures, natural disasters, pandemics, climate change, cybersecurity incidents, power outages, fires, explosions, abrupt political change, armed conflict, terrorism, sabotage, adverse weather conditions, public health crises, labor disputes, labor shortages or other reasons, we may be unable to effectively respond to alarm signals, fill customer orders, convert our backlog, collect revenue and otherwise meet obligations to or demand from our customers, which could adversely affect our financial performance. These events may also cause us to experience increased costs and reduced productivity. For example, our recent cybersecurity incident caused disruptions to our operations, adversely affecting our financial performance. For more information on the impact of the cybersecurity incident, see Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.

The occurrence or reoccurrence of regional epidemics or a global pandemic, such as COVID-19, may adversely affect our operations, financial condition, and results of operations. The extent to which global pandemics impact our business going forward will depend on factors such as the duration and scope of the pandemic; governmental, business, and individuals' actions in response to the pandemic; and the impact on economic activity, including the possibility of recession or financial market instability. Measures to contain a global pandemic may intensify other risks described in these Risk Factors.

Interruptions to production could increase our costs and reduce our sales. Any interruption in production capability could require us to make substantial capital expenditures or purchase alternative material at higher costs to fill customer orders, which could negatively affect our profitability and financial condition. We maintain property damage insurance that we believe to be adequate to provide for reconstruction of facilities and equipment, cybersecurity insurance to mitigate losses resulting from cybersecurity incidents, as well as business interruption insurance to mitigate losses resulting from significant production interruption or shutdown caused by an insured loss. However, any recovery under our insurance policies may not offset the lost sales or increased costs that may be experienced during the disruption of operations, which could adversely affect our business, financial condition, results of operations and cash flows.

Our business may be adversely affected by work stoppages, union negotiations, labor disputes and other matters associated with our labor force.

We employ approximately 100,000 people worldwide. Approximately 22% of these employees are covered by collective bargaining agreements or works councils. Although we believe that our relations with the labor unions and works councils that represent our employees are generally good and we have experienced no material strikes or work stoppages recently, no assurances can be made that we will not experience in the future these and other types of conflicts with labor unions, works councils, other groups representing employees or our employees generally, or that any future negotiations with our labor unions will not result in significant increases in our cost of labor. Additionally, a work stoppage at one of our suppliers could materially and adversely affect our operations if an alternative source of supply were not readily available. Work stoppages by employees of our customers could also result in reduced demand for our products.

Risks Related to Macroeconomic and Political Conditions

Some of the industries in which we operate are cyclical and, accordingly, demand for our products and services could be adversely affected by downturns in these industries.

Much of the demand for installation of our products and solutions is driven by commercial, institutional, industrial, data center, governmental and residential construction, industrial facility expansion, retrofit activity, maintenance projects and other capital investments in buildings within the sectors that we serve. Construction and other capital investment projects are heavily dependent on general economic conditions, localized demand for real estate and availability of credit, public funding or other sources of financing. Some of the real estate markets we serve are prone to significant fluctuations in supply and demand. In addition, most real estate developers rely heavily on project financing in order to initiate and complete projects. Declines in real estate values and increases in prevailing interest rates could lead to significant reductions in the demand for and availability of project financing, even in markets where demand may otherwise be sufficient to support new construction. These factors could in turn temper demand for new building products and solutions and have a corresponding impact on our financial condition, results of operations and cash flows.

Levels of industrial capital expenditures for facility expansions and maintenance are dependent on general economic conditions, economic conditions within specific industries we serve, expectations of future market behavior and available financing. The

businesses of many of our industrial customers are to varying degrees cyclical and have experienced periodic downturns. During such economic downturns, customers in these industries tend to delay major capital projects, including greenfield construction, maintenance projects and upgrades. Additionally, demand for our products and services may be affected by volatility in energy, component and commodity prices, commodity and component availability and fluctuating demand forecasts, as our customers may be more conservative in their capital planning, which may reduce demand for our products and services as projects are postponed or cancelled. Increases in prevailing interest rates or disruptions in financial markets and banking systems could make credit and capital markets difficult for our customers to access and could significantly raise the cost of new debt for our customers. Any difficulty in accessing these markets and the increased associated costs can have a negative effect on investment in large capital projects, including necessary maintenance and upgrades, even during periods of favorable end-market conditions.

Many of our customers inside and outside of the industrial and commercial sectors, including governmental and institutional customers, have experienced budgetary constraints as sources of revenue have been negatively impacted by adverse or stagnant economic conditions, including continued increases in interest rates. These budgetary constraints have in the past, and may in the future, reduce demand for our products and services among governmental and institutional customers.

Reduced demand for our products and services could result in the delay or cancellation of existing orders or lead to excess capacity, which unfavorably impacts our absorption of fixed costs. This reduced demand may also erode average selling prices in the industries we serve. Any of these results could materially and adversely affect our business, financial condition, results of operations and cash flows.

Economic, political, credit and capital market conditions could adversely affect our financial performance, our ability to grow or sustain our business and our ability to access the capital markets.

We compete around the world in various geographic regions and product markets. Global economic and political conditions affect each of our primary businesses and the businesses of our customers and suppliers. Recessions, economic downturns, price instability, inflation, slowing economic growth and social and political instability in the industries and/or markets where we compete could negatively affect our revenues and financial performance in future periods, result in future restructuring charges, and adversely impact our ability to grow or sustain our business. For example, current macroeconomic and political instability caused by rising interest rates, global supply chain disruptions, inflation, ongoing conflicts between Russia and Ukraine as well as Israel and Hamas, geopolitical tensions and the strengthening of the U.S. dollar, have and could continue to adversely impact our results of operations. Other potential consequences arising from the conflicts, the further escalation of geopolitical tensions globally and their effect on our business and results of operations as well as the global economy, cannot be predicted. This may include further economic sanctions, embargoes, regional instability, geopolitical shifts, regional or international expansion of current conflicts, energy instability, potential retaliatory action by governments, supply chain disruptions, disruption to local markets, increased cybersecurity attacks against us, our third-party service providers and customers, collateral consequences from cyber conflicts between nation-states or other politically motivated actors targeting critical technology infrastructure. and increased tensions among countries in which we operate. Our failure to adequately react to these and other political and economic conditions could materially and adversely affect our results of operations, financial condition or liquidity.

The capital and credit markets provide us with liquidity to operate and grow our business beyond the liquidity that operating cash flows provide. A worldwide economic downturn and/or disruption of the credit markets could reduce our access to capital necessary for our operations and executing our strategic plan. In addition, we have experienced, and expect to continue to experience, increased capital costs due to increases in global interest rates. If our access to capital were to become significantly constrained, or if costs of capital increased significantly due to increased interest rates, lowered credit ratings, prevailing industry conditions, the volatility of the capital markets or other factors; then our financial condition, results of operations and cash flows could be adversely affected.

Risks associated with our non-U.S. operations could adversely affect our business, financial condition and results of operations.

We have significant operations in a number of countries outside the U.S., some of which are located in emerging markets. Long-term economic and geopolitical uncertainty in any of the regions of the world in which we operate, such as Asia, South America, the Middle East, Europe and emerging markets, could result in the disruption of markets and negatively affect cash flows from our operations to cover our capital needs and debt service requirements.

In addition, as a result of our global presence, a significant portion of our revenues and expenses is denominated in currencies other than the U.S. dollar. We are therefore subject to non-U.S. currency risks and non-U.S. exchange exposure. While we employ financial instruments to hedge some of our transactional foreign exchange exposure, these activities do not insulate us completely from those exposures. Exchange rates can be volatile and a substantial weakening of foreign currencies against the U.S. dollar could reduce our profit margin in various locations outside of the U.S. and adversely impact the comparability of results from period to period. During each of 2022 and 2023, we experienced a reduction in revenue and profits as a result of the significant strengthening of the U.S. dollar against foreign currencies. The continued strength of the U.S. dollar could continue to adversely impact our revenue and profit in non-U.S. jurisdictions.

There are other risks that are inherent in our non-U.S. operations, including the potential for changes in socio-economic conditions, laws and regulations, including anti-trust, labor and environmental laws, and monetary and fiscal policies; the ability to enforce rights, collect revenues and protect assets in foreign jurisdictions; protectionist measures that may prohibit acquisitions or joint ventures, or impact trade volumes; unsettled or unstable political conditions; international conflict; government-imposed plant or other operational shutdowns; backlash from foreign labor organizations related to our restructuring actions; corruption; natural and man-made disasters, hazards and losses; violence, civil and labor unrest, and possible terrorist attacks. These and other factors may have a material adverse effect on our business and results of operations.

Changes in U.S. or foreign trade policies and other factors beyond our control may adversely impact our business and operating results.

Geopolitical tensions and trade disputes can disrupt supply chains and increase the cost of our products. This could cause our products to be more expensive for customers, which could reduce the demand for or attractiveness of such products. In addition, a geopolitical conflict in a region where we operate could disrupt our ability to conduct business operations in that region. Countries also could adopt restrictive trade measures, such as laws and regulations concerning investments and limitations on foreign ownership of businesses, taxation, foreign exchange controls, capital controls, employment regulations and the repatriation of earnings and controls on imports or exports of goods, technology, or data, any of which could adversely affect our operations and supply chain and limit our ability to offer our products and services as intended. Changes in laws or policies governing the terms of foreign trade, and in particular increased trade restrictions, tariffs or taxes on imports from countries where we manufacture products or from where we import products or raw materials (either directly or through our suppliers) could have an impact on our competitive position, business operations and financial results. For example, the U.S., China and other countries continue to implement restrictive trade actions, including tariffs, export controls, sanctions, legislation favoring domestic investment and other actions impacting the import and export of goods, foreign investment and foreign operations in jurisdictions in which we operate. These kinds of restrictions could be adopted with little to no advanced notice, and we may not be able to effectively mitigate the adverse impacts from such measures. Political uncertainty surrounding trade or other international disputes also could have a negative impact on customer confidence and willingness to spend money, which could impair our future growth. Any of these events could increase the cost of our products, create disruptions to our supply chain and impair our ability to effectively operate and compete in the countries where we do business.

Volatility in commodity prices may adversely affect our results of operations.

Increases in commodity costs can negatively impact the profitability of orders in backlog as prices on such orders are typically fixed; therefore, in the short-term, our ability to adjust for changes in certain commodity prices is limited. In these cases, if we are not able to recover commodity cost increases through price increases to our customers on new orders, then such increases will have an adverse effect on our results of operations. In cases where commodity price risk cannot be naturally offset or hedged through supply-based fixed-price contracts, we use commodity hedge contracts to minimize overall price risk associated with our anticipated commodity purchases. Unfavorability in our hedging programs during a period of declining commodity prices could result in lower margins as we reduce prices to match the market on a fixed commodity cost level. Additionally, to the extent we do not or are unable to hedge certain commodities and the commodity prices substantially increase, such increases will have an adverse effect on our results of operations.

During fiscal 2023, we experienced increased commodity costs as a result of global macroeconomic trends, including global price inflation, supply chain disruption and the Russia/Ukraine conflict. We could experience further cost fluctuations in the future, which could negatively impact our results of operations to the extent we are unable to successfully mitigate and offset the impact of increased costs.

Risks Related to Government Regulations

Our businesses operate in regulated industries and are subject to a variety of complex and continually changing laws and regulations.

Our operations and employees are subject to various U.S. federal, state and local licensing laws, codes and standards and similar foreign laws, codes, standards and regulations. Changes in laws or regulations could require us to change the way we operate or to utilize resources to maintain compliance, which could increase costs or otherwise disrupt operations. In addition, failure to comply with any applicable laws or regulations could result in substantial fines or revocation of our operating permits and licenses. Competition or other regulatory investigations can continue for several years, be costly to defend and can result in substantial fines. If laws and regulations were to change or if we or our products failed to comply, our business, financial condition and results of operations could be adversely affected.

Due to the international scope of our operations, the system of laws and regulations to which we are subject is complex and includes regulations issued by the U.S. Customs and Border Protection, the U.S. Department of Commerce's Bureau of Industry and Security, the U.S. Treasury Department's Office of Foreign Assets Control and various non U.S. governmental agencies, including applicable export controls, anti-trust, customs, currency exchange control and transfer pricing regulations, laws regulating the foreign ownership of assets, and laws governing certain materials that may be in our products. No assurances can be made that we will continue to be found to be operating in compliance with, or be able to detect violations of, any such laws or regulations.

We are also subject to a complex network of tax laws and tax treaties that impact our effective tax rate. For more information on risks related to tax regulation, see “Risks Related to Tax Matters” below.

We cannot predict the nature, scope or effect of future regulatory requirements to which our operations might be subject or the manner in which existing laws might be administered or interpreted.

We are subject to requirements relating to environmental and safety regulations and environmental remediation matters which could adversely affect our business, results of operation and reputation.

We are subject to numerous federal, state and local environmental laws and regulations governing, among other things, solid and hazardous waste storage, treatment and disposal, and remediation of releases of hazardous materials. There are significant capital, operating and other costs associated with compliance with these environmental laws and regulations. Environmental laws and regulations may become more stringent in the future, which could increase costs of compliance, decrease demand for our products, create reputational harm or require us to manufacture with alternative technologies and materials. For example, our subsidiary Tyco Fire Protection Products announced it will discontinue the production and sale of fluorinated firefighting foams by June 2024, including Aqueous Film-Forming Foam ("AFFF") and related products, and will transition to non-fluorinated foam alternatives.

Federal, state and local authorities also regulate a variety of matters, including, but not limited to, health, safety laws governing employee injuries, and permitting requirements in addition to the environmental matters discussed above. If we are unable to adequately comply with applicable health and safety regulations and provide our employees with a safe working environment, we may be subject to litigation and regulatory action, in addition to negatively impacting our ability to attract and retain talented employees. New legislation and regulations may require us to make material changes to our operations, resulting in significant increases to the cost of production. Additionally, violations of environmental, health and safety laws are subject to civil, and, in some cases, criminal sanctions. As a result of these various uncertainties, we may incur unexpected interruptions to operations, fines, penalties or other reductions in income which could adversely impact our business, financial condition and results of operations.

We could be adversely affected by violations of the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and similar anti-bribery laws around the world.

The U.S. Foreign Corrupt Practices Act (the "FCPA"), the U.K. Bribery Act and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to government officials or other persons for the purpose of obtaining or retaining business, and require that companies maintain accurate books and records. Our policies mandate compliance with these laws. We operate in many parts of the world that are recognized as having governmental and commercial corruption and local customs and practices that can be inconsistent with anti-bribery laws. We cannot provide assurance that our internal control policies and procedures will preclude reckless or criminal acts committed by our employees

or third-party intermediaries. Where we believe or have reason to believe that our employees or agents have or may have violated applicable anti-corruption laws, or if we are subject to allegations of any such violations, we have and will investigate the allegations and from time to time as necessary may engage outside counsel to investigate the relevant facts and circumstances, which can be expensive and require significant time and attention from senior management. Violations of these laws may result in criminal or civil sanctions, which could disrupt our business and result in a material adverse effect on our reputation, business, financial condition, results of operations and cash flows. In addition, we could be subject to commercial impacts such as lost revenue from customers who decline to do business with us as a result of such compliance matters, which also could have a material adverse effect on our reputation, business, financial condition, results of operations and cash flows.

We are subject to risks arising from regulations applicable to companies doing business with the U.S. government.

Our customers include many U.S. federal, state and local government authorities. Doing business with the U.S. federal, state and local governments subjects us to certain particular risks, including dependence on the level of government spending and compliance with and changes in governmental procurement and security regulations. Agreements relating to the sale of products to government entities may be subject to termination, reduction or modification, either at the convenience of the government or for failure to perform under the applicable contract. We are subject to potential government investigations of business practices and compliance with government procurement and security regulations, which can be expensive and burdensome. If we were charged with wrongdoing as a result of an investigation, we could be suspended from bidding on or receiving awards of new government contracts, which could have a material adverse effect on our results of operations. In addition, various U.S. federal and state legislative proposals have been made in the past that would deny governmental contracts to U.S. companies that have moved their corporate location abroad. We are unable to predict the likelihood that, or final form in which, any such proposed legislation might become law, the nature of regulations that may be promulgated under any future legislative enactments, or the effect such enactments and increased regulatory scrutiny may have on our business.

Risks Related to Litigation

Potential liability for environmental contamination could result in substantial costs.

We have projects underway at multiple current and former manufacturing and testing facilities to investigate and remediate environmental contamination resulting from past operations by us or by other businesses that previously owned or used the properties, including our Fire Technology Center and Stanton Street manufacturing facility located in Marinette, Wisconsin. These projects relate to a variety of activities, including arsenic, solvent, oil, metal, lead, PFOS, PFOA and/or other per- and polyfluorinated substances ("PFAS") and other hazardous substance contamination cleanup; and structure decontamination and demolition, including asbestos abatement. Governments in the United States and internationally have increasingly been regulating PFAS, which is contained in certain of the Company's firefighting foam products. These regulations include declining emission standards and limits set as to the presence of certain compounds. Because of uncertainties associated with environmental regulation and environmental remediation activities at sites where we may be liable, future expenses that we may incur to remediate identified sites and resolve outstanding litigation could be considerably higher than the current accrued liability on our consolidated statements of financial position, which could have a material adverse effect on our business, results of operations and cash flows.

In addition, we have been named, along with others, in a number of class action and other lawsuits relating to the use of fire-fighting foam products by the U.S. Department of Defense, the U.S. military and others for fire suppression purposes and related training exercises. It is difficult to predict the outcome or ultimate financial exposure, if any, represented by these matters, and there can be no assurance that any such exposure will not be material. Such claims may also negatively affect our reputation. See Note 21, “Commitments and Contingencies,” of the notes to consolidated financial statements for additional information on these matters.

We are party to asbestos-related product litigation that could adversely affect our financial condition, results of operations and cash flows.

We and certain of our subsidiaries, along with numerous other third parties, are named as defendants in personal injury lawsuits based on alleged exposure to asbestos containing materials. These cases typically involve product liability claims based primarily on allegations of manufacture, sale or distribution of industrial products that either contained asbestos or were used with asbestos containing components. We cannot predict with certainty the extent to which we will be successful in litigating or otherwise resolving lawsuits on satisfactory terms in the future and we continue to evaluate different strategies related to asbestos claims filed against us including entity restructuring and judicial relief. Unfavorable rulings, judgments or settlement terms could have a material adverse impact on our business and financial condition, results of operations and cash flows. See

Note 21, “Commitments and Contingencies,” of the notes to consolidated financial statements for additional information on these matters.

Legal proceedings in which we are, or may be, a party may adversely affect us.

We are currently, and may in the future, become subject to legal proceedings and commercial or contractual disputes. These are typically claims that arise in the normal course of business including, without limitation, commercial or contractual disputes with our suppliers or customers, intellectual property matters, third party liability, including product liability claims, and employment claims. In addition, we may be exposed to greater risks of liability for employee acts or omissions, or system failure, in our fire and security businesses than may not be inherent in other businesses. In particular, because many of our fire and security products and services are intended to protect lives and real and personal property, we may have greater exposure to litigation risks than other businesses. The nature of the services we provide exposes us to the risks that we may be held liable for employee acts or omissions or system failures. As a result, such employee acts or omissions or system failures could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Risks Relating to Strategic Transactions

We may be unable to successfully execute or effectively integrate acquisitions or joint ventures.

We expect acquisitions of businesses and assets, as well as joint ventures (or other strategic arrangements), to play a role in our future growth and our ability to build capabilities in our products and services. We cannot be certain that we will be able to identify attractive acquisition or joint venture targets, obtain financing for acquisitions on satisfactory terms, successfully acquire identified targets or form joint ventures, or manage the timing of acquisitions with capital obligations across our businesses. Competition for acquisition opportunities may rise, thereby increasing our costs of making acquisitions or causing us to refrain from making further acquisitions.

Acquisitions and investments may involve significant cash expenditures, debt incurrences, equity issuances, operating losses and expenses and may be dilutive to earnings. Acquisitions involve numerous other risks, including: the diversion of management attention to integration matters; difficulties in integrating operations and systems; challenges in conforming standards, controls, procedures and accounting and other policies, business cultures and compensation structures; difficulties in assimilating employees and in attracting and retaining key personnel; challenges in successfully integrating and operating businesses with different characteristics than our current core businesses; challenges in keeping existing customers and obtaining new customers; difficulties in achieving anticipated cost savings, synergies, business opportunities and growth prospects; contingent liabilities (including contingent tax liabilities and earn-out obligations) that are larger than expected; and potential unknown liabilities, adverse consequences and unforeseen increased expenses associated with acquired companies. The goodwill and intangible assets recorded with past acquisitions were significant and impairment of such assets could result in a material adverse impact on our financial condition and results of operations.

Many of these factors are outside of our control, and any one of them could result in increased costs, decreased expected revenues and diversion of management time and energy, which could materially and adversely impact our business, financial condition and results of operations.

Risks associated with joint venture investments may adversely affect our business and financial results.

We have entered into several joint ventures and we may enter into additional joint ventures in the future. Our joint venture partners may at any time have economic, business or legal interests or goals that are inconsistent with our goals or with the goals of the joint venture. In addition, we may compete against our joint venture partners in certain of our markets. Disagreements with our business partners may impede our ability to maximize the benefits of our partnerships. Our joint venture arrangements may require us, among other matters, to pay certain costs or to make certain capital investments or to seek our joint venture partner’s consent to take certain actions. In addition, our joint venture partners may be unable or unwilling to meet their economic or other obligations under the operative documents, and we may be required to either fulfill those obligations alone to ensure the ongoing success of a joint venture or to dissolve and liquidate a joint venture. These risks could result in a material adverse effect on our business and financial results.

Divestitures of some of our businesses or product lines may materially adversely affect our financial condition, results of operations or cash flows.

We continually evaluate the performance and strategic fit of all of our businesses and may sell businesses or product lines. Divestitures involve risks, including difficulties in the separation of operations, services, products and personnel, the diversion

of management's attention from other business concerns, the disruption of our business, the potential loss of key employees and the retention of uncertain environmental or other contingent liabilities related to the divested business. Some divestitures may be dilutive to earnings. In addition, divestitures may result in significant asset impairment charges, including those related to goodwill and other intangible assets, which could have a material adverse effect on our financial condition and results of operations. In the event we are unable to successfully divest a business or product line, we may be forced to wind down such business or product line, which could materially and adversely affect our results of operations and financial condition. We cannot assure you that we will be successful in managing these or any other significant risks that we encounter in divesting a business or product line, and any divestiture we undertake could materially and adversely affect our business, financial condition, results of operations and cash flows, and may also result in a diversion of management attention, operational difficulties and losses.

Risks Related to Tax Matters

Future potential changes to the tax laws could adversely affect us and our affiliates.

Legislative and regulatory action may be taken in the U.S. and other jurisdictions in which we operate, which, if ultimately enacted, could override tax treaties upon which we rely, or broaden the circumstances under which we would be considered a U.S. resident, each of which could materially and adversely affect our effective tax rate. We cannot predict the outcome of any specific legislative or regulatory proposals and such changes could have a prospective or retroactive application. However, if proposals were enacted that had the effect of disregarding our incorporation in Ireland or limiting Johnson Controls International plc's ability, as an Irish company, to take advantage of tax treaties with the U.S., we could be subject to increased taxation, potentially significant expense, and/or other adverse tax consequences.

The U.S. enacted the Inflation Reduction Act of 2022 ("IRA") in August 2022, which, among other sections, creates a new book minimum tax of at least 15% of consolidated GAAP pre-tax income for corporations with average book income in excess of $1 billion. The book minimum tax will first apply to us in fiscal 2024. We do not expect the IRA to have a material impact on our effective tax rate, however, it is possible that the U.S. Congress could advance other tax legislation proposals in the future that could have a material impact on our tax rate. In addition, in October 2021, the Organization for Economic Co-operation and Development ("OECD")/G20 inclusive framework on Base Erosion and Profit Shifting (the Inclusive Framework) published a statement updating and finalizing the key components of a two-pillar plan on global tax reform which has now been agreed upon by the majority of OECD members. Pillar One allows countries to reallocate a portion of residual profits earned by multinational enterprises ("MNE"), with an annual global revenue exceeding €20 billion and a profit margin over 10%, to other market jurisdictions. The adoption of Pillar One and its potential effective date remain uncertain. Pillar Two requires MNEs with an annual global revenue exceeding €750 million to pay a global minimum tax of 15%. On December 15, 2022, the Council of the EU formally adopted Directive (EU) 2022/2523 (the "Pillar Two Directive") to achieve a coordinated implementation of Pillar Two in EU Member States consistent with EU law. On October 19, 2023, the Irish Minster of Finance published Irish Finance (No.2) Bill 2023, which includes implementation of the 15% Pillar Two global minimum tax. The bill, subject to amendment during the legislative process, is expected to be signed into law by late December. The Pillar Two legislation is anticipated to be effective for our fiscal year beginning October 1, 2024. We are continuing to evaluate the potential impact on future periods of the Pillar Two Framework, pending legislative adoption by individual countries, as such changes could result in an increase in our effective tax rate.

Future potential changes to the U.S. tax laws could result in us being treated as a U.S. corporation for U.S. federal tax purposes, and the Internal Revenue Service ("IRS") may not agree that we should be treated as a non-U.S. corporation for U.S. federal tax purposes.

Because Johnson Controls International plc is organized under the laws of Ireland, it would generally be classified as a foreign corporation under the general rule that a corporation is considered tax resident in the jurisdiction of its organization or incorporation for U.S. federal income tax purposes. However, Section 7874 of the Code ("Section 7874") provides an exception to this general rule under which a non-U.S. incorporated entity may, in certain circumstances, be treated as a U.S. corporation for U.S. federal tax purposes. The IRS may assert that, as a result of the Merger, Johnson Controls International plc should be treated as a U.S. corporation (and, therefore, a U.S. tax resident) for U.S. federal income tax purposes pursuant to Section 7874 of the Internal Revenue Code. The IRS may also assert that the ability of our U.S. affiliates to utilize U.S. tax attributes, such as net operating losses and certain tax credits, to offset U.S. taxable income resulting from certain transactions may be limited under Section 7874. The application of these rules could result in significant additional U.S. tax liability. In addition, a retroactive change to U.S. tax laws in this area could change the tax classification of Johnson Controls International plc. If it were to be treated as a U.S. corporation for federal tax purposes, we could be subject to substantially greater U.S. tax liability than currently contemplated as a non-U.S. corporation.

Based on the terms of the Merger, we currently expect that Section 7874 does not apply to us or our affiliates as a result of the Merger. However, determining the applicability of Section 7874 is complex and is subject to factual and legal uncertainties. Thus, there can be no assurance that the IRS will agree with the position that Johnson Controls International plc should not be treated as a U.S. corporation for U.S. federal tax purposes or that Section 7874 does not otherwise apply.

Changes to the U.S. model income tax treaty could adversely affect us.

On February 17, 2016, the U.S. Treasury released a revised U.S. model income tax convention (the "new model"), which is the baseline text used by the U.S. Treasury to negotiate tax treaties. If any or all of the modifications to the model treaty are adopted in the main jurisdictions in which we do business, they could, among other things, cause double taxation, increase audit risk and substantially increase our worldwide tax liability. We cannot predict the outcome of any specific modifications to the model treaty, and we cannot provide assurance that any such modifications will not apply to us.

Negative or unexpected tax consequences could adversely affect our results of operations.

Adverse changes in the underlying profitability and financial outlook of our operations in several jurisdictions could lead to additional changes in our valuation allowances against deferred tax assets and other tax reserves on our statement of financial position, and the future sale of certain businesses could potentially result in the reversal of outside basis differences that could adversely affect our results of operations and cash flows. Additionally, changes in tax laws in the U.S., Ireland or in other countries where we have significant operations could materially affect deferred tax assets and liabilities on our consolidated statements of financial position and our income tax provision in our consolidated statements of income.

We are also subject to tax audits by governmental authorities. Negative unexpected results from one or more such tax audits could adversely affect our results of operations.

Risks Relating to Our Jurisdiction of Incorporation

Irish law differs from the laws in effect in the U.S. and may afford less protection to holders of our securities.

It may not be possible to enforce court judgments obtained in the U.S. against us in Ireland based on the civil liability provisions of the U.S. federal or state securities laws. In addition, there is some uncertainty as to whether the courts of Ireland would recognize or enforce judgments of U.S. courts obtained against us or our directors or officers based on the civil liabilities provisions of the U.S. federal or state securities laws or hear actions against us or those persons based on those laws. We have been advised that the U.S. currently does not have a treaty with Ireland providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters. Therefore, a final judgment for the payment of money rendered by any U.S. federal or state court based on civil liability, whether or not based solely on U.S. federal or state securities laws, would not automatically be enforceable in Ireland.

As an Irish company, Johnson Controls is governed by the Irish Companies Acts, which differ in some material respects from laws generally applicable to U.S. corporations and shareholders, including, among others, differences relating to interested director and officer transactions and shareholder lawsuits. Likewise, the duties of directors and officers of an Irish company generally are owed to the company only. Shareholders of Irish companies generally do not have a personal right of action against directors or officers of the company and may exercise such rights of action on behalf of the company only in limited circumstances. Accordingly, holders of Johnson Controls International plc securities may have more difficulty protecting their interests than would holders of securities of a corporation incorporated in a jurisdiction of the U.S.

Transfers of Johnson Controls ordinary shares may be subject to Irish stamp duty.

For the majority of transfers of Johnson Controls ordinary shares, there is no Irish stamp duty. However, Irish stamp duty is payable for certain share transfers. A transfer of Johnson Controls ordinary shares from a seller who holds shares beneficially (i.e., through the Depository Trust Company ("DTC")) to a buyer who holds the acquired shares beneficially is not subject to Irish stamp duty (unless the transfer involves a change in the nominee that is the record holder of the transferred shares). A transfer of Johnson Controls ordinary shares by a seller who holds shares directly (i.e., not through DTC) to any buyer, or by a seller who holds the shares beneficially to a buyer who holds the acquired shares directly, may be subject to Irish stamp duty (currently at the rate of 1% of the price paid or the market value of the shares acquired, if higher) payable by the buyer. A shareholder who directly holds shares may transfer those shares into his or her own broker account to be held through DTC without giving rise to Irish stamp duty provided that the shareholder has confirmed to Johnson Controls transfer agent that there is no change in the ultimate beneficial ownership of the shares as a result of the transfer and, at the time of the transfer, there is no agreement in place for a sale of the shares.

We currently intend to pay, or cause one of our affiliates to pay, stamp duty in connection with share transfers made in the ordinary course of trading by a seller who holds shares directly to a buyer who holds the acquired shares beneficially. In other cases, Johnson Controls may, in its absolute discretion, pay or cause one of its affiliates to pay any stamp duty. Johnson Controls Memorandum and Articles of Association provide that, in the event of any such payment, Johnson Controls (i) may seek reimbursement from the buyer, (ii) may have a lien against the Johnson Controls ordinary shares acquired by such buyer and any dividends paid on such shares and (iii) may set-off the amount of the stamp duty against future dividends on such shares. Parties to a share transfer may assume that any stamp duty arising in respect of a transaction in Johnson Controls ordinary shares has been paid unless one or both of such parties is otherwise notified by Johnson Controls.

Dividends paid by us may be subject to Irish dividend withholding tax.

In certain circumstances, as an Irish tax resident company, we will be required to deduct Irish dividend withholding tax (currently at the rate of 25%) from dividends paid to our shareholders. Shareholders that are residents in the U.S., European Union countries (other than Ireland) or other countries with which Ireland has signed a tax treaty (whether the treaty has been ratified or not) generally should not be subject to Irish withholding tax so long as the shareholder has provided certain Irish dividend withholding tax forms. However, some shareholders may be subject to withholding tax, which could adversely affect the price of our ordinary shares.

Dividends received by investors could be subject to Irish income tax.

Dividends paid in respect of Johnson Controls ordinary shares generally are not subject to Irish income tax where the beneficial owner of these dividends is exempt from dividend withholding tax, unless the beneficial owner of the dividend has some connection with Ireland other than his or her shareholding in Johnson Controls.

Johnson Controls shareholders who receive their dividends subject to Irish dividend withholding tax generally will have no further liability to Irish income tax on the dividend unless the beneficial owner of the dividend has some connection with Ireland other than his or her shareholding in Johnson Controls.

General Risk Factors

The potential insolvency or financial distress of third parties could adversely impact our business and results of operations.

We are exposed to the risk that third parties to various arrangements who owe us money or goods and services, or who purchase goods and services from us, will not be able to perform their obligations or continue to place orders due to insolvency or financial distress. If third parties fail to perform their obligations under arrangements with us, we may be forced to replace the underlying commitment at current or above market prices or on other terms that are less favorable to us. In such events, we may incur losses, or our results of operations, financial condition or liquidity could otherwise be adversely affected.

Risks related to our defined benefit retirement plans may adversely impact our results of operations and cash flow.

Significant changes in actual investment return on defined benefit plan assets, discount rates, mortality assumptions and other factors could adversely affect our results of operations and the amounts of contributions we must make to our defined benefit plans in future periods. Because we mark-to-market our defined benefit plan assets and liabilities on an annual basis, large non-cash gains or losses could be recorded in the fourth quarter of each fiscal year or when a remeasurement event occurs. Generally accepted accounting principles in the U.S. require that we calculate income or expense for the plans using actuarial valuations. These valuations reflect assumptions about financial markets and interest rates, which may change based on economic conditions. Funding requirements for our defined benefit plans are dependent upon, among other factors, interest rates, underlying asset returns and the impact of legislative or regulatory changes related to defined benefit funding obligations.

A variety of other factors could adversely affect the results of operations of our business.

Any of the following could materially and adversely impact the results of operations of our business: loss of, changes in, or failure to perform under guaranteed performance contracts with our major customers; cancellation of, or significant delays in, projects in our backlog; delays or difficulties in new product development; our ability to recognize the expected benefits of our restructuring actions, downgrades in the ratings of our debt, material increases to our level of indebtedness, products and services that we are unable to pass on to the market; changes in energy costs or governmental regulations that would decrease

the incentive for customers to update or improve their building control systems; and natural or man-made disasters or losses that impact our ability to deliver products and services to our customers.

ITEM 1B UNRESOLVED STAFF COMMENTS

The Company has no unresolved written comments regarding its periodic or current reports from the staff of the SEC.

ITEM 1C CYBERSECURITY

Requirement not yet applicable to the Company.

ITEM 2 PROPERTIES

The Company has properties in over 60 countries throughout the world, with its world headquarters located in Cork, Ireland and its North American operational headquarters located in Milwaukee, Wisconsin USA. The Company's wholly- and majority-owned facilities primarily consist of manufacturing, sales and service offices, research and development facilities, monitoring centers, and assembly and/or warehouse centers. At September 30, 2023, these properties totaled approximately 40 million square feet of floor space of which 12 million square feet are owned and 28 million square feet are leased. The Company considers its facilities to be suitable for their current uses and adequate for current needs. The majority of the facilities are operating at normal levels based on capacity. The Company does not anticipate difficulty in renewing existing leases as they expire or in finding alternative facilities.

ITEM 3 LEGAL PROCEEDINGS

Gumm v. Molinaroli, et al.

On August 16, 2016, a putative class action lawsuit, Gumm v. Molinaroli, et al., Case No. 16-cv-1093, was filed in the United States District Court for the Eastern District of Wisconsin, naming Johnson Controls, Inc., the individual members of its board of directors at the time of the merger with the Company's merger subsidiary and certain of its officers, the Company and the Company's merger subsidiary as defendants. The complaint asserted various causes of action under the federal securities laws, state law and the Taxpayer Bill of Rights, including that the individual defendants allegedly breached their fiduciary duties and unjustly enriched themselves by structuring the merger among the Company, Tyco and the merger subsidiary in a manner that would result in a United States federal income tax realization event for the putative class of certain Johnson Controls, Inc. shareholders and allegedly result in certain benefits to the defendants, as well as related claims regarding alleged misstatements in the proxy statement/prospectus distributed to the Johnson Controls, Inc. shareholders, conversion and breach of contract. The complaint also asserted that Johnson Controls, Inc., the Company and the Company's merger subsidiary aided and abetted the individual defendants in their breach of fiduciary duties and unjust enrichment. The complaint seeks, among other things, disgorgement of profits and damages. On September 30, 2016, approximately one month after the closing of the merger, plaintiffs filed a preliminary injunction motion seeking, among other items, to compel Johnson Controls, Inc. to make certain intercompany payments that plaintiffs contend will impact the United States federal income tax consequences of the merger to the putative class of certain Johnson Controls, Inc. shareholders and to enjoin Johnson Controls, Inc. from reporting to the Internal Revenue Service the capital gains taxes payable by this putative class as a result of the closing of the merger. The court held a hearing on the preliminary injunction motion on January 4, 2017, and on January 25, 2017, the judge denied the plaintiffs' motion. Plaintiffs filed an amended complaint on February 15, 2017, and the Company filed a motion to dismiss on April 3, 2017. On October 17, 2019, the court heard oral arguments on the motion to dismiss and took the matter under advisement. On November 3, 2021, the court granted the Company's motion to dismiss the amended complaint. Plaintiffs appealed to the United States Court of Appeals for the Seventh Circuit. On November 6, 2023, the Seventh Circuit affirmed the decision of the district court.

Refer to Note 21, "Commitments and Contingencies," of the notes to consolidated financial statements for discussion of environmental, asbestos, insurable liabilities and other litigation matters, which is incorporated by reference herein and is considered an integral part of Part I, Item 3, "Legal Proceedings."

ITEM 4 MINE SAFETY DISCLOSURES

Not applicable.

EXECUTIVE OFFICERS OF THE REGISTRANT

Pursuant to General Instruction G(3) of Form 10-K, the following list of executive officers of the Company as of December 14, 2023 is included as an unnumbered Item in Part I of this report in lieu of being included in the Company's Proxy Statement relating to the annual general meeting of shareholders to be held on March 13, 2024.

Julie Brandt, 49, has served as Vice President and President, Building Solutions, North America since April 2023. Prior to joining Johnson Controls, Ms. Brandt served as Executive Vice President and General Manager, North America Western Region at Otis Worldwide Corp, an elevator and escalator manufacturing, installation and service company, from September 2020 until April 2023. While at Otis, Ms. Brandt also served in roles of increasing responsibility from 2000 until 2020, including Executive Vice President and Chief Transformation Officer, from January 2019 until August 2020 and as Managing Director, Hong Kong, Macau and Taiwan, from January 2016 until December 2018.

John Donofrio, 62, has served as Executive Vice President and General Counsel of the Company since November 2017. He previously served as Vice President, General Counsel and Secretary of Mars, Incorporated, a global food manufacturer from October 2013 to November 2017. Before joining Mars in October 2013, Mr. Donofrio was Executive Vice President, General Counsel and Secretary for The Shaw Group Inc., a global engineering and construction company, from October 2009 until February 2013. Prior to joining Shaw, Mr. Donofrio was Senior Vice President, General Counsel and Chief Compliance Officer at Visteon Corporation, a global automotive supplier, a position he held from 2005 until October 2009. Mr. Donofrio has been a Director of FARO Technologies, Inc., a designer, developer, manufacturer and marketer of software driven, 3D measurement, imaging and realization systems, since 2008.

Olivier Leonetti, 59, has served as Chief Financial Officer since November 2020. Prior to joining Johnson Controls, Mr. Leonetti served as the Senior Vice President and Chief Financial Officer of Zebra Technologies, a provider of enterprise-level data capture and automatic identification solutions, a position he had held since November 2016. Prior to joining Zebra, Mr. Leonetti was the Executive Vice President and Chief Financial Officer of Western Digital, a provider of data infrastructure solutions from 2014 to 2016. Prior to joining Western Digital, Mr. Leonetti served as Vice President of Finance – Global Commercial Organization at Amgen, Inc. from 2011 to 2014. From 1997 to 2011, Mr. Leonetti served in various senior finance positions with increasing responsibility at Dell Inc., including most recently as Vice President of Finance. Prior to joining Dell Inc., Mr. Leonetti served in various worldwide finance capacities with Lex Rac Service plc and the Gillette Company. Mr. Leonetti also serves as a director on the board of Eaton Corporation plc, a provider of power management technologies and services.

Nathan Manning, 47, has served as Vice President and Chief Operations Officer, Global Field Operations, since December 2022. He previously served as Vice President and President, Building Solutions, North America from October 2020 until March 2023. He also served as Vice President and General Manager, Field Operations, from March 2020 to October 2020 and Vice President and General Manager, HVAC and Controls Building Solutions North America, from January 2019 to March 2020. Prior to joining Johnson Controls, he served in various roles at General Electric, a diversified industrial and technology company, where he held the position of General Manager, Operational Excellence for General Electric's GE Power segment from August 2017 until December 2018 and the position of General Manager, Services of GE Energy Connections, a division of GE Power, from November 2015 until August 2017. Prior to joining General Electric, Mr. Manning served as Vice President, General Manager of Eaton Aerospace, a segment of Eaton Corporation plc, a provider of power management technologies and services, from February 2014 until November 2015. Prior to joining Eaton, Mr. Manning served in a number of roles with increasing responsibility in General Electric from his hire in January 2000, including as President and Chief Executive Officer of Aviage Systems, a joint venture between General Electric and Aviation Industry Corporation of China, from July 2012 until February 2014.

Daniel C. "Skip" McConeghy, 57, has served as Vice President, Chief Accounting and Tax Officer since June 2022. Mr. McConeghy previously served as Vice President, Global Tax since October 2020 and as interim Controller since February 2022. He also served as Vice President, Corporate Tax Planning, from July 2012 through October 2020. Prior to joining Johnson Controls, Mr. McConeghy was a Tax Partner at PricewaterhouseCoopers, from July 1999 through June 2012.

George R. Oliver, 63, has served as Chief Executive Officer and Chairman of the Board since September 2017. He previously served as our President and Chief Operating Officer following the completion of the merger of Johnson Controls and Tyco in September 2016. Prior to that, Mr. Oliver was Tyco's Chief Executive Officer, a position he held since September 2012. He joined Tyco in July 2006, and served as President of a number of operating segments from 2007 through 2011. Before joining Tyco, he served in operational leadership roles of increasing responsibility at several General

Electric divisions. Mr. Oliver also serves as a director on the board of Raytheon Technologies, an aerospace and defense company.

Anu Rathninde, 53, has served as Vice President and President, Building Solutions, Asia Pacific since May 2022. Prior to joining Johnson Controls, Mr. Rathninde served as President, Electrical Distribution Systems and Advanced Safety & User Experience, Asia Pacific at Aptiv plc, and mobility architecture company primarily serving the automotive sector, from November 2021 until May 2022 and as President, Electrical Distribution Systems from May 2016 until November 2021. Prior to joining Aptiv, Mr. Rathninde served as Vice President of the Automotive Products Group at Johnson Electric, manufacturer of electric motors, actuators, motion subsystems and related electro-mechanical components. Earlier in his career, Mr. Rathninde held progressive leadership positions at Aptiv in general management, engineering, business development, strategy and business planning.

Lei Zhang Schlitz, 57, has served as Vice President and President, Global Products, since November 2022. Prior to joining Johnson Controls, Ms. Schlitz served as Executive Vice President, Automotive OEM of Illinois Tool Works Inc. ("ITW"), a global manufacturer of a diversified range of industrial products and equipment, from 2019 until October 2022. Prior to serving as Vice President, Automotive OEM, Ms. Schlitz served in various leadership roles at ITW, including Executive Vice President, ITW Food Equipment Segment, from September 2015 until January 2020, Group President, Global Ware-Wash and Refrigeration Businesses and Food Equipment Asia Pacific, from January 2014 until August 2015, Group President, Worldwide Refrigeration & Weigh Wrap Business, from May 2011 until December 2013 and as Vice President, ITW Technology Center from October 2008 until April 2011. Prior to joining ITW, Ms. Schlitz served in roles of increasing responsibility at Siemens Energy & Automation from September 2001 until September 2008 and General Electric from 1998 until September 2001. Ms. Schlitz serves on the Board of Directors for Archer Daniels Midland Company, a leader in human and animal nutrition and agricultural origination and processing.

Marlon Sullivan, 50, has served as Executive Vice President and Chief Human Resources Officer since September 2021. Prior to joining Johnson Controls, he served as the Senior Vice President of Human Resources at Delta Airlines from January 2021 to September 2021. Prior to joining Delta, Mr. Sullivan served in various human resources and talent development leadership roles at Abbott Laboratories from December 2007 through December 2020. Earlier in his career, Mr. Sullivan held a variety of human resources roles at The Home Depot.

Marc Vandiepenbeeck, 45, has served as Vice President and President, Building Solutions, Europe, Middle East, Africa and Latin America since August 2023. From 2005 until 2023, Mr. Vandiepenbeeck served in roles of increasing responsibility at Johnson Controls, including Vice President, Finance in 2023, Vice President of Finance, Building Solutions North America, from 2021 through 2023, Vice President and Treasurer, from 2019 until 2021 and Treasurer, Asia Pacific, Middle East, Hong Kong/Shanghai and China, from 2012 until 2015.

There are no family relationships, as defined by the instructions to this item, among the Company's executive officers.

PART II

ITEM 5 MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

The shares of the Company's ordinary shares are traded on the New York Stock Exchange under the symbol "JCI."

Title of Class	Number of Record Holders as of November 30, 2023
Ordinary Shares, $0.01 par value	28,519

As of September 30, 2023, approximately $3.0 billion remains available under the share repurchase program which was authorized by the Company's Board of Directors in March 2021. The share repurchase authorization does not have an expiration date and may be amended or terminated by the Board of Directors at any time without prior notice. During fiscal 2023, the Company repurchased $625 million of its ordinary shares on the open market.

The following table presents information regarding the repurchase of the Company's ordinary shares by the Company as part of the publicly announced program during the three months ended September 30, 2023.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of the Publicly Announced Program	Approximate Dollar Value of Shares that May Yet be Purchased under the Programs
7/1/23 - 7/31/23	178,302	$ 67.86	178,302	$ 2,989,400,398
8/1/23 - 8/31/23	—	—	—	—
9/1/23 - 9/30/23	—	—	—	—

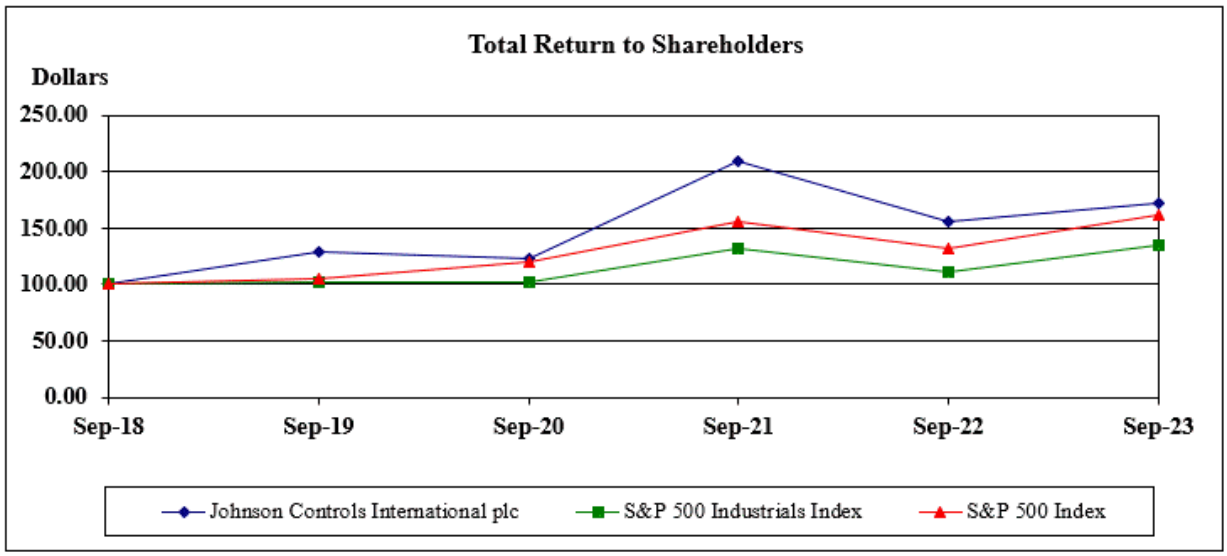
During the three months ended September 30, 2023, acquisitions of shares by the Company from certain employees in order to satisfy employee tax withholding requirements in connection with the vesting of restricted shares were not material.

Equity compensation plan information is incorporated by reference from Part III, Item 12, "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters," of this document and should be considered an integral part of this Item 5.

The following information in Item 5 is not deemed to be "soliciting material" or to be "filed" with the SEC or subject to Regulation 14A or 14C under the Securities Exchange Act of 1934 ("Exchange Act") or to the liabilities of Section 18 of the Exchange Act, and will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Exchange Act, except to the extent the Company specifically incorporates it by reference into such a filing.

The line graph below compares the cumulative total shareholder return on the Company's ordinary shares with the cumulative total return of companies on the Standard & Poor's ("S&P's") 500 Stock Index and the companies on the S&P 500 Industrials Index. This graph assumes the investment of $100 on September 30, 2018 and the reinvestment of all dividends since that date.

COMPANY/INDEX	Sep18	Sep19	Sep20	Sep21	Sep22	Sep23
Johnson Controls International plc	100.00	128.92	123.43	209.43	155.19	171.79
S&P 500 Industrials Index	100.00	101.35	102.66	132.38	111.33	134.71
S&P 500 Index	100.00	104.25	120.05	156.07	132.19	161.80



ITEM 6 [RESERVED]

ITEM 7 MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

General

Johnson Controls International plc, headquartered in Cork, Ireland, is a global leader in smart, healthy and sustainable buildings, serving a wide range of customers in more than 150 countries. The Company's products, services, systems and solutions advance the safety, comfort and intelligence of spaces to serve people, places and the planet. The Company is committed to helping its customers win and creating greater value for all of its stakeholders through its strategic focus on buildings.

The Company is a global leader in engineering, manufacturing, commissioning and retrofitting building products and systems, including residential and commercial HVAC equipment, industrial refrigeration systems, controls, security systems, fire-detection systems and fire-suppression solutions. The Company further serves customers by providing technical services, including maintenance, management, repair, retrofit and replacement of equipment (in the HVAC, industrial refrigeration, controls, security and fire-protection space), energy-management consulting and data-driven "smart building" services and solutions powered by its OpenBlue software platform and capabilities. The Company partners with customers by leveraging its broad product portfolio and digital capabilities, powered by OpenBlue, together with its direct channel service and solutions capabilities, to deliver outcome-based solutions across the lifecycle of a building that address customers' needs to improve energy efficiency, enhance security, create healthy environments and reduce greenhouse gas emissions.

The Company's fiscal year ends on September 30. Unless otherwise stated, references to years in this report relate to fiscal years rather than calendar years. This discussion summarizes the significant factors affecting the consolidated operating results, financial condition and liquidity of the Company for the year ended September 30, 2023. This discussion should be read in conjunction with Item 8, the consolidated financial statements and the notes to consolidated financial statements. A detailed discussion of the 2022 to 2021 year-over-year changes are not included herein and can be found in the Management's Discussion and Analysis of Financial Condition and Results of Operations in the Company's 2022 Annual Report on Form 10-K filed November 15, 2022 under the heading "Fiscal year 2022 compared to fiscal year 2021" which is incorporated herein by reference.

Macroeconomic Trends

Much of the demand for the Company's products and solutions is driven by construction, facility expansion, retrofit and maintenance projects within the commercial, institutional, industrial, data center, governmental and residential sectors. Construction projects are heavily dependent on general economic conditions, localized demand for real estate and the availability of credit, public funding or other financing sources. Positive or negative fluctuations in construction, industrial facility expansion, retrofit activity, maintenance projects and other capital investments in buildings within the sectors that the Company serves, as well as availability of credit, financing or funding for such projects, could have a corresponding impact on the Company's financial condition, results of operations and cash flows. The economic conditions in China, specifically challenges in real estate, began negatively impacting the Building Solutions Asia Pacific segment in the fourth quarter of fiscal 2023. The Company expects continued softening in China in fiscal 2024.

As a result of the Company's global presence, a significant portion of its revenues and expenses is denominated in currencies other than the U.S. dollar. The Company is therefore subject to non-U.S. currency risks and non-U.S. exchange exposure. While the Company employs financial instruments to hedge some of its transactional foreign exchange exposure, these activities do not insulate it completely from those exposures. In addition, the currency exposure from the translation of non-U.S. dollar functional currency subsidiaries are not able to be hedged. Exchange rates can be volatile and a substantial weakening or strengthening of foreign currencies against the U.S. dollar could increase or reduce the Company's profit margin, respectively, and impact the comparability of results from period to period. During fiscal 2023, revenue and profits were adversely impacted due to the strengthening of the U.S. dollar against foreign currencies.

The Company continues to observe trends demonstrating increased interest and demand for its products and services that enable smart, safe, efficient and sustainable buildings. This demand is driven in part by government tax incentives, building performance standards and other regulations designed to limit emissions and combat climate change. In particular, legislative and regulatory initiatives such as the U.S. Climate Smart Buildings Initiative, U.S. Inflation Reduction Act and EU Energy Performance of Buildings Directive include provisions designed to fund and encourage investment in decarbonization and digital technologies for buildings. This demand is supplemented by an increase in commitments in both the public and private sectors to reduce emissions and/or achieve net zero emissions. The Company seeks to capitalize on these trends to drive growth by developing and delivering technologies and solutions to create smart, sustainable and healthy buildings. The Company is

investing in new digital and product capabilities, including its OpenBlue platform, to enable it to deliver sustainable, high-efficiency products and tailored services to enable customers to achieve their sustainability goals. The Company is leveraging its install base, together with data-driven products and services to offer outcome-based solutions to customers with a focus on generating accelerated growth in services and recurring revenue.

The Company has experienced, and could continue to experience, increased material cost inflation and component shortages, as well as disruptions and delays in its supply chain, as a result of global macroeconomic trends, including increased global demand, geopolitical and economic tensions, including the conflicts between Russia and Ukraine and Israel and Hamas, and labor shortages. Actions taken by the Company to mitigate supply chain disruptions and inflation, including expanding and redistributing its supplier network, supplier financing, price increases and productivity improvements, have generally been successful in offsetting some, but not all, of the impact of these trends. The collective impact of these trends has been favorable to revenue due to increased demand and price increases to offset inflation, while negatively impacting margins due to supply chain disruptions and cost pressures. However, during fiscal 2023, the Company observed improved margins as supply chain disruptions eased and higher priced backlog was converted to sales. Although the Company has experienced recent improvement in its supply chain, it could experience further disruptions, shortages and cost increases in the future, the effect of which will depend on the Company's ability to successfully mitigate and offset the impact of these events.

The extent to which the Company's results of operations and financial condition are impacted by these and other factors in the future will depend on developments that are highly uncertain and cannot be predicted. See Part I, Item 1A, of this Annual Report on Form 10-K for an additional discussion of risks.

Cybersecurity Incident

During the weekend of September 23, 2023, the Company experienced a cybersecurity incident impacting its internal information technology ("IT") infrastructure and applications. The incident was detected shortly after receiving reports of outages to certain of the Company's systems. Promptly after detecting the issue, the Company implemented its incident management and response plan and business continuity plans, including implementing remediation measures to mitigate the impact of the incident and restore affected systems and functions. The Company also engaged leading cybersecurity experts and other specialized consultants to assist in its investigation and remediation of the incident, as well as the restoration of impacted applications and systems. The Company's investigation and remediation efforts remain ongoing, including the analysis of data accessed, exfiltrated or otherwise impacted during the cybersecurity incident. Based on the information reviewed to date, the Company believes the unauthorized activity has been contained and has not observed evidence of any impact to its digital products, services and solutions, including OpenBlue and Metasys.

The cybersecurity incident consisted of unauthorized access, data exfiltration and deployment of ransomware by a third party to a portion of the Company's internal IT infrastructure. The incident caused disruptions and limitation of access to portions of the Company's business applications supporting aspects of the Company's operations and corporate functions, which disruptions and limitations continued into the early portion of the first quarter of fiscal 2024. To date, the Company has largely restored the impacted applications and systems.

Lost and deferred revenues and expenses related to the cybersecurity incident adversely impacted fiscal 2023 net income by approximately $30 million, or approximately $0.04 per diluted share. This was primarily attributable to order processing and logistics disruptions and delays, and expenses associated with the response to, and remediation of, the incident.

The Company has incurred and expects to incur additional expenses associated with the response to, and remediation of, the incident in fiscal 2024, most of which the Company expects to incur in the first half of the year. These expenses include third-party expenditures, including IT recovery and forensic experts and others performing professional services to investigate and remediate the incident, as well as incremental operating expenses incurred from the resulting disruption to the Company's business operations. Further, the cybersecurity incident caused disruptions to certain of the Company's billing systems, which is expected to negatively impact cash provided from continuing operations during the first quarter of fiscal 2024. The overall impact of the cybersecurity incident in fiscal 2024 is not expected to be material to net income, net of insurance recoveries, or cash flows from continuing operations; however, the timing of recognizing the insurance recoveries may differ from the timing of recognizing the associated expenses.

The Company maintains insurance covering certain losses associated with cybersecurity incidents. The Company did not recognize any insurance recoveries related to the cybersecurity incident in the three months ended September 30, 2023. The Company currently expects that a substantial portion of its direct costs incurred related to containing, investigating and remediating the incident, as well as business interruption losses, will be reimbursed through insurance recoveries.

Restructuring and Cost Optimization Initiatives

To better align its resources with its growth strategies and reduce the cost structure of its global operations in certain underlying markets, the Company commits to restructuring plans as necessary. In the third quarter of fiscal 2023, the Company began developing a restructuring plan with certain actions focused on continued scaling of Selling, general and administrative expenses ("SG&A") to its planned growth. The scope of the plan was substantially finalized in the fourth quarter of fiscal 2023 and certain actions related to this plan were committed and executed during the fourth quarter, primarily related to workforce reductions, and were recorded to restructuring and impairment costs in the consolidated statements of income. Additional restructuring charges are expected in subsequent quarters. The Company expects savings from the restructuring initiatives to be substantially offset by incremental ongoing operating costs and investments to grow the business. Restructuring charges incurred during the first and second quarters of fiscal 2023 were the result of other segment and Corporate-level restructuring plans.

FISCAL YEAR 2023 COMPARED TO FISCAL YEAR 2022

Net Sales

	Year Ended September 30,		
(in millions)	2023	2022	Change
Net sales	$ 26,793	$ 25,299	6 %

The increase in net sales was due to higher organic sales ($1,997 million) and the favorable net impact of acquisitions and divestitures ($113 million), partially offset by the unfavorable impact of foreign currency translation ($616 million). Excluding the impact of foreign currency translation and business acquisitions and divestitures, consolidated net sales increased 8% over the prior year, attributable to increased pricing in response to inflation pressures. Refer to the "Segment Analysis" below within Item 7 for a discussion of net sales by segment.

Cost of Sales / Gross Profit

	Year Ended September 30,		
(in millions)	2023	2022	Change
Cost of sales	$ 17,822	$ 16,956	5 %
Gross profit	8,971	8,343	8 %
% of sales	33.5 %	33.0 %	

Cost of sales and gross profit both increased and gross profit as a percentage of sales increased by 50 basis points. Gross profit increased due to organic sales growth and favorable price/cost, partially offset by the unfavorable impact of foreign currency translation ($192 million) and the unfavorable year-over-year impact of net pension mark-to-market adjustments ($42 million). Gross profit as a percentage of sales increased primarily due to favorable price/cost. Refer to the "Segment Analysis" below within Item 7 for a discussion of segment earnings before interest, taxes and amortization ("EBITA").

Selling, General and Administrative Expenses

	Year Ended September 30,		
(in millions)	2023	2022	Change
Selling, general and administrative expenses	$ 6,181	$ 5,945	4 %
% of sales	23.1 %	23.5 %	

Selling, general and administrative expenses ("SG&A") increased by $236 million, and SG&A as a percentage of sales improved by 40 basis points. The increase in SG&A was primarily due to certain investments to support growth, one-time transaction and separation costs, the unfavorable year-over-year impact of net mark-to-market adjustments ($84 million) and a loss associated with a fire at a leased warehouse facility ($40 million), partially offset by non-recurring environmental remediation charges in the prior year ($255 million) and favorable foreign currency translation ($118 million). Refer to the "Segment Analysis" below within Item 7 for a discussion of segment EBITA.

Restructuring and Impairment Costs

(in millions)	Year Ended September 30, 2023	2022	Change
Restructuring and impairment costs	$ 1,064	$ 721	48 %

Restructuring and impairment costs in fiscal 2023 includes $498 million of impairment charges related to businesses classified or previously classified as held for sale, $276 million in severance and other charges resulting from restructuring initiatives, $184 million of goodwill impairment charges related to the Silent-Aire reporting unit, and $106 million of impairment charges for various long-lived assets.

Restructuring and impairment costs in fiscal 2022 includes $359 million of impairment charges related to the North America and Global Retail business which was previously held for sale, $182 million in severance and other charges resulting from restructure initiatives, $105 million of impairments for a business and assets previously held for sale, and $75 million of goodwill impairment charges related to the Silent-Aire reporting unit.

Refer to "Note 3, "Assets and Liabilities Held for Sale & Discontinued Operations," Note 7, "Property, Plant and Equipment," Note 8, "Goodwill and Other Intangible Assets," and Note 17, "Restructuring and Related Costs," of the notes to consolidated financial statements for further disclosure related to the Company's restructuring plans and impairment costs.

Net Financing Charges

	Year Ended September 30, 2023	2022	Change
Interest expense, net of capitalized interest costs	$ 307	$ 225	36 %
Other financing charges	52	27	93 %
Gain on debt extinguishment	(25)	—	*
Interest income	(18)	(6)	*
Net foreign exchange results for financing activities	(35)	(33)	6 %
Net financing charges	$ 281	$ 213	32 %

* Measure not meaningful

Refer to Note 10, "Debt and Financing Arrangements," of the notes to consolidated financial statements for further disclosure related to the Company's debt.

Equity Income

(in millions)	Year Ended September 30, 2023	2022	Change
Equity income	$ 265	$ 246	8 %

The increase in equity income was primarily due to higher income at certain partially-owned affiliates of the Johnson Controls - Hitachi joint venture. Refer to the "Segment Analysis" below within Item 7 for a discussion of segment EBITA.

Income Tax Provision

(in millions)	Year Ended September 30, 2023	2022	Change
Income tax (benefit)	$ (323)	$ (13)	*
Effective tax rate	(19)%	(1)%	

* Measure not meaningful

The statutory tax rate in Ireland of 12.5% is being used as a comparison since the Company is domiciled in Ireland.

For fiscal 2023, the effective tax rate for continuing operations was (19)% and was lower than the statutory tax rate primarily due to the favorable tax impacts of intellectual property tax adjustments, tax reserve adjustments as the result of tax audit resolutions and remeasurements, valuation allowance adjustments and the benefits of continuing global tax planning initiatives, partially offset by the unfavorable impact of impairment and restructuring charges.

For fiscal 2022, the effective tax rate for continuing operations was (1)% and was lower than the statutory tax rate primarily due to favorable impact of tax reserve adjustments as the result of expired statute of limitations for certain tax years and the benefits of continuing global tax planning initiatives, partially offset by the unfavorable impact of impairment and restructuring charges, valuation allowance adjustments, and the establishment of a deferred tax liability on the outside basis difference of the Company's investment in certain subsidiaries as a result of the planned divestitures and tax rate differentials.

The fiscal 2023 effective tax rate was lower than fiscal 2022 primarily due to tax reserve adjustments as the result of tax audit resolutions, valuation allowance adjustments and the benefits of continuing global tax planning initiatives, partially offset by the impact of impairment and restructuring charges. Refer to Note 18, "Income Taxes," of the notes to consolidated financial statements for further details.

The U.S. enacted the Inflation Reduction Act of 2022 (“IRA”) in August 2022, which, among other sections, creates a new book minimum tax of at least 15% of consolidated GAAP pre-tax income for corporations with average book income in excess of $1 billion. The book minimum tax will first apply to the Company in fiscal 2024. The Company does not expect the IRA to have a material impact on its effective tax rate, however, it is possible that the U.S. Congress could advance other tax legislation proposals in the future that could have a material impact on the Company's tax rate. In addition, in October 2021, the Organization for Economic Co-operation and Development ("OECD")/G20 inclusive framework on Base Erosion and Profit Shifting (the Inclusive Framework) published a statement updating and finalizing the key components of a two-pillar plan on global tax reform which has now been agreed upon by the majority of OECD members. Pillar One allows countries to reallocate a portion of residual profits earned by multinational enterprises ("MNE"), with an annual global revenue exceeding €20 billion and a profit margin over 10%, to other market jurisdictions. The adoption of Pillar One and its potential effective date remain uncertain. Pillar Two requires MNEs with an annual global revenue exceeding €750 million to pay a global minimum tax of 15%. On December 15, 2022, the Council of the EU formally adopted Directive (EU) 2022/2523 (the “Pillar Two Directive”) to achieve a coordinated implementation of Pillar Two in EU Member States consistent with EU law. On October 19, 2023, the Irish Minster of Finance published Irish Finance (No.2) Bill 2023, which includes implementation of the 15% Pillar Two global minimum tax. The bill, subject to amendment during the legislative process, is expected to be signed into law by late December. The Pillar Two legislation is anticipated to be effective for the Company with the fiscal year beginning October 1, 2024. The Company is continuing to evaluate the potential impact on future periods of the Pillar Two Framework, pending legislative adoption by individual countries, as such changes could result in an increase in its effective tax rate.

Income Attributable to Noncontrolling Interests

	Year Ended September 30,		
(in millions)	2023	2022	Change
Income attributable to noncontrolling interests	$ 184	$ 191	-4 %

The decrease in income attributable to noncontrolling interests was primarily due to lower net income at certain partially-owned affiliates within the Global Products segment.

Net Income Attributable to Johnson Controls

	Year Ended September 30,		
(in millions)	2023	2022	Change
Net income attributable to Johnson Controls	$ 1,849	$ 1,532	21 %

The increase in net income attributable to Johnson Controls was primarily due to higher gross profit and higher income tax benefits, partially offset by higher restructuring and impairment costs and higher SG&A. Diluted earnings per share attributable to Johnson Controls was $2.69 for the year ended September 30, 2023 compared to $2.19 for the year ended September 30, 2022.

Comprehensive Income Attributable to Johnson Controls

(in millions)	Year Ended September 30, 2023	2022	Change
Comprehensive income attributable to Johnson Controls	$ 1,805	$ 1,055	71 %

The increase in comprehensive income attributable to Johnson Controls was due to an increase in other comprehensive income attributable to Johnson Controls ($433 million) resulting primarily from reductions in foreign currency translation expense and an increase in net income attributable to Johnson Controls ($317 million).

SEGMENT ANALYSIS

Management evaluates the performance of its business units based primarily on segment EBITA, which represents income from continuing operations before income taxes and noncontrolling interests, excluding general corporate expenses, intangible asset amortization, net financing charges, restructuring and impairment costs, and net mark-to-market adjustments related to pension and postretirement plans and restricted asbestos investments.

(in millions)	Net Sales for the Year Ended September 30, 2023	2022	Change	Segment EBITA for the Year Ended September 30, 2023	2022	Change
Building Solutions North America	$ 10,330	$ 9,367	10 %	$ 1,394	$ 1,122	24 %
Building Solutions EMEA/LA	4,096	3,845	7 %	316	358	-12 %
Building Solutions Asia Pacific	2,746	2,714	1 %	343	332	3 %
Global Products	9,621	9,373	3 %	1,965	1,594	23 %
	$ 26,793	$ 25,299	6 %	$ 4,018	$ 3,406	18 %

Net Sales

- The increase in Building Solutions North America was due to organic growth, including higher prices ($979 million) and incremental sales related to business acquisitions ($29 million), partially offset by the unfavorable impact of foreign currency translation ($45 million). Excluding the impacts of business acquisitions and foreign currency translation, sales growth was led by growth in HVAC & Controls and Fire & Security.

- The increase in Building Solutions EMEA/LA was due to organic growth, including higher prices ($324 million) and the net impact of business acquisitions and divestitures ($29 million), partially offset by the unfavorable impact of foreign currency translation ($102 million). Excluding the impacts of foreign currency translation and business acquisitions and divestitures, sales growth was led by growth in Fire & Security and HVAC & Controls.

- The increase in Building Solutions Asia Pacific was due to organic growth, including higher prices ($182 million) and the net impact of business acquisitions and divestitures ($19 million), partially offset by the unfavorable impact of foreign currency translation ($169 million). The economic conditions in China, specifically challenges in real estate, began negatively impacting the Building Solutions Asia Pacific segment in the fourth quarter of fiscal 2023, but had an insignificant impact on results for the full year. Excluding the impacts of foreign currency translation and business acquisitions and divestitures, sales growth was led by continued demand for HVAC & Controls.

- The increase in Global Products was due to the net impact of higher prices and lower volumes ($512 million) and incremental sales related to business acquisitions ($36 million), partially offset by the unfavorable impact of foreign currency translation ($300 million). Excluding the impacts of foreign currency translation and business acquisitions, sales growth was driven by strong price realization and growth in Commercial HVAC and Industrial Refrigeration products.

Segment EBITA

- The increase in Building Solutions North America was primarily due to favorable price/cost, volume leverage and productivity savings, partially offset by unfavorable project mix.

- The decrease in Building Solutions EMEA/LA reflects the unfavorable impact of foreign currency translation ($13 million) and higher expenses, partially offset by favorable price/cost.

- The increase in Building Solutions Asia Pacific was primarily due to favorable price/cost and productivity savings, partially offset by the unfavorable impact of foreign currency translation ($25 million).

- The increase in Global Products was primarily due to favorable price/cost and productivity savings, partially offset by unfavorable mix, lower gross margin due to lower manufacturing absorption, an uninsured loss associated with a fire at a leased warehouse facility and the unfavorable impact of foreign currency translation ($42 million).

LIQUIDITY AND CAPITAL RESOURCES

Working Capital

	September 30,		
(in millions)	2023	2022	Change
Current assets	$ 10,737	$ 11,685	
Current liabilities	(11,084)	(11,239)	
	(347)	446	*
Less: Cash and cash equivalents	(835)	(2,031)	
Add: Short-term debt	385	669	
Add: Current portion of long-term debt	645	865	
Working capital (as defined)	$ (152)	$ (51)	*
Accounts receivable - net	$ 6,006	$ 5,727	5 %
Inventories	2,776	2,665	4 %
Accounts payable	4,268	4,368	-2 %

* Measure not meaningful

- The Company defines working capital as current assets less current liabilities, excluding cash and cash equivalents, short-term debt, the current portion of long-term debt, and current assets and liabilities held for sale (when applicable). Management believes that this measure of working capital, which excludes financing-related items and businesses to be divested, provides a more useful measurement of the Company's operating performance.

- The decrease in working capital at September 30, 2023 as compared to September 30, 2022, was primarily due to an increase in deferred revenue and lower income tax assets, partially offset by an increase in accounts receivable due to increased sales and timing of collections.

- Days sales in accounts receivable were 50 at September 30, 2023, comparable to 51 at September 30, 2022. There has been no significant adverse change in the level of overdue receivables or significant changes in revenue recognition methods.

- The Company's inventory turns for the year ended September 30, 2023 were slightly lower than the comparable period ended September 30, 2022.

- Days in accounts payable were 84 days at September 30, 2023, down slightly from 88 days at September 30, 2022. The decrease was primarily due to timing of payments.

Cash Flows From Continuing Operations

(in millions)	Year Ended September 30, 2023	2022
Cash provided by operating activities	$ 2,221	$ 1,990
Cash used by investing activities	(1,184)	(693)
Cash used by financing activities	(2,174)	(516)

- The increase in cash provided by operating activities reflects higher net income and the favorable impact of inventory, income tax and accounts receivable activity, which was partially offset by the timing of accounts payable and accrued liabilities payments.
- The increase in cash used by investing activities was primarily due to the FM:Systems acquisition. Refer to Note 2, "Acquisitions and Divestitures," of the notes to the consolidated financial statements for further disclosure related to the FM:Systems and other acquisitions.
- The decrease in cash provided by financing activities was primarily due to changes in short- and long-term borrowing activity. The net impact of debt proceeds and repayments used cash of $433 million in fiscal 2023 and generated cash of $2.0 billion in fiscal 2022. This increase in cash used was partially offset by lower stock repurchases.

Capitalization

(in millions)	September 30, 2023	2022	Change
Short-term debt	$ 385	$ 669	
Current portion of long-term debt	645	865	
Long-term debt	7,818	7,426	
Total debt	8,848	8,960	-1 %
Less: Cash and cash equivalents	835	2,031	
Total net debt	8,013	6,929	16 %
Shareholders' equity attributable to Johnson Controls	16,545	16,268	2 %
Total capitalization	$ 24,558	$ 23,197	6 %
Total net debt as a % of total capitalization	32.6 %	29.9 %	

- Net debt and net debt as a percentage of total capitalization are non-GAAP financial measures. The Company believes the percentage of total net debt to total capitalization is useful to understanding the Company's financial condition as it provides a view of the extent to which the Company relies on external debt financing for its funding and is a measure of risk to its shareholders.
- The Company's material cash requirements primarily consist of working capital requirements, repayments of long-term debt and related interest, operating leases, dividends, capital expenditures, potential acquisitions and share repurchases.
- Refer to Note 10, "Debt and Financing Arrangements," of the notes to consolidated financial statements for additional information on debt obligations and maturities. Interest payable on long-term debt is $283 million in the twelve months following September 30, 2023 and $3.6 billion thereafter.
- Refer to Note 9, "Leases," of the notes to consolidated financial statements for additional information on lease obligations and maturities.
- As of September 30, 2023, purchase obligations are $1.8 billion payable in the next twelve months and $240 million payable thereafter. These purchase obligations represent commitments under enforceable and legally binding agreements, and do not represent all future expected purchases.
- As of September 30, 2023, the Company expects to contribute $26 million and $203 million to the global pension and postretirement plans in the next twelve months and thereafter, respectively.

- As of September 30, 2023, approximately $3.0 billion remains available under the Company's share repurchase authorization, which does not have an expiration date and may be amended or terminated by the Board of Directors at any time without prior notice. The Company expects to repurchase outstanding shares from time to time depending on market conditions, alternate uses of capital, liquidity and economic environment.

- The Company declared dividends of $1.45 per share in fiscal 2023 and intends to continue paying quarterly dividends in fiscal 2024.

- The Company believes its capital resources and liquidity position, including cash and cash equivalents of $835 million at September 30, 2023, are adequate to fund operations and meet its obligations for the foreseeable future. The Company expects requirements for working capital, capital expenditures, dividends, minimum pension contributions, debt maturities and any potential acquisitions or stock repurchases in fiscal 2024 will be funded from operations, supplemented by short- and long-term borrowings, if required.

  – The Company manages its short-term debt position in the U.S. and euro commercial paper markets and bank loan markets. Commercial paper outstanding was $200 million as of September 30, 2023 and $172 million as of September 30, 2022.

  – The Company maintains a shelf registration statement with the SEC under which it may issue additional debt securities, ordinary shares, preferred shares, depository shares, warrants purchase contracts and units that may be offered in one or more offerings on terms to be determined at the time of the offering. The Company anticipates that the proceeds of any offering would be used for general corporate purposes, including repayment of indebtedness, acquisitions, additions to working capital, repurchases of ordinary shares, dividends, capital expenditures and investments in the Company's subsidiaries.

  – The Company has the ability to draw on its syndicated $2.5 billion committed revolving credit facility, which was scheduled to expire in December 2024, and a syndicated $500 million committed revolving credit facility, which expired in November 2023. Both credit facilities were renewed on December 11, 2023. The $2.5 billion facility is now scheduled to expire in December 2028 and the $500 million facility is now scheduled to expire in December 2024. There were no draws on the facilities as of September 30, 2023.

- The Company's ability to access the global capital markets and the related cost of financing is dependent upon, among other factors, the Company's credit ratings. As of September 30, 2023, the Company's credit ratings and outlook were as follows:

Rating Agency	Short-Term Rating	Long-Term Rating	Outlook
S&P	A-2	BBB+	Stable
Moody's	P-2	Baa2	Positive

  The security ratings set forth above are issued by unaffiliated third party rating agencies and are not a recommendation to buy, sell or hold securities. The ratings may be subject to revision or withdrawal by the assigning rating organization at any time.

- The Company entered into the following debt transactions in fiscal 2023:

  – Repaid $1.6 billion of debt including the following:
    - €200 million term loan with an interest rate of EURIBOR plus 0.5%
    - $32 million Senior Notes due 2023 with an interest rate of 4.625%
    - €150 million term loan with an interest rate of 0.0%
    - €135 million term loan with an interest rate of EURIBOR plus 0.5%
    - €846 million Senior Notes due 2023 with an interest rate of 1.0%
    - Tendered $105 million of its Notes due 2045 with an interest rate of 5.125%

  – Issued $1.2 billion of debt including the following:
    - €150 million term loan with an interest rate of EURIBOR plus 0.7% which is due in April 2024
    - €150 million term loan with an interest rate of EURIBOR plus 0.4% which is due March 2024
    - Together with its wholly owned subsidiary, Tyco Fire & Security Finance S.C.A., co-issued €800 million in 4.25% Senior Notes due May 2035

- Financial covenants in the Company's revolving credit facilities require a minimum consolidated shareholders' equity attributable to Johnson Controls of at least $3.5 billion at all times. The revolving credit facility also limits the amount of debt secured by liens that may be incurred to a maximum aggregated amount of 10% of consolidated shareholders' equity attributable to Johnson Controls for liens and pledges. For purposes of calculating these covenants, consolidated shareholders' equity attributable to Johnson Controls is calculated without giving effect to (i) the application of ASC 715-60, "Defined Benefit Plans - Other Postretirement," or (ii) the cumulative foreign currency translation adjustment. As of September 30, 2023, the Company was in compliance with all financial covenants set forth in its credit agreements and the indentures governing its outstanding notes, and expects to remain in compliance for the foreseeable future. None of the Company's debt agreements limit access to stated borrowing levels or require accelerated repayment in the event of a decrease in the Company's credit rating.

- The Company earns a significant amount of its income outside of the parent company. Outside basis differences in these subsidiaries are deemed to be permanently reinvested except in limited circumstances. The Company currently does not intend nor foresee a need to repatriate undistributed earnings included in the outside basis differences other than in tax efficient manners. The Company's intent is to reduce basis differences only when it would be tax efficient. The Company expects existing U.S. cash and liquidity to continue to be sufficient to fund the Company's U.S. operating activities and cash commitments for investing and financing activities for at least the next twelve months and thereafter for the foreseeable future. In the U.S., should the Company require more capital than is generated by its operations, the Company could elect to raise capital in the U.S. through debt or equity issuances. The Company has borrowed funds in the U.S. and continues to have the ability to borrow funds in the U.S. at reasonable interest rates. In addition, the Company expects existing non-U.S. cash, cash equivalents, short-term investments and cash flows from operations to continue to be sufficient to fund the Company's non-U.S. operating activities and cash commitments for investing activities, such as material capital expenditures, for at least the next twelve months and thereafter for the foreseeable future. Should the Company require more capital at the Luxembourg and Ireland holding and financing entities, other than amounts that can be provided in tax efficient methods, the Company could also elect to raise capital through debt or equity issuances. These alternatives could result in increased interest expense or other dilution of the Company's earnings.

- The Company may from time to time purchase its outstanding debt through open market purchases, privately negotiated transactions or otherwise. Purchases or retirement of debt, if any, will depend on prevailing market conditions, liquidity requirements, contractual restrictions and other factors. The amounts involved may be material.

Co-Issued Securities: Summarized Financial Information

The following information is provided in compliance with Rule 13-01 of Regulation S-X under the Securities Exchange Act of 1934 with respect to the following unsecured, unsubordinated senior notes (collectively, ("the Notes) which were issued by Johnson Controls International plc ("Parent Company") and Tyco Fire & Security Finance S.C.A. ("TFSCA"):

- €500 million aggregate principal amount of 0.375% Senior Notes due 2027
- €600 million aggregate principal amount of 3.000% Senior Notes due 2028
- $625 million aggregate principal amount of 1.750% Senior Notes due 2030
- $500 million aggregate principal amount of 2.000% Sustainability-Linked Senior Notes due 2031
- €500 million aggregate principal amount of 1.000% Senior Notes due 2032
- $400 million aggregate principal amount of 4.900% Senior Notes due 2032
- €800 million aggregate principal amount of 4.25% Senior Notes due 2035

TFSCA is a corporate partnership limited by shares (*société en commandite par actions*) incorporated and organized under the laws of the Grand Duchy of Luxembourg ("Luxembourg") and is a wholly-owned consolidated subsidiary of the Company that is 99.924% owned directly by the Parent Company and 0.076% owned by TFSCA's sole general partner and manager, Tyco Fire & Security S.à r.l., which is itself wholly-owned by the Company. The Parent Company is incorporated and organized under the laws of Ireland. TFSCA is incorporated and organized under the laws of Luxembourg. The bankruptcy, insolvency, administrative, debtor relief and other laws of Luxembourg or Ireland, as applicable, may be materially different from, or in conflict with, those of the United States, including in the areas of rights of creditors, priority of governmental and other creditors, ability to obtain post-petition interest and duration of the proceeding. The application of these laws, or any conflict among them, could adversely affect noteholders' ability to enforce their rights under the Notes in those jurisdictions or limit any amounts that they may receive.

The tables below set forth summarized financial information of the Parent Company and TFSCA (collectively, the “Obligor Group”) on a combined basis after intercompany transactions have been eliminated, including adjustments to remove the receivable and payable balances, investment in, and equity in earnings from, those subsidiaries of the Parent Company other than TFSCA (collectively, the "Non-Obligor Subsidiaries").

The following table presents summarized income statement information for the year ended September 30, 2023 (in millions):

	Obligor Group	Non-Obligor Subsidiaries
Net sales	$ —	$ —
Gross profit	—	—
Loss from continuing operations	(458)	(139)
Net loss	(458)	(139)
Income attributable to noncontrolling interests	—	—
Net loss attributable to the entity	(458)	(139)

The following table presents summarized balance sheet information as of September 30, 2023 (in millions):

	Obligor Group	Non-Obligor Subsidiaries
Current assets	$ 26	$ 5,608
Noncurrent assets	270	1,882
Current liabilities	3,652	9,289
Noncurrent liabilities	7,585	3,462
Noncontrolling interests	—	—

The same accounting policies as described in Note 1, "Summary of Significant Accounting Policies," of the notes to consolidated financial statements are used by the Parent Company and each of its subsidiaries in connection with the summarized financial information presented above.

CRITICAL ACCOUNTING ESTIMATES

The Company prepares its consolidated financial statements in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP"). This requires management to make estimates and assumptions that affect reported amounts and related disclosures. Actual results could differ from those estimates. The following estimates are considered by management to be the most critical to the understanding of the Company's consolidated financial statements as they require significant judgments that could materially impact the Company’s results of operations, financial position and cash flows.

Revenue Recognition

The Company recognizes revenue from certain long-term contracts on an over time basis, with progress towards completion measured using a cost-to-cost input method based on the relationship between actual costs incurred and total estimated costs at completion. Total estimated costs at completion are based primarily on estimated purchase contract terms, historical performance trends and other economic projections. Factors that may result in a change to these estimates include unforeseen engineering problems, construction delays, cost inflation, the performance of subcontractors and major material suppliers, and weather conditions. As a result, changes to the original estimates may be required during the life of the contract. Such estimates are reviewed monthly and any adjustments to the measure of completion are recognized as adjustments to sales and gross profit using the cumulative catch-up method. Estimated losses are recorded when identified.

For agreements with multiple performance obligations, the Company allocates the transaction price of the contract to each performance obligation using the best estimate of the relative standalone selling price of each distinct good or service in the contract. In order to estimate relative standalone selling price, market data and transfer price studies are utilized. If the standalone selling price is not directly observable, the Company estimates the standalone selling price using an adjusted market assessment approach or expected cost plus margin approach.

The Company assesses variable consideration that may affect the total transaction price, including discounts, rebates, refunds, credits or other similar sources of variable consideration, when determining the transaction price of each contract. The Company includes variable consideration in the estimated transaction price when it is probable that significant reversal of revenue recognized would not occur when the uncertainty associated with variable consideration is subsequently resolved. These estimates are based on the amount of consideration that the Company expects to be entitled to.

Goodwill and Indefinite-Lived Intangible Assets

The Company performs impairment reviews for its reporting units, which have been determined to be the Company's reportable segments or one level below the reportable segments in certain instances, using a fair value method based on management's judgments and assumptions or third party valuations. The fair value of a reporting unit refers to the price that would be received to sell the unit as a whole in an orderly transaction between market participants at the measurement date. In estimating the fair value, the Company uses the multiples of earnings approach based on the average of published multiples of earnings of comparable entities with similar operations and economic characteristics and applies the multiples to the Company's average of historical and future financial results for each reporting unit. In certain instances, the Company uses discounted cash flow analyses or estimated sales price to further support the fair value estimates. The assumptions included in the impairment tests require judgment, and changes to these inputs could impact the results of the calculations. The key assumptions used in the impairment tests were management's projections of future cash flows, weighted-average cost of capital and long-term growth rates. Although the Company's cash flow forecasts are based on assumptions that are considered reasonable by management and consistent with the plans and estimates management is using to operate the underlying businesses, there are significant judgments in determining the expected future cash flows attributable to a reporting unit.

Management completed its fiscal 2023 annual impairment test as of July 31. The fair value of all reporting units substantially exceeded their carrying values, with the exception of one reporting unit with $455 million of goodwill whose fair value in excess of its carrying value was approximately 10%. For this reporting unit, a 1% increase in the discount rate, or a 1.5% decrease in the revenue growth rates, would cause the fair value to be less than the carrying value. While no impairment was recorded, it is possible that future changes in circumstances could result in a non-cash impairment charge.

Indefinite-lived intangible assets are also subject to at least annual impairment testing in the fourth fiscal quarter or as events occur or circumstances change that indicate the assets may be impaired. Indefinite-lived intangible assets primarily consist of trademarks and trade names and are tested for impairment using a relief-from-royalty method. A considerable amount of management judgment and assumptions are required in performing the impairment tests. The key assumptions used in the impairment tests were long-term revenue growth projections, weighted-average cost of capital, the royalty rate and general industry, market and macro-economic conditions. The assumptions included in the impairment tests require judgment, and changes to these inputs could impact the results of the calculations. The key assumptions used in the impairment tests were management's projections of future cash flows, weighted-average cost of capital and long-term growth rates. Although the Company's cash flow forecasts are based on assumptions that are considered reasonable by management and consistent with the plans and estimates management is using to operate the underlying businesses, there are significant judgments in determining the expected future cash flows attributable to a reporting unit.

During fiscal 2023, the Company impaired $184 million of goodwill in its Silent-Aire reporting unit.

The Company continuously monitors for events and circumstances that could negatively impact the key assumptions in determining fair value. While the Company believes the judgments and assumptions used in the goodwill and indefinite-lived intangible impairment tests are reasonable, different assumptions or changes in general industry, market and macro-economic conditions could change the estimated fair values and, therefore, future impairment charges could be required, which could be material to the consolidated financial statements.

Refer to Note 8, "Goodwill and Other Intangible Assets," of the notes to consolidated financial statements for information regarding the results of goodwill and indefinite-lived intangible assets impairment testing performed in fiscal 2023 and 2022.

Pension Plans

The Company provides a range of benefits to its employees and retired employees, including pensions. Plan assets and obligations are measured annually, or more frequently if there is a significant remeasurement event, based on the Company's measurement date utilizing various actuarial assumptions such as discount rates, assumed rates of return and compensation increases as of that date. The Company reviews its actuarial assumptions on an annual basis and makes modifications to the assumptions based on current rates and trends when appropriate.

The Company utilizes a mark-to-market approach for recognizing pension expenses, including measuring the market related value of plan assets at fair value and recognizing actuarial gains and losses in the fourth quarter of each fiscal year or at the date of a remeasurement event. Refer to Note 16, "Retirement Plans," of the notes to consolidated financial statements for disclosure of the Company's pension plans.

U.S. GAAP requires that companies recognize in the statement of financial position a liability for plans that are underfunded or unfunded, or an asset for plans that are over funded. U.S. GAAP also requires that companies measure the benefit obligations and fair value of plan assets that determine a benefit plan's funded status as of the date of the employer's fiscal year end.

The Company considers the expected benefit payments on a plan-by-plan basis when setting assumed discount rates. As a result, the Company uses different discount rates for each plan depending on the plan jurisdiction, the demographics of participants and the expected timing of benefit payments. For the U.S. pension plans, the Company uses a discount rate provided by an independent third party calculated based on an appropriate mix of high quality bonds. For the non-U.S. pension plans, the Company consistently uses the relevant country specific benchmark indices for determining the various discount rates. The Company's weighted average discount rate on U.S. pension plans was 5.48% and 5.08% at September 30, 2023 and 2022, respectively. The Company's weighted average discount rate on non-U.S. pension plans was 4.72% and 4.36% at September 30, 2023 and 2022, respectively.

In estimating the expected return on plan assets, the Company considers the historical returns on plan assets, adjusted for forward-looking considerations, inflation assumptions and the impact of the active management of the plans' invested assets. Reflecting the relatively long-term nature of the plans' obligations, approximately 14% of the plans' assets are invested in equity securities and 63% in fixed income securities, with the remainder primarily invested in alternative investments. The expected long-term return on U.S. pension plan assets used to determine net periodic benefit cost was 8.25% and 7.00% for the years ended September 30, 2023 and 2022, respectively. The weighted average expected long-term return on non-U.S. pension plan assets was 5.02% and 3.70% for the years ended September 30, 2023 and 2022, respectively. The actual rate of return on both U.S and non-U.S pension plans was below expected rates in both fiscal 2023 and fiscal 2022.

For fiscal 2024, the Company believes the long-term rate of return will approximate 8.50% for U.S. pension plans and 5.26% for non-U.S. pension plans. Any differences between actual investment results and the expected long-term asset returns will be reflected in net periodic benefit costs in the fourth quarter of each fiscal year or at the date of a significant remeasurement event. If actual returns on plan assets are less than the Company's expectations, additional contributions may be required.

In fiscal 2023, total employer contributions to the defined benefit pension plans were $55 million, none of which were voluntary contributions made by the Company. The Company expects to contribute approximately $24 million in cash to its defined benefit pension plans in fiscal 2024.

Based on information provided by its independent actuaries and other relevant sources, the Company believes that the assumptions used are reasonable, however, changes in these assumptions could impact the Company's financial position, results of operations or cash flows.

Mark-to-market adjustments represent actuarial gains (losses) arising from changes in actuarial assumptions and actuarial experiences different from those assumed that are used to value the plan assets and the benefit obligations. The primary factors contributing to actuarial gains (losses) are changes in the discount rate used to value benefit obligations and the difference between expected and actual returns on plan assets. Mark-to-market adjustments are highly volatile and are difficult to forecast. Refer to Note 16, "Retirement Plans," of the notes to consolidated financial statements for further details.

The following chart illustrates the estimated increases (decreases) in projected benefit obligation and future ongoing pension expense, which excludes any potential mark-to-market adjustments, assuming an increase of 25 basis points in the key assumptions for the Company's pension plans (in millions):

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
	Change in Projected Benefit Obligation	Change in Ongoing Pension Expense	Change in Projected Benefit Obligation	Change in Ongoing Pension Expense
Discount rate	$ (26)	$ 2	$ (33)	$ 1
Expected return on plan assets	—	(4)	—	(3)

Loss Contingencies

Accruals are recorded for various contingencies including legal proceedings, environmental matters, self-insurance and other claims that arise in the normal course of business. The accruals are based on judgment, the probability of losses and, where applicable, the consideration of opinions of internal and/or external legal counsel and actuarial determined estimates. Additionally, the Company records receivables from third party insurers when recovery has been determined to be probable.

The Company is subject to laws and regulations relating to protecting the environment. It is difficult to estimate the Company's ultimate level of liability at many remediation sites due to the large number of other parties that may be involved, the complexity of determining the relative liability among those parties, the uncertainty as to the nature and scope of the investigations and remediation to be conducted, the uncertainty in the application of law and risk assessment, the various choices and costs associated with diverse technologies that may be used in corrective actions at the sites, and the often quite lengthy periods over which eventual remediation may occur. It is possible that technological, regulatory or enforcement developments, the results of additional environmental studies or other factors could change the Company's expectations with respect to future charges and cash outlays, and such changes could be material to the Company's future results of operations, financial condition or cash flows. Nevertheless, the Company does not currently believe that any claims, penalties or costs in addition to the amounts accrued will have a material adverse effect on the Company's financial position, results of operations or cash flows. The Company provides for expenses associated with environmental remediation obligations when such amounts are probable and can be reasonably estimated. Refer to Note 21, "Commitments and Contingencies," of the notes to consolidated financial statements.

The Company records liabilities for its workers' compensation, product, general and auto liabilities. The determination of these liabilities and related expenses is dependent on claims experience. For most of these liabilities, claims incurred but not yet reported are estimated by utilizing actuarial valuations based upon historical claims experience. The Company records receivables from third party insurers when recovery has been determined to be probable. The Company maintains captive insurance companies to manage its insurable liabilities.

Asbestos-Related Contingencies and Insurance Receivables

The Company and certain of its subsidiaries along with numerous other companies are named as defendants in personal injury lawsuits based on alleged exposure to asbestos-containing materials. The Company's estimate of the liability and corresponding insurance recovery for pending and future claims and defense costs is based on the Company's historical claim experience, and estimates of the number and resolution cost of potential future claims that may be filed and is discounted to present value from 2068 (which is the Company's reasonable best estimate of the actuarial determined time period through which asbestos-related claims will be filed against Company affiliates). Estimated asbestos-related defense costs are included in the asbestos liability. The Company's legal strategy for resolving claims also impacts these estimates. The Company considers various trends and developments in evaluating the period of time (the look-back period) over which historical claim and settlement experience is used to estimate and value claims reasonably projected to be made through 2068. At least annually, the Company assesses the sufficiency of its estimated liability for pending and future claims and defense costs by evaluating actual experience regarding claims filed, settled and dismissed, and amounts paid in settlements. In addition to claims and settlement experience, the Company considers additional quantitative and qualitative factors such as changes in legislation, the legal environment, and the Company's defense strategy. The Company also evaluates the recoverability of its insurance receivable on an annual basis. The Company evaluates all of these factors and determines whether a change in the estimate of its liability for pending and future claims and defense costs or insurance receivable is warranted.

In connection with the recognition of liabilities for asbestos-related matters, the Company records asbestos-related insurance recoveries that are probable. The Company's estimate of asbestos-related insurance recoveries represents estimated amounts due to the Company for previously paid and settled claims and the probable reimbursements relating to its estimated liability for pending and future claims discounted to present value. In determining the amount of insurance recoverable, the Company considers available insurance, allocation methodologies, solvency and creditworthiness of the insurers. Refer to Note 21, "Commitments and Contingencies," of the notes to consolidated financial statements for a discussion on management's judgments applied in the recognition and measurement of asbestos-related assets and liabilities.

Income Taxes

Deferred tax assets and liabilities are recognized for the expected future tax consequences attributable to differences between financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and other loss carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The Company records a valuation

allowance that primarily represents non-U.S. operating and other loss carryforwards for which realization is uncertain. Management judgment is required in determining the Company's provision for income taxes, deferred tax assets and liabilities, and the valuation allowance recorded against the Company's net deferred tax assets.

The Company reviews the realizability of its deferred tax assets and related valuation allowances on a quarterly basis, or whenever events or changes in circumstances indicate that a review is required. In determining the requirement for a valuation allowance, the historical and projected financial results of the legal entity or consolidated group recording the net deferred tax asset are considered, along with any other positive or negative evidence. Since future financial results may differ from previous estimates, periodic adjustments to the Company's valuation allowances may be necessary. At September 30, 2023, the Company had a valuation allowance of $6.4 billion for continuing operations, of which $5.6 billion relates to net operating loss carryforwards primarily in Brazil, France, Germany, Ireland, Luxembourg, Mexico, the United Kingdom, and the U.S. for which sustainable taxable income has not been demonstrated; and $0.8 billion for other deferred tax assets.

The Company's federal income tax returns and certain non-U.S. income tax returns for various fiscal years remain under various stages of audit by the IRS and respective non-U.S. tax authorities. Although the outcome of tax audits is always uncertain, management believes that it has appropriate support for the positions taken on its tax returns and that its annual tax provisions included amounts sufficient to pay assessments, if any, which may be proposed by the taxing authorities. At September 30, 2023, the Company had recorded a liability of $2.2 billion for its best estimate of the probable loss on certain of its tax positions, the majority of which is included in other noncurrent liabilities in the consolidated statements of financial position. Nonetheless, the amounts ultimately paid, if any, upon resolution of the issues raised by the taxing authorities may differ materially from the amounts accrued for each year.

The Company does not generally provide additional U.S. or non-U.S. income taxes on outside basis differences of consolidated subsidiaries included in shareholders' equity attributable to Johnson Controls International plc, except in limited circumstances including anticipated taxation on planned divestitures. The reduction of the outside basis differences via the sale or liquidation of these subsidiaries and/or distributions could create taxable income. The Company's intent is to reduce the outside basis differences only when it would be tax efficient. Refer to "Capitalization" within the "Liquidity and Capital Resources" section for discussion of U.S. and non-U.S. cash projections.

Refer to Note 18, "Income Taxes," of the notes to consolidated financial statements for the Company's income tax disclosures.

NEW ACCOUNTING PRONOUNCEMENTS

Refer to the "New Accounting Pronouncements" section within Note 1, "Summary of Significant Accounting Policies," of the notes to consolidated financial statements.

RISK MANAGEMENT

The Company selectively uses derivative instruments to reduce market risk associated with changes in foreign currency, commodities, and interest rates. All hedging transactions are authorized and executed pursuant to clearly defined policies and procedures, which strictly prohibit the use of financial instruments for speculative purposes. At the inception of the hedge, the Company assesses the effectiveness of the hedge instrument and designates the hedge instrument as a hedge of one of the following:

- Forecasted transaction or of the variability of cash flows to be received or paid related to an unrecognized asset or liability (a cash flow hedge)
- Net investment in a non-U.S. operation (a net investment hedge)

The Company performs hedge effectiveness testing on an ongoing basis depending on the type of hedging instrument used. All derivatives not designated as hedging instruments under ASC 815, "Derivatives and Hedging," are revalued in the consolidated statements of income.

For all foreign currency derivative instruments designated as cash flow hedges, retrospective effectiveness is tested on a monthly basis using a cumulative dollar offset test. The fair value of the hedged exposures and the fair value of the hedge instruments are revalued, and the ratio of the cumulative sum of the periodic changes in the value of the hedge instruments to the cumulative sum of the periodic changes in the value of the hedge is calculated. The hedge is deemed as highly effective if the ratio is between 80% and 125%. For commodity derivative contracts designated as cash flow hedges, effectiveness is tested using a regression calculation. Ineffectiveness is minimal as the Company aligns most of the critical terms of its derivatives with the supply contracts.

For net investment hedges, the Company assesses its net investment positions in the non-U.S. operations and compares it with the outstanding net investment hedges on a quarterly basis. The hedge is deemed effective if the aggregate outstanding principal of the hedge instruments designated as the net investment hedge in a non-U.S. operation does not exceed the Company's net investment positions in the respective non-U.S. operation.

Derivative instruments not designated as hedging instruments under ASC 815 require no assessment of effectiveness.

A discussion of the Company's accounting policies for derivative financial instruments is included in Note 1, "Summary of Significant Accounting Policies," of the notes to consolidated financial statements, and further disclosure relating to derivatives and hedging activities is included in Note 11, "Derivative Instruments and Hedging Activities," and Note 12, "Fair Value Measurements," of the notes to consolidated financial statements.

Foreign Exchange

The Company has manufacturing, sales and distribution facilities around the world and thus makes investments and enters into transactions denominated in various foreign currencies. In order to maintain strict control and achieve the benefits of the Company's global diversification, foreign exchange exposures for each currency are netted internally so that only its net foreign exchange exposures are, as appropriate, hedged with financial instruments.

The Company hedges 70% to 90% of the nominal amount of each of its known foreign exchange transactional exposures. The Company primarily enters into foreign currency exchange contracts to reduce the earnings and cash flow impact of the variation of non-functional currency denominated receivables and payables. Gains and losses resulting from hedging instruments offset the foreign exchange gains or losses on the underlying assets and liabilities being hedged. The maturities of the forward exchange contracts generally coincide with the settlement dates of the related transactions. Realized and unrealized gains and losses on these contracts are recognized in the same period as gains and losses on the hedged items. The Company also selectively hedges anticipated transactions that are subject to foreign exchange exposure, primarily with foreign currency exchange contracts, which are designated as cash flow hedges in accordance with ASC 815.

The Company has entered into foreign currency denominated debt obligations to selectively hedge portions of its net investment in non-U.S. subsidiaries. The currency effects of debt obligations are reflected in the accumulated other comprehensive income ("AOCI") account within shareholders' equity attributable to Johnson Controls ordinary shareholders where they offset gains and losses recorded on the Company's net investments globally.

At September 30, 2023 and 2022, the Company estimates that an unfavorable 10% change in the exchange rates would have decreased net unrealized gains by approximately $63 million and $133 million, respectively.

Interest Rates

Substantially all of the Company's outstanding debt has fixed interest rates, and, therefore, any fluctuation in market interest rates is not expected to have a material effect on the Company's results of operations. A 100 basis point increase/decrease in the average interest rate on the Company's variable rate debt would have an immaterial impact on interest expense.

Commodities

The Company uses commodity hedge contracts in the financial derivatives market in cases where commodity price risk cannot be naturally offset or hedged through supply base fixed price contracts. Commodity risks are systematically managed pursuant to policy guidelines. As a cash flow hedge, gains and losses resulting from the hedging instruments offset the gains or losses on purchases of the underlying commodities that will be used in the business. The maturities of the commodity hedge contracts coincide with the expected purchase of the commodities.

ENVIRONMENTAL, HEALTH AND SAFETY AND OTHER MATTERS

The Company's global operations are governed by environmental laws and worker safety laws. Under various circumstances, these laws impose civil and criminal penalties and fines, as well as injunctive and remedial relief, for noncompliance and require remediation at sites where Company-related substances have been released into the environment.

The Company has expended substantial resources globally, both financial and managerial, to comply with applicable environmental laws and worker safety laws and to protect the environment and workers. The Company believes it is in substantial compliance with such laws and maintains procedures designed to foster and ensure compliance. However, the

Company has been, and in the future may become, the subject of formal or informal enforcement actions or proceedings regarding noncompliance with such laws or the remediation of Company-related substances released into the environment. Such matters typically are resolved with regulatory authorities through commitments to compliance, abatement or remediation programs and in some cases payment of penalties. Historically, neither such commitments nor penalties imposed on the Company have been material.

Refer to Note 21, "Commitments and Contingencies," of the notes to consolidated financial statements for additional information.

ITEM 7A QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

See "Risk Management" included in Item 7 - Management’s Discussion and Analysis of Financial Condition and Results of Operations.

ITEM 8 FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Johnson Controls International plc

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated statements of financial position of Johnson Controls International plc and its subsidiaries (the "Company") as of September 30, 2023 and 2022, and the related consolidated statements of income, of comprehensive income, of shareholders' equity and of cash flows for each of the three years in the period ended September 30, 2023, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of September 30, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of September 30, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended September 30, 2023 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company did not maintain, in all material respects, effective internal control over financial reporting as of September 30, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO because a material weakness in internal control over financial reporting existed as of that date related to ineffective design and maintenance of information technology controls to prevent or detect, on a timely basis, unauthorized access to certain of the Company's financial reporting systems.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. The material weakness referred to above is described in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. We considered this material weakness in determining the nature, timing, and extent of audit tests applied in our audit of the 2023 consolidated financial statements, and our opinion regarding the effectiveness of the Company's internal control over financial reporting does not affect our opinion on those consolidated financial statements.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in management's report referred to above. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As described in Management's Report on Internal Control Over Financial Reporting, management has excluded FM:Systems from its assessment of internal control over financial reporting as of September 30, 2023 because it was acquired by the Company in a purchase business combination in July 2023. We have also excluded FM:Systems from our audit of internal

control over financial reporting. FM:Systems is a wholly-owned subsidiary whose total assets and total revenues excluded from management's assessment and our audit of internal control over financial reporting represent less than 1% of each of the related consolidated financial statement amounts as of and for the year ended September 30, 2023.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue Recognition from Certain Contracts with Customers

As described in Notes 1 and 4 to the consolidated financial statements, the Company recognized $26,793 million of net sales for the year ended September 30, 2023, of which a majority relates to certain over time and point in time contracts with customers. Revenue from certain long-term contracts to design, manufacture and install building products and systems as well as unscheduled repair or replacement services is recognized on an over time basis, with progress towards completion measured using a cost-to-cost input method based on the relationship between actual costs incurred and total estimated costs at completion. The cost-to-cost input method is used as it best depicts the transfer of control to the customer that occurs as the Company incurs costs. Changes to the original estimates may be required during the life of the contract and estimated losses are recorded when identified. The Company enters into extended warranties and long-term service and maintenance agreements with certain customers. For these arrangements, revenue is recognized over time on a straight-line basis over the respective contract term. Revenue associated with the sale of equipment and related installations are recognized over time on a cost-to-cost input method, while the revenue for monitoring and maintenance services are recognized over time as services are rendered. In other cases, the Company recognizes revenue at the point in time when control over the goods or services transfers to the customer.

The principal considerations for our determination that performing procedures relating to revenue recognition from certain contracts with customers is a critical audit matter are a high degree of auditor effort in performing procedures and evaluating audit evidence related to the revenue recognized on certain of the Company's over time and point in time contracts with customers.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the revenue recognition process for the Company's over time and point in time contracts with customers. These procedures also included, among others, evaluating the appropriateness of the timing and amount of revenue recognized for a sample of over time and point in time contracts with customers. Evaluating the appropriateness of the timing and amount of revenue recognized for certain over time contracts with customers involved (i) obtaining and inspecting source documents, such as contracts or service tickets, change orders, and evidence of progress towards completion or services delivered; (ii) evaluating the appropriateness of the over time revenue recognition methods; (iii) testing, on a sample basis for certain over time contracts, the costs incurred to date; and (iv) performing a comparison of estimated gross margin in the prior year to gross margin at

completion of the arrangement in the current year for certain over time contracts with customers. Evaluating the appropriateness of the timing and amount of revenue recognized for certain point in time contracts with customers involved (i) obtaining and inspecting source documents, such as contracts or purchase orders, evidence of goods delivered, and consideration received in exchange for those goods and (ii) evaluating the appropriateness of the point in time revenue recognition method.

/s/ PricewaterhouseCoopers LLP
Milwaukee, Wisconsin
December 14, 2023

We have served as the Company's auditor since 1957.

Johnson Controls International plc
Consolidated Statements of Income

(in millions, except per share data)	Year Ended September 30, 2023	2022	2021
Net sales			
Products and systems	$ 20,251	$ 19,274	$ 17,202
Services	6,542	6,025	6,466
	26,793	25,299	23,668
Cost of sales			
Products and systems	14,031	13,533	11,848
Services	3,791	3,423	3,761
	17,822	16,956	15,609
Gross profit	8,971	8,343	8,059
Selling, general and administrative expenses	(6,181)	(5,945)	(5,258)
Restructuring and impairment costs	(1,064)	(721)	(242)
Net financing charges	(281)	(213)	(206)
Equity income	265	246	261
Income from continuing operations before income taxes	1,710	1,710	2,614
Income tax provision (benefit)	(323)	(13)	868
Income from continuing operations	2,033	1,723	1,746
Income from discontinued operations, net of tax (Note 3)	—	—	124
Net income	2,033	1,723	1,870
Income from continuing operations attributable to noncontrolling interests	184	191	233
Net income attributable to Johnson Controls	$ 1,849	$ 1,532	$ 1,637
Amounts attributable to Johnson Controls ordinary shareholders:			
Income from continuing operations	$ 1,849	$ 1,532	$ 1,513
Income from discontinued operations	—	—	124
Net income	$ 1,849	$ 1,532	$ 1,637
Basic earnings per share attributable to Johnson Controls			
Continuing operations	$ 2.70	$ 2.20	$ 2.11
Discontinued operations	—	—	0.17
Net income	$ 2.70	$ 2.20	$ 2.28
Diluted earnings per share attributable to Johnson Controls			
Continuing operations	$ 2.69	$ 2.19	$ 2.10
Discontinued operations	—	—	0.17
Net income	$ 2.69	$ 2.19	$ 2.27

The accompanying notes are an integral part of the consolidated financial statements.

Johnson Controls International plc
Consolidated Statements of Comprehensive Income

(in millions)	Year Ended September 30, 2023	2022	2021
Net income	$ 2,033	$ 1,723	$ 1,870
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments	(84)	(603)	376
Realized and unrealized gains (losses) on derivatives	25	7	(18)
Pension and postretirement plans	(1)	(3)	4
Other comprehensive income (loss)	(60)	(599)	362
Total comprehensive income	1,973	1,124	2,232
Comprehensive income attributable to noncontrolling interests:			
Net income	184	191	233
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments	(15)	(123)	19
Realized and unrealized gains on derivatives	(1)	1	1
Other comprehensive income (loss)	(16)	(122)	20
Comprehensive income attributable to noncontrolling interests	168	69	253
Comprehensive income attributable to Johnson Controls	$ 1,805	$ 1,055	$ 1,979

The accompanying notes are an integral part of the consolidated financial statements.

Johnson Controls International plc
Consolidated Statements of Financial Position

(in millions, except par value and share data)	September 30, 2023	September 30, 2022
Assets		
Cash and cash equivalents	$ 835	$ 2,031
Accounts receivable, less allowance for expected credit losses of $90 and $66, respectively	6,006	5,727
Inventories	2,776	2,665
Other current assets	1,120	1,262
Current assets	10,737	11,685
Property, plant and equipment - net	3,136	3,131
Goodwill	17,936	17,350
Other intangible assets - net	4,888	5,155
Investments in partially-owned affiliates	1,056	963
Other noncurrent assets	4,489	3,874
Total assets	$ 42,242	$ 42,158
Liabilities and Equity		
Short-term debt	$ 385	$ 669
Current portion of long-term debt	645	865
Accounts payable	4,268	4,368
Accrued compensation and benefits	958	1,003
Deferred revenue	1,996	1,804
Other current liabilities	2,832	2,530
Current liabilities	11,084	11,239
Long-term debt	7,818	7,426
Pension and postretirement benefit obligations	278	358
Other noncurrent liabilities	5,368	5,733
Noncurrent liabilities	13,464	13,517
Commitments and contingencies (Note 21)		
Ordinary shares (par value $0.01; 2.0 billion shares authorized; shares issued: 2023 - 709,968,796; 2022 - 717,726,243)	7	7
Ordinary A shares (par value €1.00; 40,000 shares authorized, none outstanding as of September 30, 2023 and 2022)	—	—
Preferred shares (par value $0.01; 200,000,000 shares authorized, none outstanding as of September 30, 2023 and 2022)	—	—
Ordinary shares held in treasury, at cost (shares held: 2023 - 29,596,724; 2022 - 29,029,475)	(1,240)	(1,203)
Capital in excess of par value	17,349	17,224
Retained earnings	1,384	1,151
Accumulated other comprehensive loss	(955)	(911)
Shareholders' equity attributable to Johnson Controls	16,545	16,268
Noncontrolling interests	1,149	1,134
Total equity	17,694	17,402
Total liabilities and equity	$ 42,242	$ 42,158

The accompanying notes are an integral part of the consolidated financial statements.

Johnson Controls International plc
Consolidated Statements of Cash Flows

(in millions)	Year Ended September 30, 2023	2022	2021
Operating Activities of Continuing Operations			
Net income attributable to Johnson Controls	$ 1,849	$ 1,532	$ 1,513
Income attributable to noncontrolling interests	184	191	233
Net income	2,033	1,723	1,746
Adjustments to reconcile net income to cash provided by operating activities:			
Depreciation and amortization	848	830	845
Pension and postretirement benefit expense (income)	61	(216)	(551)
Pension and postretirement contributions	(57)	(96)	(68)
Equity in earnings of partially-owned affiliates, net of dividends received	(98)	30	(117)
Deferred income taxes	(676)	(141)	36
Non-cash restructuring and impairment charges	827	555	98
Equity-based compensation expense	111	102	76
Other - net	(123)	(58)	(85)
Changes in assets and liabilities, excluding acquisitions and divestitures:			
Accounts receivable	(168)	(427)	(143)
Inventories	(81)	(773)	(219)
Other assets	(216)	(362)	(164)
Restructuring reserves	59	(7)	(44)
Accounts payable and accrued liabilities	(222)	1,270	813
Accrued income taxes	(77)	(440)	328
Cash provided by operating activities from continuing operations	2,221	1,990	2,551
Investing Activities of Continuing Operations			
Capital expenditures	(539)	(592)	(552)
Sale of property, plant and equipment	32	127	124
Acquisition of businesses, net of cash acquired	(726)	(269)	(725)
Other - net	49	41	63
Cash used by investing activities from continuing operations	(1,184)	(693)	(1,090)
Financing Activities of Continuing Operations			
Net proceeds (payments) from borrowings with maturities less than three months	(51)	379	(18)
Proceeds from debt	1,173	1,771	734
Repayments of debt	(1,555)	(184)	(744)
Stock repurchases and retirements	(625)	(1,441)	(1,307)
Payment of cash dividends	(980)	(916)	(762)
Proceeds from the exercise of stock options	42	17	178
Dividends paid to noncontrolling interests	(149)	(121)	(142)
Employee equity-based compensation withholding taxes	(37)	(51)	(33)
Other - net	8	30	(37)
Cash used by financing activities from continuing operations	(2,174)	(516)	(2,131)
Discontinued Operations - Cash used by operating activities	—	(4)	(64)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(5)	(53)	116
Increase (decrease) in cash, cash equivalents and restricted cash	(1,142)	724	(618)
Cash, cash equivalents and restricted cash at beginning of period	2,066	1,342	1,960
Cash, cash equivalents and restricted cash at end of period	924	2,066	1,342
Less: Restricted cash	89	35	6
Cash and cash equivalents at end of period	$ 835	$ 2,031	$ 1,336

The accompanying notes are an integral part of the consolidated financial statements.

Johnson Controls International plc
Consolidated Statements of Shareholders' Equity

(in millions)	Year Ended September 30, 2023	2022	2021
Shareholders' Equity Attributable to Johnson Controls			
Beginning Balance	$ 16,268	$ 17,562	$ 17,447
Ordinary Shares			
Beginning balance	7	7	8
Repurchases and retirements of ordinary shares	—	—	(1)
Ending balance	7	7	7
Ordinary Shares Held in Treasury, at Cost			
Beginning balance	(1,203)	(1,152)	(1,119)
Employee equity-based compensation withholding taxes	(37)	(51)	(33)
Ending balance	(1,240)	(1,203)	(1,152)
Capital in Excess of Par Value			
Beginning balance	17,224	17,116	16,865
Change in noncontrolling interest share	—	—	(8)
Share-based compensation expense	85	88	76
Other, including options exercised	40	20	183
Ending balance	17,349	17,224	17,116
Retained Earnings			
Beginning balance	1,151	2,025	2,469
Net income attributable to Johnson Controls	1,849	1,532	1,637
Cash dividends declared	(991)	(965)	(771)
Repurchases and retirements of ordinary shares	(625)	(1,441)	(1,306)
Other	—	—	(4)
Ending balance	1,384	1,151	2,025
Accumulated Other Comprehensive Income (Loss)			
Beginning balance	(911)	(434)	(776)
Other comprehensive income (loss)	(44)	(477)	342
Ending balance	(955)	(911)	(434)
Ending Balance	16,545	16,268	17,562
Shareholders' Equity Attributable to Noncontrolling Interests			
Beginning Balance	1,134	1,191	1,086
Comprehensive income attributable to noncontrolling interests	168	69	253
Dividends attributable to noncontrolling interests	(152)	(131)	(142)
Change in noncontrolling interest share	(1)	5	(6)
Ending Balance	1,149	1,134	1,191
Total Shareholders' Equity	$ 17,694	$ 17,402	$ 18,753
Cash Dividends Declared per Ordinary Share	$ 1.45	$ 1.39	$ 1.07

The accompanying notes are an integral part of the consolidated financial statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements include the consolidated accounts of Johnson Controls International plc, a public limited company organized under the laws of Ireland, and its subsidiaries (Johnson Controls International plc and all its subsidiaries, hereinafter collectively referred to as the "Company," "Johnson Controls" or "JCI plc").

The Company's fiscal year ends on September 30. Unless otherwise stated, references to years in this report relate to fiscal years rather than calendar years.

Nature of Operations

Johnson Controls International plc, headquartered in Cork, Ireland, is a global leader in smart, healthy and sustainable buildings, serving a wide range of customers in more than 150 countries. The Company’s products, services, systems and solutions advance the safety, comfort and intelligence of spaces to serve people, places and the planet. The Company is committed to helping its customers win and creating greater value for all of its stakeholders through its strategic focus on buildings.

The Company is a global leader in engineering, manufacturing, commissioning and retrofitting building products and systems, including residential and commercial heating, ventilating, air-conditioning ("HVAC") equipment, industrial refrigeration systems, controls, security systems, fire-detection systems and fire-suppression solutions. The Company further serves customers by providing technical services, including maintenance, management and repair of equipment (in the HVAC, industrial refrigeration, controls, security and fire-protection space), energy-management consulting and data-driven “smart building” services and solutions powered by its OpenBlue software platform and capabilities. The Company partners with customers by leveraging its broad product portfolio and digital capabilities powered by OpenBlue, together with its direct channel service and solutions capabilities, to deliver outcome-based solutions across the lifecycle of a building that address customers’ needs to improve energy efficiency, enhance security, create healthy environments and reduce greenhouse gas emissions.

Principles of Consolidation

The consolidated financial statements include the consolidated accounts of Johnson Controls International plc and its subsidiaries that are consolidated in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP"). All significant intercompany transactions have been eliminated. The results of companies acquired or disposed of during the year are included in the consolidated financial statements from the effective date of acquisition or up to the date of disposal. Investments in partially-owned affiliates are accounted for by the equity method when the Company exercises significant influence, which typically occurs when its ownership interest exceeds 20%, and the Company does not have a controlling interest.

The Company consolidates variable interest entities ("VIE") when it has the power to direct the significant activities of the entity and the obligation to absorb losses or receive benefits from the entity that may be significant. The Company did not have any material consolidated or nonconsolidated VIEs in its continuing operations for the presented reporting periods.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Fair Value of Financial Instruments

ASC 820, "Fair Value Measurement," defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. ASC 820 also establishes a three-level fair value hierarchy that prioritizes information used in developing assumptions when pricing an asset or liability as follows:

Level 1: Observable inputs such as quoted prices in active markets for identical assets or liabilities;

Level 2: Quoted prices in active markets for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or inputs, other than quoted prices in active markets, that are observable either directly or indirectly; and

Level 3: Unobservable inputs where there is little or no market data, which requires the reporting entity to develop its own assumptions.

ASC 820 requires the use of observable market data, when available, in making fair value measurements. When inputs used to measure fair value fall within different levels of the hierarchy, the level within which the fair value measurement is categorized is based on the lowest level input that is significant to the fair value measurement.

Acquisitions

The purchase price of acquired businesses is allocated to the related identifiable assets and liabilities based on estimated fair values. The excess of the purchase price over the amount allocated to the assets and liabilities, if any, is recorded as goodwill. In addition, any contingent consideration is recorded at the estimated fair value as of the date of the acquisition and is recorded as part of the purchase price. This estimate is updated in future periods and any changes in the estimate, which are not considered an adjustment to the purchase price, are recorded in our consolidated statements of operations. Payments for contingent earn-out liabilities that are less than or equal to estimates on the acquisition date are reflected as financing cash outflows. Amounts paid in excess of the estimated contingent earn-out liabilities on the acquisition date are reflected as operating cash outflows.

All available information is used to estimate fair values. External valuation specialists are typically engaged to assist in the fair value determination of identifiable intangible assets and any other significant assets or liabilities. The preliminary purchase price allocation is adjusted, as necessary, up to one year after the acquisition closing date as more information is obtained regarding assets acquired and liabilities assumed based on facts and circumstances that existed as of the acquisition date.

The purchase price allocation methodology contains uncertainties because it requires the Company to make assumptions and to apply judgment to estimate the fair value of acquired assets and assumed liabilities. The fair value of assets and liabilities is estimated based upon the carrying value of the acquired assets and assumed liabilities and widely accepted valuation techniques, including discounted cash flows. Unanticipated events or circumstances may occur which could affect the accuracy of fair value estimates, including assumptions regarding industry economic factors and business strategies.

Other estimates used in determining fair value include, but are not limited to, future cash flows or income related to intangibles, market rate assumptions and discount rates. Fair value estimates are based upon assumptions believed to be reasonable, but that are inherently uncertain, and therefore, may not be realized. Accordingly, there can be no assurance that the estimates, assumptions, and values reflected in the valuations will be realized, and actual results could differ materially.

Assets and Liabilities Held for Sale

Assets and liabilities (disposal groups) to be sold are classified as held for sale in the period in which all of the following criteria are met:

- Management, having the authority to approve the action, commits to a plan to sell the disposal group;
- The disposal group is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such disposal groups;
- An active program to locate a buyer and other actions required to complete the plan to sell the disposal group have been initiated;

- Sale of the disposal group is probable and transfer of the disposal group is expected to qualify for recognition as a completed sale within one year, except if events or circumstances beyond the Company's control extend the period of time required to sell the disposal group beyond one year;

- The disposal group is being actively marketed for sale at a price that is reasonable in relation to its current fair value; and

- Actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

The Company initially measures a disposal group that is classified as held for sale at the lower of its carrying value or fair value less any costs to sell in accordance with ASC 360-10-15, "Impairment or Disposal of Long-Lived Assets." The carrying amount of any assets, including goodwill, that are part of the disposal group, but not in the scope of ASC 360-10, are tested for impairment under the relevant guidance prior to measuring the disposal group at fair value, less cost to sell.

Any loss resulting from this measurement is recognized in the period in which the held for sale criteria are met. Conversely, gains are not recognized on the sale of a disposal group until the date of sale. The Company assesses the fair value of a disposal group, less any costs to sell, each reporting period it remains classified as held for sale and reports any subsequent changes as an adjustment to the carrying value of the disposal group, as long as the new carrying value does not exceed the carrying value of the disposal group at the time it was initially classified as held for sale.

Upon determining that a disposal group meets the criteria to be classified as held for sale, the Company reports the assets and liabilities of the disposal group, if material, in the line items assets held for sale and liabilities held for sale in the consolidated statements of financial position.

Cash and Cash Equivalents

Cash equivalents include all highly liquid investments with an original maturity of three months or less when purchased.

Restricted Cash

Restricted cash relates to amounts restricted for payment of asbestos liabilities and certain litigation and environmental matters and is recorded within other current assets in the consolidated statements of financial position.

Receivables

Receivables consist of billed receivables which are currently due from customers and unbilled receivables where the Company has satisfied its performance obligations, but has not yet issued the invoice to the customer. Incentives are periodically offered to customers, including early payment discounts and extended payment terms of certain receivables. The Company extends credit to customers in the normal course of business and maintains an allowance for expected credit losses resulting from the inability or unwillingness of customers to make required payments. The allowance for expected credit losses is based on historical experience, existing economic conditions, reasonable and supportable forecasts, and any specific customer collection issues the Company has identified. The Company evaluates the reasonableness of the allowance for expected credit losses on a quarterly basis.

The Company enters into various factoring agreements to sell certain accounts receivable to third-party financial institutions. The Company collects the majority of the factored receivables on behalf of the financial institutions, but maintains no other continuing involvement with the factored receivables. Sales of accounts receivable are reflected as a reduction of accounts receivable in the consolidated statements of financial position and the proceeds are included in cash flows from operating activities in the consolidated statements of cash flows.

Inventories

Inventories are stated at the lower of cost or net realizable value using the first-in, first-out ("FIFO") method. Finished goods and work-in-process inventories include material, labor and manufacturing overhead costs.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Depreciation is provided over the estimated useful lives of the respective assets using the straight-line method for financial reporting purposes and accelerated methods for income tax purposes. Estimated useful lives generally range from 3 to 40 years for buildings and improvements, up to 15 years for subscriber systems, and from 3 to 15 years for machinery and equipment. Interest on borrowings is capitalized during the active construction period of major capital projects, added to the cost of the underlying assets and amortized over the useful lives of the assets.

Goodwill and Indefinite-Lived Intangible Assets

Goodwill reflects the cost of an acquisition in excess of the fair values assigned to identifiable net assets acquired. Goodwill is reviewed for impairment during the fourth fiscal quarter (as of July 31) or more frequently if events or changes in circumstances indicate the asset might be impaired. The Company performs impairment reviews for its reporting units, which have been determined to be the Company's reportable segments or one level below the reportable segments in certain instances, using a fair value method based on management's judgments and assumptions or third party valuations. The fair value of a reporting unit refers to the price that would be received to sell the unit as a whole in an orderly transaction between market participants at the measurement date. In estimating the fair value, the Company uses the multiples of earnings approach based on the average of published multiples of earnings of comparable entities with similar operations and economic characteristics and applies the multiples to the Company's average of historical and future financial results for each reporting unit. In certain instances, the Company uses discounted cash flow analyses or estimated sales price to further support the fair value estimates. The inputs utilized in the analyses are classified as Level 3 inputs within the fair value hierarchy as defined in ASC 820, "Fair Value Measurement." The estimated fair value is then compared to the carrying amount of the reporting unit, including recorded goodwill. The Company is subject to financial statement risk to the extent that the carrying amount exceeds the estimated fair value.

Indefinite-lived intangible assets are also subject to at least annual impairment testing in the fourth fiscal quarter or as events occur or circumstances change that indicate the assets may be impaired. Indefinite-lived intangible assets primarily consist of trademarks and trade names and are tested for impairment using a relief-from-royalty method. The Company considers the implications of both external (e.g., market growth, competition and local economic conditions) and internal (e.g., product sales and expected product growth) factors and their potential impact on cash flows related to the intangible asset in both the near- and long-term. The Company also considers the profitability of the business, among other factors, to determine the royalty rate for use in the impairment assessment.

While the Company believes that the estimates and assumptions underlying the valuation methodologies are reasonable, different estimates and assumptions could result in different outcomes.

Leases

Lessee arrangements

The Company leases certain administrative, production and other facilities, fleet vehicles, information technology equipment and other equipment under arrangements that are accounted for as operating leases. The Company determines whether an arrangement contains a lease at contract inception based on whether the arrangement involves the use of a physically distinct identified asset and whether the Company has the right to obtain substantially all of the economic benefits from the use of the asset throughout the period as well as the right to direct the use of the asset.

Right-of-use assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent its obligation to make lease payments arising from the lease. Right-of-use assets and the corresponding lease liabilities are recognized at commencement date based on the present value of lease payments for all leases with terms longer than twelve months. The majority of the Company's leases do not provide an implicit interest rate. To determine the present value of lease payments, the Company uses its incremental borrowing rate based on information available on the lease commencement date or the implicit rate if it is readily determinable. The Company determines its incremental borrowing rate based on a comparable market yield curve consistent with its credit rating, term of the lease and relative economic environment. The Company has elected to combine lease and nonlease components for its leases.

Most leases contain options to renew or terminate the lease. Right-of-use assets and lease liabilities reflect only the options which the Company is reasonably certain to exercise.

The Company has certain real estate leases that contain variable lease payments which are based on changes in the Consumer Price Index (CPI). Additionally, the Company's leases generally require it to pay for fuel, maintenance, repair, insurance and taxes. These payments are not included in the right-of-use asset or lease liability and are expensed as incurred.

Lease expense is recognized on a straight-line basis over the lease term.

Lessor arrangements

The Company has monitoring services and maintenance agreements within its security business that include subscriber system assets for which the Company retains ownership. These agreements contain both lease and nonlease components. The Company has elected to combine lease and nonlease components for these arrangements where the timing and pattern of transfer of the lease and nonlease components are the same and the lease component would be classified as an operating lease if accounted for separately. The Company has concluded that in these arrangements the nonlease components are the predominant characteristic, and as a result, the combined component is accounted for under the revenue guidance.

Impairment of Long-Lived Assets

Long-lived assets, including right-of-use assets under operating leases, other tangible assets and intangible assets with definite lives, are reviewed for impairment whenever events or changes in circumstances indicate that the asset’s carrying amount may not be recoverable. The Company conducts its long-lived asset impairment analyses in accordance with ASC 360-10-15, "Impairment or Disposal of Long-Lived Assets," ASC 350-30, "General Intangibles Other than Goodwill" and ASC 985-20, "Costs of Software to be Sold, Leased, or Marketed."

Assets and liabilities are grouped at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities and evaluates the asset group against the sum of the undiscounted future cash flows. If the undiscounted cash flows do not indicate the carrying amount of the asset group is recoverable, an impairment charge is measured as the amount by which the carrying amount of the asset group exceeds its fair value based on discounted cash flow analysis or appraisals.

Intangible assets acquired in a business combination that are used in research and development activities are considered indefinite-lived until the completion or abandonment of the associated research and development efforts. During the period that those assets are considered indefinite lived, they are not amortized but are tested for impairment annually and more frequently if events or changes in circumstances indicate that it is more likely than not that the asset is impaired. If the carrying amount of an intangible asset exceeds its fair value, the Company recognizes an impairment loss in an amount equal to that excess.

Unamortized capitalized costs of a computer software product are compared to the net realizable value of the product. The amount by which the unamortized capitalized costs of a computer software product exceed the net realizable value of that asset is written off.

Revenue Recognition

Revenue from certain long-term contracts to design, manufacture and install building products and systems as well as unscheduled repair or replacement services is recognized on an over time basis, with progress towards completion measured using a cost-to-cost input method based on the relationship between actual costs incurred and total estimated costs at completion. The cost-to-cost input method is used as it best depicts the transfer of control to the customer that occurs as the Company incurs costs. Changes to the original estimates may be required during the life of the contract and such estimates are reviewed monthly. If contract modifications result in additional goods or services that are distinct from those transferred before the modification, they are accounted for prospectively as if the Company entered into a new contract. If the goods or services in the modification are not distinct from those in the original contract, sales and gross profit are adjusted using the cumulative catch-up method for revisions in estimated total contract costs and contract values. Estimated losses are recorded when identified. The Company does not adjust the promised amount of consideration for the effects of a significant financing component because at contract inception it expects to receive the payment within twelve months of transfer of goods or services.

The Company enters into extended warranties and long-term service and maintenance agreements with certain customers. For these arrangements, revenue is recognized over time on a straight-line basis over the respective contract term.

The Company also sells certain HVAC and refrigeration products and services in bundled arrangements with multiple performance obligations, such as equipment, commissioning, service labor and extended warranties. Approximately four to twelve months separate the timing of the first deliverable until the last piece of equipment is delivered. There may also be extended warranty arrangements with durations of one to five years commencing upon the end of the standard warranty period. In addition, the Company sells security monitoring systems that may have multiple performance obligations, including equipment, installation, monitoring services and maintenance agreements. Revenue associated with the sale of equipment and related installations are recognized over time on a cost-to-cost input method, while the revenue for monitoring and maintenance services are recognized over time as services are rendered. The transaction price is allocated to each performance obligation based on the relative standalone selling price method. In order to estimate relative standalone selling price, market data and transfer price studies are utilized. If the standalone selling price is not directly observable, the Company estimates the standalone selling price using an adjusted market assessment approach or expected cost plus margin approach. If the Company retains ownership of the subscriber system asset, fees for monitoring and maintenance services are recognized over the contract term on a straight-line basis. Non-refundable fees received in connection with the initiation of a monitoring contract, along with associated direct and incremental selling costs, are deferred and amortized over the estimated life of the contract.

In all other cases, the Company recognizes revenue at the point in time when control over the goods or services transfers to the customer.

The Company assesses variable consideration that may affect the total transaction price, including discounts, rebates, refunds, credits or other similar sources of variable consideration, when determining the transaction price of each contract. The Company includes variable consideration in the estimated transaction price when it is probable that significant reversal of revenue recognized would not occur when the uncertainty associated with variable consideration is subsequently resolved. These estimates are based on the amount of consideration that the Company expects to be entitled to.

Shipping and handling costs billed to customers are included in sales and the related costs are included in cost of sales when control transfers to the customer. The Company presents amounts collected from customers for sales and other taxes net of the related amounts remitted.

Subscriber System Assets, Dealer Intangibles and Related Deferred Revenue Accounts

The Company considers assets related to the acquisition of new customers in its electronic security business in three asset categories:

- Internally generated residential subscriber systems outside of North America;
- Internally generated commercial subscriber systems; and
- Customer accounts acquired through the ADT dealer program, primarily outside of North America (referred to as dealer intangibles).

Subscriber system assets include installed property, plant and equipment for which the Company retains ownership and deferred costs directly related to the customer acquisition and system installation. Subscriber system assets represent capitalized equipment (e.g. security control panels, touch pad, motion detectors, window sensors, and other equipment) and installation costs associated with electronic security monitoring arrangements under which the Company retains ownership of the security system assets in a customer's place of business or residence. Installation costs represent costs incurred to prepare the asset for its intended use. The Company pays property taxes on the subscriber system assets and may retrieve such assets when the agreement is terminated. These assets embody a probable future economic benefit as they generate future monitoring revenue for the Company.

Costs related to the subscriber system equipment and installation are categorized as property, plant and equipment rather than deferred costs. Deferred costs associated with subscriber system assets represent direct and incremental selling expenses (such as commissions) related to acquiring the customer. Commissions related to up-front consideration paid by customers in connection with the establishment of the monitoring arrangement are determined based on a percentage of the up-front fees and do not exceed deferred revenue. Such deferred costs are recorded as other current and noncurrent assets within the consolidated statements of financial position.

Subscriber system assets and any deferred revenue resulting from the customer acquisition are accounted for over the expected life of the subscriber. In certain geographical areas which have a large number of customers that behave in a similar manner over time, the Company accounts for subscriber system assets and related deferred revenue using pools, with separate pools for

the components of subscriber system assets and any related deferred revenue based on the same month and year of acquisition. Pooled subscriber system assets and related deferred revenue are depreciated using a straight-line method with lives up to 12 years and considering customer attrition. Non-pooled subscriber systems (primarily in Europe, Latin America and Asia) and related deferred revenue are depreciated using a straight-line method with a 15-year life, with remaining balances written off upon customer termination.

Certain contracts and related customer relationships result from purchasing residential security monitoring contracts from an external network of independent dealers who operate under the ADT dealer program, primarily outside of North America. Acquired contracts and related customer relationships are recorded at their contractually determined purchase price.

During the first 6 months (12 months in certain circumstances) after the purchase of the customer contract, any cancellation of monitoring service, including those that result from customer payment delinquencies, results in a chargeback by the Company to the dealer for the full amount of the contract purchase price. The Company records the amount charged back to the dealer as a reduction of the previously recorded intangible asset.

Intangible assets arising from the ADT dealer program described above are amortized in pools determined by the same month and year of contract acquisition on a straight-line basis over the period of the customer relationship. The estimated useful life of dealer intangibles ranges from 12 to 15 years.

Research and Development Costs

Expenditures for research activities relating to product development and improvement are charged against income as incurred and included within selling, general and administrative expenses in the consolidated statements of income. Such expenditures for the years ended September 30, 2023, 2022 and 2021 were $320 million, $295 million and $275 million, respectively.

Stock-Based Compensation

Restricted (Non-vested) Stock /Units

Restricted stock and restricted stock units are typically settled in shares for employees in the U.S. and in cash for employees not in the U.S. Restricted awards typically vest over a period of three years from the grant date. The Company's Compensation and Talent Development Committee may approve different vesting terms on specific grants. The fair value of each share-settled restricted award is based on the closing market value of the Company’s ordinary shares on the date of grant. The fair value of each cash-settled restricted award is recalculated at the end of each reporting period based on the closing market value of the Company's ordinary shares at the end of the reporting period, and the liability and expense are adjusted based on the new fair value.

Performance Share Awards

Performance-based share unit ("PSU") awards are generally contingent on the achievement of predetermined performance goals over a performance period of one to three years and on the award holder's continuous employment until the vesting date. The majority of PSUs are also indexed to the achievement of specified levels of total shareholder return versus a peer group over the performance period.

Upon completion of the performance period, earned PSUs are typically settled with shares of the Company's ordinary shares for employees in the U.S. and in cash for employees not in the U.S.

The fair value of the portion of the PSU which is linked to the achievement of performance goals is based on the closing market value of the Company's ordinary shares on the date of grant. Share-based compensation expense for these PSUs is recognized over the performance period based on the probability of achieving the performance targets.

The fair value of the portion of the PSU that is indexed to total shareholder return is estimated on the date of grant using a Monte Carlo simulation that uses the following assumptions:

- The risk-free interest rate for periods during the contractual life of the PSU is based on the U.S. Treasury yield curve in effect at the time of grant.
- The expected volatility is based on the historical volatility of the Company's stock over the most recent three-year period as of the grant date.

Share-based compensation expense for PSUs which are indexed to total shareholder return is not adjusted for changes in performance subsequent to the grant date because the likelihood of achieving the market condition is incorporated in the grant date fair value of the award.

Stock Options

Stock options are granted with an exercise price equal to the market price of the Company's stock at the date of grant. Stock option awards typically vest between two and three years after the grant date and expire ten years from the grant date.

The fair value of each option is estimated on the date of grant using a Black-Scholes option valuation model that uses the following assumptions:

- The expected life of options represents the period of time that options granted are expected to be outstanding.
- The risk-free interest rate for periods during the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of grant.
- For grants in fiscal 2023, expected volatility is based on the historical volatility of the Company's stock corresponding to the expected life as of the grant date. For grants in fiscal 2022 and fiscal 2021, expected volatility is based on the historical volatility of the Company's stock since October 2016 and certain peer companies' stock prior to October 2016 over the most recent period corresponding to the expected life as of the grant date.
- The expected dividend yield is based on the expected annual dividend as a percentage of the market value of the Company's ordinary shares as of the grant date.

The Company uses historical data to estimate option exercises and employee terminations within the valuation model.

Earnings Per Share

The Company presents both basic and diluted earnings per share ("EPS") amounts. Basic EPS is calculated by dividing net income attributable to Johnson Controls by the weighted average number of ordinary shares outstanding during the reporting period. Diluted EPS is calculated by dividing net income attributable to Johnson Controls by the weighted average number of ordinary shares and ordinary equivalent shares outstanding during the reporting period that are calculated using the treasury stock method for stock options, unvested restricted stock and unvested performance share awards. The treasury stock method assumes that the Company uses the proceeds from the exercise of stock option awards to repurchase ordinary shares at the average market price during the period. The assumed proceeds under the treasury stock method include the purchase price that the grantee will pay in the future and compensation cost for future service that the Company has not yet recognized. For unvested restricted stock and unvested performance share awards, assumed proceeds under the treasury stock method include unamortized compensation cost.

Foreign Currency Translation

Substantially all of the Company's international operations use the respective local currency as the functional currency. Assets and liabilities of international entities have been translated at period-end exchange rates, and income and expenses have been translated using average exchange rates for the period. Monetary assets and liabilities denominated in non-functional currencies are adjusted to reflect period-end exchange rates. Aggregate transaction gains, net of the impact of foreign currency hedges, for the years ended September 30, 2023, 2022 and 2021 were $28 million, $49 million and $56 million, respectively.

Derivative Financial Instruments

The Company has written policies and procedures that place all derivative financial instruments under the direction of Corporate treasury and restrict all derivative transactions to those intended for hedging purposes. The use of derivatives for speculative purposes is strictly prohibited. The Company selectively uses derivatives to manage the market risk from changes in foreign exchange rates, commodity prices, stock-based compensation liabilities and interest rates.

The fair values of all derivatives are recorded in the consolidated statements of financial position. The change in a derivative's fair value is recorded each period in current earnings or accumulated other comprehensive income ("AOCI"), depending on whether the derivative is designated as part of a hedge transaction and if so, the type of hedge transaction.

Investments

Investments in debt and equity securities and deferred compensation plan assets are marked to market at the end of each accounting period. Unrealized gains and losses are recognized in the consolidated statements of income.

Pension and Postretirement Benefits

The Company utilizes a mark-to-market approach for recognizing pension and postretirement benefit expenses, including measuring plan assets at fair value and recognizing actuarial gains and losses in the fourth quarter of each fiscal year or at the date of a remeasurement event.

Guarantees

The Company records an estimate for future warranty-related costs based on actual historical return rates and other known factors. Based on analysis of return rates and other factors, the Company's warranty provisions are adjusted as necessary. The Company monitors its warranty activity and adjusts its reserve estimates when it is probable that future warranty costs will be different than those estimates.

The Company's product warranty liability is recorded in the consolidated statements of financial position in other current liabilities if the warranty is less than one year and in other noncurrent liabilities if the warranty extends longer than one year.

Loss Contingencies

Accruals are recorded for various contingencies including legal proceedings, environmental matters, self-insurance and other claims that arise in the normal course of business when it is probable a liability has been incurred and the amount of the liability is reasonably estimable. The accruals are based on judgment, the probability of losses and, where applicable, the consideration of opinions of internal and/or external legal counsel and actuarial determined estimates. Additionally, the Company records receivables from third party insurers when recovery has been determined to be probable.

The Company is subject to laws and regulations relating to protecting the environment. Expenses associated with environmental remediation obligations are recognized when such amounts are probable and can be reasonably estimated.

Liabilities and expenses for workers' compensation, product, general and auto liabilities is dependent on claims experience. For most of these liabilities, claims incurred but not yet reported are estimated by utilizing actuarial valuations based upon historical claims experience. Receivables from third party insurers are recorded when recovery has been determined to be probable. The Company maintains captive insurance companies to manage its insurable liabilities.

Asbestos-Related Contingencies and Insurance Receivables

The Company and certain of its subsidiaries, along with numerous other companies, are named as defendants in personal injury lawsuits based on alleged exposure to asbestos-containing materials. The estimated liability and corresponding insurance recovery for pending and future claims and defense costs is based on the Company's historical claim experience, and estimates of the number and resolution cost of potential future claims that may be filed and is discounted to present value from 2068 (which is the Company's reasonable best estimate of the actuarial determined time period through which asbestos-related claims will be filed against its affiliates). Estimated asbestos-related defense costs are included in the asbestos liability. The Company's legal strategy for resolving claims also impacts these estimates. The Company considers various trends and developments in evaluating the period of time (the look-back period) over which historical claim and settlement experience is used to estimate and value claims reasonably projected to be made through 2068. At least annually, the Company assesses the sufficiency of its estimated liability for pending and future claims and defense costs by evaluating actual experience regarding claims filed, settled and dismissed, and amounts paid in settlements. In addition to claims and settlement experience, the Company considers additional quantitative and qualitative factors such as changes in legislation, the legal environment, and the Company's defense strategy. The Company also evaluates the recoverability of its insurance receivable on an annual basis. The Company evaluates all of these factors and determines whether a change in the estimate of its liability for pending and future claims and defense costs or insurance receivable is warranted.

In connection with the recognition of liabilities for asbestos-related matters, the Company records asbestos-related insurance recoveries that are probable. Estimated asbestos-related insurance recoveries represent estimated amounts due to the Company for previously paid and settled claims and the probable reimbursements relating to its estimated liability for pending and future claims discounted to present value. In determining the amount of insurance recoverable, the Company considers available insurance, allocation methodologies, solvency and creditworthiness of the insurers.

Income Taxes

Deferred tax liabilities and assets are recognized for the expected future tax consequences of events that have been reflected in the consolidated financial statements. Deferred tax asset and liabilities are determined based on the differences between the book and tax basis of particular assets and liabilities and operating loss carryforwards, using tax rates in effect for the years in which the differences are expected to reverse. A valuation allowance is provided to reduce the carrying or book value of deferred tax assets if, based upon the available evidence, including consideration of tax planning strategies, it is more-likely-than-not that some or all of the deferred tax assets will not be realized.

Prior Period Revision – Statement of Cash Flows

The Company revised the amounts previously reported as net proceeds from borrowings with maturities less than three months and proceeds from debt for certain short-term debt transactions that were incorrectly presented on a net basis within the financing activities section of the consolidated statements of cash flows for the years ended September 30, 2022 and 2021. Cash provided by financing activities and the total increase (decrease) in cash, cash equivalents and restricted cash were unchanged for all affected periods. The Company does not believe the impact of the incorrect presentation was material to any period.

New Accounting Pronouncements

Recently Issued Accounting Pronouncements

In September 2022, the FASB issued ASU 2022-04, "Disclosure of Supplier Finance Program Obligations", which is intended to enhance the transparency surrounding the use of supplier finance programs. Supplier finance programs may also be referred to as reverse factoring, payables finance, or structured payables arrangements. The amendments require a buyer that uses supplier finance programs to make annual disclosures about the program’s key terms, the balance sheet presentation of related amounts, the confirmed amount outstanding at the end of the period, and associated rollforward information. Only the amount outstanding at the end of the period must be disclosed in interim periods. The Company expects to adopt the new disclosures, other than the rollforward disclosure, as required at the beginning of fiscal 2024. The rollforward disclosures will be adopted as required at the beginning of fiscal 2025.

Other recently issued accounting pronouncements are not expected to have a material impact on the Company's consolidated financial statements.

2. ACQUISITIONS AND DIVESTITURES

FM:Systems Acquisition

In July 2023, the Company completed its acquisition of FM:Systems, a leading digital workplace management and Internet of Things ("IoT") solutions provider for facilities and real estate professionals, for $540 million, net of cash acquired, which was comprised of an upfront cash payment of $465 million, net of cash acquired, and the estimated fair value at the acquisition date of contingent earn-out liabilities of $75 million. The contingent earn-out liabilities are primarily based upon the achievement of certain defined operating results in the two years following the acquisition, with a maximum payout of $155 million.

In connection with the acquisition, the Company recorded goodwill of $399 million in the Building Solutions North America segment. Goodwill is attributable primarily to expected synergies, expanded market opportunities and other benefits that the Company believes will result from integrating the products and capabilities of FM:Systems into its operations. The goodwill created in the acquisition is not deductible for tax purposes.

The preliminary fair values of the assets acquired and liabilities assumed related to FM:Systems are as follows (in millions):

Cash and cash equivalents	$ 8
Accounts receivable	15
All other current assets	9
Goodwill	399
Intangible assets	194
All other noncurrent assets	7
Total assets acquired	632
Deferred revenue	24
All other current liabilities	49
Other noncurrent liabilities	11
Total liabilities acquired	84
Net assets acquired	$ 548

The purchase price allocation to identifiable intangible assets acquired is as follows:

	Fair Value (in millions)	Weighted Average Life (in years)
Customer relationships	$ 117	10
Technology	74	10
Trademarks and other definite-lived intangibles	3	4
Total identifiable intangible assets	$ 194	

Silent-Aire Acquisition

In May 2021, the Company completed its acquisition of Silent-Aire, a global leader in hyperscale data center cooling and modular critical infrastructure solutions, for approximately $755 million, net of cash acquired, which was comprised of an upfront net cash payment of approximately $661 million, the estimated fair value of contingent earn-out liabilities at the acquisition date of approximately $86 million and a working capital adjustment of $8 million. The contingent earn-out liabilities are based upon the achievement of certain defined operating results in each of the three years following the acquisition, with a maximum payout of approximately $250 million. The Company recorded reductions in the fair value of the contingent earn-out liability of $30 million and $43 million during the years ended September 30, 2023 and 2022, respectively. No earn-out payments were made for the twelve-month earn-out periods ended April 30, 2023 and 2022, as the performance measures for the periods were not achieved.

Other Acquisitions

During fiscal 2023, the Company acquired several other businesses for a combined purchase price, net of cash acquired, of $306 million, of which $260 million was paid as of September 30, 2023. Intangible assets associated with these acquisitions totaled $116 million and primarily relate to customer relationships and technology. The Company recorded goodwill associated with these acquisitions of $119 million in the Global Products segment, $55 million in the Building Solutions Asia Pacific segment and $13 million in the Building Solutions EMEA/LA segment.

During fiscal 2022, the Company acquired several businesses for a combined purchase price, net of cash acquired, of $323 million, of which $269 million was paid as of September 30, 2022. Intangible assets associated with these acquisitions totaled $123 million and primarily relate to customer relationships and technology. The Company recorded goodwill associated with these acquisitions of $194 million, of which $68 million was assigned to the Building Solutions EMEA/LA segment, $45 million was assigned to the Global Products segment, $44 million was assigned to the Building Solutions Asia Pacific segment and $36 million was assigned to the Building Solutions North America segment.

Other acquisitions were not material individually or in the aggregate in fiscal 2023 and 2022.

Divestitures

Refer to Note 3, "Assets and Liabilities Held for Sale & Discontinued Operations," of the notes to the consolidated financial statements for disclosure of a business in the Building Solutions Asia Pacific segment that was sold on August 1, 2023. No divestitures were material individually or in the aggregate in fiscal 2023 and 2022.

3. ASSETS AND LIABILITIES HELD FOR SALE AND DISCONTINUED OPERATIONS

Assets and Liabilities Held for Sale

During fiscal 2023, the Company concluded that its Global Retail business, which is included in the Building Solutions North America, Building Solutions Asia Pacific and Building Solutions EMEA/LA segments and was previously presented as held for sale in the consolidated statements of financial position as of September 30, 2022, no longer met the criteria to be classified as held for sale. The Company discontinued sales efforts based on market factors and other considerations and determined that it was no longer probable that the business would be sold within one year. As a result, the assets and liabilities are now reported as held and used on the consolidated statements of financial position as of both September 30, 2023 and September 30, 2022. The net assets were reclassified to held and used at the lower of fair value or adjusted carrying value in the current period. Due to impairment charges recorded in prior periods, there was no impact to the consolidated statements of income as a result of the reclassification.

A business in the Building Solutions Asia Pacific segment, which was previously classified as held for sale, was sold on August 1, 2023. The net assets were not significant to the consolidated statements of financial position.

During fiscal 2022, the Company determined that certain assets of the Building Solutions Asia Pacific segment no longer met the criteria to be classified as held for sale because the Company could no longer assert that the sale of the assets was probable within one year due to declines in the Chinese real estate market after the COVID-19 lockdowns. As a result, the Company reclassified the held for sale assets to held and used as of September 30, 2022. As a result, the Company reclassified the held for sale assets to held and used as of September 30, 2022. Upon reclassification, an impairment of $45 million was recorded within restructuring and impairment costs in the consolidated statements of income to adjust the asset to the lower of its carrying value adjusted for depreciation and the fair value of the asset as of September 30, 2022.

The following table summarizes impairment charges for the various assets held for sale (in millions):

	Year Ended September 30,	
	2023	2022
Global Retail business	$ 438	$ 359
Business in the Building Solutions Asia Pacific segment	60	60
Certain assets in the Building Solution Asia Pacific segment	—	45

The impairment charges were recorded within restructuring and impairment costs in the consolidated statements of income and include costs to write down the disposal groups to their estimated fair values, less costs to sell; impairment of goodwill; and the write-off of internal-use software projects that were no longer probable of being completed. Refer to Note 8, "Goodwill and Other Intangible Assets," of the notes to the consolidated financial statements for further information regarding the goodwill impairment charges.

The businesses did not meet the criteria to be classified as discontinued operations as neither planned divestiture represented a strategic shift that would have a major effect on the Company's operations and financial results.

Discontinued Operations

The Company completed the sale of its Power Solutions business on April 30, 2019. In fiscal 2021, the favorable resolution of certain post-closing working capital and net debt adjustments resulted in income from discontinued operations of $124 million, net of tax of $26 million, due to a reversal of a reserve established in connection with the sale.

4. REVENUE RECOGNITION

Disaggregated Revenue

The following table presents the Company's revenues disaggregated by segment and by products and systems versus services revenue (in millions):

	Year Ended September 30,					
	2023			2022		
	Products & Systems	Services	Total	Products & Systems	Services	Total
Building Solutions North America	$ 6,368	$ 3,962	$ 10,330	$ 5,708	$ 3,659	$ 9,367
Building Solutions EMEA/LA	2,275	1,821	4,096	2,188	1,657	3,845
Building Solutions Asia Pacific	1,987	759	2,746	2,005	709	2,714
Global Products	9,621	—	9,621	9,373	—	9,373
Total	$ 20,251	$ 6,542	$ 26,793	$ 19,274	$ 6,025	$ 25,299

The following table presents further disaggregation of Global Products revenues by product type (in millions):

	Year Ended September 30,	
	2023	2022
HVAC	$ 6,820	$ 6,756
Fire & Security	2,446	2,367
Industrial Refrigeration	355	250
Total	$ 9,621	$ 9,373

Contract Balances

Contract assets represent the Company’s right to consideration for performance obligations that have been satisfied but not billed and consist of unbilled receivables and costs in excess of billings. Contract liabilities are customer payments received before performance obligations are satisfied. Contract balances are classified as assets or liabilities on a contract-by-contract basis at the end of each reporting period.

The following table presents the location and amount of contract balances in the Company's consolidated statements of financial position (in millions):

		September 30,	
	Location of contract balances	2023	2022
Contract assets - current	Accounts receivable - net	$ 2,370	$ 2,067
Contract assets - noncurrent	Other noncurrent assets	12	79
Contract liabilities - current	Deferred revenue	1,996	1,804
Contract liabilities - noncurrent	Other noncurrent liabilities	297	282

The Company recognized revenue that was included in the beginning of period contract liability balance of approximately $1.6 billion and $1.5 billion for the years ended September 30, 2023 and 2022, respectively.

Performance Obligations

A performance obligation is a distinct good, service, or bundle of goods and services promised in a contract. A contract’s transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. When contracts with customers require significant and complex integration, contain goods or services which are highly interdependent or interrelated, or are goods or services which significantly modify or customize other promises in the contracts and, therefore, are not distinct, then the entire contract is accounted for as a single performance obligation. For any contracts with multiple performance obligations, the contract’s transaction price is allocated to each performance obligation based on the estimated relative standalone selling price of each distinct good or service in the contract. For product sales, each product sold to a customer typically represents a distinct performance obligation.

Performance obligations are satisfied as of a point in time or over time. The timing of satisfying the performance obligation is typically indicated by the terms of the contract. As of September 30, 2023, the aggregate amount of the transaction price allocated to remaining performance obligations was approximately $19.6 billion, of which approximately 65% is expected to be recognized as revenue over the next two years. The remaining performance obligations expected to be recognized in revenue beyond two years primarily relate to large, multi-purpose contracts to construct hospitals, schools and other governmental buildings, which include services to be performed over the building's lifetime, with average initial contract terms of 25 to 35 years. Future contract modifications could affect both the timing and the amount of the remaining performance obligations. The Company excludes the value of remaining performance obligations for contracts with an original expected duration of one year or less.

Costs to Obtain or Fulfill a Contract

The Company recognizes the incremental costs incurred to obtain or fulfill a contract with a customer as an asset when the costs are recoverable. These costs consist primarily of sales commissions and bid/proposal costs. Costs to obtain or fulfill a contract are capitalized when incurred and amortized to expense over the period of contract performance.

The following table presents the location and amount of costs to obtain or fulfill a contract recorded in the Company's consolidated statements of financial position (in millions):

	September 30,	
	2023	2022
Other current assets	$ 156	$ 139
Other noncurrent assets	224	174
Total	$ 380	$ 313

Amortization of costs to obtain or fulfill a contract were $251 million and $191 million during the years ended September 30, 2023 and 2022, respectively. There were no impairment losses recognized in the year ended September 30, 2023 or 2022.

5. ACCOUNTS RECEIVABLE

The Company sold $1,962 million and $1,115 million of accounts receivable under factoring agreements during the years ended September 30, 2023, and 2022, respectively. The cost of factoring such receivables was not material. Previously sold receivables still outstanding were $681 million and $476 million as of September 30, 2023 and September 30, 2022, respectively.

6. INVENTORIES

Inventories consisted of the following (in millions):

	September 30,	
	2023	2022
Raw materials and supplies	$ 1,203	$ 1,040
Work-in-process	226	203
Finished goods	1,347	1,422
Inventories	$ 2,776	$ 2,665

7. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consisted of the following (in millions):

	September 30,	
	2023	2022
Buildings and improvements	$ 1,337	$ 1,320
Subscriber systems	823	762
Machinery and equipment	4,227	3,745
Construction in progress	540	514
Land	194	197
Total property, plant and equipment	7,121	6,538
Less: Accumulated depreciation	(3,985)	(3,407)
Property, plant and equipment - net	$ 3,136	$ 3,131

During the fourth quarter of fiscal 2023, the Company determined that a triggering event had occurred in the asset group comprising the security subscriber business of Argentina, primarily as a result of the significant devaluation of the Argentine peso that occurred during the quarter and the resulting impact on operating results and cash flows. The Company conducted the two-step impairment test required in accordance with ASC 360, "Property, Plant & Equipment" and determined that the carrying amount of the asset group exceeded its fair value. A non-cash impairment charge to the subscriber system assets of $78 million was recorded and is included in restructuring and impairment costs in the consolidated statements of income. The Company used a discounted cash flow model to estimate the fair value of the asset group. The primary assumptions and inputs used in the model included management's internal projections of future cash flows, the weighted-average cost of capital and the long-term growth rate. The fair value measurement is classified as Level 3 within the fair value hierarchy as defined in ASC 820, "Fair Value Measurement" due to the unobservable inputs used.

8. GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill

The changes in the carrying amount of goodwill in each of the Company’s reportable segments were as follows (in millions):

	Year Ended September 30, 2023				
	Building Solutions North America	Building Solutions EMEA/LA	Building Solutions Asia Pacific	Global Products	Total
Goodwill	$ 9,630	$ 1,794	$ 1,116	$ 5,591	18,131
Accumulated impairment loss	(659)	(47)	—	(75)	(781)
Balance at beginning of period	8,971	1,747	1,116	5,516	17,350
Acquisitions [1]	399	13	55	119	586
Impairments	—	—	—	(184)	(184)
Foreign currency translation and other	11	125	8	40	184
Balance at end of period	$ 9,381	$ 1,885	$ 1,179	$ 5,491	$ 17,936

	Year Ended September 30, 2022				
	Building Solutions North America	Building Solutions EMEA/LA	Building Solutions Asia Pacific	Global Products	Total
Goodwill	$ 9,639	$ 2,088	$ 1,237	$ 5,842	18,806
Accumulated impairment loss	(424)	(47)	—	—	(471)
Balance at beginning of period	9,215	2,041	1,237	5,842	18,335
Acquisitions [1]	37	78	44	60	219
Divestitures	—	(5)	(14)	—	(19)
Impairments	(235)	—	—	(75)	(310)
Foreign currency translation and other	(46)	(367)	(151)	(311)	(875)
Balance at end of period	$ 8,971	$ 1,747	$ 1,116	$ 5,516	$ 17,350

[1] Includes measurement period adjustments

In the second quarter of fiscal 2023, management completed an updated comprehensive review of the Silent-Aire reporting unit, which is included in the Global Products segment. Because actual results were lower than planned and the nearer term forecast was revised to reflect lower margins and earnings, the Company determined a triggering event had occurred and a quantitative test of goodwill for possible impairment was necessary. As a result of the goodwill impairment test, the Company recorded a non-cash impairment charge of $184 million within restructuring and impairment costs in the consolidated statements of income in fiscal 2023, which was determined by comparing the carrying amount of the reporting unit to its fair value. The Silent-Aire reporting unit has no remaining goodwill balance as of September 30, 2023.

Management completed its fiscal 2023 annual impairment test as of July 31. The fair value of all reporting units substantially exceeded their carrying values, with the exception of one reporting unit with $455 million of goodwill whose fair value in excess of its carrying value was approximately 10%. For this reporting unit, a 1% increase in the discount rate, or a 1.5% decrease in the revenue growth rates, would cause the fair value to be less than the carrying value. While no impairment was recorded, it is possible that future changes in circumstances could result in a non-cash impairment charge.

During its fiscal 2022 annual impairment test, the Company determined that goodwill in the Silent-Are reporting unit was impaired and recorded a non-cash impairment charge of $75 million within restructuring and impairment costs in the consolidated statements of income. The impairment charge was determined by comparing the carrying amount of the reporting unit to its fair value.

The Company used a discounted cash flow model to estimate the fair value of the Silent-Aire reporting unit in both fiscal 2023 and 2022. The primary assumptions and inputs used in the model included management's internal projections of future cash flows, the weighted-average cost of capital and the long-term growth rate. The fair value measurement is classified as Level 3 within the fair value hierarchy as defined in ASC 820, "Fair Value Measurement" due to the unobservable inputs used.

In fiscal 2022, the Company concluded it had a triggering event requiring assessment of goodwill impairment for its North America Retail reporting unit in conjunction with classifying its Global Retail business as held for sale. As a result, the Company recorded a non-cash impairment charge of $235 million within restructuring and impairment costs in the consolidated statements of income in fiscal 2022. The North America Retail reporting unit had no remaining goodwill balance as of September 30, 2023 or 2022. The Company used the market approach to estimate the fair value of the reporting unit based on the relative estimated sales proceeds for the planned disposal of the Global Retail business attributable to the North America Retail reporting unit. The inputs utilized in the analysis are classified as Level 3 inputs within the fair value hierarchy as defined in ASC 820, "Fair Value Measurement."

Refer to Note 3, "Assets and Liabilities Held for Sale & Discontinued Operations," of the notes to the consolidated financial statements for further disclosure.

There were no other triggering events requiring that an impairment assessment be conducted in fiscal 2023, 2022 or 2021. However, it is possible that future changes in circumstances would require the Company to record additional non-cash impairment charges.

Other Intangible Assets

The Company's other intangible assets, primarily from business acquisitions, consisted of (in millions):

	September 30,					
	2023			2022		
	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
Definite-lived intangible assets						
Technology	$ 1,575	$ (806)	$ 769	$ 1,481	$ (728)	$ 753
Customer relationships	3,047	(1,496)	1,551	3,011	(1,340)	1,671
Miscellaneous	889	(435)	454	949	(425)	524
	5,511	(2,737)	2,774	5,441	(2,493)	2,948
Indefinite-lived intangible assets						
Trademarks/tradenames	2,114	—	2,114	2,207	—	2,207
Total intangible assets	$ 7,625	$ (2,737)	$ 4,888	$ 7,648	$ (2,493)	$ 5,155

During the fourth quarter of fiscal 2023, the Company impaired $18 million of Miscellaneous intangible assets in the Global Products segment and $10 million of a trademark in the Building Solutions Asia Pacific segment. These non-cash charges were recorded within restructuring and impairment costs in the consolidated statements of income.

There was no impairment of other indefinite-lived intangible assets in any of these years, other than as disclosed above. For all other remaining indefinite lived intangible assets, the Company estimated fair values were greater than the carrying values, with the exception of three other registered trademarks in which the estimated fair values were consistent with their carrying values which totaled $412 million.

Amortization of other intangible assets included within continuing operations for the years ended September 30, 2023, 2022 and 2021 was $439 million, $427 million and $435 million, respectively.

The following table summarizes the expected amortization of definite-lived intangible assets, excluding the impact of future acquisitions, by year (in millions):

2024	$ 508
2025	479
2026	410
2027	365
2028	252

9. LEASES

The following table presents the Company's lease costs (in millions):

	Year Ended September 30,		
	2023	2022	2021
Operating lease cost	$ 384	$ 352	$ 384
Variable lease cost	165	165	130
Total lease costs	$ 549	$ 517	$ 514

The following table presents supplemental consolidated statement of financial position information (in millions):

	Location of lease balances	September 30, 2023	September 30, 2022
Operating lease right-of-use assets	Other noncurrent assets	$ 1,389	$ 1,271
Operating lease liabilities - current	Other current liabilities	318	280
Operating lease liabilities - noncurrent	Other noncurrent liabilities	1,086	987
Weighted-average remaining lease term		7 years	7 years
Weighted-average discount rate		3.5 %	2.1 %

The following table presents supplemental cash flow information related to operating leases (in millions):

	Year Ended September 30, 2023	2022	2021
Cash paid for amounts included in the measurement of lease liability:			
Operating cash outflows from operating leases	$ 373	$ 367	$ 398
Noncash operating lease activity:			
Right-of-use assets obtained in exchange for operating lease liabilities	427	369	515

The following table presents future minimum rental payments for operating lease liabilities as of September 30, 2023 (in millions):

2024	$ 358
2025	300
2026	227
2027	171
2028	123
After 2028	404
Total operating lease payments	1,583
Less: Interest	(179)
Present value of lease payments	$ 1,404

10. DEBT AND FINANCING ARRANGEMENTS

Short-Term Debt

Short-term debt consisted of the following (in millions):

	September 30, 2023	2022
Bank borrowings	$ 26	$ 10
Commercial paper	200	172
Term loans	159	487
	$ 385	$ 669
Weighted average interest rate on short-term debt outstanding	5.1 %	0.5 %

Long-Term Debt

Long-term debt consisted of the following (in millions; due dates by fiscal year):

Issuer	Interest Rate	Due Date	Par Value	Carrying Value	
				September 30, 2023	September 30, 2022
JCI plc	4.625%	2023	$ 25	$ —	$ 25
TIFSA[1]	4.625%	2023	$ 7	—	7
JCI plc	1.00%	2023	€ 846	—	830
JCI plc	3.625%	2024	$ 453	453	453
JCI Inc.	3.625%	2024	$ 31	31	31
JCI plc	EURIBOR plus 0.70%	2024	€ 150	159	—
JCI plc	1.375%	2025	€ 423	450	419
TIFSA[1]	1.375%	2025	€ 54	57	53
JCI plc	3.90%	2026	$ 487	499	505
TIFSA[1]	3.90%	2026	$ 51	50	51
JCI plc	TORF plus 0.40%	2027	¥ 30,000	202	208
JCI plc and TFSCA[2]	0.375%	2027	€ 500	528	488
JCI plc and TFSCA[2]	3.00%	2028	€ 600	634	586
JCI plc and TFSCA[2]	1.75%	2030	$ 625	624	623
JCI plc and TFSCA[2]	2.00%	2031	$ 500	497	496
JCI plc and TFSCA[2]	1.00%	2032	€ 500	529	489
JCI plc and TFSCA[2]	4.90%	2032	$ 400	394	394
JCI plc and TFSCA[2]	4.25%	2035	€ 800	839	—
JCI plc	6.00%	2036	$ 342	339	339
JCI Inc.	6.00%	2036	$ 8	8	8
JCI plc	5.70%	2041	$ 190	189	189
JCI Inc.	5.70%	2041	$ 30	30	30
JCI plc	5.25%	2042	$ 155	155	155
JCI Inc.	5.25%	2042	$ 6	6	6
JCI plc	4.625%	2044	$ 444	442	441
JCI Inc.	4.625%	2044	$ 6	6	6
JCI plc	5.125%	2045	$ 477	431	557
TIFSA[1]	5.125%	2045	$ 23	23	23
JCI plc	6.95%	2046	$ 32	32	32
JCI Inc.	6.95%	2046	$ 4	4	4
JCI plc	4.50%	2047	$ 500	496	496
JCI plc	4.95%	2064	$ 341	340	340
JCI Inc.	4.95%	2064	$ 15	15	15
Other				36	25
Gross long-term debt				8,498	8,324
Less: current portion				645	865
Less: debt issuance costs				35	33
Long-term debt				$ 7,818	$ 7,426

[1] TIFSA = Tyco International Finance S.A.
[2] TFSCA = Tyco Fire & Security Finance S.C.A.

The following table presents maturities of long-term debt as of September 30, 2023 (in millions):

2024	$	646
2025		508
2026		550
2027		731
2028		634
After 2028		5,429
Total	$	8,498

Other

As of September 30, 2023, the Company had a syndicated $2.5 billion committed revolving credit facility, which was scheduled to expire in December 2024, and a syndicated $500 million committed revolving credit facility, which expired in November 2023. Both credit facilities were renewed on December 11, 2023. The $2.5 billion facility is now scheduled to expire in December 2028 and the $500 million facility is now scheduled to expire in December 2024. There were no draws on the facilities as of September 30, 2023.

As of September 30, 2023, the Company was in compliance with all financial covenants set forth in its credit agreements and the indentures governing its outstanding notes, and expects to remain in compliance for the foreseeable future.

Total interest paid on both short and long-term debt for the years ended September 30, 2023, 2022 and 2021 was $298 million, $226 million and $242 million, respectively.

11. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

Cash Flow Hedges

The Company has global operations and participates in foreign exchange markets to minimize its risk of loss from fluctuations in foreign currency exchange rates. The Company selectively hedges anticipated transactions that are subject to foreign exchange rate risk primarily using foreign currency exchange forward contracts. The Company hedges 70% to 90% of the notional amount of each of its known foreign exchange transactional exposures.

The Company selectively hedges anticipated transactions that are subject to commodity price risk, primarily using commodity hedge contracts, to minimize overall price risk associated with its purchases of copper and aluminum in cases where commodity price risk cannot be naturally offset or hedged through supply base fixed price contracts. Commodity risks are systematically managed pursuant to policy guidelines. The maturities of the commodity hedge contracts coincide with the expected purchase of the commodities.

As cash flow hedges under ASC 815, "Derivatives and Hedging," the hedge gains or losses due to changes in fair value are initially recorded as a component of AOCI and are subsequently reclassified into earnings when the hedged transactions occur and affect earnings. These contracts were highly effective in hedging the variability in future cash flows attributable to changes in currency exchange rates during the years ended September 30, 2023 and 2022.

The Company had the following outstanding contracts to hedge forecasted commodity purchases (in metric tons):

	Volume Outstanding as of September 30,	
Commodity	2023	2022
Copper	2,812	3,629
Aluminum	5,976	6,758

The Company enters into forward-starting interest rate swaps in conjunction with anticipated note issuances. The following table summarizes forward-starting interest rate swaps and the related anticipated note issuances (in millions):

	Year Ended September 30,	
	2023	2022
US dollar denominated		
Forward-starting interest swaps	$ 600	$ 300
Anticipated note issuance	800	400
Euro denominated		
Forward-starting interest swap	€ 400	€ 200
Anticipated note issuance	800	600

Forward-starting interest swaps are terminated when the anticipated notes are issued. As of September 30, 2023, $600 million of forward-starting interest swaps were outstanding. Accumulated amounts recorded in AOCI as of the date of the note issuance are amortized to interest expense over the life of the related note to reflect the difference between the swap's reference rate and the fixed rate of the note.

Net Investment Hedges

The Company enters into cross-currency interest rate swaps and foreign currency denominated debt obligations to selectively hedge portions of its net investment in non-U.S. subsidiaries. The currency effects of the cross-currency interest rate swaps and debt obligations are reflected in the AOCI account within shareholders’equity attributable to Johnson Controls ordinary shareholders where they offset gains and losses recorded on the Company’s net investments globally.

The following table summarizes net investment hedges (in billions):

	September 30,	
	2023	2022
Euro-denominated bonds designated as net investment hedges in Europe	€ 2.9	€ 2.9
Yen-denominated debt designated as a net investment hedge in Japan	¥ 30	¥ 30
US dollar vs. Yen cross-currency interest rate swap designated as a net investment hedge in Japan	¥ 14	¥ —

Derivatives Not Designated as Hedging Instruments

The Company holds certain foreign currency forward contracts not designated as hedging instruments under ASC 815 to hedge foreign currency exposure resulting from monetary assets and liabilities denominated in nonfunctional currencies. The changes in fair value of these foreign currency exchange derivatives are recorded in the consolidated statements of income where they offset foreign currency transactional gains and losses on the nonfunctional currency denominated assets and liabilities being hedged.

Fair Value of Derivative Instruments

The following table presents the location and fair values of derivative instruments and hedging activities included in the Company's consolidated statements of financial position (in millions):

	Designated as Hedging Instruments		Not Designated as Hedging Instruments	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Other current assets				
Foreign currency exchange derivatives	$ 16	$ 30	$ 13	$ 24
Interest rate swaps	22	—	—	—
Other noncurrent assets				
Cross-currency interest rate swap	5	—	—	—
Total assets	$ 43	$ 30	$ 13	$ 24
Other current liabilities				
Foreign currency exchange derivatives	$ 20	$ 24	$ 5	$ 27
Commodity derivatives	2	10	—	—
Long-term debt				
Foreign currency denominated debt	3,253	3,077	—	—
Total liabilities	$ 3,275	$ 3,111	$ 5	$ 27

Counterparty Credit Risk

The use of derivative financial instruments exposes the Company to counterparty credit risk. The Company has established policies and procedures to limit the potential for counterparty credit risk, including establishing limits for credit exposure and continually assessing the creditworthiness of counterparties. As a matter of practice, the Company deals with major banks worldwide having strong investment grade long-term credit ratings. To further reduce the risk of loss, the Company generally enters into International Swaps and Derivatives Association ("ISDA") master netting agreements with substantially all of its counterparties. The Company enters into ISDA master netting agreements with counterparties that permit the net settlement of amounts owed under the derivative contracts. The master netting agreements generally provide for net settlement of all outstanding contracts with a counterparty in the case of an event of default or a termination event. The Company has not elected to offset the fair value positions of the derivative contracts recorded in the consolidated statements of financial position.

The Company's derivative contracts do not contain any credit risk related contingent features and do not require collateral or other security to be furnished by the Company or the counterparties. The Company's exposure to credit risk associated with its derivative instruments is measured on an individual counterparty basis, as well as by groups of counterparties that share similar attributes. The Company does not anticipate any non-performance by any of its counterparties, and the concentration of risk with financial institutions does not present significant credit risk to the Company.

The gross and net amounts of derivative assets and liabilities were as follows (in millions):

	Fair Value of Assets		Fair Value of Liabilities	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Gross amount recognized	$ 56	$ 54	$ 3,280	$ 3,138
Gross amount eligible for offsetting	(19)	(42)	(19)	(42)
Net amount	$ 37	$ 12	$ 3,261	$ 3,096

Derivatives Impact on the Statements of Income and Statements of Comprehensive Income

The following table presents the pre-tax gains (losses) recorded in other comprehensive income (loss) related to cash flow hedges (in millions):

Derivatives in Cash Flow Hedging Relationships	Year Ended September 30, 2023	2022	2021
Foreign currency exchange derivatives	$ (13)	$ 26	$ 15
Commodity derivatives	1	(21)	4
Interest rate swaps	27	16	(21)
Total	$ 15	$ 21	$ (2)

The following table presents the location and amount of the pre-tax gains (losses) on cash flow hedges reclassified from AOCI into the Company's consolidated statements of income (in millions):

Derivatives in Cash Flow Hedging Relationships	Location of Gain (Loss) Reclassified from AOCI into Income	Year Ended September 30, 2023	2022	2021
Foreign currency exchange derivatives	Cost of sales	$ (4)	$ 25	$ 11
Commodity derivatives	Cost of sales	(8)	(7)	3
Interest rate swaps	Net financing charges	—	(2)	—
Total		$ (12)	$ 16	$ 14

The following table presents the location and amount of pre-tax gains (losses) on derivatives not designated as hedging instruments recognized in the Company's consolidated statements of income (in millions):

Derivatives Not Designated as Hedging Instruments	Location of Gain (Loss) Recognized in Income on Derivative	Year Ended September 30, 2023	2022	2021
Foreign currency exchange derivatives	Cost of sales	$ (16)	$ 10	$ (6)
Foreign currency exchange derivatives	Net financing charges	(103)	85	174
Foreign currency exchange derivatives	Selling, general and administrative	—	—	(2)
Foreign currency exchange derivatives	Income tax provision	—	—	(1)
Interest rate swaps	Net financing charges	1	—	—
Equity swap	Selling, general and administrative	—	(5)	28
Total		$ (118)	$ 90	$ 193

Pre-tax gains (losses) on net investment hedges recorded as foreign currency translation adjustment ("CTA") within other comprehensive income (loss) were $(223) million, $470 million and $42 million for the years ended September 30, 2023, 2022 and 2021, respectively. No gains or losses were reclassified from CTA into income for the years ended September 30, 2023, 2022 and 2021.

12. FAIR VALUE MEASUREMENTS

The following tables present the Company's fair value hierarchy for those assets and liabilities measured at fair value (in millions):

		Fair Value Measurements Using:		
	Total as of September 30, 2023	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Other current assets				
Foreign currency exchange derivatives	$ 29	$ —	$ 29	$ —
Interest rate swaps	22	—	22	—
Other noncurrent assets				
Cross-currency interest rate swap	5	—	5	—
Deferred compensation plan assets	45	45	—	—
Exchange traded funds (fixed income)[1]	76	76	—	—
Exchange traded funds (equity)[1]	155	155	—	—
Total assets	$ 332	$ 276	$ 56	$ —
Other current liabilities				
Foreign currency exchange derivatives	$ 25	$ —	$ 25	$ —
Commodity derivatives	2	—	2	—
Contingent earn-out liabilities	48	—	—	48
Other noncurrent liabilities				
Contingent earn-out liabilities	76	—	—	76
Total liabilities	$ 151	$ —	$ 27	$ 124

		Fair Value Measurements Using:		
	Total as of September 30, 2022	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Other current assets				
Foreign currency exchange derivatives	$ 54	$ —	$ 54	$ —
Exchange traded funds (fixed income)[1]	22	22	—	—
Other noncurrent assets				
Deferred compensation plan assets	46	46	—	—
Exchange traded funds (fixed income)[1]	86	86	—	—
Exchange traded funds (equity)[1]	131	131	—	—
Total assets	$ 339	$ 285	$ 54	$ —
Other current liabilities				
Foreign currency exchange derivatives	$ 51	$ —	$ 51	$ —
Commodity derivatives	10	—	10	—
Contingent earn-out liabilities	30	—	—	30
Other noncurrent liabilities				
Contingent earn-out liabilities	30	—	—	30
Total liabilities	$ 121	$ —	$ 61	$ 60

[1]Classified as restricted investments for payment of asbestos liabilities. Refer to Note 21, "Commitments and Contingencies" of the notes to consolidated financial statements for further details.

The following table summarizes the changes in contingent earn-out liabilities, which are valued using significant unobservable inputs (Level 3) (in millions):

Balance at September 30, 2022	$	60
Acquisitions		112
Payments		(10)
Reduction for change in estimates		(39)
Currency translation		1
Balance at September 30, 2023	$	124

Valuation Methods

Commodity derivatives: The commodity derivatives are valued under a market approach using publicized prices, where available, or dealer quotes.

Contingent earn-out liabilities: The contingent earn-out liabilities are generally established using a Monte Carlo simulation based on the forecasted operating results and the earn-out formulas specified in the purchase agreements.

Cross-currency interest rate swaps: The fair value of cross-currency interest rate swaps represents the difference between the swap's reference rate and exchange rate and the interest and exchange rates for a similar instrument as of the reporting period. Cross-currency interest rate swaps are valued under a market approach using publicized prices.

Deferred compensation plan assets: Assets held in the deferred compensation plans will be used to pay benefits under certain of the Company's non-qualified deferred compensation plans. The investments primarily consist of mutual funds which are publicly traded on stock exchanges and are valued using a market approach based on the quoted market prices. Unrealized gains (losses) on the deferred compensation plan assets are recognized in the consolidated statements of income where they offset unrealized gains and losses on the related deferred compensation plan liability.

Foreign currency exchange derivatives: The foreign currency exchange derivatives are valued under a market approach using publicized spot and forward prices.

Interest rate swaps: The fair value of interest rate swaps represents the difference between the swap's reference rate and the interest rate for a similar instrument as of the reporting period. Interest rate swaps are valued under a market approach using publicized prices.

Investments in exchange traded funds: Investments in exchange traded funds are valued using a market approach based on quoted market prices, where available, or broker/dealer quotes of identical or comparable instruments. Refer to Note 21, "Commitments and Contingencies," of the notes to consolidated financial statements for further information.

The following table presents the portion of unrealized gains (losses) recognized in the consolidated statements of income that relate to equity securities still held at September 30, 2023 and 2022 (in millions):

	Year Ended September 30,	
	2023	2022
Deferred compensation plan assets	$ 5	$ (10)
Investments in exchange traded funds	24	(55)

All of the gains and losses on investments in exchange traded funds related to restricted investments.

The fair values of cash and cash equivalents, accounts receivable, short-term debt and accounts payable approximate their carrying values.

The fair value of long-term debt at September 30, 2023 and 2022 was as follows (in billions):

	Year Ended September 30,	
	2023	2022
Public debt	$ 7.1	$ 7.1
Other long-term debt	0.4	0.2
Total fair value of long-term debt	$ 7.5	$ 7.3

The fair value of public debt was determined primarily using market quotes which are classified as Level 1 inputs within the ASC 820 fair value hierarchy. The fair value of other long-term debt was determined using quoted market prices for similar instruments and are classified as Level 2 inputs within the ASC 820 fair value hierarchy.

13. STOCK-BASED COMPENSATION

The Johnson Controls International plc 2021 Equity and Incentive Plan authorizes stock options, stock appreciation rights, restricted (non-vested) stock/units, performance shares, performance units and other stock-based awards. The Compensation and Talent Development Committee of the Company's Board of Directors determines the types of awards to be granted to individual participants and the terms and conditions of the awards. Annual awards are typically granted in the first quarter of the fiscal year. As of September 30, 2023, there were 55 million shares of the Company's common stock reserved and 41 million shares available for issuance under the 2021 Equity and Incentive Plan.

The following table summarizes stock-based compensation related charges and benefits (in millions):

	Year Ended September 30,		
	2023	2022	2021
Compensation expense	$ 101	$ 104	$ 97
Income tax benefit resulting from share-based compensation arrangements	25	26	24
Tax impact from exercise and vesting of equity settled awards	7	12	12

Compensation expense is recorded in selling, general and administrative expenses. The Company does not settle stock options granted under share-based payment arrangements in cash.

Restricted (Non-vested) Stock / Units

A summary of non-vested restricted stock awards at September 30, 2023, and changes for the year then ended, is presented below:

	Weighted Average Price	Shares/Units Subject to Restriction
Non-vested, September 30, 2022	$ 58.78	2,949,194
Granted	65.72	2,010,495
Vested	53.55	(1,487,685)
Forfeited	64.14	(664,891)
Non-vested, September 30, 2023	$ 64.90	2,807,113

At September 30, 2023, the Company had approximately $113 million of total unrecognized compensation cost related to non-vested restricted stock arrangements granted which is expected to be recognized over a weighted-average period of 1.9 years.

Performance Share Awards (PSU's)

The following table summarizes the assumptions used in determining the fair value of stock options granted:

	Year Ended September 30,		
	2023	2022	2021
Risk-free interest rate	4.04%	0.99%	0.20%
Expected volatility of the Company's stock	33.50%	30.00%	30.90%

A summary of the status of the Company's non-vested PSU's at September 30, 2023, and changes for the year then ended, is presented below:

	Weighted Average Price	Shares/Units Subject to PSU
Non-vested, September 30, 2022	$ 60.30	1,143,071
Granted	79.45	344,029
Vested	43.19	(361,117)
Forfeited	71.18	(258,459)
Non-vested, September 30, 2023	$ 71.77	867,524

At September 30, 2023, the Company had approximately $32 million of total unrecognized compensation cost related to non-vested performance-based share unit awards which is expected to be recognized over a weighted-average period of 1.9 years.

Stock Options

The following table summarizes the assumptions used in determining the fair value of stock options granted:

	Year Ended September 30,		
	2023	2022	2021
Expected life of option (years)	5.8	6.0	6.5
Risk-free interest rate	3.59%	1.35%	0.60%
Expected volatility of the Company's stock	29.40%	27.80%	27.60%
Expected dividend yield on the Company's stock	2.10%	1.71%	2.28%

A summary of stock option activity at September 30, 2023, and changes for the year then ended, is presented below:

	Weighted Average Option Price	Shares Subject to Option	Weighted Average Remaining Contractual Life (years)	Aggregate Intrinsic Value (in millions)
Outstanding, September 30, 2022	$ 42.46	5,683,847		
Granted	66.77	570,140		
Exercised	38.17	(1,068,612)		
Forfeited or expired	59.31	(265,459)		
Outstanding, September 30, 2023	$ 45.44	4,919,916	5.75	$ 56
Exercisable, September 30, 2023	$ 39.11	3,762,092	3.83	$ 53

The following table summarizes additional stock option information:

	Year Ended September 30,		
	2023	2022	2021
Weighted-average grant-date fair value of options granted	$ 18.21	$ 18.59	$ 9.36
Intrinsic value of options exercised (in millions)	27	19	94

At September 30, 2023, the Company had approximately $10 million of total unrecognized compensation cost related to non-vested stock options which is expected to be recognized over a weighted-average period of 1.6 years.

14. EARNINGS PER SHARE

The following table reconciles the numerators and denominators used to calculate basic and diluted earnings per share (in millions):

	Year Ended September 30,		
	2023	2022	2021
Income Available to Ordinary Shareholders			
Income from continuing operations	$ 1,849	$ 1,532	$ 1,513
Income from discontinued operations	—	—	124
Basic and diluted income available to shareholders	$ 1,849	$ 1,532	$ 1,637
Weighted Average Shares Outstanding			
Basic weighted average shares outstanding	684.3	696.1	716.6
Effect of dilutive securities:			
Stock options, unvested restricted stock and unvested performance share awards	3.1	3.5	4.5
Diluted weighted average shares outstanding	687.4	699.6	721.1
Antidilutive Securities			
Stock options and unvested restricted stock	0.2	0.4	—

15. EQUITY

Dividends

The authority to declare and pay dividends is vested in the Board of Directors. The timing, declaration and payment of future dividends to holders of the Company's ordinary shares is determined by the Company's Board of Directors and depends upon many factors, including the Company's financial condition and results of operations, the capital requirements of the Company's businesses, industry practice and any other relevant factors.

Under Irish law, dividends may only be paid (and share repurchases and redemptions must generally be funded) out of "distributable reserves." The creation of distributable reserves was accomplished by way of a capital reduction, which the Irish High Court approved on December 18, 2014 and as acquired in conjunction with the Merger.

Share Repurchase Program

As of September 30, 2023, approximately $3.0 billion remained available under the share repurchase program which was approved by the Company's Board of Directors in March 2021. The share repurchase program does not have an expiration date and may be amended or terminated by the Board of Directors at any time without prior notice.

Accumulated Other Comprehensive Income

The following table includes changes in AOCI attributable to Johnson Controls (in millions, net of tax):

	Year Ended September 30,		
	2023	2022	2021
Foreign currency translation adjustments			
Balance at beginning of period	$ (901)	$ (421)	$ (778)
Aggregate adjustment for the period	(69)	(480)	357
Balance at end of period	(970)	(901)	(421)
Realized and unrealized gains (losses) on derivatives			
Balance at beginning of period	(11)	(17)	2
Current period changes in fair value	19	20	(3)
Reclassification to income [(1)]	11	(16)	(14)
Net tax impact	(4)	2	(2)
Balance at end of period	15	(11)	(17)
Pension and postretirement plans			
Balance at beginning of period	1	4	—
Reclassification to income	(1)	(3)	(3)
Other changes	—	—	8
Net tax impact	—	—	(1)
Balance at end of period	—	1	4
Accumulated other comprehensive loss, end of period	$ (955)	$ (911)	$ (434)

[(1)] Refer to Note 11, "Derivative Instruments and Hedging Activities," of the notes to consolidated financial statements for disclosure of the line items in the consolidated statements of income affected by reclassifications from AOCI into income related to derivatives.

16. RETIREMENT PLANS

Pension Benefits

The Company has non-contributory defined benefit pension plans covering certain U.S. and non-U.S. employees. The benefits provided are primarily based on years of service and average compensation or a monthly retirement benefit amount. Certain of the Company's U.S. pension plans no longer allow new participants to enter the plans and no longer accrue benefits. Funding for U.S. pension plans equals or exceeds the minimum requirements of the Employee Retirement Income Security Act of 1974. Funding for non-U.S. plans observes the local legal and regulatory limits. Also, the Company makes contributions to union-trusteed pension funds for construction and service personnel.

The following table includes information for pension plans with accumulated benefit obligations ("ABO") in excess of plan assets (in millions):

	September 30,	
	2023	2022
Accumulated benefit obligation	$ 1,834	$ 2,004
Fair value of plan assets	1,618	1,720

The following table includes information for pension plans with projected benefit obligations ("PBO") in excess of plan assets (in millions):

	September 30,	
	2023	2022
Projected benefit obligation	$ 1,846	$ 2,013
Fair value of plan assets	1,633	1,729

The Company contributed $55 million to the defined benefit plans in fiscal 2023 and expects to contribute approximately $24 million in cash in fiscal 2024. None of contributions made by the Company were voluntary.

Projected benefit payments from the plans as of September 30, 2023 are estimated as follows (in millions):

2024	$ 277
2025	235
2026	235
2027	233
2028	172
2029 - 2033	1,160

Postretirement Benefits

The Company provides certain health care and life insurance benefits for eligible retirees and their dependents primarily in the U.S. and Canada. Most non-U.S. employees are covered by government sponsored programs. The cost to the Company is not significant.

Eligibility for coverage is based on meeting certain years of service and retirement age qualifications. These benefits may be subject to deductibles, co-payment provisions and other limitations. The Company has reserved the right to modify these benefits.

The health care cost trend assumption does not have a significant effect on the amounts reported.

The following table includes information for postretirement plans with accumulated postretirement benefit obligations ("APBO") in excess of plan assets (in millions):

	September 30,	
	2023	2022
Accumulated postretirement benefit obligation	$ 58	$ 68
Fair value of plan assets	24	28

The Company contributed $2 million to the postretirement benefit plans in fiscal 2023 and expects to contribute approximately $2 million in cash in fiscal 2024.

Projected benefit payments from the plans as of September 30, 2023 are estimated as follows (in millions):

2024	$ 10
2025	10
2026	9
2027	9
2028	7
2029 - 2033	27

Defined Contribution Plans

The Company sponsors various defined contribution savings plans that allow employees to contribute a portion of their pre-tax and/or after-tax income in accordance with plan specified guidelines. Under specified conditions, the Company will contribute to certain savings plans based on predetermined percentages of compensation earned by the employee and/or will match a percentage of the employee contributions up to certain limits. Defined contribution plan contributions charged to expense amounted to $209 million, $196 million and $118 million during the years ended September 30, 2023, 2022 and 2021, respectively. The Company temporarily suspended certain contributions in fiscal 2021 in response to the COVID-19 pandemic.

Multiemployer Benefit Plans

The Company contributes to multiemployer benefit plans based on obligations arising from collective bargaining agreements related to certain of its hourly employees in the U.S. These plans provide retirement benefits to participants based on their service to contributing employers. The benefits are paid from assets held in trust for that purpose. The trustees typically are responsible for determining the level of benefits to be provided to participants as well as for such matters as the investment of the assets and the administration of the plans.

The risks of participating in these multiemployer benefit plans are different from single-employer benefit plans in the following aspects:

- Assets contributed to the multiemployer benefit plan by one employer may be used to provide benefits to employees of other participating employers.
- If a participating employer stops contributing to the multiemployer benefit plan, the unfunded obligations of the plan may be borne by the remaining participating employers.
- If the Company stops participating in some of its multiemployer benefit plans, it may be required to pay those plans an amount based on its allocable share of the underfunded status of the plan, referred to as a withdrawal liability.

The Company participates in approximately 260 multiemployer benefit plans, none of which are individually significant to the Company. The number of employees covered by the Company’s multiemployer benefit plans has remained consistent over the past three years, and there have been no significant changes that affect the comparability of fiscal 2023, 2022 and 2021 contributions. The Company recognizes expense for the contractually-required contribution for each period. The Company contributed $67 million, $71 million and $67 million to multiemployer benefit plans during the years ended September 30, 2023, 2022 and 2021, respectively.

Based on the most recent information available, the Company believes that the present value of actuarial accrued liabilities in certain of these multiemployer benefit plans may exceed the value of the assets held in trust to pay benefits. Currently, the Company is not aware of any significant multiemployer benefit plans for which it is probable or reasonably possible that the Company will be obligated to make up any shortfall in funds. Moreover, if the Company were to exit certain markets or otherwise cease making contributions to these funds, the Company could trigger a withdrawal liability. Currently, the Company is not aware of any multiemployer benefit plans for which it is probable or reasonably possible that the Company will have a significant withdrawal liability. Any accrual for a shortfall or withdrawal liability will be recorded when it is probable that a liability exists and it can be reasonably estimated.

Plan Assets

The Company’s investment policies employ an approach whereby a mix of equities, fixed income and alternative investments are used to maximize the long-term return of plan assets for a prudent level of risk. The investment portfolio primarily contains a diversified blend of equity and fixed income investments. Equity investments are diversified across U.S. and non-U.S. stocks, as well as growth, value and small to large capitalization. Fixed income investments include corporate and government issues, with short-, mid- and long-term maturities, with a focus on investment grade when purchased and a target duration close to that of the plan liability. Investment and market risks are measured and monitored on an ongoing basis through regular investment portfolio reviews, annual liability measurements and periodic asset/liability studies. The majority of the real estate component of the portfolio is invested in a diversified portfolio of high-quality, operating properties with cash yields greater than the targeted appreciation. Investments in other alternative asset classes, including hedge funds, diversify the expected investment returns relative to the equity and fixed income investments. As a result of the Company's diversification strategies, there are no significant concentrations of risk within the portfolio of investments.

The Company's actual asset allocations are in line with target allocations. The Company rebalances asset allocations as appropriate, in order to stay within a range of allocation for each asset category.

The expected return on plan assets is based on the Company's expectation of the long-term average rate of return of the capital markets in which the plans invest. The average market returns are adjusted, where appropriate, for active asset management returns. The expected return reflects the investment policy target asset mix and considers the historical returns earned for each asset category.
The Company's plan assets at September 30, 2023 and 2022, by asset category, are as follows (in millions):

		Fair Value Measurements Using:		
Asset Category	Total as of September 30, 2023	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
U.S. Pension				
Cash and Cash Equivalents	$ 61	$ —	$ 61	$ —
Equity Securities				
Large-Cap	60	60	—	—
Small-Cap	65	65	—	—
International - Developed	108	108	—	—
International - Emerging	20	20	—	—
Fixed Income Securities				
Government	225	225	—	—
Corporate/Other	583	583	—	—
Alternative	211	—	211	—
Total Investments in the Fair Value Hierarchy	1,333	$ 1,061	$ 272	$ —
Real Estate Investments Measured at Net Asset Value[1]	295			
Due to Broker	(129)			
Total Plan Assets	$ 1,499			
Non-U.S. Pension				
Cash and Cash Equivalents	$ 52	$ 52	$ —	$ —
Equity Securities				
Large-Cap	52	9	43	—
International - Developed	52	12	40	—
International - Emerging	2	—	2	—
Fixed Income Securities				
Government	701	40	661	—
Corporate/Other	415	271	144	—
Hedge Fund	15	—	15	—
Real Estate	9	9	—	—
Total Investments in the Fair Value Hierarchy	1,298	$ 393	$ 905	$ —
Real Estate Investments Measured at Net Asset Value[1]	90			
Total Plan Assets	$ 1,388			
Postretirement				
Cash and Cash Equivalents	$ 8	$ 8	$ —	$ —
Equity Securities - Global	71	—	71	—
Total Investments in the Fair Value Hierarchy	79	$ 8	$ 71	$ —
Multi-Credit Strategy Investments Measured at Net Asset Value[1]	65			
Total Plan Assets	$ 144			

Asset Category	Total as of September 30, 2022	Fair Value Measurements Using: Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
U.S. Pension				
Cash and Cash Equivalents	$ 40	$ —	$ 40	$ —
Equity Securities				
Large-Cap	160	160	—	—
Small-Cap	175	175	—	—
International - Developed	139	139	—	—
International - Emerging	39	39	—	—
Fixed Income Securities				
Government	217	216	1	—
Corporate/Other	804	804	—	—
Total Investments in the Fair Value Hierarchy	1,574	$ 1,533	$ 41	$ —
Real Estate Investments Measured at Net Asset Value[1]	322			
Due to Broker	(166)			
Total Plan Assets	$ 1,730			
Non-U.S. Pension				
Cash and Cash Equivalents	$ 150	$ 150	$ —	$ —
Large-Cap	45	8	37	—
International - Developed	43	12	31	—
International - Emerging	3	—	3	—
Fixed Income Securities				
Government	650	50	600	—
Corporate/Other	418	277	141	—
Hedge Fund	18	—	18	—
Real Estate	9	9	—	—
Total Investments in the Fair Value Hierarchy	1,336	$ 506	$ 830	$ —
Real Estate Investments Measured at Net Asset Value[1]	97			
Total Plan Assets	$ 1,433			
Postretirement				
Cash and Cash Equivalents	$ 13	$ 13	$ —	$ —
Equity Securities				
Global	66	—	66	—
Total Investments in the Fair Value Hierarchy	79	13	66	—
Multi-Credit Strategy Investments Measured at Net Asset Value[1]	65			
Total Plan Assets	$ 144			

[1]The fair value of certain real estate and multi-credit strategy investments do not have a readily determinable fair value and require the fund managers to independently arrive at fair value by calculating net asset value ("NAV") per share. In order to calculate NAV per share, the fund managers value the investments using any one, or a combination of, the following methods: independent third party appraisals, discounted cash flow analysis of net cash flows projected to be generated by the investment and recent sales of comparable investments. Assumptions used to revalue the investments are updated every quarter. Due to the fact that the fund managers calculate NAV per share, the Company utilizes a practical expedient for measuring the fair value of its real estate and multi-credit strategy investments, as provided for under ASC 820, "Fair Value Measurement." In applying the

practical expedient, the Company is not required to further adjust the NAV provided by the fund manager in order to determine the fair value of its investments as the NAV per share is calculated in a manner consistent with the measurement principles of ASC 946, "Financial Services - Investment Companies," and as of the Company's measurement date. The Company believes this is an appropriate methodology to obtain the fair value of these assets. For the component of the real estate portfolio under development, the investments are carried at cost until they are completed and valued by a third party appraiser. In accordance with ASU No. 2015-07, "Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)," investments for which fair value is measured using the net asset value per share practical expedient are disclosed separate from the fair value hierarchy. The fair value amounts presented in these tables are intended to permit reconciliation of total plan assets to the amounts presented in the notes to consolidated financial statements.

The following is a description of the valuation methodologies used for assets measured at fair value. Certain assets are held within commingled funds which are valued at the unitized NAV or percentage of the net asset value as determined by the manager of the fund. These values are based on the fair value of the underlying net assets owned by the fund.

Cash and Cash Equivalents: The fair value of cash and cash equivalents is valued at cost.

Equity Securities: The fair value of equity securities is determined by direct quoted market prices. The underlying holdings are direct quoted market prices on regulated financial exchanges.

Fixed Income Securities: The fair value of fixed income securities is determined by direct or indirect quoted market prices. If indirect quoted market prices are utilized, the value of assets held in separate accounts is not published, but the investment managers report daily the underlying holdings. The underlying holdings are direct quoted market prices on regulated financial exchanges.

Hedge Funds: The fair value of hedge funds is accounted for by the custodian. The custodian obtains valuations from underlying managers based on market quotes for the most liquid assets and alternative methods for assets that do not have sufficient trading activity to derive prices. The Company and custodian review the methods used by the underlying managers to value the assets. The Company believes this is an appropriate methodology to obtain the fair value of these assets.

Real Estate: The fair value of real estate is determined by quoted market prices of the underlying Real Estate Investment Trusts ("REITs"), which are securities traded on an open exchange.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Funded Status

The following table contains the ABO and reconciliations of the changes in the PBO, the changes in plan assets and the funded status (in millions):

	Pension Benefits				Postretirement Benefits	
	U.S. Plans		Non-U.S. Plans			
September 30,	2023	2022	2023	2022	2023	2022
Accumulated Benefit Obligation	$ 1,564	$ 1,822	$ 1,424	$ 1,417	$ 76	$ 89
Change in Projected Benefit Obligation						
Projected benefit obligation at beginning of year	$ 1,822	$ 2,629	$ 1,471	$ 2,625	$ 89	$ 123
Service cost	—	—	16	20	—	1
Interest cost	78	56	68	39	4	2
Plan participant contributions	—	—	3	2	3	3
Actuarial gain	(37)	(587)	(62)	(651)	(7)	(25)
Benefits and settlements paid	(299)	(276)	(126)	(166)	(12)	(14)
Other	—	—	(3)	(3)	—	—
Currency translation adjustment	—	—	106	(395)	—	(1)
Projected benefit obligation at end of year	$ 1,564	$ 1,822	$ 1,473	$ 1,471	$ 77	$ 89
Change in Plan Assets						
Fair value of plan assets at beginning of year	$ 1,730	$ 2,459	$ 1,433	$ 2,344	$ 144	$ 172
Actual return on plan assets	66	(454)	(77)	(459)	7	(20)
Employer and employee contributions	3	1	55	94	5	6
Benefits paid	(85)	(85)	(61)	(74)	(12)	(14)
Settlement payments	(215)	(191)	(65)	(92)	—	—
Other	—	—	(2)	(2)	—	—
Currency translation adjustment	—	—	105	(378)	—	—
Fair value of plan assets at end of year	$ 1,499	$ 1,730	$ 1,388	$ 1,433	$ 144	$ 144
Funded status	$ (65)	$ (92)	$ (85)	$ (38)	$ 67	$ 55
Amounts recognized in the statement of financial position consist of:						
Prepaid benefit cost	$ 1	$ 37	$ 97	$ 151	$ 101	$ 95
Accrued benefit liability	(66)	(129)	(182)	(189)	(34)	(40)
Net amount recognized	$ (65)	$ (92)	$ (85)	$ (38)	$ 67	$ 55
Weighted Average Assumptions [1]						
Discount rate [2]	5.48 %	5.08 %	4.72 %	4.36 %	5.42 %	4.92 %
Rate of compensation increase	N/A	N/A	2.90 %	3.00 %	N/A	N/A
Interest crediting rate	N/A	N/A	1.63 %	1.69 %	N/A	N/A

[1] Plan assets and obligations are determined based on a September 30 measurement date at September 30, 2023 and 2022.

[2] The Company considers the expected benefit payments on a plan-by-plan basis when setting assumed discount rates. As a result, the Company uses different discount rates for each plan depending on the plan jurisdiction, the demographics of participants and the expected timing of benefit payments. For the U.S. pension and postretirement plans, the Company uses a discount rate provided by an independent third party calculated based on an appropriate mix of high quality bonds. For the non-U.S. pension and postretirement plans, the Company consistently uses the relevant country specific benchmark indices for determining the various discount rates. The Company has elected to utilize a full yield curve approach in the estimation of service and interest components of net periodic benefit cost (credit) for pension and other postretirement for plans that utilize a

yield curve approach. The full yield curve approach applies the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows.

The fiscal 2023 and fiscal 2022 net actuarial gains related to changes in the projected benefit obligation were primarily the result of the increase in discount rates globally.

Net Periodic Benefit Cost

The following table contains the components of net periodic benefit costs, which are recorded in selling, general and administrative expenses or cost of sales consistent with the related employees' salaries in the consolidated statements of income (in millions):

	Pension Benefits								
	U.S. Plans			Non-U.S. Plans			Postretirement Benefits		
Year ended September 30,	2023	2022	2021	2023	2022	2021	2023	2022	2021
Components of Net Periodic Benefit Cost (Credit):									
Service cost	$ —	$ —	$ —	$ 16	$ 20	$ 27	$ —	$ 1	$ 1
Interest cost	78	56	47	68	39	32	4	2	2
Expected return on plan assets	(131)	(150)	(171)	(77)	(81)	(112)	(9)	(9)	(8)
Net actuarial (gain) loss	28	16	(214)	86	(116)	(115)	(5)	4	(35)
Settlement (gain) loss	1	1	—	6	5	(1)	—	—	—
Amortization of prior service cost (credit)	—	—	—	—	—	1	(4)	(4)	(4)
Other	—	—	—	—	—	(1)	—	—	—
Net periodic benefit cost (credit) included in continuing operations	$ (24)	$ (77)	$ (338)	$ 99	$ (133)	$ (169)	$ (14)	$ (6)	$ (44)
Expense Assumptions:									
Discount rate	5.08 %	2.52 %	2.25 %	4.36 %	1.79 %	1.35 %	4.92 %	2.30 %	1.90 %
Expected return on plan assets	8.25 %	7.00 %	6.90 %	5.02 %	3.70 %	4.90 %	6.64 %	5.29 %	5.30 %
Rate of compensation increase	N/A	N/A	N/A	3.00 %	2.85 %	2.75 %	N/A	N/A	N/A
Interest crediting rate	N/A	N/A	N/A	1.69 %	1.44 %	1.50 %	N/A	N/A	N/A

17. RESTRUCTURING AND RELATED COSTS

To better align its resources with its growth strategies and reduce the cost structure of its global operations in certain underlying markets, the Company commits to restructuring plans as necessary. Restructuring activities generally result in charges for workforce reductions, plant closures, asset impairments and other related costs which are reported as restructuring and impairment costs in the Company’s consolidated statements of income. The Company expects the restructuring actions to reduce cost of sales and SG&A due to reduced employee-related costs, depreciation and amortization expense.

In the third quarter of fiscal 2023, the Company began developing a restructuring plan with certain actions focused on continued scaling of SG&A expenses to its planned growth. The scope of the plan was substantially finalized in the fourth quarter of fiscal 2023 and certain actions related to this plan were committed and executed during the fourth quarter, primarily related to workforce reductions, and were recorded to restructuring and impairment costs in the consolidated statements of income. Additional restructuring charges are expected in subsequent quarters. Restructuring charges incurred during the first and second quarters of fiscal 2023 were the result of other segment and Corporate-level restructuring plans.

Refer to Note 3, "Assets and Liabilities Held for Sale & Discontinued Operations," Note 7, "Property, Plant and Equipment," and Note 8, "Goodwill and Other Intangible Assets," of the notes to the consolidated financial statements for disclosure of other impairment costs.

The following table summarizes restructuring and related costs (in millions):

	Year Ended September 30, 2023
Building Solutions North America	$ 43
Building Solutions EMEA/LA	97
Building Solutions Asia Pacific	18
Global Products	69
Corporate	49
Total	$ 276

The following table summarizes changes in the restructuring reserve, which is included within other current liabilities in the consolidated statements of financial position, for new restructuring actions taken in the year ended September 30, 2023 (in millions):

	Employee Severance and Termination Benefits	Long-Lived Asset Impairments	Other	Total
Restructuring and related costs	204	38	34	276
Utilized—cash	(111)	—	(19)	(130)
Utilized—noncash	—	(38)	(3)	(41)
Balance at September 30, 2023	$ 93	$ —	$ 12	$ 105

18. INCOME TAXES

The more significant components of the Company's income tax provision from continuing operations are as follows (in millions):

	2023	2022	2021
Tax expense at Ireland statutory rate of 12.5%	$ 214	$ 214	$ 327
U.S. state income tax, net of federal benefit	39	(23)	34
Income subject to the U.S. federal tax rate	56	(95)	3
Income subject to rates different than the statutory rate	92	125	30
Reserve and valuation allowance adjustments	(559)	(274)	66
Intellectual property transactions and adjustments	(176)	—	417
Restructuring and impairment costs	11	40	(9)
Income tax provision (benefit)	$ (323)	$ (13)	$ 868
Effective tax rate	(19)%	(1)%	33%

For fiscal 2023, the effective tax rate for continuing operations was (19)% and was lower than the statutory tax rate primarily due to the favorable tax impacts of intellectual property tax adjustments, tax reserve adjustments as the result of tax audit resolutions and remeasurements, valuation allowance adjustments and the benefits of continuing global tax planning initiatives, partially offset by the unfavorable impact of impairment and restructuring charges.

For fiscal 2022, the effective tax rate for continuing operations was (1)% and was lower than the statutory tax rate primarily due to favorable impact of tax reserve adjustments as the result of expired statute of limitations for certain tax years and the benefits of continuing global tax planning initiatives, partially offset by the unfavorable impact of impairment and restructuring charges, valuation allowance adjustments, and the establishment of a deferred tax liability on the outside basis difference of the Company's investment in certain subsidiaries as a result of the planned divestitures and tax rate differentials.

For fiscal 2021, the effective tax rate for continuing operations was 33% and was higher than the statutory tax rate primarily due to the unfavorable impact of tax impacts of an intercompany transfer of certain of the Company's intellectual property rights, valuation allowance adjustments, the income tax effects of mark-to-market adjustments and tax rate differentials, partially offset by the benefits of continuing global tax planning initiatives.

Valuation Allowances

The Company reviews the realizability of its deferred tax assets and related valuation allowances on a quarterly basis, or whenever events or changes in circumstances indicate that a review is required. In determining the requirement for a valuation allowance, the historical and projected financial results of the legal entity or consolidated group recording the net deferred tax asset are considered, along with any other positive or negative evidence. Since future financial results may differ from previous estimates, periodic adjustments to the Company's valuation allowances may be necessary.

In fiscal 2023, due to changes in forecasted taxable income, the Company determined that it was more likely than not that certain deferred tax assets of Canada, Mexico, and Spain would be realized. The valuation allowance adjustment resulted in a tax benefit of $121 million.

In fiscal 2022, due to changes in forecasted taxable income, the Company determined that it was more likely than not that certain deferred tax assets of Japan would not be realized. The valuation allowance adjustment resulted in a tax charge of $27 million.

In fiscal 2021, as a result of an intercompany transfer of certain of the Company's intellectual property rights, the Company determined that it was more likely than not that certain deferred tax assets of Switzerland would be realized and certain deferred tax assets of Canada would not be realized. The valuation allowance adjustments resulted in a $39 million net benefit to income tax expense. Due to changes in forecasted taxable income, the Company also recorded a discrete tax charge of $105 million related to valuation allowances on certain Mexico deferred tax assets which were considered unrealizable.

The following table summarizes changes in the valuation allowance (in millions):

	Year Ended September 30,		
	2023	2022	2021
Balance at beginning of period	$ 5,973	$ 5,853	$ 5,518
Allowance provision for new operating and other loss carryforwards	573	325	505
Allowance benefits	(168)	(205)	(170)
Balance at end of period	$ 6,378	$ 5,973	$ 5,853

Uncertain Tax Positions

The Company is subject to income taxes in the U.S. and numerous non-U.S. jurisdictions. Judgment is required in determining its worldwide provision for income taxes and recording the related assets and liabilities. In the ordinary course of the Company's business, there are many transactions and calculations where the ultimate tax determination is uncertain. The Company is regularly under audit by tax authorities.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in millions):

	2023	2022	2021
Beginning balance, October 1	$ 2,537	$ 2,726	$ 2,528
Additions for tax positions related to the current year	72	169	240
Additions for tax positions of prior years	96	31	33
Reductions for tax positions of prior years	(27)	(48)	(6)
Settlements with taxing authorities	(6)	(7)	(24)
Statute closings and audit resolutions	(446)	(334)	(45)
Ending balance, September 30	$ 2,226	$ 2,537	$ 2,726

The following table summarizes tax effected unrecognized tax benefits that, if recognized, would impact the effective tax rate and the related accrued interest, net of tax benefit (in millions):

	September 30,		
	2023	2022	2021
Tax effected unrecognized tax benefits that, if recognized, would affect the effective tax rate	$ 1,581	$ 1,973	$ 2,268
Net accrued interest	335	284	252

In fiscal 2023, as the result of tax audit resolutions, statute expirations, and remeasurements of ongoing controversy matters in various jurisdictions, the Company adjusted its reserve for uncertain tax positions which resulted in a $438 million net benefit to income tax expense.

In fiscal 2022, the statute of limitations for certain tax years expired, which resulted in a $301 million benefit to income tax expense.

In the U.S., fiscal years 2017 through 2018 are currently under appeal by the Internal Revenue Service ("IRS") for certain legal entities. Additionally, the Company is currently under exam in the following major non-U.S. jurisdictions for continuing operations:

Tax Jurisdiction	Tax Years Covered
Belgium	2015 - 2022
Germany	2007 - 2021
Luxembourg	2017 - 2018
Mexico	2015 - 2018
United Kingdom	2014 - 2015; 2018; 2020 - 2021

It is reasonably possible that certain tax examinations and/or tax litigation will conclude within the next twelve months, which could have a material impact on tax expense. Based upon the circumstances surrounding these examinations, the impact is not currently quantifiable.

Other Tax Matters

During fiscal 2023, 2022 and 2021, the Company incurred charges for restructuring and impairment costs of $1,064 million, $721 million and $242 million, which generated tax benefits of $122 million, $50 million and $39 million, respectively.

In fiscal 2021, the Company completed an intercompany transfer of certain of the Company's intellectual property rights which resulted in a net tax charge of $417 million.

Impacts of Tax Legislation and Change in Statutory Tax Rates

On September 11, 2023, the Schaffhausen parliament approved a partial revision of the cantonal act on direct taxation: Immediate Minimum Taxation Measure ("IMTM"). The IMTM increases Switzerland's combined statutory income tax rate to approximately 15%. On November 19, 2023, IMTM was approved in a public referendum in the canton of Schaffhausen, was published in the cantonal official gazette on December 8,2023, and is effective starting January 1, 2024. The Company is still evaluating the impact on its deferred tax assets in the canton of Schaffhausen, however the revaluation of these assets could have a noncash impact of less than $100 million to its consolidated financial statements.

On August 16, 2022, the U.S. enacted the Inflation Reduction Act ("IRA") which, among other things, creates a new book minimum tax of at least 15% of consolidated GAAP pre-tax income for corporations with average book income in excess of $1 billion. The book minimum tax is first applicable in fiscal year 2024. The Company does not expect this provision to have a material impact on its effective tax rate.

During the fiscal years ended 2023, 2022 and 2021, other tax legislation was adopted in various jurisdictions. These law changes did not have a material impact on the Company's consolidated financial statements.

Selected Income Tax Data

Selected income tax data related to continuing operations were as follows (in millions):

	2023	2022	2021
Components of income (loss) from continuing operations before income taxes:			
U.S.	$ (130)	$ 67	$ 543
Non-U.S.	1,840	1,643	2,071
Income from continuing operations before income taxes	$ 1,710	$ 1,710	$ 2,614
Components of the provision (benefit) for income taxes:			
Current			
U.S. federal	$ (165)	$ (219)	$ 459
U.S. state	105	53	108
Non-U.S.	413	294	265
	353	128	832
Deferred			
U.S. federal	(267)	(175)	(7)
U.S. state	(25)	(69)	46
Non-U.S.	(384)	103	(3)
	(676)	(141)	36
Income tax provision (benefit)	$ (323)	$ (13)	$ 868
Income taxes paid	$ 430	$ 568	$ 504

At September 30, 2023 and 2022, the Company recorded within the consolidated statements of financial position in other current assets approximately $65 million and $253 million, respectively, of income tax assets. At September 30, 2023 and 2022, the Company recorded within the consolidated statements of financial position in other current liabilities approximately $249 million and $143 million, respectively, of accrued income tax liabilities.

The Company has not provided U.S. or non-U.S. income taxes on approximately $24.4 billion of outside basis differences of consolidated subsidiaries of Johnson Controls International plc. The Company is indefinitely reinvested in these basis differences. The reduction of the outside basis differences via the sale or liquidation of these subsidiaries and/or distributions could create taxable income. The Company's intent is to reduce the outside basis differences only when it would be tax efficient. Given the numerous ways in which the basis differences may be reduced, it is not practicable to estimate the amount of unrecognized withholding taxes and deferred tax liability on the outside basis differences.

Deferred taxes were classified in the consolidated statements of financial position as follows (in millions):

	September 30,	
	2023	2022
Other noncurrent assets	$ 1,499	$ 954
Other noncurrent liabilities	(411)	(503)
Net deferred tax asset	$ 1,088	$ 451

Temporary differences and carryforwards which gave rise to deferred tax assets and liabilities included (in millions):

	September 30,	
	2023	2022
Deferred tax assets		
Accrued expenses and reserves	$ 507	$ 376
Employee and retiree benefits	71	78
Property, plant and equipment	629	444
Net operating loss and other credit carryforwards	6,748	6,488
Research and development	171	52
Operating lease liabilities	348	309
Other, net	38	58
	8,512	7,805
Valuation allowances	(6,378)	(5,973)
	2,134	1,832
Deferred tax liabilities		
Subsidiaries, joint ventures and partnerships	446	338
Intangible assets	252	734
Operating lease right-of-use assets	348	309
	1,046	1,381
Net deferred tax asset	$ 1,088	$ 451

At September 30, 2023, the Company had available net operating loss carryforwards of approximately $24.4 billion, of which $14.1 billion will expire at various dates between 2024 and 2043, and the remainder has an indefinite carryforward period. The Company had available U.S. foreign tax credit carryforwards at September 30, 2023 of $35 million which will expire in 2029. The valuation allowance, generally, is for loss and credit carryforwards for which realization is uncertain because it is unlikely that the losses and/or credits will be realized given the lack of sustained profitability and/or limited carryforward periods in certain countries.

19. SEGMENT INFORMATION

ASC 280, "Segment Reporting," establishes the standards for reporting information about segments in financial statements. In applying the criteria set forth in ASC 280, the Company has determined that it has four reportable segments for financial reporting purposes.

The Company conducts its business through four business segments:

- *Building Solutions North America* which operates in the United States and Canada;
- *Building Solutions EMEA/LA* which operates in Europe, the Middle East, Africa and Latin America;
- *Building Solutions Asia Pacific* which operates in Asia Pacific; and
- *Global Products* which operates worldwide and includes the Johnson Controls-Hitachi joint venture.

The Building Solutions segments:

- Design, sell, install and service HVAC, controls, building management, refrigeration, integrated electronic security and integrated fire-detection and suppression systems; and
- Provide energy-efficiency solutions and technical services, including data-driven "smart building" solutions as well as inspection, scheduled maintenance, and repair and replacement of mechanical and controls systems.

The Global Products segment designs, manufactures and sells:

- HVAC equipment, controls software and software services for residential and commercial applications;
- Refrigeration equipment and controls;
- Fire protection and suppression; and
- Security products, including intrusion security, anti-theft devices, access control, and video surveillance and management systems.

The Company’s segments provide products and services to commercial, institutional, industrial, data center, governmental and residential customers.

Management evaluates the performance of its business segments primarily on segment earnings before interest, taxes and amortization ("EBITA"), which represents income from continuing operations before income taxes and noncontrolling interests, excluding general corporate expenses, intangible asset amortization, net financing charges, restructuring and impairment costs, and net mark-to-market adjustments related to pension and postretirement plans and restricted asbestos investments.

Financial information relating to the Company’s reportable segments is as follows (in millions):

	Year Ended September 30,		
	2023	2022	2021
Net Sales			
Building Solutions North America	$ 10,330	$ 9,367	$ 8,685
Building Solutions EMEA/LA	4,096	3,845	3,884
Building Solutions Asia Pacific	2,746	2,714	2,616
Global Products	9,621	9,373	8,483
Total net sales	$ 26,793	$ 25,299	$ 23,668

	Year Ended September 30,		
	2023	2022	2021
Segment EBITA [1]			
Building Solutions North America	$ 1,394	$ 1,122	$ 1,204
Building Solutions EMEA/LA	316	358	401
Building Solutions Asia Pacific	343	332	344
Global Products	1,965	1,594	1,436
Total segment EBITA	4,018	3,406	3,385
Amortization of intangible assets	(439)	(427)	(435)
Corporate expenses	(432)	(369)	(290)
Net financing charges	(281)	(213)	(206)
Restructuring and impairment costs	(1,064)	(721)	(242)
Net mark-to-market adjustments	(92)	34	402
Income from continuing operations before income taxes	$ 1,710	$ 1,710	$ 2,614

	September 30,		
	2023	2022	2021
Assets [2]			
Building Solutions North America	$ 15,603	$ 15,226	$ 15,317
Building Solutions EMEA/LA	5,202	4,991	5,397
Building Solutions Asia Pacific	2,645	2,474	2,728
Global Products	15,406	15,185	15,227
	38,856	37,876	38,669
Assets held for sale	—	66	156
Unallocated	3,386	4,216	3,065
Total	$ 42,242	$ 42,158	$ 41,890

	Year Ended September 30,		
	2023	2022	2021
Depreciation/Amortization			
Building Solutions North America	$ 225	$ 213	$ 245
Building Solutions EMEA/LA	101	96	103
Building Solutions Asia Pacific	23	21	25
Global Products	454	461	432
	803	791	805
Corporate	45	39	40
Total	$ 848	$ 830	$ 845

	Year Ended September 30,		
	2023	2022	2021
Capital Expenditures			
Building Solutions North America	$ 104	$ 141	$ 87
Building Solutions EMEA/LA	119	119	128
Building Solutions Asia Pacific	33	22	31
Global Products	233	257	265
	489	539	511
Corporate	50	53	41
Total	$ 539	$ 592	$ 552

(1) For the years ended September 30, 2023, 2022 and 2021, segment EBITA includes $262 million, $240 million and $250 million, respectively, of equity income for the Global Products segment. Equity income for other segments is immaterial.

(2) Building Solutions EMEA/LA assets as of September 30, 2023, 2022 and 2021 include $130 million, $115 million and $111 million, respectively, of investments in partially-owned affiliates. Global Products assets as of September 30, 2023, 2022 and 2021 include $905 million, $834 million and $945 million, respectively, of investments in partially-owned affiliates. Investments in partially-owned affiliates for other segments are immaterial.

In fiscal 2023, 2022 and 2021, no customer exceeded 10% of consolidated net sales.

Geographic Segments

Financial information relating to the Company's operations by geographic area is as follows (in millions):

	Year Ended September 30,		
	2023	2022	2021
Net Sales			
United States	$ 13,989	$ 12,864	$ 11,577
Europe	4,882	4,186	4,069
Asia Pacific	5,610	5,791	5,748
Other Non-U.S.	2,312	2,458	2,274
Total	$ 26,793	$ 25,299	$ 23,668
Long-Lived Assets (Year-end)			
United States	$ 1,594	$ 1,582	$ 1,638
Europe	514	462	436
Asia Pacific	630	658	727
Other Non-U.S.	398	429	427
Total	$ 3,136	$ 3,131	$ 3,228

Net sales attributed to geographic locations are based on the location of where the sale originated. Long-lived assets by geographic location consist of net property, plant and equipment.

20. GUARANTEES

Certain of the Company's subsidiaries at the business segment level have guaranteed the performance of third-parties and provided financial guarantees for uncompleted work and financial commitments. The terms of these guarantees vary with end dates ranging from the current fiscal year through the completion of such transactions and would typically be triggered in the event of nonperformance. Performance under the guarantees, if required, would not have a material effect on the Company's financial position, results of operations or cash flows.

The Company offers warranties to its customers depending upon the specific product and terms of the customer purchase agreement. A typical warranty program requires that the Company replace defective products within a specified time period from the date of sale.

The changes in the carrying amount of the Company's total product warranty liability were as follows (in millions).

	Year Ended September 30,	
	2023	2022
Balance at beginning of period	$ 180	$ 192
Accruals for warranties issued during the period	134	119
Settlements made (in cash or in kind) during the period	(112)	(114)
Changes in estimates to pre-existing warranties	1	(6)
Accruals from acquisitions and divestitures	1	—
Currency translation	(1)	(11)
Balance at end of period	$ 203	$ 180

21. COMMITMENTS AND CONTINGENCIES

Environmental Matters

The following table presents the location and amount of reserves for environmental liabilities in the Company's consolidated statements of financial position (in millions):

	September 30,	
	2023	2022
Other current liabilities	$ 31	$ 66
Other noncurrent liabilities	211	220
Total reserves for environmental liabilities	$ 242	$ 286

The Company periodically examines whether the contingent liabilities related to the environmental matters described below are probable and reasonably estimable based on experience and ongoing developments in those matters, including continued study and analysis of ongoing remediation obligations. The Company expects that it will pay the amounts recorded over an estimated period of up to 20 years. The Company is not able to estimate a possible loss or range of loss, if any, in excess of the established accruals for environmental liabilities at this time.

A substantial portion of the Company's environmental reserves relates to ongoing long-term remediation efforts to address contamination relating to fire-fighting foams containing perfluorooctane sulfonate ("PFOS"), perfluorooctanoic acid ("PFOA"), and/or other per- and poly-fluoroalkyl substances ("PFAS") at or near the Tyco Fire Products L.P. (“Tyco Fire Products”) Fire Technology Center ("FTC") located in Marinette, Wisconsin and surrounding areas in the City of Marinette and Town of Peshtigo, Wisconsin, as well as the continued remediation of PFAS, arsenic and other contaminants at the Tyco Fire Products Stanton Street manufacturing facility also located in Marinette, Wisconsin (the “Stanton Street Facility”).

The use of fire-fighting foams at the FTC was primarily for training and testing purposes to ensure that such products sold by the Company’s affiliates, Chemguard, Inc. ("Chemguard") and Tyco Fire Products, were effective at suppressing high intensity fires that may occur at military installations, airports or elsewhere. On July 18, 2023, Tyco Fire Products announced that it plans to discontinue the production and sale of fluorinated firefighting foams by June 2024, including AFFF products, and will transition to non-fluorinated foam alternatives.

Tyco Fire Products has been engaged in remediation activities at the Stanton Street Facility since 1990. Its corporate predecessor, Ansul Incorporated (“Ansul”), manufactured arsenic-based agricultural herbicides at the Stanton Street Facility, which resulted in significant arsenic contamination of soil and groundwater on the site and in parts of the adjoining Menominee River. In 2009, Ansul entered into an Administrative Consent Order (the "Consent Order") with the U.S. Environmental Protection Agency (“EPA”) to address the presence of arsenic at the site. Under this agreement, Tyco Fire Products’ principal obligations are to contain the arsenic contamination on the site, pump and treat on-site groundwater, dredge, treat and properly dispose of contaminated sediments in the adjoining river areas, and monitor contamination levels on an ongoing basis. Activities completed under the Consent Order since 2009 include the installation of a subsurface barrier wall around the facility to contain contaminated groundwater, the installation and ongoing operation and monitoring of a groundwater extraction and treatment system and the dredging and offsite disposal of treated river sediment. In addition to ongoing remediation activities, the Company is also working with the Wisconsin Department of Natural Resources ("WDNR") to investigate and remediate the presence of PFAS at or near the Stanton Street Facility as part of the evaluation and remediation of PFAS in the Marinette region.

Tyco Fire Products is operating and monitoring the recently constructed Groundwater Extraction and Treatment System ("GETS"), a permanent groundwater remediation system that extracts groundwater containing PFAS, treats it using advanced filtration systems, and returns the treated water to the environment. Tyco Fire Products has also completed the removal and disposal of PFAS-affected soil from the FTC. The Company's reserves for continued remediation of the FTC, the Stanton Street Facility and surrounding areas in Marinette and Peshtigo are based on estimates of costs associated with the long-term remediation actions, including the continued operation of the GETS, the implementation of long-term drinking water solutions, continued monitoring and testing of the wells, the operation and wind-down of other legacy remediation and treatment systems and the completion of ongoing investigation obligations.

PFOA, PFOS, and other PFAS compounds are being studied by EPA and other environmental and health agencies and researchers. In March 2021, EPA published its final determination to regulate PFOS and PFOA in drinking water. In March

2023, EPA announced a proposed National Primary Drinking Water Regulation (“NPDWR”) for six PFAS compounds including PFOA and PFOS. The NPDWR proposes establishing legally enforceable levels, called Maximum Contaminant Levels, of 4.0 parts per trillion for each of PFOA and PFOS. EPA indicated that it anticipates finalizing the regulation by the end of 2023.

In August 2022, EPA published a proposed rule that would designate PFOA and PFOS as “hazardous substances” under Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"). In April 2023, EPA issued an Advanced Notice of Proposed Rulemaking ("ANPR") seeking input on whether it should expand the proposed rule to designate as "hazardous substances" under CERCLA: (1) seven additional PFAS; (2) the precursors to PFOA, PFOS, and the seven additional PFAS; or (3) entire categories of PFAS.

It is difficult to estimate the Company’s ultimate level of liability at many remediation sites due to the large number of other parties that may be involved, the complexity of determining the relative liability among those parties, the financial viability of other potentially responsible parties and third-party indemnitors, the uncertainty as to the nature and scope of the investigations and remediation to be conducted, changes in environmental regulations, changes in permissible levels of specific compounds in drinking water sources, or changes in enforcement theories and policies, including efforts to recover natural resource damages, the uncertainty in the application of law and risk assessment, the various choices and costs associated with diverse technologies that may be used in corrective actions at the sites, and the often quite lengthy periods over which eventual remediation may occur. It is possible that technological, regulatory or enforcement developments, the results of additional environmental studies or other factors could change the Company's expectations with respect to future charges and cash outlays, and such changes could be material to the Company's future results of operations, financial condition or cash flows. Nevertheless, the Company does not currently believe that any claims, penalties or costs in addition to the amounts accrued will have a material adverse effect on the Company’s financial position, results of operations or cash flows.

In addition, the Company has identified asset retirement obligations for environmental matters that are expected to be addressed at the retirement, disposal, removal or abandonment of existing owned facilities. Conditional asset retirement obligations were $13 million and $17 million at September 30, 2023 and 2022, respectively.

FTC-Related Remediation and Litigation

On June 21, 2019, the WDNR announced that it had received from the Wisconsin Department of Health Services (“WDHS”) a recommendation for groundwater quality standards as to, among other compounds, PFOA and PFOS. The WDHS recommended a groundwater enforcement standard for PFOA and PFOS of 20 parts per trillion. Although Wisconsin approved final regulatory standards for PFOA and PFOS in drinking water and surface water in February 2022, the Wisconsin Natural Resources Board did not approve WDNR's proposed standards for PFOA and PFOS in groundwater. The WDNR has initiated a rulemaking proceeding for a rule that would establish groundwater quality standards for PFOA, PFOS, perfluorobutane sulfonic acid and its potassium salt (“PFBS”) and hexafluoropropylene oxide dimer acid and its ammonium salt (“HFPO-DA”). WDNR indicates that the rule could be finalized by the winter of 2023-2024.

In July 2019, the Company received a letter from the WDNR directing the expansion of the evaluation of PFAS in the Marinette region to include (1) biosolids sludge produced by the City of Marinette Waste Water Treatment Plant and spread on certain fields in the area and (2) the Menominee and Peshtigo Rivers. On October 16, 2019, the WDNR issued a “Notice of Noncompliance” to Tyco Fire Products and Johnson Controls, Inc. regarding the WDNR’s July 2019 letter. The WDNR issued a further letter regarding the issue on November 4, 2019. In February 2020, the WDNR sent a letter to Tyco Fire Products and Johnson Controls, Inc. further directing the expansion of the evaluation of PFAS in the Marinette region to include investigation activities south and west of the previously defined FTC study area. In September 2021, the WDNR sent an additional “Notice of Noncompliance” to Tyco Fire Products and Johnson Controls, Inc. concerning land-applied biosolids, which reviewed and responded to the Company’s biosolids investigation conducted to that date. On April 10, 2023, the WDNR issued a third “Notice of Noncompliance” to Tyco Fire Products and Johnson Controls, Inc. concerning land-applied biosolids in the Marinette region. Tyco Fire Products and Johnson Controls, Inc. believe that they have complied with all applicable environmental laws and regulations. The Company cannot predict what regulatory or enforcement actions, if any, might result from the WDNR’s actions, or the consequences of any such actions.

In March 2022, the Wisconsin Department of Justice (“WDOJ”) filed a civil enforcement action against Johnson Controls Inc. and Tyco Fire Products in Wisconsin state court relating to environmental matters at the FTC (*State of Wisconsin v. Tyco Fire Products, LP and Johnson Controls, Inc.*, Case No. 22-CX-1 (filed March 14, 2022 in Circuit Court in Marinette County, Wisconsin)). The WDOJ alleges that the Company failed to timely report the presence of PFAS chemicals at the FTC, and that the Company has not sufficiently investigated or remediated PFAS at or near the FTC. The WDOJ seeks monetary penalties and an injunction ordering these two subsidiaries to complete a site investigation and cleanup of PFAS contamination in

accordance with the WDNR's requests. The parties are proceeding with fact discovery and the court has set a trial date of December 3, 2024. The Company is vigorously defending this civil enforcement action and believes that it has meritorious defenses, but the Company is presently unable to predict the duration, scope, or outcome of this action.

In October 2022, the Town of Peshtigo filed a tort action in Wisconsin state court against Tyco Fire Products, Johnson Controls Inc., Chemguard, Inc., and ChemDesign, Inc. relating to environmental matters at the FTC (*Town of Peshtigo v. Tyco Fire Products L.P. et al.*, Case No. 2022CV000234 (filed October 18, 2022 in Circuit Court in Marinette County, Wisconsin)). The Town alleges that use of AFFF products at the FTC caused contamination of water supplies in Peshtigo. The Town seeks monetary penalties and an injunction ordering abatement of PFAS contamination in Peshtigo. The case has been removed to federal court and transferred to a multi-district litigation ("MDL") before the United States District Court for the District of South Carolina. The Company plans to vigorously defend against this case and believes that it has meritorious defenses, but the Company is presently unable to predict the duration, scope, or outcome of this action.

In November 2022, individuals filed six actions in Dane County, Wisconsin alleging personal injury and/or property damage against Tyco Fire Products, Johnson Controls Inc., Chemguard, Inc., and other unaffiliated defendants related to environmental matters at the FTC. Plaintiffs allege that use of AFFF products at the FTC and activities by third parties unrelated to the Company contaminated nearby drinking water sources, surface waters, and other natural resources and properties, including their personal properties. The individuals seek monetary damages for their personal injury and/or property damage. These lawsuits have been transferred to the MDL. Subsequently, several additional plaintiffs have direct-filed in the MDL complaints with similar allegations. These lawsuits are presently at the beginning stages of litigation. The Company is vigorously defending these cases and believes that it has meritorious defenses, but the Company is presently unable to predict the duration, scope, or outcome of this action.

Aqueous Film-Forming Foam ("AFFF") Litigation

Two of the Company's subsidiaries, Chemguard and Tyco Fire Products, have been named, along with other defendant manufacturers, suppliers and distributors, and, in some cases, certain subsidiaries of the Company affiliated with Chemguard and Tyco Fire Products, in a number of class action and other lawsuits relating to the use of fire-fighting foam products by the U.S. Department of Defense (the "DOD") and others for fire suppression purposes and related training exercises. Plaintiffs generally allege that the firefighting foam products contain or break down into the chemicals PFOS and PFOA and/or other PFAS compounds and that the use of these products by others at various airbases, airports and other sites resulted in the release of these chemicals into the environment and ultimately into communities' drinking water supplies neighboring those airports, airbases and other sites. Plaintiffs generally seek compensatory damages, including damages for alleged personal injuries, medical monitoring, diminution in property values, investigation and remediation costs, and natural resources damages, and also seek punitive damages and injunctive relief to address remediation of the alleged contamination.

In September 2018, Tyco Fire Products and Chemguard filed a Petition for Multidistrict Litigation with the United States Judicial Panel on Multidistrict Litigation ("JPML") seeking to consolidate all existing and future federal cases into one jurisdiction. On December 7, 2018, the JPML issued an order transferring various AFFF cases to the MDL. Additional cases have been identified for transfer to or are being directly filed in the MDL.

AFFF Putative Class Actions

Chemguard and Tyco Fire Products are named in 43 pending putative class actions in federal courts originating from 16 states and territories. All of these cases have been direct-filed in or transferred to the MDL.

AFFF Individual or Mass Actions

There are more than 5,400 individual or "mass" actions pending that were filed in state or federal courts originating from 52 states and territories against Chemguard and Tyco Fire Products and other defendants in which the plaintiffs generally seek compensatory damages, including damages for alleged personal injuries, medical monitoring, and alleged diminution in property values. The cases involve plaintiffs from various states including approximately 7,000 plaintiffs in Colorado and more than 5,400 other plaintiffs. The vast majority of these matters have been tagged for transfer to, transferred to, or directly-filed in the MDL, and it is anticipated that several newly-filed state court actions will be similarly tagged and transferred. There are several matters that are proceeding in state courts, including actions in Arizona, Illinois and Virginia.

Tyco and Chemguard are also periodically notified by other individuals that they may assert claims regarding PFOS and/or PFOA contamination allegedly resulting from the use of AFFF.

AFFF Municipal and Water Provider Cases

Chemguard and Tyco Fire Products have been named as defendants in more than 720 cases in federal and state courts involving municipal or water provider plaintiffs that were filed in state or federal courts originating from 35 states and territories. The vast majority of these cases have been transferred to or were directly filed in the MDL, and it is anticipated that the remaining cases will be transferred to the MDL. These municipal and water provider plaintiffs generally allege that the use of the defendants' fire-fighting foam products at fire training academies, municipal airports, Air National Guard bases, or Navy or Air Force bases released PFOS and PFOA into public water supply wells and/or other public property, allegedly requiring remediation. The MDL court set the first case for trial on June 5, 2023 (*City of Stuart (Florida) v. 3M Co. et al.*). On April 26, 2023, the parties entered a stipulation dismissing Chemguard with prejudice from the City of Stuart case, and on May 4, 2023 the parties entered into a stipulation dismissing Tyco with prejudice from the City of Stuart case. On June 5, 2023, the MDL court continued the trial date for the City of Stuart case, and the parties remaining in that case later reached settlement. The parties in the MDL have designated four additional plaintiffs as water provider bellwether cases and are conducting initial discovery into those cases. The parties are also working to identify potential personal injury cases for an additional bellwether phase.

Tyco and Chemguard are also periodically notified by other municipal entities that those entities may assert claims regarding PFOS and/or PFOA contamination allegedly resulting from the use of AFFF.

State or U.S. Territory Attorneys General Litigation related to AFFF

In June 2018, the State of New York filed a lawsuit in New York state court (*State of New York v. The 3M Company et al* No. 904029-18 (N.Y. Sup. Ct., Albany County)) against a number of manufacturers, including affiliates of the Company, with respect to alleged PFOS and PFOA contamination purportedly resulting from firefighting foams used at locations across New York, including Stewart Air National Guard Base in Newburgh and Gabreski Air National Guard Base in Southampton, Plattsburgh Air Force Base in Plattsburgh, Griffiss Air Force Base in Rome, and unspecified "other" sites throughout the State. The lawsuit seeks to recover costs and natural resource damages associated with contamination at these sites. This suit has been removed to the United States District Court for the Northern District of New York and transferred to the MDL.

In February 2019, the State of New York filed a second lawsuit in New York state court (*State of New York v. The 3M Company et al* (N.Y. Sup. Ct., Albany County)), against a number of manufacturers, including affiliates of the Company, with respect to alleged PFOS and PFOA contamination purportedly resulting from firefighting foams used at additional locations across New York. This suit has been removed to the United States District Court for the Northern District of New York and transferred to the MDL. In July 2019, the State of New York filed a third lawsuit in New York state court (*State of New York v. The 3M Company et al* (N.Y. Sup. Ct., Albany County)), against a number of manufacturers, including affiliates of the Company, with respect to alleged PFOS and PFOA contamination purportedly resulting from firefighting foams used at further additional locations across New York. This suit has been removed to the United States District Court for the Northern District of New York and transferred to the MDL. In November 2019, the State of New York filed a fourth lawsuit in New York state court (*State of New York v. The 3M Company et al* (N.Y. Sup. Ct., Albany County)), against a number of manufacturers, including affiliates of the Company, with respect to alleged PFOS and PFOA contamination purportedly resulting from firefighting foams used at further additional locations across New York. This suit has been removed to federal court and transferred to the MDL.

In April 2021, the State of Alaska filed a lawsuit in the superior court of the State of Alaska against a number of manufacturers and other defendants, including affiliates of the Company, with respect to PFOS and PFOA damage of the State's land and natural resources allegedly resulting from the use of firefighting foams at various locations throughout the State. The State's case has been removed to federal court and transferred to the MDL. The State of Alaska has also named a number of manufacturers and other defendants, including affiliates of the Company, as third-party defendants in two cases brought by individuals against the State. These two cases have also been transferred to the MDL.

In early November 2021, the Attorney General of the State of North Carolina filed four individual lawsuits in the superior courts of the State of North Carolina against a number of manufacturers and other defendants, including affiliates of the Company, with respect to PFOS and PFOA damage of the State's land, natural resources, and property allegedly resulting from the use of firefighting foams at four separate locations throughout the State. These four cases have been removed to federal court and transferred to the MDL. In October 2022, the Attorney General filed two similar lawsuits in the superior courts of the State of North Carolina regarding alleged PFAS damages at two additional locations. These two cases have also been removed to federal court and transferred to the MDL.

In addition, 29 other states and territories have filed 31 lawsuits against a number of manufacturers and other defendants, including affiliates of the Company, with respect to PFAS damage of each of those State's environmental and natural resources

allegedly resulting from the manufacture, storage, sale, distribution, marketing, and use of PFAS-containing AFFF within each respective State. The states and territories are: Arkansas, Arizona, California, Colorado, Delaware, the District of Columbia, Florida, Illinois, Kentucky, Massachusetts, Maryland, Maine, Michigan, Mississippi, New Hampshire, New Jersey, New Mexico, Ohio, Oregon, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Washington, Wisconsin, Guam, the Northern Mariana Islands, and Puerto Rico. All of these complaints, other than Delaware and South Carolina, have been removed to federal court and transferred to the MDL. It is anticipated that the Delaware and South Carolina complaints will be removed to federal court and transferred to the MDL.

Other AFFF Related Matters

In March 2020, the Kalispel Tribe of Indians (a federally recognized Tribe) and two tribal corporations filed a lawsuit in the United States District Court for the Eastern District of Washington against a number of manufacturers, including affiliates of the Company, and the United States with respect to PFAS contamination allegedly resulting from the use and disposal of AFFF by the United States Air Force at and around Fairchild Air Force Base in eastern Washington. This case has been transferred to the MDL.

In October 2022, the Red Cliff Band of Lake Superior Chippewa Indians (a federally recognized tribe) filed a lawsuit in the United States District Court for the Western District of Wisconsin against a number of manufacturers, including affiliates of the Company, with respect to PFAS contamination allegedly resulting from the use and disposal of AFFF at Duluth Air National Guard Base in Duluth, Minnesota. This complaint has been transferred to the MDL.

In July 2023, the Fond du Lac Band of Lake Superior Chippewa (a federally recognized tribe) direct-filed a lawsuit in the MDL against a number of manufacturers, including affiliates of the Company, with respect to PFAS contamination allegedly resulting from the use and disposal of AFFF at Duluth Air National Guard Base in Duluth, Minnesota.

The Company is vigorously defending all of the above AFFF matters and believes that it has meritorious defenses to class certification and the claims asserted, including statutes of limitations, the government contractor defense, various medical and scientific defenses, and other factual and legal defenses. The government contractor defense is a form of immunity available to government contractors that produced products for the United States government pursuant to the government's specifications. In September 2022, the AFFF MDL Court declined to grant summary judgment on the government contractor defense, ruling that various factual issues relevant to the defense must be decided by a jury rather than the Court. The Company has a historical general liability insurance program and is pursuing coverage under the program from various insurers through insurance claims discussions and litigation pending in a state court in Wisconsin and a federal district court in South Carolina. The insurance litigation involves numerous factual and legal issues and remains at a relatively early stage. However, there are numerous factual and legal issues to be resolved in connection with these claims, and it is extremely difficult to predict the outcome or ultimate financial exposure, if any, represented by these matters, and there can be no assurance that any such exposure will not be material.

Asbestos Matters

The Company and certain of its subsidiaries, along with numerous other third parties, are named as defendants in personal injury lawsuits based on alleged exposure to asbestos containing materials. These cases have typically involved product liability claims based primarily on allegations of manufacture, sale or distribution of industrial products that either contained asbestos or were used with asbestos containing components.

The following table presents the location and amount of asbestos-related assets and liabilities in the Company's consolidated statements of financial position (in millions):

	September 30,	
	2023	2022
Other current liabilities	$ 58	$ 58
Other noncurrent liabilities	364	380
Total asbestos-related liabilities	422	438
Other current assets	28	37
Other noncurrent assets	273	263
Total asbestos-related assets	301	300
Net asbestos-related liabilities	$ 121	$ 138

The following table presents the components of asbestos-related assets (in millions):

	September 30,	
	2023	2022
Restricted		
Cash	$ 20	$ 6
Investments	231	239
Total restricted assets	251	245
Insurance receivables for asbestos-related liabilities	50	55
Total asbestos-related assets	$ 301	$ 300

The amounts recorded by the Company for asbestos-related liabilities and insurance-related assets are based on the Company's strategies for resolving its asbestos claims, currently available information, and a number of estimates and assumptions. Key variables and assumptions include the number and type of new claims that are filed each year, the average cost of resolution of claims, the identity of defendants, the resolution of coverage issues with insurance carriers, amount of insurance, and the solvency risk with respect to the Company's insurance carriers. Many of these factors are closely linked, such that a change in one variable or assumption may impact one or more of the others, and no single variable or assumption predominately influences the determination of the Company's asbestos-related liabilities and insurance-related assets. Furthermore, predictions with respect to these variables are subject to greater uncertainty in the later portion of the projection period. Other factors that may affect the Company's liability and cash payments for asbestos-related matters include uncertainties surrounding the litigation process from jurisdiction to jurisdiction and from case to case, reforms of state or federal tort legislation and the applicability of insurance policies among subsidiaries. As a result, actual liabilities or insurance recoveries could be significantly higher or lower than those recorded if assumptions used in the Company's calculations vary significantly from actual results.

Self-Insured Liabilities

The Company records liabilities for its workers' compensation, product, general and auto liabilities. The determination of these liabilities and related expenses is dependent on claims experience. For most of these liabilities, claims incurred but not yet reported are estimated by utilizing actuarial valuations based upon historical claims experience. The Company maintains captive insurance companies to manage its insurable liabilities.

The following table presents the location and amount of insurable liabilities in the Company's consolidated statements of financial position (in millions):

	September 30,	
	2023	2022
Other current liabilities	$ 86	$ 89
Accrued compensation and benefits	21	22
Other noncurrent liabilities	226	230
Total self-insured liabilities	$ 333	$ 341

The following table presents the location and amount of insurable receivables in the Company's consolidated statements of financial position (in millions):

	September 30,	
	2023	2022
Other current assets	$ 6	$ 10
Other noncurrent assets	14	20
Total insurance receivables	$ 20	$ 30

Other Matters

The Company is involved in various lawsuits, claims and proceedings incident to the operation of its businesses, including those pertaining to product liability, environmental, safety and health, intellectual property, employment, commercial and contractual matters, and various other casualty matters. Although the outcome of litigation cannot be predicted with certainty and some lawsuits, claims or proceedings may be disposed of unfavorably to us, it is management's opinion that none of these will have a material adverse effect on the Company's financial position, results of operations or cash flows. Costs related to such matters were not material to the periods presented.

22. SUBSEQUENT EVENTS

During the weekend of September 23, 2023, the Company experienced a cybersecurity incident impacting its internal information technology ("IT") infrastructure and applications. The incident was detected shortly after receiving reports of outages to certain of the Company's systems. Promptly after detecting the issue, the Company implemented its incident management and response plan and business continuity plans, including implementing remediation measures to mitigate the impact of the incident and restore affected systems and functions. The Company also engaged leading cybersecurity experts and other specialized consultants to assist in its investigation and remediation of the incident, as well as the restoration of impacted applications and systems. The cybersecurity incident consisted of unauthorized access, data exfiltration and deployment of ransomware by a third party to a portion of the Company's internal IT infrastructure. The incident caused disruptions and limitation of access to portions of the Company's business applications supporting aspects of the Company's operations and corporate functions.

Lost and deferred revenues and expenses related to the cybersecurity incident had an immaterial impact on fiscal 2023 net income. During the first quarter of fiscal 2024, expenses have been and will continue to be incurred, primarily related to third-party expenditures, including IT recovery and forensic experts and others performing professional services to investigate and remediate the incident, as well as incremental operating expenses incurred from the resulting disruption to the Company's business operations. The overall impact in fiscal 2024 is not expected to be material to net income, net of insurance recoveries, or cash flows from continuing operations; however, the timing of recognizing the insurance recoveries may differ from the timing of recognizing the associated expenses.

ITEM 9 CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of September 30, 2023. The Company's disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act, is recorded, processed, summarized and reported, within the time periods specified in the Commissions' rules and forms, and that such information is accumulated and communicated to the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Based on such evaluations, the Company's Chief Executive Officer and Chief Financial Officer have concluded that, as of September 30, 2023, the Company's disclosure controls and procedures were not effective because of the material weakness in its internal control over financial reporting described below.

Notwithstanding the material weakness in internal control over financial reporting described below, management believes and has concluded that the consolidated financial statements included in this Annual Report on Form 10-K fairly present, in all material respects, the Company's financial position, results of operations and cash flows for the periods presented in conformity with U.S. generally accepted accounting principles.

Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). The Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's internal control over financial reporting based on the framework in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, due to the material weakness described below, the Company's management has concluded that, as of September 30, 2023, the Company did not maintain effective internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of its financial statements will not be prevented or detected on a timely basis.

The Company did not maintain sufficient information technology controls to prevent or detect, on a timely basis, unauthorized access to certain of its financial reporting systems. Specifically, the Company did not design and maintain effective controls related to access monitoring, intrusion detection and response capability, patch management and backup and recovery such that recovery from a cybersecurity incident could be performed in a timely manner. This material weakness could result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected. However, this material weakness did not result in a misstatement to the annual or interim consolidated financial statements previously filed or included in this Annual Report on Form 10-K.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has excluded FM:Systems, which the Company acquired in July 2023, from its assessment of internal control over financial reporting as of September 30, 2023. FM:Systems is a wholly owned subsidiary of the Company whose total assets and total revenues excluded from management's assessment represented less than 1% each of the related consolidated financial statement amounts for the Company as of and for the year ended September 30, 2023.

PricewaterhouseCoopers LLP, an independent registered public accounting firm, has audited the effectiveness of the Company's internal control over financial reporting as of September 30, 2023 as stated in its report which is included in Item 8 of this Form 10-K.

Remediation Plan for Material Weakness in Internal Control Over Financial Reporting

The Company is committed to remediating the above noted material weakness and has actively implemented measures designed to help ensure the material weakness is remediated as soon as possible. Although some remediation measures have been completed, other actions with respect to the Company's remediation plan are ongoing and include, among other things, the following:

- engaging security specialists to assist in the review, assessment and remediation of the Company's IT controls;
- additional strengthening of access requirements and unauthorized access detection to the Company's financial reporting systems; and
- implementing additional procedures to facilitate more effective backup and recovery of the Company's financial reporting systems.

Though the remediation plan is subject to continual review and revision, the Company expects the remediation plan described above will address the identified material weakness. The remediation plan is subject to oversight by the Audit Committee of the Board of Directors and the identified material weakness will not be considered remediated until the remediation plan has been fully implemented, the applicable controls operate for a sufficient period of time, and the Company has concluded that newly implemented controls are operating effectively.

Changes in Internal Control Over Financial Reporting

There were no changes in the Company's internal control over financial reporting during the quarter ended September 30, 2023, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B OTHER INFORMATION

Officer Rule 10b5-1 Plans

During the three months ended September 30, 2023, the following officers adopted, amended or terminated a contract, instruction or written plan for the purchase or sale of securities of the Company intended to satisfy the affirmative defense conditions of Rule 10b5–1(c) (a "Rule 10b5–1 trading arrangement"):

On August 8, 2023, Marc Vandiepenbeeck, the Company's Vice President and President, Building Solutions, Europe, Middle East, Africa and Latin America, entered into a Rule 10b5–1 trading arrangement (the "Vandiepenbeeck 10b5-1 Plan") during the Company's third quarter open trading window. The Vandiepenbeeck 10b5-1 Plan contemplates the sale in regular intervals of up to 12,974 ordinary shares of Company stock issued upon the vesting of restricted stock units and performance stock units. The restricted stock units and performance stock units are scheduled to vest in December 2023. The number of shares to be sold under the Vandiepenbeeck 10b5-1 Plan represents the maximum actual number of shares issuable under the applicable restricted stock unit and performance stock unit awards. The actual number of shares to be sold under the Vandiepenbeeck 10b5-1 Plan will depend on the achievement of applicable performance conditions under the performance share units and the number of shares withheld to satisfy tax obligations upon the vesting of the applicable awards. The Vandiepenbeeck 10b5-1 Plan is expected to become effective on or about December 20, 2023 and is scheduled to terminate upon the earlier of the sale of all shares contemplated under the Vandiepenbeeck 10b5-1 Plan or December 26, 2024.

Entry into a Material Definitive Agreement; Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant

On December 11, 2023, the Company entered into a credit agreement (the "New 5-Year Credit Agreement") among the Company, certain of its subsidiaries party thereto from time to time (together with the Company, the "Borrowers"), the lenders party thereto from time to time, and JPMorgan Chase Bank, N.A., as administrative agent. Under the New 5-Year Credit Agreement, which will mature on December 11, 2028, the Borrowers may obtain revolving loans in an aggregate principal amount of up to $2.5 billion outstanding from time to time, including a $300 million sublimit for the issuance of letters of credit. The New 5-Year Credit Agreement replaces the Prior 5-Year Credit Agreement (as defined below).

Borrowings under the New 5-Year Credit Agreement will bear interest at the Adjusted Term SOFR Rate (as defined in the New 5-Year Credit Agreement) determined for the interest period or, at the Company's election, the Base Rate (as defined in the New 5-Year Credit Agreement), plus, in each case, an applicable margin based on the credit rating of the Company's senior unsecured long-term debt. The New 5-Year Credit Agreement will also require the Company to pay a facility fee on the

aggregate amount of the lenders' commitments, whether or not drawn, at a rate determined by reference to the credit rating of the Company's senior unsecured long-term debt. Under the New 5-Year Credit Agreement, the interest rate and facility fee rate are subject to upward or downward adjustments if the Company achieves, or fails to achieve, certain specified sustainability targets with respect to greenhouse gas emissions, diverse supplier spend, and water withdrawals in water-stressed locations. Such upward or downward sustainability adjustments may be up to 4.25 basis points per annum in the case of the interest rate and up to 0.75 basis points per annum in the case of the facility fee rate.

The borrowings under the New 5-Year Credit Agreement will be used for general business purposes and will not be secured with liens on any of the Company's or its subsidiaries' assets. The Company will guarantee all borrowings by the subsidiary Borrowers under the New 5-Year Credit Agreement.

The New 5-Year Credit Agreement contains various restrictions and covenants applicable to the Company and, with certain exceptions, its subsidiaries. Among other requirements, the Company must maintain consolidated shareholders' equity of at least $3.5 billion.

The New 5-Year Credit Agreement also contains customary events of default. If an event of default under the New 5-Year Credit Agreement occurs and is continuing, then the administrative agent may terminate the lender commitments under the New 5-Year Credit Agreement and declare any outstanding obligations thereunder to be immediately due and payable. In addition, if the Company or any of its significant subsidiaries becomes the subject of voluntary or involuntary proceedings under any bankruptcy, insolvency or similar law, then any outstanding obligations under the New 5-Year Credit Agreement will automatically become immediately due and payable.

The foregoing description of the New 5-Year Credit Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the New 5-Year Credit Agreement filed herewith as Exhibit 10.1 and incorporated herein by reference. In the ordinary course of business, certain of the lenders under the New 5-Year Credit Agreement and their affiliates have provided, and may in the future provide, investment banking, commercial banking, cash management, foreign exchange or other financial services to the Company and/or one or more of its subsidiaries for which they have received, and may in the future receive, compensation.

On December 11, 2023, the Company also entered into a 364-day credit agreement (the "364-Day Credit Agreement") among the Company, the other Borrowers party thereto from time to time, the lenders party thereto from time to time, and JPMorgan Chase Bank, N.A., as administrative agent. The 364-Day Credit Agreement is being entered into simultaneously with the New 5-Year Credit Agreement, with a collection of parties substantively similar to those party to the New 5-Year Credit Agreement, and on terms substantively similar to those set forth in the New 5-Year Credit Agreement. Accordingly, while the Company does not consider the 364-Day Credit Agreement to be a material agreement, a description of the 364-Day Credit Agreement is being included in this filing as information supplemental to disclosure of the New 5-Year Credit Agreement.

Under the 364-Day Credit Agreement, the Borrowers may obtain revolving loans in an aggregate principal amount of up to $500 million outstanding from time to time prior to December 9, 2024 (the "Commitment Termination Date"). Prior to the Commitment Termination Date, by notice to the administrative agent and subject to certain other conditions set forth in the 364-Day Credit Agreement including the absence of any default thereunder, the Company may elect to convert all or a ratable portion of the outstanding revolving loans under the 364-Day Credit Agreement into term loans (the "Term-Out Option") that will mature on the first anniversary of the Commitment Termination Date. The Borrowers will pay a fee to the lenders under the 364-Day Credit Agreement equal to 1.00% of the aggregate principal amount of any outstanding revolving loans converted into term loans pursuant to the Term-Out Option.

Termination of a Material Definitive Agreement

On December 11, 2023, the credit agreement, dated as of December 5, 2019, among the Company, certain of its subsidiaries party thereto, the lenders party thereto, and JPMorgan Chase Bank, N.A., as administrative agent (as amended, supplemented or otherwise modified, the "Prior 5-Year Credit Agreement"), was terminated and replaced by the New 5-Year Credit Agreement. Under the Prior 5-Year Credit Agreement, the borrowers thereunder were able to obtain revolving loans in an aggregate principal amount of up to $2.5 billion outstanding from time to time, including a $300 million sublimit for the issuance of letters of credit. Borrowings under the Prior 5-Year Credit Agreement were not secured with liens on any of the Company's or its subsidiaries' assets, and the Prior 5-Year Credit Agreement contained customary events of default and financial and other covenants. On December 11, 2023, there were no loans outstanding under the Prior 5-Year Credit Agreement.

ITEM 9C DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

None.

PART III

In response to Part III, Items 10, 11, 12, 13 and 14, parts of the Company's definitive proxy statement (to be filed pursuant to Regulation 14A within 120 days after Registrant's fiscal year-end of September 30, 2023) for its annual meeting to be held on March 13, 2024, are incorporated by reference in this Form 10-K.

ITEM 10 DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information relating to directors and nominees of Johnson Controls is set forth under the caption "Proposal Number One" in Johnson Controls' proxy statement for its annual meeting of shareholders to be held on March 13, 2024 (the "Johnson Controls Proxy Statement") and is incorporated by reference herein. Information about executive officers is included in Part I, Item 4 of this Annual Report on Form 10-K. The information required by Items 405, 407(c)(3), (d)(4) and (d)(5) of Regulation S-K is contained under the captions "Governance of the Company - Nomination of Directors and Board Diversity," "Governance of the Company - Board Committees", and "Committees of the Board - Audit Committee" of the Johnson Controls Proxy Statement and such information is incorporated by reference herein.

Code of Ethics

Johnson Controls has adopted a code of ethics for directors, officers (including the Company's principal executive officer, principal financial officer and principal accounting officer) and employees, known as Values First, The Johnson Controls Code of Ethics. The Code of Ethics is available on the Company's website at www.valuesfirst.johnsoncontrols.com. The Company posts any amendments to or waivers of its Code of Ethics (to the extent applicable to the Company's directors or executive officers) at the same location on the Company's website. In addition, copies of the Code of Ethics may be obtained in print without charge upon written request by any stockholder to the office of the Company at One Albert Quay, Cork, Ireland.

ITEM 11 EXECUTIVE COMPENSATION

The information required by Item 402 of Regulation S-K is contained under the captions "Compensation Discussion & Analysis" (excluding the information under the caption "Compensation Committee Report on Executive Compensation"), "Executive Compensation Tables" "Compensation of Non-Employee Directors" and "CEO Pay Ratio" of the Johnson Controls Proxy Statement. Such information is incorporated by reference.

The information required by Items 407(e)(4) and (e)(5) of Regulation S-K is contained under the captions "Committees of the Board - Compensation Committee Interlocks and Insider Participation" and "Compensation Discussion & Analysis - Compensation Committee Report on Executive Compensation" of the Johnson Controls Proxy Statement. Such information (other than the Compensation Committee Report on Executive Compensation, which shall not be deemed to be "filed") is incorporated by reference.

ITEM 12 SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information in the Johnson Controls Proxy Statement set forth under the caption "Security Ownership of Certain Beneficial Owners and Management" is incorporated herein by reference.

The Johnson Controls International plc 2021 Equity and Incentive Plan authorizes stock options, stock appreciation rights, restricted (non-vested) stock/units, performance shares, performance units and other stock-based awards. The Compensation and Talent Development Committee of the Company's Board of Directors determines the types of awards to be granted to individual participants and the terms and conditions of the awards. Annual awards are typically granted in the first quarter of the fiscal year.

The following table provides information about the Company's equity compensation plans as of September 30, 2023:

	(a)	(b)	(c)
Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by shareholders	4,919,916	$ 45.44	41,213,340
Equity compensation plans not approved by shareholders	—	—	—
Total	4,919,916	$ 45.44	41,213,340

ITEM 13 CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information in the Johnson Controls Proxy Statement set forth under the captions “Committees of the Board,” “Governance of the Company - Director Independence,” and “Governance of the Company - Other Directorships, Conflicts and Related Party Transactions,” is incorporated herein by reference.

ITEM 14 PRINCIPAL ACCOUNTING FEES AND SERVICES

The information in the Johnson Controls Proxy Statement set forth under “Proposal Number Two” related to the appointment of auditors is incorporated herein by reference.

PART IV

ITEM 15 EXHIBIT AND FINANCIAL STATEMENT SCHEDULES

All Financial Statement Schedules are omitted because they are not applicable, or the required information is shown in the financial statements or notes thereto.

Financial statements of 50% or less-owned companies have been omitted because the proportionate share of their revenue or profit before income taxes is individually less than 20% of the respective consolidated amounts and investments in such companies are less than 20% of consolidated total assets.

ITEM 16 FORM 10-K SUMMARY

Not applicable.

Johnson Controls International plc
Index to Exhibits

(a) (1) and (2) Financial Statements and Supplementary Data - See Item 8
(b) Exhibit Index:

Exhibit	Title
2.1	Separation and Distribution Agreement, dated as of September 8, 2016, by and between Johnson Controls International plc and Adient Limited (incorporated by reference to Exhibit 2.1 to the registrant's Current Report on Form 8-K filed September 9, 2016)
3.1	Memorandum and Articles of Association of Johnson Controls International plc, as amended by special resolutions dated September 8, 2014, August 17, 2016 and March 7, 2018 (incorporated by reference to Exhibit 3.1 to the registrant's Quarterly Report on Form 10-Q filed on May 3, 2018)
4.1	Indenture, dated December 28, 2016, between Johnson Controls International plc and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to the registrant's current report on Form 8-K filed on December 28, 2016)
4.2	First Supplemental Indenture, dated December 28, 2016, between Johnson Controls International plc, and U.S. Bank National Association, as trustee, and Elavon Financial Services DAC, UK Branch, as paying agent for the New Euro Notes attaching forms of 2.355% Senior Notes due 2017 (retired; no longer outstanding), 7.125% Senior Notes due 2017 (retired; no longer outstanding), 1.400% Senior Notes due 2017 (retired, no longer outstanding), 3.750% Notes due 2018 (retired; no longer outstanding), 5.000% Senior Notes due 2020 (retired; no longer outstanding), 4.25% Senior Notes due 2021 (retired; no longer outstanding), 3.750% Senior Notes due 2021 (retired; no longer outstanding), 3.625% Senior Notes due 2024, 6.000% Notes due 2036, 5.70% Senior Notes due 2041, 5.250% Senior Notes due 2041, 4.625% Senior Notes due 2044, 6.950% Debentures due December 1, 2045, 4.950% Senior Notes due 2064, 4.625% Notes due 2023, 1.375% Notes due 2025, 3.900% Notes due 2026, and 5.125% Notes due 2045 (incorporated by reference to Exhibit 4.2 to the registrant's current report on Form 8-K filed on December 28, 2016)
4.3	Second Supplemental Indenture, dated February 7, 2017, between Johnson Controls International plc and U.S. Bank National Association, as trustee, attaching form of 4.500% Senior Notes due 2047 (incorporated by reference to Exhibit 4.2 to the registrant's Current Report on Form 8-K filed on February 7, 2017)
4.4	Fifth Supplemental Indenture, dated September 11, 2020, among Johnson Controls International plc, Tyco Fire & Security Finance S.C.A. and U.S. Bank National Association, as trustee, attaching form of the 1.750% Senior Notes due 2030 (incorporated by reference to Exhibit 4.2 to the registrant's Current Report on Form 8-K filed on September 11, 2020)
4.5	Sixth Supplemental Indenture, dated September 15, 2020, among Johnson Controls International plc, Tyco Fire & Security Finance S.C.A., U.S. Bank National Association, as trustee, and Elavon Financial Services DAC, as paying agent, attaching forms of the 0.375% Senior Notes due 2027 and the 1.000% Senior Notes due 2032 (incorporated by reference to Exhibit 4.2 to the registrant's Current Report on Form 8-K filed on September 15, 2020)
4.6	Seventh Supplemental Indenture, dated September 16, 2021, among Johnson Controls International plc, Tyco Fire & Security Finance S.C.A. and U.S. Bank National Association, as trustee, attaching form of the 2.000% Sustainability-Linked Senior Notes due 2031 (incorporated by reference to Exhibit 4.2 to the registrant's Current Report on Form 8-K filed on September 16, 2021)
4.7	Eighth Supplemental Indenture, dated as of September 7, 2022, among Johnson Controls International plc, Tyco Fire & Security Finance S.C.A., U.S. Bank Trust Company, National Association, as trustee and Elavon Financial Services DAC, as paying agent attaching form of the 3.000% Senior Notes due 2028 (incorporated by reference to Exhibit 4.2 to the registrant's Current Report on Form 8-K filed on September 7, 2022)
4.8	Ninth Supplemental Indenture, dated as of September 14, 2022, among Johnson Controls International plc, Tyco Fire & Security Finance S.C.A. and U.S. Bank Trust Company, National Association, as trustee (attaching form of the 4.900% Senior Notes due 2032). (incorporated by reference to Exhibit 4.2 to the registrant's Current Report on Form 8-K filed on September 14, 2022)

Johnson Controls International plc
Index to Exhibits

Exhibit	Title
4.9	Tenth Supplemental Indenture, dated as of May 23, 2023, among Johnson Controls International plc, Tyco Fire & Security Finance S.C.A., U.S. Bank Trust Company, National Association, as trustee and Elavon Financial Services DAC, as paying agent (attaching form of the 4.250% Senior Notes due 2035).(incorporated by reference to Exhibit 4.2 to the registrant's Current Report on Form 8-K filed on May 23, 2023)
4.10	Description of the Ordinary Shares of Johnson Controls International plc (filed herewith)
4.11	Description of the Johnson Controls International plc Notes (filed herewith)
4.12	Description of the Johnson Controls International plc and Tyco Fire & Security Finance S.C.A. Notes (filed herewith)
4.13	Miscellaneous long-term debt agreements and financing leases with banks and other creditors and debenture indentures.*
4.14	Miscellaneous industrial development bond long-term debt issues and related loan agreements and leases.*
10.1	Credit Agreement, dated as of December 11, 2023, among Johnson Controls International plc, certain of its subsidiaries party thereto from time to time, the lenders party thereto from time to time, and JPMorgan Chase Bank, N.A., as administrative agent (filed herewith)
10.2	Tax Matters Agreement, dated as of September 8, 2016, by and between Johnson Controls International plc and Adient Limited (incorporated by reference to Exhibit 10.2 to the registrant's Current Report on Form 8-K filed on September 9, 2016)
10.3	Employee Matters Agreement, dated as of September 8, 2016, by and between Johnson Controls International plc and Adient Limited (incorporated by reference to Exhibit 10.3 to the registrant's Current Report on Form 8-K filed on September 9, 2016)
10.4	Tax Sharing Agreement, dated September 28, 2012 by and among Pentair Ltd., Johnson Controls International plc (formerly Tyco International Ltd.), Tyco International Finance S.A. and The ADT Corporation (incorporated by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K filed on October 1, 2012) (Commission File No. 1-13836)
10.5	Non-Income Tax Sharing Agreement dated September 28, 2012 by and among Johnson Controls International plc (formerly Tyco International Ltd.), Tyco International Finance S.A. and The ADT Corporation (incorporated by reference to Exhibit 10.2 to the registrant's Current Report on Form 8-K filed on October 1, 2012) (Commission File No. 1-13836)
10.6	Trademark Agreement, dated as of September 25, 2012, by and among ADT Services GmbH, ADT US Holdings, Inc., Johnson Controls International plc (formerly Tyco International Ltd.) and The ADT Corporation (incorporated by reference to Exhibit 10.3 to the registrant's Current Report on Form 8-K filed on October 1, 2012) (Commission File No. 1-13836)
10.7	Form of Deed of Indemnification between Johnson Controls International plc and certain of its directors and officers (filed herewith)
10.8	Form of Indemnification Agreement between Tyco Fire & Security (US) Management, LLC and certain directors and officers of Johnson Controls International plc (filed herewith)

Johnson Controls International plc
Index to Exhibits

Exhibit	Title
10.9	Johnson Controls International plc 2012 Share and Incentive Plan, amended and restated as of March 8, 2017 (incorporated by reference to Exhibit 10.2 to the registrant's Quarterly Report on Form 10-Q filed on May 4, 2017)**
10.10	Johnson Controls International plc 2012 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.6 to the registrant's Current Report on Form 8-K filed on September 6, 2016)**
10.11	Johnson Controls International plc 2021 Equity and Incentive Plan (incorporated by reference to Annex B to the registrant's Definitive Proxy Statement on Schedule 14A filed on January 22, 2021) **
10.12	Johnson Controls International plc Severance and Change in Control Policy for Officers, amended and restated March 11, 2021 (Incorporated by reference to Exhibit 10.4 to the registrant's Quarterly Report on Form 10-Q filed on April 30, 2021)**
10.13	Johnson Controls International plc Executive Deferred Compensation Plan, as amended and restated March 11, 2021 (Incorporated by reference to Exhibit 10.5 to the registrant's Quarterly Report on Form 10-Q filed on April 30, 2021)**
10.14	Johnson Controls International plc Retirement Restoration Plan, as amended and restated March 11, 2021 (incorporated by reference to Exhibit 10.7 to the registrant's Quarterly Report on Form 10-Q filed on April 30, 2021)**
10.15	Tyco Supplemental Savings and Retirement Plan as amended and restated effective January 1, 2018 (incorporated by reference to Exhibit 10.2 to the registrant's Current Report on Form 8-K filed on September 19, 2017) **
10.16	Letter Agreement between Johnson Controls International plc and George R. Oliver dated December 8, 2017 (Incorporated by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K filed on December 11, 2017)**
10.17	Form of terms and conditions for Option / SAR Awards, Restricted Stock / Unit Awards, Performance Share Awards under the Johnson Controls International plc 2012 Share and Incentive Plan for periods commencing December 6, 2018 (incorporated by reference to Exhibit 10.2 to the registrant's Quarterly Report on Form 10-Q filed February 1, 2019)**
10.18	Form of Option/SAR Award for Executive Officers (incorporated by reference to Exhibit 10.24 to the registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2019 filed on November 21, 2019)**
10.19	Form of terms and conditions for Option / SAR Awards, Restricted Stock / Unit Awards, Performance Share Awards under the Johnson Controls International plc 2012 Share and Incentive Plan for fiscal 2018 (incorporated by reference to Exhibit 10.3 to the registrant's Quarterly Report on Form 10-Q filed on February 2, 2018)**
10.20	Form of terms and conditions for Option / SAR Awards, and Restricted Stock / Unit Awards, under the Johnson Controls International plc 2012 Share and Incentive Plan for fiscal 2018 applicable to Messrs. Oliver and Stief (incorporated by reference to Exhibit 10.4 to the registrant's Quarterly Report on Form 10-Q filed on February 2, 2018)**
10.21	Form of terms and conditions for Option / SAR Awards, Restricted Stock / Unit Awards, Performance Share Awards under the Johnson Controls International plc 2012 Share and Incentive Plan for periods commencing on September 2, 2016 (incorporated by reference to Exhibit 10.33 to the registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2016 filed on November 23, 2016)**

Johnson Controls International plc
Index to Exhibits

Exhibit	Title
10.22	Form of terms and conditions for Option / SAR Awards, and Restricted Stock / Unit Awards, under the Johnson Controls International plc 2012 Share and Incentive Plan for periods commencing on September 2, 2016 applicable to Messrs. Molinaroli, Oliver and Stief (incorporated by reference to Exhibit 10.1 to registrant's Quarterly Report on Form 10-Q filed on February 8, 2017)**
10.23	Form of terms and conditions for Option Awards, Restricted Unit Awards, Performance Share Awards under the 2012 Share and Incentive Plan for fiscal 2016 (incorporated by reference to Exhibit 10.2 to the registrant's Current Report on Form 8-K filed on October 13, 2015)**
10.24	Form of terms and conditions for Option Awards, Restricted Unit Awards, Performance Share Awards under the 2012 Stock and Incentive Plan for fiscal 2015 (incorporated by reference to Exhibit 10.9 to the registrant's Annual Report on Form 10-K for the fiscal year ended September 26, 2014 filed on November 14, 2014) (Commission File No. 1-13836)**
10.25	Form of terms and conditions for Option Awards, Restricted Unit Awards, Performance Share Awards under the 2012 Stock and Incentive Plan for fiscal 2014 (incorporated by reference to Exhibit 10.9 to the registrant's Annual Report on Form 10-K filed on for the year ended September 27, 2013 filed on November 14, 2013) (Commission File No. 1-13836)**
10.26	Johnson Controls, Inc. 2012 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.1(a) to Johnson Controls, Inc.'s Current Report on Form 8-K filed January 28, 2013) (Commission File No. 1-5097)**
10.27	Form of option/stock appreciation right agreement for Johnson Controls, Inc. 2012 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.1(c) to Johnson Controls, Inc.'s Current Report on Form 8-K filed November 21, 2013) (Commission File No. 1-5097)**
10.28	Restrictive covenants applicable to equity award agreements beginning December 2019 (incorporated by reference to Exhibit 10.3 to the registrant's Quarterly Report on Form 10-Q filed on January 31, 2020)**
10.29	Form of terms and conditions for Option / SAR Awards, Restricted Stock / Unit Awards, Performance Share Awards under the Johnson Controls International plc 2012 Share and Incentive Plan for fiscal 2021 (incorporated by reference to Exhibit 10.1 to the registrant's Quarterly Report on Form 10-Q filed on January 29, 2021)**
10.30	Form of terms and conditions for Option / SAR Awards, Restricted Stock / Unit Awards, Performance Share Awards under the Johnson Controls International plc 2021 Equity and Incentive Plan (incorporated by reference to Exhibit 10.2 to the registrant's Quarterly Report on Form 10-Q filed on April 30, 2021)**
10.31	Form of terms and conditions for Restricted Stock Units for Directors under the Johnson Controls International plc 2021 Equity and Incentive Plan (incorporated by reference to Exhibit 10.3 to the registrant's Quarterly Report on Form 10-Q filed on April 30, 2021)**
10.32	Form of terms and conditions for Restricted Stock / Unit Awards under the Johnson Controls International plc 2021 Equity and Incentive Plan applicable to Ms. Schlitz (incorporated by reference to Exhibit 10.37 to the registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2022 filed on November 15, 2022)**
10.33	Form of terms and conditions for Option / SAR Awards, Restricted Stock / Unit Awards, Performance Share Awards under the Johnson Controls International plc 2021 Equity and Incentive Plan for fiscal 2023 (incorporated by reference to Exhibit 10.1 to the registrant's Quarterly Report on Form 10-Q filed on February 1, 2023)**

Johnson Controls International plc
Index to Exhibits

Exhibit	Title
21.1	Subsidiaries of Johnson Controls International plc (filed herewith)
22.1	Co-Issuer of Debt Securities (filed herewith)
23.1	Consent of Independent Public Accounting Firm (filed herewith)
31.1	Certification by the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
31.2	Certification by the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.1	Certification by the Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
97	Johnson Controls International plc Executive Compensation Recoupment Policy effective October 2, 2023 (filed herewith)**
101	Financial statements from the Annual Report on Form 10-K of Johnson Controls International plc for the fiscal year ended September 30, 2023 formatted in iXBRL (Inline Extensible Business Reporting Language): (i) the Consolidated Statements of Financial Position, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Cash Flow, (v) the Consolidated Statements of Shareholders' Equity and (vi) Notes to Consolidated Financial Statements (filed herewith)
104	Cover Page Interactive Data File (embedded within the iXBRL document and contained in Exhibit 101) (filed herewith)
*	These instruments are not being filed as exhibits herewith because none of the long-term debt instruments authorizes the issuance of debt in excess of 10% of the total assets of Johnson Controls International plc and its subsidiaries on a consolidated basis. Johnson Controls International plc agrees to furnish a copy of each agreement to the Securities and Exchange Commission upon request.
**	Management contract or compensatory plan.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

JOHNSON CONTROLS INTERNATIONAL PLC

By /s/ Olivier Leonetti
Olivier Leonetti
Executive Vice President and
Chief Financial Officer

Date: December 14, 2023

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below as of December 14, 2023, by the following persons on behalf of the registrant and in the capacities indicated:

/s/ George R. Oliver
George R. Oliver
Chairman and Chief Executive Officer
(Principal Executive Officer)

/s/ Olivier Leonetti
Olivier Leonetti
Executive Vice President and
Chief Financial Officer (Principal Financial Officer)

/s/ Daniel C. McConeghy
Daniel C. McConeghy
Vice President and Chief Accounting and Tax Officer
(Principal Accounting Officer)

/s/ Jean Blackwell
Jean Blackwell
Director

/s/ Pierre Cohade
Pierre Cohade
Director

/s/ Michael E. Daniels
Michael E. Daniels
Director

/s/ W. Roy Dunbar
W. Roy Dunbar
Director

/s/ Gretchen R. Haggerty
Gretchen R. Haggerty
Director

/s/ Ayesha Khanna
Ayesha Khanna
Director

/s/ Simone Menne
Simone Menne
Director

/s/ Jürgen Tinggren
Jürgen Tinggren
Director

/s/ Mark P. Vergnano
Mark P. Vergnano
Director

/s/ John D. Young
John D. Young
Director

Exhibit 4.10

DESCRIPTION OF ORDINARY SHARES

The following description of the material terms of our ordinary shares is based on the provisions of our Irish memorandum and articles of association. This description is not complete and is subject to the applicable provisions of Irish law and our memorandum and articles of association, which are incorporated by reference as exhibits to this Annual Report on Form 10-K. The transfer agent and registrar for our ordinary shares is Equiniti Trust Company. Our ordinary shares are listed on the New York Stock Exchange under the ticker symbol "JCI."

Capital Structure

Authorized and Issued Share Capital

Our authorized share capital is $22,000,000 and €40,000, divided into 2,000,000,000 ordinary shares with a par value of $0.01 per share, 200,000,000 preferred shares with a par value of $0.01 per share, and 40,000 ordinary A shares with a par value of €1.00 per share. The authorized share capital includes 40,000 ordinary A shares with a par value of €1.00 per share in order, at the time of its incorporation, to satisfy statutory requirements for the incorporation of all Irish public limited companies. We may issue shares subject to the maximum amount prescribed by our authorized share capital contained in our memorandum and articles of association.

As a matter of Irish company law, the directors of a company may issue new ordinary or preferred shares (including the grant of options and issue of warrants) without shareholder approval once authorized to do so by the memorandum and articles of association of the company or by an ordinary resolution adopted by the shareholders at a general meeting. An ordinary resolution requires over 50% of the votes cast by a company's shareholders at a general meeting. The authority conferred can be granted for a maximum period of five years, at which point it will lapse unless renewed by the shareholders of the company by an ordinary resolution. The board of directors is authorized, under an annual authorization by shareholders pursuant to an ordinary resolution, to issue ordinary shares subject to a maximum of approximately 20% of our issued share capital. The current annual authorization will expire at the earlier of the date of our annual general meeting in 2024 or September 8, 2024 unless renewed (a renewal of the authorization will be proposed at our annual general meeting in 2024, which if approved would expire on the date of our annual general meeting in 2025 or 18 months after the date of our 2024 annual general meeting (whichever is earlier)).

Notwithstanding this authority, under the Irish Takeover Rules the board of directors would not be permitted to issue any shares, during a period when an offer has been made for us or is believed to be imminent unless the issue is (i) approved by shareholders at a general meeting, (ii) consented to by the Irish Takeover Panel on the basis it would not constitute action frustrating the offer, (iii) consented to by the Irish Takeover Panel and approved by the holders of more than 50% of our voting rights, (iv) consented to by the Irish Takeover Panel in circumstances where a contract for the issue of the shares had been entered into prior to that period, or (v) consented to by the Irish Takeover Panel in circumstances where the issue of the shares was decided by our board of directors prior to that period and either action has been taken to implement the issuance (whether in part or in full) prior to such period or the issuance was otherwise in the ordinary course of business.

The board of directors has previously represented that it will not, without prior shareholder approval, approve the issuance or use of any of the preferred shares for any defensive or anti-takeover purpose or for the purpose of implementing any shareholder rights plan. Within these limits, the board of directors may approve the issuance or use of preferred shares for capital raising, financing or acquisition needs or opportunities that has the effect of making a takeover of us or other acquisition transaction more difficult or costly, as could also be the case if the board of directors were to issue additional ordinary shares.

The authority to issue preferred shares provides us with the flexibility to consider and respond to future business needs and opportunities as they arise from time to time, including in connection with capital raising, financing, and acquisition transactions or opportunities.

The authorized but unissued share capital may be increased or reduced by way of an ordinary resolution of our shareholders. The shares comprising our authorized share capital may be divided into shares of such par value as the

resolution shall prescribe. The rights and restrictions to which the ordinary shares will be subject are prescribed in our memorandum and articles of association.

Irish law does not recognize fractional shares held of record; accordingly, our memorandum and articles of association do not provide for the issuance of fractional shares, and our official Irish register will not reflect any fractional shares.

Dividends

Under Irish law, dividends and distributions may only be made from distributable reserves. Distributable reserves, broadly, means our accumulated realized profits less our accumulated realized losses. In addition, no distribution or dividend may be made unless our net assets are equal to, or in excess of, the aggregate of our called up share capital plus undistributable reserves and the distribution does not reduce our net assets below such aggregate. Undistributable reserves include the share premium account, the par value of shares acquired by us and the amount by which our accumulated unrealized profits, so far as not previously utilized by any capitalization, exceed our accumulated unrealized losses, so far as not previously written off in a reduction or reorganization of capital.

The determination as to whether or not we have sufficient distributable reserves to fund a dividend must be made by reference to our "relevant financial statements." The "relevant financial statements" will be either the last set of unconsolidated annual audited financial statements or unaudited financial statements prior to the declaration of a dividend prepared in accordance with the Irish Companies Act, which give a "true and fair view" of our unconsolidated financial position and accord with accepted accounting practice. The relevant financial statements must be filed in the Companies Registration Office (the official public registry for companies in Ireland).

The mechanism as to who declares a dividend and when a dividend shall become payable is governed by our articles of association, which authorize the directors to declare such dividends as appear justified from our profits without the approval of the shareholders at a general meeting. The board of directors may also recommend a dividend to be approved and declared by the shareholders at a general meeting. Although the shareholders may direct that the payment be made by distribution of assets, shares or cash, no dividend issued may exceed the amount recommended by the directors. The dividends can be declared and paid in the form of cash or non-cash assets.

Our directors may deduct from any dividend payable to any shareholder all sums of money (if any) payable by him or her to us in relation to our shares. Our directors are also entitled to issue shares with preferred rights to participate in dividends we declare. The holders of such preferred shares may, depending on their terms, be entitled to claim arrears of a declared dividend out of subsequently declared dividends in priority to ordinary shareholders.

Preemptive Rights and Advance Subscription Rights

Certain statutory preemption rights apply automatically in favor of our shareholders where our shares are to be issued for cash (including pursuant to non-compensatory options). Statutory preemption rights do not apply (i) where shares are issued for non-cash consideration (such as in a stock-for-stock acquisition), (ii) to the issue of non-equity shares (that is, shares that have the right to participate only up to a specified amount in any income or capital distribution) or (iii) where shares are issued pursuant to an employee option or similar equity plan. In addition, and without prejudice to any existing authorities granted to the board of directors, the board of directors is authorized, under an annual authorization by shareholders pursuant to a special resolution, to issue ordinary shares without the application of preemption rights of up to approximately 5% of our issued share capital. The current annual authorization will expire at the earlier of the date of our annual general meeting in 2024 or September 8, 2024 unless renewed (a renewal of the authorization will be proposed at our annual general meeting in 2024, which if approved would expire on the date of our annual general meeting in 2025 or 18 months after the date of our 2024 annual general meeting (whichever is earlier)).

A special resolution requires not less than 75% of the votes cast by our shareholders at a general meeting. If the opt-out is not renewed, shares issued for cash must be offered to our pre-existing shareholders pro rata to their

existing shareholding in accordance with the statutory preemption rights described above before the shares can be issued to any new shareholders.

Issuance of Warrants and Options

Our articles of association provide that, subject to any shareholder approval requirement under any laws, regulations or the rules of any stock exchange to which we are subject, the board is authorized, from time to time, in its discretion, to grant such persons, for such periods and upon such terms as the board deems advisable, options to purchase such number of shares of any class or classes or of any series of any class as the board may deem advisable, and to cause warrants or other appropriate instruments evidencing such options to be issued. The issuance of warrants or options is subject to the same requirements for shareholder authority and statutory preemption rights as applies to the issue of ordinary shares described under the headings "*–Capital Structure– Authorized and Issued Share Capital*" and "*–Preemptive Rights and Advance Subscription Rights*" in this summary and the number of shares capable of being issued under options and warrants are aggregated with the number of shares issued under those authorizations for determining the utilization of those authorizations. The board may issue shares upon exercise of warrants or options without shareholder approval or authorization provided that the original warrants or options were issued when valid authorization was in place.

Share Repurchases and Redemptions

Overview

Article 3 of our articles of association provides that any ordinary share which we have acquired or agreed to acquire shall be deemed to be a redeemable share. Accordingly, for Irish company law purposes, the repurchase of ordinary shares by us will technically be effected as a redemption of those shares as described below. If our articles of association did not contain Article 3(d), repurchases of our ordinary shares would be subject to many of the same rules that apply to purchases of our ordinary shares by subsidiaries described below, including the shareholder approval requirements described below and the requirement that any on-market purchases be effected on a "recognized stock exchange." Except where otherwise noted, when we refer to repurchasing or buying back our ordinary shares, we are referring to the redemption of ordinary shares by us pursuant to Article 3(d) of the articles of association or the purchase of our ordinary shares by a subsidiary of ours, in each case in accordance with our articles of association and Irish company law as described below.

Repurchases and Redemptions by Us

Under Irish law, a company can issue redeemable shares and redeem them out of distributable reserves or the proceeds of a new issue of shares for that purpose. The issue of redeemable shares may only be made by us where the nominal value of the issued share capital that is not redeemable is not less than 10% of the aggregate of the par value and share premium in respect of the allotment of our shares together with the par value of any shares acquired by us. All redeemable shares must also be fully paid and the terms of redemption of the shares must provide for payment on redemption. Redeemable shares may, upon redemption, be cancelled or held in treasury. Shareholder approval will not be required to redeem our ordinary shares. Our board of directors will also be entitled to issue preferred shares which may be redeemed at either our option or the that of the shareholder, depending on the terms of such preferred shares.

Repurchased and redeemed shares may be cancelled or held as treasury shares. The nominal value of treasury shares held by us at any time must not exceed 10% of our company capital (consisting of the aggregate of the par value and share premium in respect of the allotment of our shares together with the par value of any shares acquired by us). While we hold shares as treasury shares, we cannot exercise any voting rights in respect of those shares. We may cancel or reissue treasury shares subject to certain conditions.

Purchases by Our Subsidiaries

Under Irish law, it may be permissible for an Irish or non-Irish subsidiary to purchase our shares either on-market or off-market. A general authority of our shareholders is required to allow a subsidiary of ours to make on-market purchases of our ordinary shares; however, as long as this general authority has been granted, no specific

shareholder authority for a particular on-market purchase by a subsidiary of our ordinary shares is required. Such an authority has been adopted by our shareholders. We have sought such general authority, which must expire no later than 18 months after the date on which it was granted, at previous annual general meetings and expect to seek to renew such authority at subsequent annual general meetings. In order for a subsidiary of ours to make an on-market purchase of our shares, such shares must be purchased on a "recognized stock exchange." The New York Stock Exchange, on which our shares are listed, is a recognized stock exchange for this purpose under Irish company law. For an off-market purchase by a subsidiary of ours, the proposed purchase contract must be authorized by special resolution of our shareholders before the contract is entered into. The person whose shares are to be bought back cannot vote in favor of the special resolution and, from the date of the notice of the meeting at which the resolution approving the contract is to be proposed, the purchase contract must be on display or must be available for inspection by shareholders at our registered office.

The number of shares held by our subsidiaries at any time will count as treasury shares and will be included in any calculation of the permitted treasury share threshold of 10% of the aggregate of the par value and share premium in respect of the allotment of our shares together with the par value of any shares acquired by us. While a subsidiary holds our shares, it cannot exercise any voting rights in respect of those shares. The acquisition of our shares by a subsidiary must be funded out of distributable reserves of the subsidiary.

Lien on Shares, Calls on Shares and Forfeiture of Shares

Our articles of association provide that we will have a first and paramount lien on every share for all moneys payable, whether presently due or not, in respect of such share. Subject to the terms of their allotment, directors may call for any unpaid amounts in respect of any shares to be paid, and if payment is not made, the shares may be forfeited. These provisions are standard inclusions in the articles of association of an Irish company limited by shares, such as us.

Bonus Shares

Under our articles of association, the board of directors may resolve to capitalize any amount credited to any reserve or fund available for distribution or the share premium account or other undistributable reserve of ours for issuance and distribution to shareholders as fully paid up bonus shares on the same basis of entitlement as would apply in respect of a dividend distribution.

Consolidation and Division; Subdivision

Under our articles of association, we may by ordinary resolution consolidate and divide all or any of our share capital into shares of larger par value than its existing shares or subdivide our shares into smaller amounts than is fixed by our articles of association.

Reduction of Share Capital

We may, by ordinary resolution, reduce our authorized but unissued share capital in any way and reduce the nominal value of any of its shares. We also may, by special resolution and subject to confirmation by the Irish High Court (or as otherwise permitted under the Irish Companies Act), reduce or cancel our issued share capital in any way.

General Meetings of Shareholders

We are generally required to hold an annual general meeting at intervals of no more than fifteen months, provided that an annual general meeting is held in each calendar year, no more than nine months after our fiscal year-end.

Our articles of association provide that shareholder meetings may be held outside of Ireland (subject to compliance with the Irish Companies Act). Where a company holds its annual general meeting or extraordinary general meeting outside of Ireland, the Irish Companies Act requires that the company, at its own expense, make all necessary arrangements to ensure that members can by technological means participate in the meeting without

leaving Ireland (unless all of the members entitled to attend and vote at the meeting consent in writing to the meeting being held outside of Ireland).

Extraordinary general meetings may be convened by (i) the board of directors, (ii) on requisition of the shareholders holding not less than 10% of the paid up share capital of our shares carrying voting rights or (iii) on requisition of our auditors. Extraordinary general meetings are generally held for the purposes of approving shareholder resolutions as may be required from time to time.

Notice of a general meeting must be given to all of our shareholders and to our auditors. Our articles of association provide that the maximum notice period is 60 days. The minimum notice periods are 21 days' notice in writing for an annual general meeting or an extraordinary general meeting to approve a special resolution and 14 days' notice in writing for any other extraordinary general meeting. In each case the notice period excludes the date of mailing, the date of the meeting and is in addition to two days for deemed delivery where this is by electronic means. General meetings may be called by shorter notice, but only with the consent of our auditors and all of the shareholders entitled to attend and vote thereat. Because of the 21-day and 14-day requirements described in this paragraph, our articles of association include provisions reflecting these requirements of Irish law.

In the case of an extraordinary general meeting convened by our shareholders, the proposed purpose of the meeting must be set out in the requisition notice. The requisition notice can contain any resolution. Upon receipt of this requisition notice, the board of directors has 21 days to convene a meeting of our shareholders to vote on the matters set out in the requisition notice. This meeting must be held within two months of the receipt of the requisition notice. If the board of directors does not convene the meeting within such 21-day period, the requisitioning shareholders, or any of them representing more than one half of the total voting rights of all of them, may themselves convene a meeting, which meeting must be held within three months of the receipt of the requisition notice.

The only matters which must, as a matter of Irish company law, be transacted at an annual general meeting are the presentation of the annual accounts, balance sheet and reports of the directors and auditors, the appointment of auditors and the fixing of the auditor's remuneration (or delegation of same). If no resolution is made in respect of the reappointment of an auditor at an annual general meeting, the previous auditor will be deemed to have continued in office. Directors are elected by the affirmative vote of a majority of the votes cast by shareholders at an annual general meeting and, pursuant to our articles of association, serve for one-year terms. Any nominee for director who does not receive a majority of the votes cast is not elected to the board. However, because Irish law requires a minimum of two directors at all times, in the event that an election results in no directors being elected, each of the two nominees receiving the greatest number of votes in favor of his or her election shall hold office until his or her successor shall be elected. In the event that an election results in only one director being elected, that director shall be elected and shall serve for a one-year term, and the nominee receiving the greatest number of votes in favor of their election shall hold office until his or her successor shall be elected.

If the directors become aware that our net assets are half or less of the amount of our called-up share capital, the directors must convene an extraordinary general meeting of our shareholders not later than 28 days from the date that they learn of this fact. This meeting must be convened for the purposes of considering whether any, and if so what, measures should be taken to address the situation.

Voting

General

Where a poll is demanded at a general meeting, every shareholder shall have one vote for each ordinary share that he or she holds as of the record date for the meeting. Voting rights on a poll may be exercised by shareholders registered in our share register as of the record date for the meeting or by a duly appointed proxy of such a registered shareholder, which proxy need not be a shareholder. Where interests in shares are held by a nominee trust company this company may exercise the rights of the beneficial holders on their behalf as their proxy. All proxies must be appointed in the manner prescribed by the Irish Companies Act. Our articles of association permit the appointment of proxies by the shareholders to be notified by us electronically, when permitted by the directors.

Our articles of association provide that all resolutions shall be decided by a show of hands unless a poll is demanded by the chairman, by at least three shareholders as of the record date for the meeting or by any shareholder or shareholders holding not less than 10% of the total voting rights of ours as of the record date for the meeting. Each of our shareholders of record as of the record date for the meeting has one vote at a general meeting on a show of hands.

In accordance with our articles of association, our directors may from time to time cause us to issue preferred shares. These preferred shares may have such voting rights as may be specified in the terms of such preferred shares (e.g., they may carry more votes per share than ordinary shares or may entitle their holders to a class vote on such matters as may be specified in the terms of the preferred shares).

Treasury shares will not be entitled to vote at general meetings of shareholders

Supermajority Voting

Irish company law requires "special resolutions" of the shareholders at a general meeting to approve certain matters. A special resolution requires not less than 75% of the votes cast by our shareholders at a general meeting. This may be contrasted with "ordinary resolutions," which require a simple majority of the votes cast by our shareholders at a general meeting. Examples of matters requiring special resolutions include:

- amending our objects;
- amending our memorandum and articles of association;
- approving the change of our name;
- authorizing the entering into of a guarantee or provision of security in connection with a loan, quasi-loan or credit transaction to a director or connected person;
- opting out of pre-emption rights on the issuance of new shares;
- re-registration from a public limited company as a private company;
- variation of class rights attached to classes of shares;
- purchase of own shares off-market;
- the reduction of share capital;
- resolving that we be wound up by the Irish courts;
- resolving in favor of a shareholders' voluntary winding-up;
- re-designation of shares into different share classes; and
- setting the re-issue price of treasury shares.

A scheme of arrangement with shareholders requires a court order from the Irish High Court and the approval of (1) 75% of the voting shareholders by value and (2) 50% in number of the voting shareholders, at a meeting called to approve the scheme.

Variation of Class Rights Attaching to Shares

Variation of all or any special rights attached to any class of our shares is addressed in our articles of association as well as the Irish Companies Act. Any variation of class rights attaching to our issued shares must be approved by a special resolution of the shareholders of the class affected.

Quorum for General Meetings

The presence, in person or by proxy, of the holders of our ordinary shares outstanding which entitle the holders to a majority of the voting power of shares outstanding constitutes a quorum for the conduct of business. No business may take place at a general meeting if a quorum is not present in person or by proxy. The board of directors has no authority to waive quorum requirements stipulated in our articles of association. Abstentions and broker non-votes will be counted as present for purposes of determining whether there is a quorum in respect of the proposals.

Inspection of Books and Records

Under Irish law, shareholders have the right to: (1) receive a copy of our memorandum and articles of association and any act of the Irish Government which alters our memorandum of association; (2) inspect and obtain copies of our minutes of general meetings and resolutions; (3) inspect and receive a copy of the register of shareholders, register of directors and secretaries, register of directors' interests and other statutory registers maintained by us; (4) receive copies of financial statements and directors' and auditors' reports which have previously been sent to shareholders prior to an annual general meeting; and (5) receive financial statements of a subsidiary company of ours which have previously been sent to shareholders prior to an annual general meeting for the preceding ten years. Our auditors will also have the right to inspect all of our books, records and vouchers. The auditors' report must be circulated to the shareholders with our audited financial statements 21 days before the annual general meeting and must be laid before the shareholders at our annual general meeting.

Acquisitions and Appraisal Rights

There are a number of mechanisms for acquiring an Irish public limited company, including:

- a court-approved scheme of arrangement under the Irish Companies Act. A scheme of arrangement with shareholders requires a court order from the Irish High Court and the approval of: (1) 75% of the voting shareholders by value; and (2) greater than 50% in number of the voting shareholders, at a meeting called to approve the scheme;
- through a tender offer by a third party for all of our shares. Where the holders of 80% or more of our shares have accepted an offer for their shares, the remaining shareholders may be statutorily required to also transfer their shares. If the bidder does not exercise its "squeeze out" right, then the non-accepting shareholders also have a statutory right to require the bidder to acquire their shares on the same terms. If our shares were listed on Euronext Dublin or another regulated stock exchange in the European Union, this threshold would be increased to 90%; and
- by way of a merger with an EEA-incorporated company under the E.U. Cross Border Merger Directive (Directive 2017/1132/EU of the European Parliament and of the Council on cross-border mergers of limited liability companies). Such a merger must be approved by a special resolution (there is no statutory merger regime pursuant to Irish law for mergers between an Irish company and a company based outside of the European Economic Area, but Irish law nevertheless allows for the transfer of all assets and liabilities in accordance with an agreement such as the merger agreement).

Under Irish law, there is no requirement for a company's shareholders to approve a sale, lease or exchange of all or substantially all of a company's property and assets. However, our articles of association provide that the affirmative vote of the holders of a majority of the outstanding voting shares on the relevant record date is required to approve a sale, lease or exchange of all or substantially all of its property or assets.

Disclosure of Interests in Shares

Under the Irish Companies Act, there is a notification requirement for shareholders who acquire or cease to be interested in 3% of the shares of an Irish public limited company. A shareholder of ours must therefore make such a notification to us if as a result of a transaction the shareholder will be interested in 3% or more of our shares; or if as a result of a transaction a shareholder who was interested in more than 3% of our shares ceases to be so interested. Where a shareholder is interested in more than 3% of our shares, any alteration of his or her interest that brings his or her total holding through the nearest whole percentage number, whether an increase or a reduction,

must be notified to us. The relevant percentage figure is calculated by reference to the aggregate par value of the shares in which the shareholder is interested as a proportion of the entire par value of our share capital. Where the percentage level of the shareholder's interest does not amount to a whole percentage this figure may be rounded down to the next whole number. All such disclosures should be notified to us within 5 business days of the transaction or alteration of the shareholder's interests that gave rise to the requirement to notify. Where a person fails to comply with the notification requirements described above no right or interest of any kind whatsoever in respect of any of our shares concerned, held by such person, shall be enforceable by such person, whether directly or indirectly, by action or legal proceeding. However, such person may apply to the court to have the rights attaching to the shares concerned reinstated.

In addition to the above disclosure requirement, under the Irish Companies Act we may by notice in writing require a person whom we know or have reasonable cause to believe to be, or at any time during the three years immediately preceding the date on which such notice is issued, to have been interested in shares comprised in our relevant share capital to: (a) indicate whether or not it is the case, and (b) where such person holds or has during that time held an interest in our shares, to give such further information as may be required by us including particulars of such person's own past or present interests in our shares. Any information given in response to the notice is required to be given in writing within such reasonable time as may be specified in the notice.

Where such a notice is served by us on a person who is or was interested in our shares and that person fails to give us any information required within the reasonable time specified, we may apply to court for an order directing that the affected shares be subject to certain restrictions.

Under the Irish Companies Act, the restrictions that may be placed on the shares by the court are as follows:

- any transfer of those shares, or in the case of unissued shares any transfer of the right to be issued with shares and any issue of shares, shall be void;
- no voting rights shall be exercisable in respect of those shares;
- no further shares shall be issued in right of those shares or in pursuance of any offer made to the holder of those shares; and
- no payment shall be made of any sums due from us on those shares, whether in respect of capital or otherwise.

Where our shares are subject to these restrictions, the court may order the shares to be sold and may also direct that the shares shall cease to be subject to these restrictions. Failure to comply with such a court order is a criminal offence.

Anti-Takeover Provisions

Business Combinations with Interested Shareholders

Our articles of association include a provision similar to Section 203 of the Delaware General Corporation Law, which generally prohibits us from engaging in a business combination with an interested shareholder for a period of three years following the date the person became an interested shareholder, unless, in general:

- our board of directors approved the transaction which resulted in the shareholder becoming an interested shareholder;
- upon consummation of the transaction which resulted in the shareholder becoming an interested shareholder, the shareholder owned at least 85% of the voting shares outstanding at the time of commencement of such transaction, excluding for purposes of determining the number of voting shares outstanding (but not the outstanding voting shares owned by the interested shareholder), voting shares owned by persons who are directors and also officers and by certain employee share plans; or

- the business combination is approved by our board of directors and authorized at an annual or extraordinary general meeting of shareholders by a special resolution, excluding for this purpose any votes cast by the interested shareholder.

A "business combination" is generally defined as a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested shareholder. An "interested shareholder" is generally defined as a person who, together with affiliates and associates, owns or, within three years prior to the date in question, owned 15% or more of our outstanding voting shares.

Shareholder Rights Plans and Share Issuances

Irish law does not expressly prohibit companies from issuing share purchase rights or adopting a shareholder rights plan as an anti-takeover measure. However, there is no directly relevant case law on the validity of such plans under Irish law, and shareholder approval may be required under Irish law to implement such a plan. In addition, such a plan would be subject to the Irish Takeover Rules described below.

Subject to the Irish Takeover Rules described below, the board also has power to issue any of our authorized and unissued shares on such terms and conditions as it may determine and any such action should be taken in our best interests. It is possible, however, that the terms and conditions of any issue of preferred shares could discourage a takeover or other transaction that holders of some or a majority of the ordinary shares believe to be in their best interests or in which holders might receive a premium for their shares over the then market price of the shares. The board of directors represents that, it will not, without prior shareholder approval, approve the issuance or use of any of the preferred shares for any defensive or anti-takeover purpose or for the purpose of implementing any shareholder rights plan. Within these limits, the board of directors may approve the issuance or use of preferred shares for capital raising, financing or acquisition needs or opportunities that has the effect of making a takeover of us or other acquisition transactions more difficult or costly, as could also be the case if the board of directors were to issue additional ordinary shares.

Irish Takeover Rules and Substantial Acquisition Rules

A transaction by virtue of which a third party is seeking to acquire 30% or more of the voting rights of our shares will be governed by the Irish Takeover Panel Act 1997 and the Irish Takeover Rules made thereunder and will be regulated by the Irish Takeover Panel. The "General Principles" of the Irish Takeover Rules and certain important aspects of the Irish Takeover Rules are described below.

General Principles

The Irish Takeover Rules are built on the following General Principles which will apply to any transaction regulated by the Irish Takeover Panel:

- in the event of an offer, all classes of shareholders of the target company should be afforded equivalent treatment and, if a person acquires control of a company, the other holders of securities must be protected;
- the holders of securities in the target company must have sufficient time to allow them to make an informed decision regarding the offer;
- the board of a company must act in the interests of the company as a whole. If the board of the target company advises the holders of securities as regards the offer it must advise on the effects of the implementation of the offer on employment, employment conditions and the locations of the target company's place of business;
- false markets in the securities of the target company or any other company concerned by the offer must not be created;
- a bidder can only announce an offer after ensuring that he or she can fulfill in full the consideration offered;

- a target company may not be hindered longer than is reasonable by an offer for its securities. This is a recognition that an offer will disrupt the day-to-day running of a target company particularly if the offer is hostile and the board of the target company must divert its attention to resist the offer; and
- a "substantial acquisition" of securities (whether such acquisition is to be effected by one transaction or a series of transactions) will only be allowed to take place at an acceptable speed and shall be subject to adequate and timely disclosure.

Mandatory Bid

Under certain circumstances, a person who acquires our shares or other voting rights may be required under the Irish Takeover Rules to make a mandatory cash offer for our remaining outstanding shares at a price not less than the highest price paid for the shares by the acquirer (or any parties acting in concert with the acquirer) during the previous 12 months. This mandatory bid requirement is triggered if, unless the Panel otherwise consents, an acquisition of shares would (i) increase the aggregate holding of an acquirer (including the holdings of any parties acting in concert with the acquirer) to shares representing 30% or more of the voting rights in us, or (ii) in the case of a person holding (together with its concert parties) shares representing 30% or more of the voting rights in us, after giving effect to the acquisition, increase the percentage of the voting rights held by that person (together with its concert parties) by 0.05% within a 12-month period. Any person (excluding any parties acting in concert with the holder) holding shares representing more than 50% of the voting rights of a company is not subject to these mandatory offer requirements in purchasing additional securities.

Voluntary Bid; Requirements to Make a Cash Offer and Minimum Price Requirements

A voluntary offer is an offer that is not a mandatory offer. If a bidder or any of its concert parties acquire our ordinary shares within the period of three months prior to the commencement of the offer period, the offer price must be not less than the highest price paid for our ordinary shares by the bidder or its concert parties during that period. The Irish Takeover Panel has the power to extend the "look back" period to 12 months if the Irish Takeover Panel, having regard to the General Principles, believes it is appropriate to do so.

If the bidder or any of its concert parties has acquired our ordinary shares (i) during the period of 12 months prior to the commencement of the offer period which represent more than 10% of our total ordinary shares or (ii) at any time after the commencement of the offer period, the offer shall be in cash (or accompanied by a full cash alternative) and the price per ordinary share shall be not less than the highest price paid by the bidder or its concert parties during, in the case of (i), the period of 12 months prior to the commencement of the offer period and, in the case of (ii), the offer period. The Irish Takeover Panel may apply this rule to a bidder who, together with its concert parties, has acquired less than 10% of our total ordinary shares in the 12-month period prior to the commencement of the offer period if the Panel, having regard to the General Principles, considers it just and proper to do so.

An offer period will generally commence from the date of the first announcement of the offer or proposed offer.

Substantial Acquisition Rules

The Irish Takeover Rules also contain rules governing substantial acquisitions of shares which restrict the speed at which a person may increase his or her holding of shares and rights over shares to an aggregate of between 15% and 30% of the voting rights of our shares. Except in certain circumstances, an acquisition or series of acquisitions of shares or rights over shares representing 10% or more of the voting rights of our shares is prohibited, if such acquisition(s), when aggregated with shares or rights already held, would result in the acquirer holding 15% or more but less than 30% of the voting rights of our shares and such acquisitions are made within a period of seven days. These rules also require accelerated disclosure of acquisitions of shares or rights over shares relating to such holdings.

Frustrating Action

Under the Irish Takeover Rules, our board of directors is not permitted to take any action which might frustrate an offer for our shares once the board of directors has received an approach which may lead to an offer or

has reason to believe an offer is imminent except as noted below. Potentially frustrating actions such as (i) the issue of shares, options or convertible securities, or the redemption or purchase of own securities (other than under a contract entered into prior to the announcement of the offer or the board having reason to believe an offer is imminent), (ii) material acquisitions or disposals, (iii) entering into contracts other than in the ordinary course of business or (iv) any action, other than seeking alternative offers, which may result in frustration of an offer, are prohibited during the course of an offer or at any time during which the board has reason to believe an offer is imminent. Exceptions to this prohibition are available where:

- the action is approved by the offeree at a general meeting; or
- with the consent of the Irish Takeover Panel where:
    - the Irish Takeover Panel is satisfied the action would not constitute a frustrating action;
    - the holders of 50% of the voting rights state in writing that they approve the proposed action and would vote in favor of it at a general meeting;
    - the action is taken in accordance with a contract entered into prior to the announcement of the offer; or
    - the decision to take such action was made before the announcement of the offer and either has been at least partially implemented or is in the ordinary course of business.

Corporate Governance

Our articles of association delegate the day-to-day management of us to the board of directors. The board of directors may then delegate the management of us to committees, executives or to a management team, but regardless, the directors will remain responsible, as a matter of Irish law, for the proper management of our affairs.

Our corporate governance guidelines and general approach to corporate governance as reflected in our memorandum and articles of association and our internal policies and procedures are guided by U.S. practice and applicable federal securities laws and regulations and the requirements of the New York Stock Exchange. Although we are an Irish public limited company, we are not subject to the listing rules of Euronext Dublin or the listing rules of the U.K. Financial Conduct Authority and we are therefore not subject to, nor will we adopt, the U.K. Corporate Governance Code, any guidelines issued by the Investment Association or the Pre-Emption Group Statement of Principles, or any other non-statutory Irish or U.K. governance standards or guidelines. While there are many similarities and overlaps between the U.S. corporate governance standards applied by us and the U.K. Corporate Governance Code and other Irish/U.K. governance standards or guidelines, there are differences, in particular relating to the extent of the authorization to issue share capital and effect share repurchases that may be granted to the board and the criteria for determining the independence of directors.

Duration; Dissolution; Rights upon Liquidation

Our duration is unlimited. We may be dissolved and wound up at any time by way of either a shareholders' voluntary winding up or a creditors' winding up. In the case of a shareholders' voluntary winding up, the consent of not less than 75% of the votes cast by our shareholders is required. We may also be dissolved by way of court order on the application of a creditor or the Director of Corporate Enforcement (where the court is satisfied on a petition of the Director of Corporate Enforcement that it is in the public interest that we should be would up), or by the Companies Registration Office (by way of strike-off) as an enforcement measure where we have failed to file certain returns.

The rights of the shareholders to a return of our assets on dissolution or winding up, following the settlement of all claims of creditors, may be prescribed in our memorandum and articles of association or the terms of any preferred shares issued by our directors from time to time. The holders of preferred shares in particular may have the right to priority in a dissolution or winding up of us. If the articles of association contain no specific provisions in respect of a dissolution or winding up then, subject to the priorities of any creditors, the assets will be distributed to shareholders in proportion to the paid-up par value of the shares held. Our articles of association provide that our

ordinary shareholders are entitled to participate pro rata in a winding up, but their right to do so may be subject to the rights of any preferred shareholders to participate under the terms of any series or class of preferred shares.

Stock Exchange Listing

Our ordinary shares are listed on the New York Stock Exchange under the symbol "JCI".

Uncertificated Shares

Pursuant to the Irish Companies Act a shareholder is entitled to be issued a share certificate on request and subject to payment of a nominal fee.

Transfer and Registration of Shares

Our share register is maintained by its transfer agent. Registration in this share register is determinative of membership in us. A shareholder of ours who holds shares beneficially is not the holder of record of such shares. Instead, the depository (for example, Cede & Co., as nominee for DTC) or other nominee is the holder of record of such shares. Accordingly, a transfer of shares from a person who holds such shares beneficially to a person who also holds such shares beneficially through the same depository or other nominee will not be registered in our official share register, as the depository or other nominee will remain the record holder of such shares.
A written instrument of transfer is required under Irish law in order to register on our official share register any transfer of shares (i) from a person who holds such shares directly to any other person, (ii) from a person who holds such shares beneficially to a person who holds such shares directly, or (iii) from a person who holds such shares beneficially to another person who holds such shares beneficially where the transfer involves a change in the depository or other nominee that is the record owner of the transferred shares. An instrument of transfer also is required for a shareholder who directly holds shares to transfer those shares into his or her own broker account (or vice versa). Such instruments of transfer may give rise to Irish stamp duty, which must be paid prior to registration of the transfer on our official Irish share register.

We may, in our absolute discretion, pay or cause one of our affiliates to pay any stamp duty. Our articles of association provide that, in the event of any such payment, we shall be entitled to (i) seek reimbursement from the buyer, (ii) set-off the amount of the stamp duty against future dividends on such shares, and (iii) claim a first and permanent lien on our ordinary shares acquired by such buyer and any dividends paid on such shares. Parties to a share transfer may assume that any stamp duty arising in respect of a transaction in our ordinary shares has been paid unless one or both of such parties is otherwise notified by us.

Our articles of association delegate to our Secretary (or his or her nominee) the authority to execute an instrument of transfer on behalf of a transferring party. In order to help ensure that the official share register is regularly updated to reflect trading of our ordinary shares occurring through normal electronic systems, we regularly produce any required instruments of transfer in connection with any transactions for which we pay stamp duty (subject to the reimbursement and set-off rights described above). In the event that we notify one or both of the parties to a share transfer that we believe stamp duty is required to be paid in connection with such transfer and that we will not pay such stamp duty, such parties may either themselves arrange for the execution of the required instrument of transfer (and may request a form of instrument of transfer from us for this purpose) or request that we execute an instrument of transfer on behalf of the transferring party in a form determined by us. In either event, if the parties to the share transfer have the instrument of transfer duly stamped (to the extent required) and then provide it to our transfer agent, the transferee will be registered as the legal owner of the relevant shares on our official Irish share register (subject to the matters described below).

Our directors have general discretion to decline to register an instrument of transfer unless the transfer is in respect of one class of shares only, the instrument of transfer is accompanied by the certificate of shares to which it relates and such other evidence as the directors may reasonably require to show the right of the transferor to make the transfer, a fee of €10 or such lesser sum is paid to us, the instrument of transfer is in favor of not more than four transferees and it is lodged at our registered office or such other place as the board of directors may appoint.

The registration of transfers may be suspended by the directors at such times and for such period, not exceeding in the whole 30 days in each year, as the directors may from time to time determine.

Formation; Fiscal Year; Registered Office

We were incorporated in Ireland as a public limited company on May 9, 2014 (under the name "Tyco International plc") with company registration number 543654. Our fiscal year ends on September 30 of each year and our registered address is One Albert Quay, Cork, T12 X8N6, Ireland.

No Sinking Fund

The ordinary shares have no sinking fund provisions.

No Liability for Further Calls or Assessments

When the ordinary shares are issued, they will be duly and validly issued, fully paid and nonassessable.

Exhibit 4.11

DESCRIPTION OF JCI PLC NOTES

Capitalized terms used in this "*Description of JCI plc Notes*" and not otherwise defined have the meanings set forth under the heading "*—Definitions*" below. For purposes of this "Description of JCI plc Notes" section, (a) the terms "*JCI plc*," "*we*," and "*us*" refer only to Johnson Controls International plc, a public limited company organized under the laws of Ireland, and its successors permitted by the terms of the JCI plc Indenture (as defined below) and (b) the term "Johnson Controls" refers to Johnson Controls International plc and its consolidated subsidiaries.

For purposes of this description, the “JCI plc Notes” mean the following series of notes issues by JCI plc:

Initial Aggregate Principal Amount (millions)	Series of JCI plc Notes
$500	3.625% Senior Notes due 2024
$400	6.000% Notes due 2036
$300	5.70% Senior Notes due 2041
$250	5.250% Senior Notes due 2041
$450	4.625% Senior Notes due 2044
$125	6.950% Debentures due December 1, 2045
$450	4.950% Senior Notes due 2064
€500	1.375% Notes due 2025
$750	3.900% Notes due 2026
$750	5.125% Notes due 2045
$500	4.500% Senior Notes Due 2047

Each series of JCI plc Notes is a series of debt securities that were issued under an Indenture and a supplemental indenture thereto (collectively, the "*JCI plc Indenture*"), between JCI plc and U.S. Bank Trust Company, National Association (successor in interest to U.S. Bank National Association), as trustee (the "*Trustee*"). Elavon Financial Services DAC, UK Branch, as paying agent for the JCI plc 1.375% Notes due 2025 (the “*JCI plc Euro Notes*”), is also a party to the supplemental indentures related to the issuance of the JCI plc Euro Notes. We also entered into separate agency agreements among us, Elavon Financial Services DAC, UK Branch, as paying agent for the JCI plc Euro Notes, and (1) Elavon Financial Services DAC, as transfer agent and security registrar for the JCI plc notes other than the 1.000% Senior Notes due 2023 and 4.500% Senior Notes Due 2047 and (2) U.S. Bank National Association as transfer agent, security registrar and Trustee for the 1.000% Senior Notes due 2023 and 4.500% Senior Notes Due 2047. The terms of the JCI plc Notes include those expressly set forth in such notes and the JCI plc Indenture and those made part of the JCI plc Indenture by reference to the Trust Indenture Act.

This description is a summary of the material provisions of the JCI plc Notes and the JCI plc Indenture. This description does not restate those agreements and instruments in their entirety. You are encouraged to read the applicable JCI plc Notes and the JCI plc Indenture, as supplemented, which is filed as an exhibit to this Annual Report on Form 10-K, carefully and in their entirety as they contain information not included in this summary.

General

The JCI plc Notes are unsecured, unsubordinated obligations of JCI plc. The Notes rank senior in right of payment to JCI plc's existing and future indebtedness and other obligations that are expressly subordinated in right of payment to the Notes; equal in right of payment to JCI plc's existing and future indebtedness and other obligations that are not so subordinated; effectively junior to any of JCI plc's secured indebtedness and other obligations to the extent of the value of the assets securing such indebtedness or other obligations; and structurally junior to all existing and future indebtedness and other obligations incurred by JCI plc's subsidiaries.

The JCI plc Notes (other than the JCI plc Euro Notes) (the "*JCI plc Dollar Notes*") were issued in book-entry form, represented by Dollar Global Securities (as defined below), and delivered through the facilities of DTC. The JCI plc Euro Notes were issued in book-entry form, represented by Euro Global Securities (as defined below) deposited with or on behalf of a common depositary on behalf of Clearstream and Euroclear and registered in the name of the nominee of the common depositary for the accounts of Clearstream and Euroclear.

The JCI plc Dollar Notes were issued in registered form without interest coupons and only in denominations of $2,000 and whole multiples of $1,000 in excess thereof. The JCI plc Euro Notes were issued in registered form without interest coupons and only in denominations of €100,000 and whole multiples of €1,000 in excess thereof.

The table below sets forth the interest rate and calculation method, interest payment dates, and maturity date for each series of JCI plc Notes. Interest with respect to each series of JCI plc Notes is payable on each interest payment date to the holders of record at the close of business on each corresponding record date indicated below.

Series of JCI plc Notes	Interest Rate and Calculation Method	Interest Payment Dates	Record Dates	Maturity Date
3.625% Senior Notes due 2024	3.625% per annum, calculated on the basis of a 360-day year consisting of twelve 30-day months	January 2 and July 2	Preceding December 18 and June 18, respectively	July 2, 2024
6.000% Notes due 2036	6.000% per annum, calculated on the basis of a 360-day year consisting of twelve 30-day months	January 15 and July 15	Preceding January 1 and July 1, respectively	January 15, 2036
5.70% Senior Notes due 2041	5.70% per annum, calculated on the basis of a 360-day year consisting of twelve 30-day months	March 1 and September 1	Preceding February 15 and August 15, respectively	March 1, 2041
5.250% Senior Notes due 2041	5.250% per annum, calculated on the basis of a 360-day year consisting of twelve 30-day months	June 1 and December 1	Preceding May 15 and November 15, respectively	December 1, 2041
4.625% Senior Notes due 2044	4.625% per annum, calculated on the basis of a 360-day year consisting of twelve 30-day months	January 2 and July 2	Preceding December 18 and June 18, respectively	July 2, 2044
6.950% Debentures due December 1, 2045	6.950% per annum, calculated on the basis of a 360-day year consisting of twelve 30-day months	June 1 and December 1	Preceding May 15 and November 15, respectively	December 1, 2045
4.950% Senior Notes due 2064	4.950% per annum, calculated on the basis of a 360-day year consisting of twelve 30-day months	January 2 and July 2	Preceding December 18 and June 18, respectively	July 2, 2064
1.375% Notes due 2025	1.375% per annum, calculated based on the actual number of days in the period for which interest is being calculated and the actual number of days from and including the last date on which interest was paid (or February 25, 2016, if no interest has been paid), to but excluding the next scheduled interest payment date (ACTUAL/ACTUAL (ICMA)).	February 25	Preceding February 10	February 25, 2025
3.900% Notes due 2026	3.900% per annum, calculated on the basis of a 360-day year consisting of twelve 30-day months	February 14 and August 14	Preceding February 1 and August 1, respectively	February 14, 2026
5.125% Notes due 2045	5.125% per annum, calculated on the basis of a 360-day year consisting of twelve 30-day months	March 14 and September 14	Preceding March 1 and September 1, respectively	September 14, 2045
4.500 Senior Notes due 2047	4.500% per annum, calculated on the basis of a 360-day year consisting of twelve 30-day months	February 15 and August 15	Preceding February 1 and August 1, respectively	February 15, 2047

Except as provided below, the JCI plc Notes are not subject to redemption, repurchase or repayment at the option of any holder thereof, upon the occurrence of any particular circumstance or otherwise. The JCI plc Notes do not have the benefit of any sinking fund. The JCI plc Notes are not convertible into or exchangeable for shares or other securities of JCI plc.

JCI plc Indenture May Be Used for Future Issuances

We may, without the consent of the then existing holders of the JCI plc Notes of any series, "re-open" any series of JCI plc Notes and issue additional JCI plc Notes of such series, which additional JCI plc Notes will have the same terms as the JCI plc Notes of such series except for the issue price, issue date and, under some circumstances, the first interest payment date; provided that, if such additional JCI plc Notes are not fungible with the JCI plc Notes of the applicable series for U.S. federal income tax purposes, such additional JCI plc Notes will have a separate CUSIP, ISIN and/or other identifying number, as applicable. Additional JCI plc Notes issued in this manner will form a single series with the JCI plc Notes of the applicable series.

In addition, the JCI plc Indenture does not limit the amount of debt securities that can be issued thereunder and provides that debt securities of any series may be issued thereunder up to the aggregate principal amount that we may authorize from time to time. All debt securities issued as a series, including those issued pursuant to any reopening of a series, will vote together as a single class. Debt securities issued pursuant to the JCI plc Indenture may have terms that differ from those of the JCI plc Notes, as set forth in Section 2.01 of the JCI plc Indenture.

Issuance of JCI plc Euro Notes in Euros

All payments of interest and principal, including payments made upon any redemption or repurchase of the JCI plc Euro Notes, will be payable in euros. If the euro is unavailable to us due to the imposition of exchange controls or other circumstances beyond our control or if the euro is no longer being used by the then member states of the European Monetary Union that have adopted the euro as

their currency or for the settlement of transactions by public institutions of or within the international banking community, then all payments in respect of the JCI plc Euro Notes will be made in U.S. dollars until the euro is again available to us or so used. In such circumstances, the amount payable on any date in euros will be converted into U.S. dollars at the rate mandated by the U.S. Federal Reserve Board as of the close of business on the second business day prior to the relevant payment date or, in the event the U.S. Federal Reserve Board has not mandated a rate of conversion, on the basis of the then most recent U.S. dollar/euro exchange rate available on or prior to the second business day prior to the relevant payment date as determined by JCI plc in its sole discretion. Any payment in respect of the JCI plc Euro Notes so made in U.S. dollars will not constitute an Event of Default (as defined below) under the JCI plc Euro Notes or the JCI plc Indenture. Neither the Trustee nor the paying agent for the JCI plc Euro Notes shall have any responsibility for any calculation or conversion in connection with the foregoing.

Optional Redemption

JCI plc Dollar Notes

Prior to the applicable Par Call Date set forth in the table below, JCI plc may, at its option, redeem the JCI plc Dollar Notes of any series (other than the JCI plc Dollar Notes designated as "non-par callable" under the caption "Par Call Date" and/or "non-callable prior to maturity" under the caption "Applicable Spread" in the table below), in whole at any time or in part from time to time (in $1,000 increments, provided that any remaining principal amount thereof shall be at least the minimum authorized denomination thereof), at a redemption price equal to the greater of (the "*Applicable Par Call Date Notes Premium*"):

(i) 100% of the principal amount of the JCI plc Dollar Notes of the applicable series to be redeemed, and

(ii) as determined by the Quotation Agent and delivered to the Trustee in writing, the sum of the present values of the remaining scheduled payments of principal and interest thereon that would be due if the applicable JCI plc Dollar Notes matured on the applicable Par Call Date (exclusive of interest accrued to the redemption date), discounted to the redemption date (assuming a 360-day year consisting of twelve 30-day months) at the Adjusted Redemption Treasury Rate plus the Applicable Spread set forth in the table below, plus, in either situation (i) or (ii), accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

On or after the applicable Par Call Date, JCI plc may, at its option, redeem the JCI plc Dollar Notes of any series (other than the JCI plc Dollar Notes designated as "non-par callable" under the caption "Par Call Date" and/or "non-callable prior to maturity" under the caption "Applicable Spread" in the table below), in whole at any time or in part from time to time (in $1,000 increments, provided that any remaining principal amount thereof shall be at least the minimum authorized denomination thereof), at a redemption price equal to 100% of the principal amount of the JCI plc Dollar Notes of the applicable series to be redeemed, plus accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

JCI plc may, at its option, redeem each series of JCI plc Dollar Notes designated as "non-par callable" under the caption "Par Call Date" and not designated as "non-callable prior to maturity" under the caption "Applicable Spread" in the table below, in whole at any time or in part from time to time (in $1,000 increments, provided that any remaining principal amount thereof shall be at least the minimum authorized denomination thereof), at a redemption price equal to the greater of (the "*Applicable Non-Par Call Date Notes Premium*"):

(i) 100% of the principal amount of the JCI plc Dollar Notes of the applicable series to be redeemed, and

(ii) as determined by the Quotation Agent and delivered to the Trustee in writing, the sum of the present values of the remaining scheduled payments of principal and interest thereon (exclusive of interest accrued to the redemption date), discounted to the redemption date (assuming a 360-day year consisting of twelve 30-day months) at the Adjusted Redemption Treasury Rate plus the Applicable Spread set forth in the table below, plus, in either situation (i) or (ii), accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

Each series of JCI plc Dollar Notes designated as "non-callable prior to maturity" under the caption "Applicable Spread" in the table below is not redeemable prior to maturity.

The Par Call Date, Applicable Spread and minimum authorized denominations for each series of JCI plc Dollar Notes are as follows:

Series of JCI plc Dollar Notes	Par Call Date	Applicable Spread	Minimum Authorized Denominations
3.625% Senior Notes due 2024	April 2, 2024 (three months prior to the maturity date)	15 basis points	$ 2,000
6.000% Notes due 2036	non-par callable	25 basis points	$ 2,000
5.70% Senior Notes due 2041	non-par callable	20 basis points	$ 2,000
5.250% Senior Notes due 2041	June 1, 2041 (six months prior to the maturity date)	35 basis points	$ 2,000
4.625% Senior Notes due 2044	January 2, 2044 (six months prior to the maturity date)	20 basis points	$ 2,000
6.950% Debentures due 2045	non-par callable	non-callable prior to maturity	$ 2,000
4.950% Senior Notes due 2064	January 2, 2064 (six months prior to the maturity date)	25 basis points	$ 2,000
3.900% Notes due 2026	November 14, 2025 (three months prior to the maturity date)	30 basis points	$ 2,000
5.125% Notes due 2045	March 14, 2045 (six months prior to the maturity date)	35 basis points	$ 2,000
4.500 Senior Notes due 2047	August 15, 2046 (six months prior to the maturity date)	25 basis points	$ 2,000

"*Adjusted Redemption Treasury Rate*," with respect to any redemption date for the JCI plc Dollar Notes of any series, means the rate equal to the semiannual equivalent yield to maturity or interpolated (on a 30/360 day count basis) yield to maturity of the Comparable Redemption Treasury Issue, assuming a price for the Comparable Redemption Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Redemption Treasury Price for such redemption date.

"*Comparable Redemption Treasury Issue*" means the United States Treasury security selected by the Quotation Agent as having a maturity comparable to the remaining term of the JCI plc Dollar Notes to be redeemed that would be utilized at the time of selection and in accordance with customary financial practice in pricing new issues of corporate debt securities of comparable maturity to the remaining term of such JCI plc Dollar Notes.

"*Comparable Redemption Treasury Price*," with respect to any redemption date for the JCI plc Dollar Notes of any series, means (i) the average of the Redemption Reference Treasury Dealer Quotations for such redemption date, after excluding the highest and lowest such Redemption Reference Treasury Dealer Quotations (unless there is more than one highest or lowest quotation, in which case only one such highest and/or lowest quotation shall be excluded), or (ii) if the Quotation Agent obtains fewer than four such Redemption Reference Treasury Dealer Quotations, the average of all such Redemption Reference Treasury Dealer Quotations.

"*Independent Investment Banker*" means one of the Redemption Reference Treasury Dealers appointed by us.

"*Quotation Agent*" means a Redemption Reference Treasury Dealer appointed as such agent by JCI plc.

"*Redemption Reference Treasury Dealer*" means (1) each of Citigroup Global Markets Inc., Merrill Lynch, Pierce, Fenner & Smith Incorporated (with respect to the JCI plc Dollar Notes other than the 4.500 Senior Notes due 2047) and J.P. Morgan Securities LLC (with respect to the 4.500 Senior Notes due 2047) (or their respective Affiliates that are Primary Treasury Dealers (as defined below)) and their respective successors and (2) two other Primary Treasury Dealers selected by JCI plc after consultation with the Independent Investment Banker; provided, however, that if any of the foregoing shall cease to be a primary U.S. government securities dealer in New York City (a "*Primary Treasury Dealer*"), JCI plc will substitute therefor another Primary Treasury Dealer.

"Redemption Reference Treasury Dealer Quotations," with respect to each Redemption Reference Treasury Dealer and any redemption date for the JCI plc Dollar Notes of any series, means the average, as determined by the Quotation Agent, of the bid and offer prices at 11:00 a.m., New York City time, for the Comparable Redemption Treasury Issue (expressed in each case as a percentage of its principal amount) for settlement on the redemption date quoted in writing to the Quotation Agent by such Redemption Reference Treasury Dealer on the third business day preceding such redemption date.

JCI plc Euro Notes

Prior to November 25, 2024 (three months prior to the maturity date), JCI plc may, at its option, redeem the JCI plc 1.375% Notes due 2025, in whole at any time or in part from time to time (in €1,000 increments, provided that any remaining principal amount thereof shall be at least the minimum authorized denomination of €100,000), at a redemption price equal to the greater of (the *Applicable Euro Notes Premium*") (i) 100% of the principal amount of the JCI plc 1.375% Notes due 2025 to be redeemed and (ii) the sum of the present values of the Remaining Scheduled Payments (as defined below) discounted to the redemption date, on an annual basis (ACTUAL/ACTUAL (ICMA)), at a rate equal to the Treasury Rate (as defined below) plus 20 basis points plus, in either case, accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

On or after November 25, 2024 (three months prior to their maturity date), JCI plc may, at its option, redeem the JCI plc 1.375% Notes due 2025, in whole at any time or in part from time to time (in €1,000 increments, provided that any remaining principal amount thereof shall be at least the minimum authorized denomination of €100,000), at a redemption price equal to 100% of the principal amount of the JCI plc 1.375% Notes due 2025 to be redeemed, plus accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

"*Treasury Rate*" means the rate per annum (which, if less than zero, shall be deemed to be zero) equal to the annual equivalent yield to maturity of the Reference Bond (as defined below), assuming a price for the Reference Bond (expressed as a percentage of its principal amount) equal to the middle market price of the Reference Bond prevailing at 11:00 a.m. (London time) on the third business day preceding such redemption date as determined by us or an independent investment bank appointed by us.

"*Reference Bond*" means, in relation to any Treasury Rate calculation, a German government bond whose maturity is closest to the maturity of the applicable JCI plc Euro Notes, or if we or an independent investment bank appointed by us considers that such similar bond is not in issue, such other German government bond as we or an independent investment bank appointed by us, with the advice of three brokers of, and/or market makers in, German government bonds selected by us or an independent investment bank appointed by us, determine to be appropriate for determining the Treasury Rate.

"*Remaining Scheduled Payments*" means, with respect to each JCI plc Euro Note to be redeemed, the remaining scheduled payments of principal of and interest on the relevant JCI plc Euro Note that would be due after the related redemption date but for the redemption. If that redemption date is not an interest payment date with respect to a JCI plc Euro Note, the amount of the next succeeding scheduled interest payment on the relevant JCI plc Euro Note will be reduced by the amount of interest accrued on the JCI plc Euro Note to the redemption date.

Redemption Upon Changes in Withholding Taxes

JCI plc may redeem all, but not less than all, of the JCI plc Notes of any series under the following conditions:

- if there is an amendment to, or change in, the laws or regulations of a Relevant Taxing Jurisdiction (as defined below) or any change in the application or official interpretation of such laws, including any action taken by, or a change in published administrative practice of, a taxing authority or a holding by a court of competent jurisdiction, regardless of whether such action, change or holding is with respect to JCI plc, which amendment or change is announced on or after the date of issuance of the applicable JCI plc Notes (or, in the case of any Relevant Taxing Jurisdiction that becomes a Relevant Taxing Jurisdiction after the date of issuance of the applicable JCI plc Notes, after such later date);
- as a result of such amendment or change, JCI plc becomes, or there is a material probability that JCI plc will become, obligated to pay Additional Amounts (as defined below), on the next payment date with respect to the JCI plc Notes of such series;
- JCI plc delivers to the Trustee a written opinion of independent tax counsel to JCI plc of recognized standing to the effect that JCI plc has, or there is a material probability that it will become obligated, to pay Additional Amounts as a result of a change, amendment, official interpretation or application described above; and
- following the delivery of the opinion described in the previous bullet point, JCI plc provides notice of redemption not less than 30 days, but not more than 90 days, prior to the redemption date. The notice of redemption cannot be given more than 90 days before the earliest date on which JCI plc would be otherwise required to pay Additional Amounts, and the obligation to pay Additional Amounts must still be in effect when the notice is given.

Upon the occurrence of each of the bullet points above, JCI plc may redeem the JCI plc Notes of such series at a redemption price equal to 100% of the principal amount thereof, together with accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

The foregoing provisions shall apply *mutatis mutandis* to any Successor Person (as defined below) to JCI plc.

Notice of Redemption

Notice of any redemption will be mailed, or delivered electronically if the JCI plc Notes are held by any depositary, at least 30 days but not more than 90 days before the date fixed for such redemption to each holder of JCI plc Notes of a series to be redeemed. If less than all the JCI plc Notes of such series are to be redeemed, the Trustee will select the outstanding JCI plc Notes of such series to be redeemed in accordance with a method that complies with the requirements, if any, of any stock exchange on which

such JCI plc Notes are listed, and the applicable procedures of the depositary, if the JCI plc Notes of such series are held by any depositary; provided, however, that with respect to any JCI plc Notes not listed on any stock exchange and/or held by a depositary, the Trustee will select such JCI plc Notes by lot or by such other method that the Trustee considers fair and appropriate.

Interest on such JCI plc Notes or portions of JCI plc Notes will cease to accrue on and after the date fixed for redemption, unless JCI plc defaults in the payment of such redemption price and accrued interest (if any) with respect to any such JCI plc Note or portion thereof.

If any redemption date of any JCI plc Note is not a business day, then payment of principal and interest may be made on the next succeeding business day with the same force and effect as if made on the nominal redemption date and no interest will accrue for the period after such nominal date.

Payment of Additional Amounts

All payments in respect of the JCI plc Notes will be made by JCI plc free and clear of, and without withholding or deduction for or on account of, any present or future taxes, duties, levies, imposts, assessments or governmental charges of whatever nature ("*Taxes*") unless the withholding or deduction of such Taxes is required by law.

In the event that JCI plc is required to withhold or deduct any amount for or on account of any Taxes imposed or levied by or on behalf of Ireland or any other jurisdiction (other than the United States of America) in which JCI plc is organized, resident or doing business for tax purposes or from or through which payments by or on behalf of JCI plc are made, or any political subdivision or any authority thereof or therein (each, but not including the United States of America or any political subdivision or any authority thereof or therein, a "*Relevant Taxing Jurisdiction*") from any payment made under or with respect to any JCI plc Note, JCI plc will pay such additional amounts ("*Additional Amounts*") so that the net amount received by each holder of JCI plc Notes (including Additional Amounts) after such withholding or deduction will equal the amount that such holder would have received if such Taxes had not been required to be withheld or deducted.

Additional Amounts will not be payable with respect to a payment made to a holder of JCI plc Notes or a holder of beneficial interests in Global Securities where such holder is subject to taxation on such payment by the Relevant Taxing Jurisdiction for any reason other than such Person's mere ownership of the JCI plc Notes or beneficial interests or for or on account of:

- any Taxes that are imposed or withheld solely because such holder or a fiduciary, settlor, beneficiary, or member of such holder if such holder is an estate, trust, partnership, limited liability company or other fiscally transparent entity, or a Person holding a power over an estate or trust administered by a fiduciary holder:
    - is or was present or engaged in, or is or was treated as present or engaged in, a trade or business in the Relevant Taxing Jurisdiction or has or had a permanent establishment in the Relevant Taxing Jurisdiction;
    - has or had any present or former connection (other than the mere fact of ownership of such JCI plc Notes) with the Relevant Taxing Jurisdiction, including being or having been a national citizen or resident thereof, being treated as being or having been a resident thereof or being or having been physically present therein;
- any estate, inheritance, gift, transfer, excise, personal property or similar Taxes imposed with respect to the JCI plc Notes;
- any Taxes imposed solely as a result of the presentation of such JCI plc Notes, where presentation is required, for payment on a date more than 30 days after the date on which such payment became due and payable or the date on which payment thereof is duly provided for, whichever is later, except to the extent that the beneficiary or holder thereof would have been entitled to the payment of Additional Amounts had such JCI plc Notes been presented for payment on any date during such 30-day period;
- any Taxes imposed or withheld solely as a result of the failure of such holder or any other Person to comply with applicable certification, information, documentation or other reporting requirements concerning the nationality, residence, identity or connection with the Relevant Taxing Jurisdiction, if such compliance is required by statute or regulation of the Relevant Taxing Jurisdiction as a precondition to relief or exemption from such Taxes;
- any Taxes that are payable by any method other than withholding or deduction by JCI plc or any paying agent from payments in respect of such JCI plc Notes;
- any Taxes required to be withheld by any paying agent from any payment in respect of any JCI plc Notes if such payment can be made without such withholding by at least one other paying agent;
- any withholding or deduction for Taxes which would not have been imposed if the relevant JCI plc Notes had been presented to another paying agent in a Member State of the European Union;

- any withholding or deduction required pursuant to sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986, as amended (or any amended or successor provisions), any regulations, rules, practices or agreements entered into pursuant thereto, official interpretations thereof or any law implementing an intergovernmental approach thereto; or
- any combination of the above conditions.

Additional Amounts also will not be payable to any holder of JCI plc Notes or the holder of a beneficial interest in a global JCI plc Note that is a fiduciary, partnership, limited liability company or other fiscally transparent entity, or to such holder that is not the sole holder of such JCI plc Note or holder of such beneficial interests in such JCI plc Note, as the case may be. This exception, however, will apply only to the extent that a beneficiary or settlor with respect to the fiduciary, or a beneficial owner or member of the partnership, limited liability company or other fiscally transparent entity, would not have been entitled to the payment of an Additional Amount had the beneficiary, settlor, beneficial owner or member received directly its beneficial or distributive share of the payment.

JCI plc also:

- will make such withholding or deduction of Taxes;
- will remit the full amount of Taxes so deducted or withheld to the relevant tax authority in accordance with all applicable laws;
- will use its commercially reasonable efforts to obtain from each relevant tax authority imposing such Taxes certified copies of tax receipts evidencing the payment of any Taxes so deducted or withheld; and
- upon request, will make available to the holders of the JCI plc Notes, within 90 days after the date the payment of any Taxes deducted or withheld is due pursuant to applicable law, certified copies of tax receipts evidencing such payment by JCI plc (unless, notwithstanding JCI plc's efforts to obtain such receipts, the same are not obtainable).

At least 30 days prior to each date on which any payment under or with respect to the JCI plc Notes of a series is due and payable, if JCI plc will be obligated to pay Additional Amounts with respect to such payment, JCI plc will deliver to the Trustee an Officer's Certificate stating the fact that such Additional Amounts will be payable, the amounts so payable and such other information as is necessary to enable the Trustee to pay such Additional Amounts to holders of such JCI plc Notes on the payment date.

In addition, JCI plc will pay any stamp, issue, registration, documentary or other similar taxes and duties, including interest, penalties and Additional Amounts with respect thereto, payable in a Relevant Taxing Jurisdiction in respect of the creation, issue, offering, enforcement, redemption or retirement of the JCI plc Notes.

The foregoing provisions shall survive any termination or the discharge of the JCI plc Indenture and shall apply *mutatis mutandis* to any Successor Person to JCI plc.

Whenever in the JCI plc Indenture, any JCI plc Notes, or in this "*Description of JCI plc Notes*" there is mentioned, in any context, the payment of principal, premium, if any, redemption price, repurchase price, interest or any other amount payable under or with respect to any JCI plc Notes, such mention shall be deemed to include the payment of Additional Amounts to the extent payable in the particular context.

Offer to Repurchase Upon Change of Control Triggering Event

Upon the occurrence of a Change of Control Triggering Event with respect to a series of JCI plc Notes (other than the 6.000% Notes due 2036 and the 6.950% Debentures due December 1, 2045), unless we have exercised our right to redeem the JCI plc Notes of such series by giving irrevocable notice on or prior to the 30th day after the Change of Control Triggering Event in accordance with the JCI plc Indenture, each holder of JCI plc Notes of such series will have the right to require us to purchase all or a portion of such holder's JCI plc Notes of such series pursuant to the offer described below (the "*Change of Control Offer*"), at a purchase price equal to 101% of the principal amount thereof plus accrued and unpaid interest, if any, thereon to, but excluding, the date of purchase (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date) (the "*Change of Control Payment*"). If the Change of Control Payment Date (as defined below) falls on a day that is not a business day, the related payment of the Change of Control Payment will be made on the next business day as if it were made on the date such payment was due, and no interest will accrue on the amounts so payable for the period from and after such date to the next business day.

Within 30 days following the date upon which the Change of Control Triggering Event occurs or, at our option, prior to any Change of Control but after the public announcement of the pending Change of Control, we will be required to send, by first class mail, or deliver electronically if the applicable JCI plc Notes are held by any depositary, a notice to each holder of JCI plc Notes of the applicable series, with a copy to the Trustee, which notice will govern the terms of the Change of Control Offer. Such notice will state,

among other things, the purchase date, which must be no earlier than 30 days nor later than 60 days from the date such notice is mailed or delivered electronically (or, in the case of a notice mailed or delivered electronically prior to the date of consummation of a Change of Control, no earlier than 30 days nor later than 60 days from the date of the Change of Control Triggering Event), other than as may be required by law (the "*Change of Control Payment Date*"). The notice, if mailed or delivered electronically prior to the date of consummation of the Change of Control, will state that the Change of Control Offer is conditioned on the Change of Control being consummated on or prior to the Change of Control Payment Date.

On the Change of Control Payment Date, we will, to the extent lawful:

- accept or cause a third party to accept for payment all JCI plc Notes of the applicable series properly tendered pursuant to the Change of Control Offer;
- deposit or cause a third party to deposit with the applicable paying agent an amount equal to the Change of Control Payment in respect of all JCI plc Notes of the applicable series properly tendered; and
- deliver or cause to be delivered to the Trustee the JCI plc Notes of the applicable series properly accepted together with an Officer's Certificate stating the aggregate principal amount of JCI plc Notes of each series being repurchased.

We will not be required to make a Change of Control Offer with respect to the JCI plc Notes of the applicable series if a third party makes such an offer in the manner, at the times and otherwise in compliance with the requirements for such an offer made by us and such third party purchases all the JCI plc Notes of the applicable series properly tendered and not withdrawn under its offer. In addition, we will not repurchase any JCI plc Notes of the applicable series if there has occurred and is continuing on the Change of Control Payment Date an Event of Default under the JCI plc Indenture, other than a Default in the payment of the Change of Control Payment on the Change of Control Payment Date.

We must comply in all material respects with the requirements of Rule 14e-1 under the Exchange Act, and any other securities laws and regulations thereunder to the extent those laws and regulations are applicable in connection with the repurchase of the JCI plc Notes of the applicable series as a result of a Change of Control Triggering Event. To the extent that the provisions of any such securities laws or regulations conflict with the Change of Control Offer provisions of the JCI plc Notes of the applicable series, we will be required to comply with those securities laws and regulations and will not be deemed to have breached our obligations under the Change of Control Offer provisions of the JCI plc Notes of such series by virtue of any such conflict.

The definition of Change of Control includes a phrase relating to the direct or indirect sale, lease, transfer, conveyance or other disposition of "all or substantially all" of the properties or assets of JCI plc and its subsidiaries taken as a whole. Although there is a limited body of case law interpreting the phrase "substantially all," there is no precise, established definition of the phrase under applicable law. Accordingly, the applicability of the requirement that we offer to repurchase the JCI plc Notes as a result of a sale, lease, transfer, conveyance or other disposition of less than all of the assets of JCI plc and its subsidiaries taken as a whole to another "person" or "group" (as those terms are used in Section 13(d)(3) of the Exchange Act) may be uncertain.

Other Provisions of the JCI plc Euro Notes

Claims against JCI plc for the payment of principal or Additional Amounts, if any, of the JCI plc Euro Notes will be prescribed ten years after the applicable due date for payment thereof. Claims against JCI plc for the payment of interest, if any, of the JCI plc Euro Notes will be prescribed five years after the applicable due date for payment of interest.

Certain Covenants

The JCI plc Indenture contains the following covenants:

Limitation on Liens

JCI plc will not, and will not permit any Restricted Subsidiary to, issue, incur, assume or guarantee any Indebtedness that is secured by a lien upon any asset that at the time of such issuance, assumption or guarantee constitutes a Principal Property, or any shares of stock of or Indebtedness issued by any Restricted Subsidiary, whether now owned or hereafter acquired, without effectively providing that, for so long as such lien shall continue in existence with respect to such secured Indebtedness, the JCI plc Notes and any other debt securities issued pursuant to the Indenture and any supplement thereto (together with, if JCI plc shall so determine, any other Indebtedness of JCI plc ranking equally with the JCI plc Notes and any other debt securities issued pursuant to the Indenture and any supplement thereto, it being understood that for purposes hereof, Indebtedness which is secured by a lien and Indebtedness which is not so secured shall not, solely by reason of such lien, be deemed to be of different ranking) shall be equally and ratably secured by a lien ranking ratably with or equal to (or at JCI plc's option prior to) such secured Indebtedness; provided, however, that the foregoing covenant shall not apply to:

- liens existing on the date the JCI plc Notes of the applicable series are first issued;
- liens on the stock, assets or Indebtedness of a Person existing at the time such Person becomes a Restricted Subsidiary, unless created in contemplation of such Person becoming a Restricted Subsidiary;
- liens on any assets or Indebtedness of a Person existing at the time such Person is merged with or into or consolidated with or acquired by JCI plc or a Restricted Subsidiary or at the time of a purchase, lease or other acquisition of the assets of a corporation or firm as an entirety or substantially as an entirety by JCI plc or any Restricted Subsidiary; provided, however, that no such lien shall extend to any other Principal Property of JCI plc or such Restricted Subsidiary prior to such acquisition or to any other Principal Property thereafter acquired other than additions to such acquired property;
- liens on any Principal Property existing at the time of acquisition thereof by JCI plc or any Restricted Subsidiary, or liens to secure the payment of the purchase price of such Principal Property by JCI plc or any Restricted Subsidiary, or to secure any Indebtedness incurred, assumed or guaranteed by JCI plc or a Restricted Subsidiary for the purpose of financing all or any part of the purchase price of such Principal Property or improvements or construction thereon, which Indebtedness is incurred, assumed or guaranteed prior to, at the time of or within one year after such acquisition, or in the case of real property, completion of such improvement or construction or commencement of full operation of such property, whichever is later; provided, however, that in the case of any such acquisition, construction or improvement, the lien shall not apply to any other Principal Property, other than the Principal Property so acquired, constructed or improved, and accessions thereto and improvements and replacements thereof and the proceeds of the foregoing;
- liens securing Indebtedness owing by any Restricted Subsidiary to JCI plc or a subsidiary thereof;
- liens in favor of the United States of America or any State thereof, or any department, agency or instrumentality or political subdivision of the United States of America or any State thereof, or in favor of any other country or any political subdivision thereof, to secure partial, progress, advance or other payments pursuant to any contract, statute, rule or regulation or to secure any Indebtedness incurred or guaranteed for the purpose of financing all or any part of the purchase price, or, in the case of real property, the cost of construction or improvement, of the Principal Property subject to such liens, including liens incurred in connection with pollution control, industrial revenue or similar financings;
- pledges, liens or deposits under workers' compensation or similar legislation, and liens thereunder that are not currently dischargeable, or in connection with bids, tenders, contracts, other than for the payment of money, or leases to which JCI plc or any Restricted Subsidiary is a party, or to secure the public or statutory obligations of JCI plc or any Restricted Subsidiary, or in connection with obtaining or maintaining self-insurance, or to obtain the benefits of any law, regulation or arrangement pertaining to unemployment insurance, old age pensions, social security or similar matters, or to secure surety, performance, appeal or customs bonds to which JCI plc or any Restricted Subsidiary is a party, or in litigation or other proceedings in connection with the matters heretofore referred to in this clause, such as interpleader proceedings, and other similar pledges, liens or deposits made or incurred in the ordinary course of business;
- liens created by or resulting from any litigation or other proceeding that is being contested in good faith by appropriate proceedings, including liens arising out of judgments or awards against JCI plc or any Restricted Subsidiary with respect to which JCI plc or such Restricted Subsidiary in good faith is prosecuting an appeal or proceedings for review or for which the time to make an appeal has not yet expired; or final unappealable judgment liens which are satisfied within 15 days of the date of judgment; or liens incurred by JCI plc or any Restricted Subsidiary for the purpose of obtaining a stay or discharge in the course of any litigation or other proceeding to which JCI plc or such Restricted Subsidiary is a party;
- liens for taxes or assessments or governmental charges or levies not yet due or delinquent; or that can thereafter be paid without penalty, or that are being contested in good faith by appropriate proceedings; landlord's liens on property held under lease; and any other liens or charges incidental to the conduct of the business of JCI plc or any Restricted Subsidiary, or the ownership of their respective assets, that were not incurred in connection with the borrowing of money or the obtaining of advances or credit and that, in the opinion of the Board of Directors of JCI plc, do not materially impair the use of such assets in the operation of the business of JCI plc or such Restricted Subsidiary or the value of such Principal Property for the purposes of such business;
- liens to secure JCI plc's or any Restricted Subsidiary's obligations under agreements with respect to spot, forward, future and option transactions, entered into in the ordinary course of business;
- liens not permitted by the foregoing clauses, inclusive, if at the time of, and after giving effect to, the creation or assumption of any such lien, the aggregate amount of all outstanding Indebtedness of JCI plc and its Restricted Subsidiaries, without duplication, secured by all such liens not so permitted by the foregoing bullets, inclusive, together with the Attributable Debt in respect of Sale and Lease-Back Transactions permitted by the first bullet under "*Limitation on Sale and Lease-Back Transactions*" below, do not exceed the greater of $100,000,000 and 10% of Consolidated Net Worth; and
- any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part, of any lien referred to in the foregoing bullets inclusive; provided, however, that the principal amount of Indebtedness secured thereby unless otherwise excepted under the foregoing bullets shall not exceed the principal amount of Indebtedness so secured at the time of such extension, renewal or replacement (plus any premium, fee, cost, expense or charge payable in connection with any such extension, renewal or replacement), and that such extension, renewal or replacement shall be

limited to all or a part of the assets, or any replacements therefor, that secured the lien so extended, renewed or replaced, plus improvements and construction on such assets.

Limitation on Sale and Lease-Back Transactions

JCI plc will not, and will not permit any Restricted Subsidiary to, enter into any Sale and Lease-Back Transaction unless:

- JCI plc or such Restricted Subsidiary, at the time of entering into a Sale and Lease-Back Transaction, would be entitled to incur Indebtedness secured by a lien on the Principal Property to be leased in an amount at least equal to the Attributable Debt in respect of such Sale and Lease-Back Transaction, without equally and ratably securing the JCI plc Notes of the applicable series pursuant to the covenant described under "*Limitations on Liens*" above; or
- the direct or indirect proceeds of the sale of the Principal Property to be leased are at least equal to the fair value of such Principal Property, as determined by JCI plc's Board of Directors in good faith, and an amount equal to the net proceeds from the sale of the assets so leased is applied, within 180 days of the effective date of any such Sale and Lease-Back Transaction, to the purchase or acquisition (or, in the case of real property, commencement of the construction) of assets or to the retirement (other than at maturity or pursuant to a mandatory sinking fund or mandatory redemption or prepayment provision) of the JCI plc Notes and any other debt securities issued pursuant to the Indenture and any supplement thereto or of Funded Indebtedness ranking on a parity with or senior to the JCI plc Notes and any other debt securities issued pursuant to the Indenture and any supplement thereto; provided that there shall be credited to the amount of net proceeds required to be applied pursuant to this provision an amount equal to the sum of (i) the principal amount of the JCI plc Notes and any other debt securities issued pursuant to the Indenture and any supplement thereto delivered within 180 days of the effective date of such Sale and Lease-Back Transaction to the Trustee for retirement and cancellation and (ii) the principal amount of other Funded Indebtedness voluntarily retired by JCI plc within such 180-day period, excluding retirements of the JCI plc Notes and any other debt securities issued pursuant to the Indenture and any supplement thereto and other Funded Indebtedness at maturity or pursuant to mandatory sinking fund or mandatory redemption or prepayment provisions.

Merger and Consolidation

JCI plc will not, directly or indirectly, consolidate with or merge with or into, or convey, transfer or lease all or substantially all its assets in one or a series of related transactions to, any Person, unless:

(1) the resulting, surviving or transferee Person (the "*Successor Person*") will be a corporation, limited liability company, public limited company, limited partnership or other entity organized and existing under the laws of (u) the United States of America, any State thereof or the District of Columbia, (v) Ireland, (w) England and Wales, (x) Jersey, (y) any member state of the European Union as in effect on the date the JCI plc Notes of the applicable series are first issued or (z) Switzerland; provided that the Successor Person (if not JCI plc) will expressly assume, by a supplemental indenture, executed and delivered to the Trustee, in form reasonably satisfactory to the Trustee, all the obligations of JCI plc under the JCI plc Notes of the applicable series and the JCI plc Indenture;

(2) immediately after giving effect to such transaction (and treating any Indebtedness which becomes an obligation of the Successor Person or any Restricted Subsidiary as a result of such transaction as having been incurred by the Successor Person or such Restricted Subsidiary at the time of such transaction), no Default shall have occurred and be continuing; and

(3) JCI plc shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel under the JCI plc Indenture, each stating that such consolidation, merger or transfer and such supplemental indenture (if any) comply with the JCI plc Indenture.

Notwithstanding the foregoing, (A) any conveyance, transfer or lease of assets between or among JCI plc and its subsidiaries shall not be prohibited under the JCI plc Indenture and (B) JCI plc may, directly or indirectly, consolidate with or merge with or into an Affiliate incorporated solely for the purpose of reincorporating JCI plc in another jurisdiction within the United States of America, any State thereof or the District of Columbia, Ireland, England and Wales, Jersey, any member state of the European Union as in effect on the date the JCI plc Notes of the applicable series are first issued or Switzerland to realize tax or other benefits.

The Successor Person will succeed to, and be substituted for, and may exercise every right and power of, JCI plc under the JCI plc Indenture, and the predecessor issuer, other than in the case of a lease, will be automatically released from all obligations under the JCI plc Notes and the JCI plc Indenture, including, without limitation, the obligation to pay the principal of and interest on the JCI plc Notes of the applicable series.

Reports by JCI plc

So long as any JCI plc Notes are outstanding, JCI plc shall file with the Trustee, within 15 days after JCI plc is required to file with the SEC, copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the SEC may from time to time by rules and regulations prescribe) that JCI plc may be required to file with the SEC pursuant to Section 13 or Section 15(d) of the Exchange Act. JCI plc shall be deemed to have complied with the previous sentence to the extent that such information, documents and reports are filed with the SEC via EDGAR, or any successor electronic delivery procedure; provided, however, that the Trustee shall have no obligation whatsoever to determine whether or not such information, documents or reports have been filed pursuant to the EDGAR system (or its successor). Delivery of such reports, information and documents to the Trustee is for informational purposes only and the Trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including JCI plc's compliance with any of its covenants under the JCI plc Indenture (as to which the Trustee is entitled to rely exclusively on Officer's Certificates).

JCI plc will furnish to the Trustee on or before 120 days after the end of each fiscal year an Officer's Certificate stating that in the course of the performance by the signers of their duties as Officers of JCI plc, they would normally have knowledge of any Default by JCI plc in the performance or fulfillment or observance of any covenants or agreements contained in the JCI plc Indenture during the preceding fiscal year, stating whether or not they have knowledge of any such Default and, if so, specifying each such Default of which the signers have knowledge and the nature thereof.

Listing

The JCI plc Notes are listed on the New York Stock Exchange. We have no obligation to maintain such listing, and we may delist the JCI plc Notes at any time.

Events of Default

As to any series of JCI plc Notes, an "*Event of Default*" means any one of the following events (whatever the reason for such Event of Default and whether it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body):

(1) failure to pay any interest on the JCI plc Notes of that series when due, which failure continues for 30 days;

(2) failure to pay principal or premium, if any, with respect to the JCI plc Notes of that series when due;

(3) failure on the part of JCI plc to observe or perform any other covenant, warranty or agreement in the JCI plc Notes of that series, or in the JCI plc Indenture as it relates to the JCI plc Notes of that series, other than a covenant, warranty or agreement, a Default in whose performance or whose breach is specifically dealt with elsewhere in the section of the JCI plc Indenture governing Events of Default, if the failure continues for 90 days after written notice by the Trustee or the holders of at least 25% in aggregate principal amount of the JCI plc Notes of that series then outstanding;

(4) an Event of Default with respect to any other series of debt securities issued under the JCI plc Indenture or an uncured or unwaived failure to pay principal of or interest on any of our other obligations for borrowed money beyond any period of grace with respect thereto if, in either case, (a) the aggregate principal amount thereof is in excess of $200,000,000; and (b) the default in payment is not being contested by us in good faith and by appropriate proceedings; and

(5) specified events of bankruptcy, insolvency, receivership or reorganization.

However, the Event of Default in clause (4) above is subject to the following:

- if such Event of Default with respect to such other series of debt securities issued under the JCI plc Indenture or such default in payment with respect to such other obligations for borrowed money shall be remedied or cured by JCI plc or waived by the requisite holders of such other series of debt securities or such other obligations for borrowed money, then the Event of Default under the JCI plc Indenture by reason thereof shall be deemed likewise to have been thereupon remedied, cured or waived without further action upon the part of either the Trustee or any of the holders of JCI plc Notes; and

- subject to certain duties, responsibilities and rights of the Trustee under the JCI plc Indenture, the Trustee shall not be charged with knowledge of any such Event of Default with respect to such other series of debt securities issued under the JCI plc Indenture or such payment default with respect to such other obligations for borrowed money unless written notice thereof shall have been given to a Trust Officer of the Trustee by JCI plc, by the holder or an agent of the holder of such other obligations for borrowed money, by the trustee then acting under any indenture or other instrument under

which such payment default with respect to such other obligations for borrowed money shall have occurred, or by the holders of not less than 25% in aggregate principal amount of outstanding debt securities of such other series.

Notice and Declaration of Defaults

The JCI plc Indenture provides that the Trustee will, within the later of 90 days after the occurrence of a Default with respect to any series for which there are JCI plc Notes outstanding which is continuing and which is known to a Trust Officer of the Trustee, or 60 days after such Default is actually known to such Trust Officer of the Trustee or written notice of such Default is received by the Trustee, give to the holders of such JCI plc Notes notice, by mail as the names and addresses of such holders appear on the security register, or electronically if such JCI plc Notes are held by any depositary, of all uncured Defaults known to it, including events specified above without grace periods, unless such Defaults shall have been cured before the giving of such notice; provided, that except in the case of Default in the payment of the principal of, premium, if any, or interest on any of the JCI plc Notes of any series, or in the payment of any sinking fund installment with respect to the JCI plc Notes of any series, the Trustee shall be protected in withholding such notice to the holders if the Trustee in good faith determines that withholding of such notice is in the interests of the holders of the JCI plc Notes of such series.

The Trustee or the holders of not less than 25% in aggregate principal amount of the outstanding JCI plc Notes of any series may declare the JCI plc Notes of that series immediately due and payable upon the occurrence of any Event of Default. The holders of a majority in principal amount of the outstanding JCI plc Notes of all series issued under the JCI plc Indenture and any supplement thereto affected by such waiver (voting as one class), on behalf of the holders of all of the JCI plc Notes of all such series, may waive any existing Default and its consequences, except a Default in the payment of principal, premium, if any, or interest, including sinking fund payments (provided, however, that only holders of a majority in principal amount of the JCI plc Notes of an applicable series may rescind an acceleration with respect to such series and its consequences, including any related payment default that resulted from such acceleration).

Actions upon Default

In case an Event of Default with respect to any series of JCI plc Notes occurs and is continuing, the JCI plc Indenture provides that the Trustee will be under no obligation to exercise any of its rights or powers under the JCI plc Indenture at the request, order or direction of any of the holders of JCI plc Notes outstanding of any series unless the applicable holders have offered to the Trustee reasonable security and indemnity, satisfactory to the Trustee in its sole discretion, against any loss, liability or expense which may be incurred thereby. The right of a holder to institute a proceeding with respect to the JCI plc Notes of the applicable series is subject to conditions precedent including notice and indemnity to the Trustee, but the right of any holder of any applicable JCI plc Note to receive payment of the principal of, and premium, if any, and interest on their due dates or to institute suit for the enforcement thereof shall not be impaired or affected without the consent of such holder.

The holders of a majority in aggregate principal amount of the JCI plc Notes outstanding of the series in Default will have the right to direct the time, method and place for conducting any proceeding for any remedy available to the Trustee or exercising any power or trust conferred on the Trustee, in each case with respect to such series. Any direction by such holders will be in accordance with law and the provisions of the JCI plc Indenture. Subject to certain provisions of the JCI plc Indenture, the Trustee shall have the right to decline to follow any such direction if the Trustee in good faith, by a Trust Officer or Trust Officers of the Trustee, shall determine that the action or proceeding so directed may not be lawfully taken, would involve the Trustee in personal liability, would be materially or unjustly prejudicial to the rights of holders of JCI plc Notes of such series not joining in such direction or would be unduly prejudicial to the interests of the holders of JCI plc Notes and other debt securities issued under the JCI plc Indenture of all series not joining in the giving of such direction. The Trustee will be under no obligation to act in accordance with any such direction unless the applicable holders offer the Trustee reasonable security and indemnity, satisfactory to the Trustee in its sole discretion, against costs, expenses and liabilities which may be incurred thereby.

Modification of the JCI plc Indenture

JCI plc and the Trustee may from time to time and at any time enter into an indenture or indentures supplemental to the JCI plc Indenture, which shall conform to the provisions of the Trust Indenture Act as then in effect, without the consent of the holders of any series of JCI plc Notes for one or more of the following purposes:

- to cure any ambiguity, defect or inconsistency in the JCI plc Indenture or JCI plc Notes of any series, including making any such changes as are required for the JCI plc Indenture to comply with the Trust Indenture Act;
- to add an additional obligor on the JCI plc Notes or to add a guarantor of any outstanding series of JCI plc Notes, or to evidence the succession of another Person to JCI plc or any additional obligor or guarantor of the JCI plc Notes, or successive successions, and the assumption by the Successor Person of the covenants, agreements and obligations of

JCI plc or such obligor or guarantor, as the case may be, pursuant to provisions in the JCI plc Indenture concerning consolidation, merger, the sale of assets or successor entities;

- to provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- to add to the covenants of JCI plc for the benefit of the holders of any outstanding series of JCI plc Notes (and if such covenants are to be for the benefit of less than all outstanding series of debt securities, stating that such covenants are expressly being included solely for the benefit of such series) or to surrender any of JCI plc's rights or powers under the JCI plc Indenture;
- to add any additional Events of Default for the benefit of the holders of any outstanding series of JCI plc Notes (and if such Events of Default are to be applicable to less than all outstanding series, stating that such Events of Default are expressly being included solely to be applicable to such series);
- to change or eliminate any of the provisions of the JCI plc Indenture, provided that any such change or elimination shall not become effective with respect to any outstanding JCI plc Note of any series created prior to the execution of such supplemental indenture which is entitled to the benefit of such provision;
- to secure the JCI plc Notes of any series;
- to make any other change that does not adversely affect the rights of any holder of outstanding JCI plc Notes in any material respect;
- to provide for the issuance of and establish the form and terms and conditions of a series of debt securities, to provide which, if any, of the covenants of JCI plc shall apply to such series, to provide which of the events of default set forth in the base indenture shall apply to such series, to name one or more guarantors and provide for guarantees of such series, to provide for the terms and conditions upon which the guarantee by any guarantor of such series may be released or terminated, or to define the rights of the holders of such series of debt securities;
- to issue additional JCI plc Notes of any series to the extent permitted by the JCI plc Indenture; provided that such additional JCI plc Notes have the same terms as, and be deemed part of the same series as, the applicable series of JCI plc Notes to the extent required under the JCI plc Indenture; or
- to evidence and provide for the acceptance of appointment under the JCI plc Indenture by a successor Trustee with respect to the JCI plc Notes of one or more series and to add to or change any of the provisions of the JCI plc Indenture as shall be necessary to provide for or facilitate the administration of the trust thereunder by more than one Trustee.

In addition, under the JCI plc Indenture, with the consent (evidenced as provided in the JCI plc Indenture) of the holders of not less than a majority in aggregate principal amount of the outstanding debt securities of all series affected by such supplemental indenture or indentures (voting as one class), JCI plc and the Trustee from time to time and at any time may enter into an indenture or indentures supplemental to the JCI plc Indenture for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of the JCI plc Indenture or of any supplemental indenture thereto or of modifying in any manner not covered by the immediately preceding paragraph the rights of the holders of the debt securities of each such series under the JCI plc Indenture. However, the following changes may only be made with the consent of each holder of outstanding JCI plc Notes affected:

- extend a fixed maturity of or any installment of principal of any JCI plc Notes of any series or reduce the principal amount thereof or reduce the amount of principal of any original issue discount security that would be due and payable upon declaration of acceleration of the maturity thereof;
- reduce the rate of or extend the time for payment of interest on any JCI plc Note of any series;
- reduce the premium payable upon the redemption of any JCI plc Note of any series;
- make any JCI plc Note of any series payable in currency other than that stated in the applicable JCI plc Note;
- impair the right to institute suit for the enforcement of any payment in respect of any JCI plc Note of any series on or after the fixed maturity thereof or, in the case of redemption, on or after the redemption date;
- modify the subordination provisions applicable to any JCI plc Note of any series in a manner adverse in any material respect to the holder thereof; or
- reduce the aforesaid percentage of JCI plc Notes of the applicable series, the holders of which are required to consent to any such supplemental indenture or indentures.

A supplemental indenture that changes or eliminates any covenant, event of default set forth in the base indenture or other provision of the JCI plc Indenture that has been expressly included solely for the benefit of one or more particular series of debt securities, if any, or which modifies the rights of the holders of debt securities of such series with respect to such covenant, event of

default or other provision, shall be deemed not to affect the rights under the JCI plc Indenture of the holders of securities of any other series.

Notwithstanding anything herein or otherwise, the provisions under the JCI plc Indenture relative to JCI plc's obligation to make any offer to repurchase the JCI plc Notes of any series as a result of a Change of Control Triggering Event as provided under Section 4.08 of the base indenture may be waived or modified with the written consent of the holders of a majority in principal amount of the outstanding debt securities of the applicable series or multiple affected series.

It will not be necessary for the consent of the holders of the JCI plc Notes of any series to approve the particular form of any proposed supplement, amendment or waiver, but it shall be sufficient if such consent approves the substance thereof.

Information Concerning the Trustee

If an Event of Default with respect to the JCI plc Notes of a series has occurred and is continuing, the Trustee shall exercise with respect to the JCI plc Notes of such series such of the rights and powers vested in it by the JCI plc Indenture, and use the same degree of care and skill in its exercise, as a prudent Person would exercise or use under the circumstances in the conduct of such Person's own affairs. If an Event of Default has occurred and is continuing, the Trustee will be under no obligation to exercise any of its rights or powers under the JCI plc Indenture at the request, order or direction of any holders of JCI plc Notes of the applicable series, unless such holders shall have offered to the Trustee security and indemnity, satisfactory to it in its sole discretion, against any loss, liability or expense which may be incurred thereby, and then only to the extent required by the terms of the JCI plc Indenture. No provision of the JCI plc Indenture shall require the Trustee to expend or risk its own funds or otherwise incur financial liability in the performance of any of its duties under the JCI plc Indenture or in the exercise of any of its rights or powers.

The Trustee may resign with respect to the JCI plc Notes of a series at any time by giving a written notice to JCI plc. The holders of a majority in principal amount of the outstanding JCI plc Notes of a particular series may remove the Trustee with respect to such series of JCI plc Notes by notifying JCI plc and the Trustee in writing. JCI plc may remove the Trustee if:

- the Trustee has or acquires a "conflicting interest," within the meaning of Section 310(b) of the Trust Indenture Act, and fails to comply with the provisions of Section 310(b) of the Trust Indenture Act, or otherwise fails to comply with the eligibility requirements provided in the JCI plc Indenture and fails to resign after written request therefor by JCI plc in accordance with the JCI plc Indenture;
- the Trustee is adjudged a bankrupt or an insolvent or an order for relief is entered with respect to the Trustee under any bankruptcy law;
- a custodian or public officer takes charge of the Trustee or its property; or
- the Trustee becomes incapable of acting.

If the Trustee resigns or is removed or if a vacancy exists in the office of Trustee with respect to the JCI plc Notes of any series for any reason, JCI plc shall promptly appoint a successor Trustee with respect to the JCI plc Notes of such series.

A resignation or removal of the Trustee and appointment of a successor Trustee shall become effective only upon the successor Trustee's acceptance of the appointment as provided in the JCI plc Indenture.

The Trustee and its Affiliates have engaged, currently are engaged, and may in the future engage in financial or other transactions with JCI plc and our Affiliates in the ordinary course of their respective businesses.

Payment and Paying Agents

JCI plc will pay the principal of, premium, if any, and interest on the JCI plc Notes at any office of ours or any agency designated by us.

The Trustee was appointed by JCI plc as paying agent with regard to the JCI plc Dollar Notes. The location of the corporate trust office of the Trustee for payment on the JCI plc Dollar Notes is U.S. Bank Global Corporate Trust Services, Attn: Payments, EP-MN-WS2N, 111 Fillmore Ave E, St. Paul, MN 55107-1402.

The paying agent for the JCI plc Euro Notes is Elavon Financial Services DAC, UK Branch. For so long as the JCI plc Euro Notes are in global form, payment of principal and interest on, and any other amount due in respect of, the JCI plc Euro Notes will be made by or to the order of the paying agent on behalf of the common depositary or its nominee as the registered holder thereof. After payment by JCI plc or the paying agent of interest, principal or other amounts in respect of the JCI plc Euro Notes to the common

depositary (or its nominee), JCI plc will not have responsibility or liability for such amounts to Euroclear or Clearstream, or to holders or beneficial owners of book-entry interests in the JCI plc Euro Notes.

In addition JCI plc will maintain a transfer agent and a security registrar for the JCI plc Notes. The transfer agent and security registrar for the JCI plc Notes other than the 4.500% Senior Notes Due 2047 is Elavon Financial Services DAC. The transfer agent and security registrar for the 4.500% Senior Notes Due 2047 is the Trustee.

The security registrar as to any series of JCI plc Notes will maintain a register reflecting ownership of the JCI plc Notes of such series outstanding from time to time, if any, and together with the applicable transfer agent, will make payments on and facilitate transfers of the JCI plc Notes of such series on behalf of JCI plc. No service charge will be made for any registration of transfer or exchange of JCI plc Notes. However, we may require holders to pay any transfer taxes or other similar governmental charges payable in connection with any such transfer or exchange.

JCI plc may change or appoint any paying agent, security registrar or transfer agent with respect to the JCI plc Notes of a series without prior notice to the holders of the JCI plc Notes of such series. JCI plc or any of its subsidiaries may act as paying agent, transfer agent or security registrar in respect of any JCI plc Notes.

Governing Law

The JCI plc Indenture and any JCI plc Notes issued thereunder shall be deemed to be a contract made under the internal laws of the State of New York, and for all purposes shall be construed in accordance with the laws of the State of New York without regard to conflicts of laws principles that would require the application of any other law. The JCI plc Indenture is subject to the provisions of the Trust Indenture Act that are required to be part of the JCI plc Indenture and shall, to the extent applicable, be governed by such provisions.

Satisfaction and Discharge of the JCI plc Indenture

The JCI plc Indenture shall cease to be of further effect with respect to a series of JCI plc Notes if, at any time:

(a) JCI plc has delivered or has caused to be delivered to the Trustee for cancellation all JCI plc Notes of such series theretofore authenticated, other than any JCI plc Notes that have been destroyed, lost or stolen and that have been replaced or paid as provided in the JCI plc Indenture, and JCI plc Notes for whose payment funds or governmental obligations have theretofore been deposited in trust or segregated and held in trust by JCI plc and thereupon repaid to JCI plc or discharged from such trust, as provided in the JCI plc Indenture; or

(b) all such JCI plc Notes of a particular series not theretofore delivered to the Trustee for cancellation have become due and payable or are by their terms to become due and payable within one year or are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption, and JCI plc shall irrevocably deposit or cause to be deposited with the Trustee as trust funds the entire amount, in funds or governmental obligations, or a combination thereof, sufficient to pay at maturity or upon redemption all JCI plc Notes of such series not theretofore delivered to the Trustee for cancellation, including principal, premium, if any, and interest due or to become due on such date of maturity or redemption date, as the case may be, and if in either case JCI plc shall also pay or cause to be paid all other sums payable under the JCI plc Indenture with respect to such series by JCI plc.

With respect to any redemption of any JCI plc Notes that requires the payment of any premium, the amount deposited pursuant to the above paragraph shall be sufficient for purposes of the JCI plc Indenture to the extent that an amount is so deposited with the Trustee or paying agent, as applicable, equal to t such premium, on such JCI plc Notes calculated as of the date of the notice of redemption, with any deficit on the redemption date only required to be deposited with the Trustee or paying agent, as applicable, on or prior to the redemption date.

Notwithstanding the above, JCI plc may not be discharged from the following obligations, which will survive until the date of maturity or the redemption date, as the case may be, for the applicable series of JCI plc Notes:

- to make any interest or principal payments that may be required with respect to the JCI plc Notes of such series;
- to register the transfer or exchange of the JCI plc Notes of such series;
- to execute and authenticate the JCI plc Notes of such series;
- to replace stolen, lost or mutilated JCI plc Notes of such series;
- to maintain an office or agency with respect to the JCI plc Notes of such series;

- to maintain paying agencies with respect to the JCI plc Notes of such series; and
- to appoint new Trustees with respect to the JCI plc Notes of such series as required by the Indenture.

JCI plc also may not be discharged from the following obligations, which will survive the satisfaction and discharge of the applicable series of JCI plc Notes:

- to compensate and reimburse the Trustee in accordance with the terms of the JCI plc Indenture;
- to receive unclaimed payments held by the Trustee for at least one year after the date upon which the principal, if any, or interest on the JCI plc Notes of such series shall have respectively come due and payable and remit those payments to the holders thereof if required; and
- to withhold or deduct taxes as provided in the JCI plc Indenture.

For purposes of this "*Description of JCI plc Notes*," the term "*governmental obligations*" shall have the following meaning with respect to the JCI plc Euro Notes: (x) any security which is (i) a direct obligation of the German government or (ii) an obligation of a Person controlled or supervised by and acting as an agency or instrumentality of the German government the payment of which is fully and unconditionally guaranteed by the German government, the central bank of the German government or a governmental agency of the German government, which, in either case (x)(i) or (ii), is not callable or redeemable at the option of the issuer thereof, and (y) certificates, depositary receipts or other instruments which evidence a direct ownership interest in obligations described in clause (x)(i) or (x)(ii) above or in any specific principal or interest payments due in respect thereof.

Defeasance and Discharge of Obligations

JCI plc's obligations with respect to the JCI plc Notes of any series will be discharged upon compliance with the conditions under the caption "*Covenant Defeasance*"; provided that JCI plc may not be discharged from the following obligations, which will survive until such date of maturity or the redemption date, as the case may be, for the applicable series of JCI plc Notes:

- to make any interest or principal payments that may be required with respect to the JCI plc Notes of such series;
- to register the transfer or exchange of the JCI plc Notes of such series;
- to execute and authenticate the JCI plc Notes of such series;
- to replace stolen, lost or mutilated JCI plc Notes of such series;
- to maintain an office or agency with respect to the JCI plc Notes of such series;
- to maintain paying agencies with respect to the JCI plc Notes of such series; and
- to appoint new Trustees with respect to the JCI plc Notes of such series as required by the Indenture.

JCI plc also may not be discharged from the following obligations, which will survive the satisfaction and discharge of the applicable series of JCI plc Notes:

- to compensate and reimburse the Trustee in accordance with the terms of the JCI plc Indenture;
- to receive unclaimed payments held by the Trustee for at least one year after the date upon which the principal, if any, or interest on the JCI plc Notes of such series shall have respectively come due and payable and remit those payments to the holders thereof if required; and
- to withhold or deduct taxes as provided in the JCI plc Indenture.

Covenant Defeasance

Upon compliance with specified conditions, JCI plc, at its option and at any time, by written notice executed by an Officer delivered to the Trustee, may elect to have its obligations, to the extent applicable, under the covenants described under "*—Offer to Repurchase Upon Change of Control Triggering Event*" and "*—Certain Covenants*" above, and the operation of the Event of Default described in clause (4) of the first paragraph under the caption "*—Events of Default*" above, discharged with respect to all outstanding JCI plc Notes of a series and the JCI plc Indenture insofar as such JCI plc Notes are concerned. For this purpose, such covenant defeasance means that, with respect to the outstanding JCI plc Notes of a series, JCI plc may omit to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such covenant, whether directly or indirectly, by reason of any reference in the JCI plc Indenture to any such covenant or by reason of reference in any such covenant to any other provision of the JCI plc Indenture or in any other document, and such omission to comply shall not constitute a Default or an Event of Default relating to the applicable series of JCI plc Notes. These conditions are:

- JCI plc irrevocably deposits in trust with the Trustee or, at the option of the Trustee, with a trustee satisfactory to the Trustee and JCI plc, as the case may be, under the terms of an irrevocable trust agreement in form and substance satisfactory to the Trustee, funds or governmental obligations or a combination thereof sufficient, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, to pay principal of, premium, if any, and interest on the outstanding JCI plc Notes of such series to maturity or redemption, as the case may be, and to pay all other amounts payable by it under the JCI plc Indenture (provided that, with respect to any redemption of any JCI plc Notes that requires the payment of any premium, the amount deposited pursuant to the above paragraph shall be sufficient for purposes of the JCI plc Indenture to the extent that an amount is so deposited with the Trustee or paying agent, as applicable, equal to the such premium on such JCI plc Notes calculated as of the date of the notice of redemption, with any deficit on the redemption date only required to be deposited with the Trustee or paying agent, as applicable, on or prior to the redemption date), provided that (A) the trustee of the irrevocable trust shall have been irrevocably instructed to pay such funds or the proceeds of such governmental obligations to the Trustee and (B) the Trustee shall have been irrevocably instructed to apply such funds or the proceeds of such governmental obligations to the payment of such principal, premium, if any, and interest with respect to the JCI plc Notes of such series;
- JCI plc delivers to the Trustee an Officer's Certificate stating that all conditions precedent specified herein relating to defeasance or covenant defeasance, as the case may be, have been complied with, and an Opinion of Counsel to the same effect;
- no Event of Default shall have occurred and be continuing, and no event which with notice or lapse of time or both would become such an Event of Default shall have occurred and be continuing, on the date of such deposit; and
- JCI plc shall have delivered to the Trustee an Opinion of Counsel (which, in the case of a defeasance, must be based on a change in law) or a ruling received from the U.S. Internal Revenue Service to the effect that the beneficial owners of the JCI plc Notes of such series will not recognize income, gain or loss for U.S. federal income tax purposes as a result of JCI plc's exercise of such defeasance or covenant defeasance and will be subject to U.S. Federal income tax in the same amount and in the same manner and at the same times as would have been the case if such election had not been exercised.

Definitions

As used in the JCI plc Notes and this "*Description of JCI plc Notes*," the following defined terms shall have the following meanings with respect to the JCI plc Notes:

"*Affiliate*", with respect to any specified Person, means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, "*control*" when used with respect to any specified Person means the power to direct the management and policies of such Person, directly or indirectly, whether through ownership of voting securities, by contract or otherwise; and the terms "*controlling*" and "*controlled*" have meanings correlative to the foregoing.

"*Attributable Debt*," in connection with a Sale and Lease-Back Transaction, as of any particular time, means the aggregate of present values (discounted at a rate that, at the inception of the lease, represents the effective interest rate that the lessee would have incurred to borrow over a similar term the funds necessary to purchase the leased assets) of the obligations of JCI plc or any Restricted Subsidiary for net rental payments during the remaining term of the applicable lease, including any period for which such lease has been extended or, at the option of the lessor, may be extended. The term "*net rental payments*" under any lease of any period shall mean the sum of the rental and other payments required to be paid in such period by the lessee thereunder, not including any amounts required to be paid by such lessee, whether or not designated as rental or additional rental, on account of maintenance and repairs, reconstruction, insurance, taxes, assessments, water rates or similar charges required to be paid by such lessee thereunder or any amounts required to be paid by such lessee thereunder contingent upon the amount of sales, maintenance and repairs, reconstruction, insurance, taxes, assessments, water rates or similar charges.

"*Board of Directors*" means the Board of Directors of JCI plc or any duly authorized committee of such Board of Directors.

"*business day*" means any day other than a Saturday or Sunday, (1) that is not a day on which banking institutions in the City of New York or London are authorized or obligated by law, executive order or regulation to close, and (2) in respect of the JCI plc Euro Notes, on which the Trans-European Automated Real-time Gross Settlement Express Transfer System (the TARGET2 system), or any successor thereto, is open.

"*Change of Control*" means the occurrence of any of the following after the date of issuance of the JCI plc Notes of the applicable series:

(1) the direct or indirect sale, lease, transfer, conveyance or other disposition (other than by way of merger or consolidation), in one or a series of related transactions, of all or substantially all of our assets and the assets of our subsidiaries taken as a whole to any "person" or "group" (as those terms are used in Section 13(d)(3) of the Exchange Act) other than to us or one of our subsidiaries, other than any such transaction or series of related transactions where holders of our Voting Stock outstanding immediately prior thereto hold Voting Stock of the transferee Person representing a majority of the voting power of the transferee Person's Voting Stock immediately after giving effect thereto;

(2) the consummation of any transaction (including, without limitation, any merger or consolidation) the result of which is that any "person" or "group" (as those terms are used in Section 13(d)(3) of the Exchange Act) (other than us or one of our subsidiaries) becomes the "beneficial owner" (as defined in Rules 13d-3 and 13d-5 under the Exchange Act), directly or indirectly, of our Voting Stock representing a majority of the voting power of our outstanding Voting Stock;

(3) we consolidate with, or merge with or into, any Person, or any Person consolidates with, or merges with or into, us, in any such event pursuant to a transaction in which any of our outstanding Voting Stock or Voting Stock of such other Person is converted into or exchanged for cash, securities or other property, other than any such transaction where our Voting Stock outstanding immediately prior to such transaction constitutes, or is converted into or exchanged for, Voting Stock representing a majority of the voting power of the Voting Stock of the surviving Person (or its parent) immediately after giving effect to such transaction; or

(4) the adoption by our shareholders of a plan relating to our liquidation or dissolution.

Notwithstanding the foregoing, a transaction will not be deemed to involve a change of control under clause (2) above if (1) we become a direct or indirect wholly-owned subsidiary of a holding company or other Person and (2)(A) the direct or indirect holders of the Voting Stock of such holding company or other Person immediately following that transaction are substantially the same as the holders of our Voting Stock immediately prior to that transaction or (B) immediately following that transaction no person (as that term is used in Section 13(d)(3) of the Exchange Act) (other than a holding company or other Person satisfying the requirements of this sentence) is the beneficial owner, directly or indirectly, of more than 50% of the Voting Stock of such holding company or other Person.

"*Change of Control Triggering Event*" means, with respect to the applicable series of JCI plc Notes, the JCI plc Notes of such series cease to be rated Investment Grade by each of the Rating Agencies on any date during the period (the "*Trigger Period*") commencing 60 days prior to the first public announcement by us of any Change of Control (or pending Change of Control) and ending 60 days following consummation of such Change of Control (which Trigger Period will be extended following consummation of a Change of Control for so long as any of the Rating Agencies has publicly announced that it is considering a possible ratings downgrade or withdrawal). However, a Change of Control Triggering Event otherwise arising by virtue of a particular reduction in, or withdrawal of, rating shall not be deemed to have occurred in respect of a particular Change of Control (and thus shall not be deemed a Change of Control Triggering Event for purposes of the definition of Change of Control Triggering Event) if the Rating Agencies making the reduction in, or withdrawal of, rating to which this definition would otherwise apply do not announce or publicly confirm or inform the Trustee in writing at our request that the reduction or withdrawal was the result, in whole or in part, of any event or circumstance comprised of or arising as a result of, or in respect of, the applicable Change of Control (whether or not the applicable Change of Control shall have occurred at the time of the Change of Control Triggering Event). If a Rating Agency is not providing a rating for the JCI plc Notes of such series at the commencement of any Trigger Period, the JCI plc Notes of such series will be deemed to have ceased to be rated Investment Grade by such Rating Agency during that Trigger Period.

Notwithstanding the foregoing, no Change of Control Triggering Event will be deemed to have occurred in connection with any particular Change of Control unless and until such Change of Control has actually been consummated.

"*Consolidated Net Worth*" at any date means total assets less total liabilities, in each case appearing on the most recently prepared consolidated balance sheet of JCI plc and its subsidiaries as of the end of a fiscal quarter of JCI plc, prepared in accordance with United States generally accepted accounting principles as in effect on the date of the consolidated balance sheet.

"*Consolidated Tangible Assets*" at any date means total assets less all intangible assets appearing on the most recently prepared consolidated balance sheet of JCI plc and its subsidiaries as of the end of a fiscal quarter of JCI plc, prepared in accordance with United States generally accepted accounting principles as in effect on the date of the consolidated balance sheet.

"*Default*" means any event, act or condition that with notice or lapse of time, or both, would constitute an Event of Default.

"*Funded Indebtedness*" means any Indebtedness of JCI plc or any consolidated subsidiary maturing by its terms more than one year from the date of the determination thereof, including any Indebtedness renewable or extendable at the option of the obligor to a date later than one year from the date of the determination thereof.

"*Indebtedness*" means, without duplication, the principal amount (such amount being the face amount or, with respect to original issue discount bonds or zero coupon notes, bonds or debentures or similar securities, determined based on the accreted amount as of the date of the most recently prepared consolidated balance sheet of JCI plc and its subsidiaries as of the end of a fiscal quarter of JCI plc prepared in accordance with United States generally accepted accounting principles as in effect on the date of such consolidated balance sheet) of (i) all obligations for borrowed money, (ii) all obligations evidenced by debentures, notes or other similar instruments, (iii) all obligations in respect of letters of credit or bankers acceptances or similar instruments or reimbursement obligations with respect thereto (such instruments to constitute Indebtedness only to the extent that the outstanding reimbursement obligations in respect thereof are collateralized by cash or cash equivalents reflected as assets on a balance sheet prepared in accordance with United States generally accepted accounting principles), (iv) all obligations to pay the deferred purchase price of property or services, except (A) trade and similar accounts payable and accrued expenses, (B) employee compensation, deferred compensation and pension obligations, and other obligations arising from employee benefit programs and agreements or other similar employment arrangements, (C) obligations in respect of customer advances received and (D) obligations in connection with earnout and holdback agreements, in each case in the ordinary course of business, (v) all obligations as lessee to the extent capitalized in accordance with United States generally accepted accounting principles and (vi) all Indebtedness of others consolidated in such balance sheet that is guaranteed by JCI plc or any of its subsidiaries or for which JCI plc or any of its subsidiaries is legally responsible or liable (whether by agreement to purchase indebtedness of, or to supply funds or to invest in, others).

"*Intangible assets*" means the amount, if any, stated under the headings "Goodwill" and "Other intangible assets, net" or under any other heading of intangible assets separately listed, in each case on the face of the most recently prepared consolidated balance sheet of JCI plc and its subsidiaries as of the end of a fiscal quarter of JCI plc, prepared in accordance with United States generally accepted accounting principles as in effect on the date of the consolidated balance sheet.

"*Investment Grade*" means a rating of Baa3 or better by Moody's (or its equivalent under any successor rating category of Moody's) and a rating of BBB– or better by S&P (or its equivalent under any successor rating category of S&P), and the equivalent investment grade credit rating from any replacement rating agency or rating agencies selected by us under the circumstances permitting us to select a replacement rating agency and in the manner for selecting a replacement rating agency, in each case as set forth in the definition of "*Rating Agency*."

"*lien*" means a mortgage, pledge, security interest, lien or encumbrance.

"*Moody's*" means Moody's Investors Service, Inc., a subsidiary of Moody's Corporation, and its successors.

"*Officer*" means any director, any managing director, the chairman or any vice chairman of the Board of Directors, the chief executive officer, the president, the chief financial officer, any vice president, the treasurer, any assistant treasurer, the secretary or any assistant secretary, or any equivalent of the foregoing, of JCI plc or any Person duly authorized to act for or on behalf of JCI plc.

"*Officer's Certificate*" means a certificate, signed by any Officer of JCI plc, that is delivered to the Trustee in accordance with the terms of the JCI plc Indenture.

"*Opinion of Counsel*" means a written opinion acceptable to the Trustee from legal counsel licensed in any State of the United States of America and applying the laws of such State. The counsel may be an employee of or counsel to JCI plc.

"*Person*" means any individual, corporation, partnership, limited liability company, business trust, association, joint-stock company, joint venture, trust, incorporated or unincorporated organization or government or any agency or political subdivision thereof.

"*Principal Property*" means any manufacturing, processing or assembly plant or any warehouse or distribution facility, or any office or parcel of real property (including fixtures but excluding leases and other contract rights which might otherwise be deemed real property) of JCI plc or any of its subsidiaries that is used by any U.S. Subsidiary of JCI plc and is located in the United States of America (excluding its territories and possessions and Puerto Rico) and (A) is owned by JCI plc or any subsidiary of JCI plc on the date the JCI plc Notes of the applicable series are issued, (B) the initial construction of which has been completed after the date on which the JCI plc Notes of the applicable series are issued, or (C) is acquired after the date on which the JCI plc Notes of the applicable series are issued, in each case, other than any such plants, facilities, warehouses or portions thereof, that in the opinion of the Board of Directors of JCI plc, are not collectively of material importance to the total business conducted by JCI plc and its subsidiaries as an entirety, or that have a net book value (excluding any capitalized interest expense), on the date the JCI plc Notes of the applicable series are issued in the case of clause (A) of this definition, on the date of completion of the initial construction in the case of clause (B) of this definition or on the date of acquisition in the case of clause (C) of this definition, of less than 2.0% of Consolidated Tangible Assets on the consolidated balance sheet of JCI plc and its subsidiaries as of the applicable date.

"*Rating Agency*" means each of Moody's and S&P; provided, that if any of Moody's or S&P ceases to provide rating services to issuers or investors, we may appoint another "nationally recognized statistical rating organization" as defined under Section 3(a)(62) of the Exchange Act as a replacement for such Rating Agency; provided, that we shall give notice of such appointment to the Trustee.

"*Restricted Subsidiary*" means any subsidiary of JCI plc that owns or leases a Principal Property.

"*Sale and Lease-Back Transaction*" means an arrangement with any Person providing for the leasing by JCI plc or a Restricted Subsidiary of any Principal Property whereby such Principal Property has been or is to be sold or transferred by JCI plc or a Restricted Subsidiary to such Person other than JCI plc or any of its subsidiaries; provided, however, that the foregoing shall not apply to any such arrangement involving a lease for a term, including renewal rights, for not more than three years.

"S&P" means Standard & Poor's Global Ratings, a division of S&P Global Inc., and its successors.

"*Trust Officer*" means any officer within the corporate trust department of the Trustee, including any vice president, senior associate, associate, trust officer or any other officer of the Trustee who customarily performs functions similar to those performed by the Persons who at the time shall be such officers, respectively, or to whom any corporate trust matter is referred because of such Person's knowledge of and familiarity with the particular subject and who shall have direct responsibility for the administration of the JCI plc Indenture.

"*U.S. Subsidiary*" means any subsidiary of JCI plc that was formed under the laws of the United States of America, any State thereof or the District of Columbia (but not any territory thereof).

"*Voting Stock*" of any specified Person as of any date means the capital stock of such Person that is at the time entitled to vote generally in the election of the board of directors of such Person.

Exhibit 4.12

DESCRIPTION OF JCI PLC AND TFSCA NOTES

Capitalized terms used in this "*Description of JCI plc and TFSCA Notes*" and not otherwise defined have the meanings set forth under the heading "*—Definitions*" below. For purposes of this "*Description of the JCI plc and TFSCA Notes*" section, (a) the terms "*JCI plc*" or "*Company*" refer only to Johnson Controls International plc, a public limited company organized under the laws of Ireland, and its successors permitted by the terms of the Indenture, (b) the terms "*TFSCA*" or "*Co-Issuer*" refer to Tyco Fire & Security Finance S.C.A., a corporate partnership limited by shares incorporated and organized under the laws of the Grand Duchy of Luxembourg, and its successors permitted by the terms of the Indenture, (c) the terms "*Issuers,*" "*we*," "*us*" and "*our*" refer to JCI plc and TFSCA together, and (d) the term "*Johnson Controls*" refers to JCI plc and its consolidated subsidiaries, including TFSCA.

For purposes of this description:

- "*2027 Notes*" refers to our 0.375% Senior Notes due 2027
- "*2028 Notes*" refers to our 3.000% Senior Notes due 2028
- "*2030 Notes*" refers to our 1.750% Senior Notes due 2030
- "*2031 Notes"* refers to our 2.000% Sustainability-Linked Senior Notes due 2031
- "*2032 USD Notes*" refers to our 4.900% Senior Notes due 2032
- "*2032 Euro Notes*" refers to our 1.000% Senior Notes due 2032
- "*2035 Notes*" refers to our 4.250% Senior Notes due 2035
- "*Euro Notes*" refers to the 2027 Notes, the 2028 Notes, the 2032 Euro Notes and the 2035 Notes
- "*USD Notes*" refers to the 2030 Notes, the 2031 Notes and the 2032 USD Notes
- "*Notes*" refers to the Euro Notes and the USD Notes.

The 2030 Notes were issued under the Indenture, dated as of December 28, 2016 (the "*Base Indenture*"), between JCI plc and U.S. Bank Trust Company, National Association (successor in interest to U.S. Bank National Association), as trustee (the "Trustee") and a Fifth Supplemental Indenture among JCI plc, TFSCA and the Trustee. The 2027 Notes and the 2032 Euro Notes were issued under the Base Indenture and a Sixth Supplemental Indenture among JCI plc, TFSCA, the Trustee and Elavon Financial Services DAC, as paying agent. The 2031 Notes were issued under the Base Indenture and a Seventh Supplemental Indenture among JCI plc, TFSCA and the Trustee. The 2028 Notes were issued under the Base Indenture and an Eighth Supplemental Indenture among JCI plc, TFSCA, the Trustee and Elavon Financial Services DAC, as paying agent. The 2032 USD Notes were issued under the Base Indenture and a Ninth Supplemental Indenture among JCI plc, TFSCA and the Trustee. The 2035 Notes were issued under the Base Indenture and a Tenth Supplemental Indenture among JCI plc, TFSCA, the Trustee and Elavon Financial Services DAC, as paying agent (together with the Base Indenture, the Fifth Supplemental Indenture, the Sixth Supplemental Indenture, the Seventh Supplemental Indenture, the Eighth Supplemental Indenture and the Ninth Supplemental Indenture, the "*Indenture*"). We entered into agency agreements with respect to the Euro Notes among us, Elavon Financial Services DAC, as paying agent, and U.S. Bank Trust Company, National Association (successor in interest to U.S. Bank National Association), as transfer agent, security registrar and Trustee.

The terms of the Notes include those expressly set forth in such Notes and the Indenture and those made part of the Indenture by reference to the Trust Indenture Act of 1939 (15 U.S.C. §§77aaa-77bbbb), as in effect from time to time (the "*Trust Indenture Act*").

The 2027 Notes and the 2032 Euro Notes were each issued in an aggregate initial principal amount of €500,000,000. The 2028 Notes were issued in an aggregate initial principal amount of €600,000,000. The 2030 Notes were issued in an aggregate initial principal amount of $625,000,000. The 2031 Notes were issued in an aggregate principal amount of $500,000,000. The 2032 USD Notes were issued in an aggregate initial principal amount of $400,000,000. The 2035 Notes were issued in an aggregate initial principal amount of €800,000,000.

The Issuers are jointly and severally liable for all obligations under the Notes. The Co-Issuer is a wholly-owned consolidated subsidiary of the Company that is 99.924% owned directly by the Company and 0.076% owned by TFSCA's sole general partner and manager, Tyco Fire & Security S.à.r.l., which is itself wholly owned by the Company. The Co-Issuer is a holding company that directly and indirectly holds significantly all of the subsidiaries of JCI plc. The Co-Issuer engages in intercompany financial services on behalf of JCI plc, including engaging in intercompany loan transactions and engaging in currency hedging transactions on behalf of JCI plc and its subsidiaries.

This description is a summary of the material provisions of the Notes and the Indenture. This description does not restate those agreements and instruments in their entirety. We urge you to read the Notes and the Indenture, which are filed as exhibits to this Annual Report on Form 10-K, because they, not the summaries below, define the rights of holders of the Notes.

General

The Notes constitute separate series and are JCI plc's and the Co-Issuer's unsecured, unsubordinated obligations. The Notes rank senior in right of payment to JCI plc's and the Co-Issuer's existing and future indebtedness and other obligations that are expressly subordinated in right of payment to the Notes; equal in right of payment to JCI plc's and the Co-Issuer's existing and future indebtedness and other obligations that are not so subordinated; effectively junior to any of JCI plc's and the Co-Issuer's secured indebtedness and other obligations to the extent of the value of the assets securing such indebtedness or other obligations; and structurally junior to all existing and future indebtedness and other obligations incurred by JCI plc's and the Co-Issuer's subsidiaries. TFSCA is not a co-issuer in respect of JCI plc's outstanding senior notes other than the 2027 Notes, 2028 Notes, 2030 Notes, 2031 Notes, 2032 USD Notes, 2032 Euro Notes and 2035 Notes.

The Euro Notes were issued in book-entry form, represented by Global Securities (as defined below), deposited with or on behalf of a common depositary on behalf of Clearstream and Euroclear and registered in the name of the nominee of the common depositary for the accounts of Clearstream and Euroclear. The USD Notes were issued in book-entry form, represented by Global Securities and delivered through the facilities of DTC.

The Euro Notes were issued in registered form without interest coupons and only in denominations of €100,000 and whole multiples of €1,000 in excess thereof. The USD Notes were issued in registered form without interest coupons and only in denominations of $2,000 and whole multiples of $1,000 in excess thereof.

Except as provided below, the Notes are not subject to redemption, repurchase or repayment at the option of any holder thereof, upon the occurrence of any particular circumstance or otherwise. The Notes do not have the benefit of any sinking fund. The Notes are not be convertible into or exchangeable for shares or other securities of the Issuers.

For the avoidance of doubt, articles 470-1 to 470-19 of the Luxembourg law of 10 August 1915 relating to commercial companies, as amended, do not apply to the Notes.

Maturity and Interest

Euro Notes

The 2027 Notes mature on September 15, 2027 and bear interest at a rate of 0.375% per annum. The 2028 Notes mature on September 15, 2028 and bear interest at a rate of 3.000% per annum. The 2032 Euro Notes mature on September 15, 2032 and bear interest at a rate of 1.000% per annum. The 2035 Notes mature on May 23, 2035 and bear interest at a rate of 4.250% per annum. The date from which interest accrued on the 2027 Notes and 2032 Euro Notes was September 15, 2020. The date from which interest accrued on the 2028 Notes was September 7, 2022. The date from which interest accrued on the 2035 Notes was May 23, 2023. Interest in respect of the 2027 Notes and the 2032 Euro Notes is payable annually in arrears on September 15 of each year, beginning on September 15, 2021, to the applicable holders of record at the close of business on the September 1 next preceding such interest payment date. Interest in respect of the 2028 Notes is payable annually in arrears on September 15 of each year, beginning on September 15, 2023, to the applicable holders of record at the close of business on the September 1 next preceding such interest payment date. Interest in respect of the 2035 Notes is payable annually in arrears on May 23 of each year, beginning on May 23, 2024, to the applicable holders of record at the close of business on the May 8 next preceding such interest payment date. The basis upon which interest shall be calculated is the actual number of days in the period for which interest is being calculated and the actual number of days from and including the last date on which interest was paid on such series of Euro Notes, to but excluding the next scheduled interest payment date. This payment convention is referred to as "*ACTUAL/ACTUAL (ICMA)*," as defined in the statutes, by-laws, rules and recommendations published by the International Capital Markets Association (the "*ICMA Rulebook*").

2030 Notes and 2032 USD Notes

The 2030 Notes mature on September 15, 2030 and bear interest at a rate of 1.750% per annum. The 2032 USD Notes mature on December 1, 2032 and bear interest at a rate of 4.900% per annum. The date from which interest accrued on the 2030 Notes was September 11, 2020. The date from which interest accrued on the 2032 USD Notes was September 14, 2022. Interest in respect of the 2030 Notes is payable semi-annually in arrears on March 15 and September 15 of each year, beginning on March 15, 2021, to the applicable holders of record at the close of business on the March 1 and September 1 next preceding such interest payment date. Interest in respect of the 2032 USD Notes is payable semi-annually in arrears on June 1 and December 1 of each year, beginning on December 1, 2022, to the applicable holders of record at the close of business on the May 15 and November 15 next preceding such interest payment date. Interest is computed on the basis of a 360-day year comprised of twelve 30-day months.

2031 Notes

The 2031 Notes will mature on September 16, 2031 and bear interest at a rate of 2.000% per annum. The date from which interest accrued on the 2031 Notes was September 16, 2021. Interest in respect of the 2031 Notes is payable semi-annually in arrears on March 16 and September 16 of each year, beginning on March 16, 2022, to the applicable holders of record at the close of business on the March 2 and September 2 next preceding such interest payment date. Interest is computed on the basis of a 360-day year comprised of twelve 30-day months.

The interest rate applicable to the 2031 Notes was subject to adjustment based upon the satisfaction or non-satisfaction of the Sustainability Performance. Targets (as defined in the Seventh Supplemental Indenture) by a specified notification date. The Issuers provided notification of satisfaction to the Trustee prior to the required notification date (and the Issuers received a related assurance letter from the External Verifier (as defined in the Seventh Supplemental Indenture)). As a result, pursuant to the terms of the 2031 Notes and the Seventh Supplemental Indenture, the interest rate payable on the 2031 Notes is no longer subject to adjustment.

Indenture May Be Used for Future Issuances

We may, without the consent of the then existing holders of the Notes, "re-open" and issue additional Notes of any series, which additional Notes will have the same terms as such series of Notes except for the issue price, issue date and, under some circumstances, the first interest payment date; provided that, if such additional Notes are not fungible with the existing Notes of such series for U.S. federal income tax purposes, such additional Notes will have a separate CUSIP, ISIN and/or other identifying number, as applicable. Additional Notes issued in this manner will form a single series with the applicable series of Notes.

In addition, the Indenture does not limit the amount of debt securities that can be issued thereunder and provides that debt securities of any series may be issued thereunder up to the aggregate principal amount that we may authorize from time to time. All debt securities issued as a series, including those issued pursuant to any reopening of a series, will vote together as a single class. Debt securities issued pursuant to the Indenture may have terms that differ from those of the Notes, as set forth in Section 2.01 of the Indenture.

Issuance of Notes in Euros

All payments of interest and principal, including payments made upon any redemption or repurchase of the Euro Notes, are payable in euros. If the euro is unavailable to us due to the imposition of exchange controls or other circumstances beyond our control or if the euro is no longer being used by the then member states of the European Monetary Union that have adopted the euro as their currency or for the settlement of transactions by public institutions of or within the international banking community, then all payments in respect of the Euro Notes will be made in U.S. dollars until the euro is again available to us or so used. In such circumstances, the amount payable on any date in euros will be converted into U.S. dollars at the rate mandated by the U.S. Federal Reserve Board as of the close of business on the second business day prior to the relevant payment date or, in the event the U.S. Federal Reserve Board has not mandated a rate of conversion, on the basis of the then most recent U.S. dollar/euro exchange rate available on or prior to the second business day prior to the relevant payment date as determined by the Issuers in their sole discretion. Any payment in respect of the Euro Notes so made in U.S. dollars will not constitute an Event of Default (as defined below) under the Euro Notes or the Indenture. Neither the Trustee nor the paying agent shall have any responsibility for any calculation or conversion in connection with the foregoing.

Optional Redemption

Euro Notes

2027 Notes

Prior to July 15, 2027 (the "*2027 Par Call Date*"), the Issuers may, at their option, redeem the 2027 Notes, in whole at any time or in part from time to time (in €1,000 increments, provided that any remaining principal amount thereof shall be at least the minimum authorized denomination of €100,000), at a redemption price equal to the greater of (i) 100% of the principal amount of the 2027 Notes to be redeemed and (ii) the sum of the present values of the Remaining Scheduled Payments (as defined below) that would be due if the 2027 Notes matured on the 2027 Par Call Date, discounted to the redemption date, on an annual basis (ACTUAL/ACTUAL (ICMA)), at a rate equal to the Treasury Rate (as defined below) plus 20 basis points plus, in either case, accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

On or after the 2027 Par Call Date, the Issuers may, at their option, redeem the 2027 Notes, in whole at any time or in part from time to time (in €1,000 increments, provided that any remaining principal amount thereof shall be at least the minimum authorized denomination of €100,000), at a redemption price equal to 100% of the principal amount of the 2027 Notes to be redeemed, plus accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

2028 Notes

Prior to July 15, 2028 (the "*2028 Par Call Date*"), the Issuers may, at their option, redeem the 2028 Notes, in whole at any time or in part from time to time (in €1,000 increments, provided that any remaining principal amount thereof shall be at least the minimum authorized denomination of €100,000), at a redemption price equal to the greater of (i) 100% of the principal amount of the 2028 Notes to be redeemed and (ii) the sum of the present values of the Remaining Scheduled Payments (as defined below) that would be due if the 2028 Notes matured on the 2028 Par Call Date, discounted to the redemption date, on an annual basis (ACTUAL/ACTUAL (ICMA)), at a rate equal to the Treasury Rate (as defined below) plus 30 basis points plus, in either case, accrued and unpaid interest, if any,

thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

On or after the 2028 Par Call Date, the Issuers may, at their option, redeem the 2028 Notes, in whole at any time or in part from time to time (in €1,000 increments, provided that any remaining principal amount thereof shall be at least the minimum authorized denomination of €100,000), at a redemption price equal to 100% of the principal amount of the 2028 Notes to be redeemed, plus accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

2032 Euro Notes

Prior to June 15, 2032 (the "2032 Euro Par Call Date"), the Issuers may, at their option, redeem the 2032 Euro Notes, in whole at any time or in part from time to time (in €1,000 increments, provided that any remaining principal amount thereof shall be at least the minimum authorized denomination of €100,000), at a redemption price equal to the greater of (i) 100% of the principal amount of the 2032 Euro Notes to be redeemed and (ii) the sum of the present values of the Remaining Scheduled Payments (as defined below) that would be due if the 2032 Euro Notes matured on the 2032 Euro Par Call Date, discounted to the redemption date, on an annual basis (ACTUAL/ACTUAL (ICMA)), at a rate equal to the Treasury Rate (as defined below) plus 25 basis points plus, in either case, accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

On or after the 2032 Euro Par Call Date, the Issuers may, at their option, redeem the 2032 Euro Notes, in whole at any time or in part from time to time (in €1,000 increments, provided that any remaining principal amount thereof shall be at least the minimum authorized denomination of €100,000), at a redemption price equal to 100% of the principal amount of the 2032 Euro Notes to be redeemed, plus accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

2035 Notes

Prior to February 23, 2035 (the "2035 Par Call Date"), the Issuers may, at their option, redeem the 2035 Notes, in whole at any time or in part from time to time (in €1,000 increments, provided that any remaining principal amount thereof shall be at least the minimum authorized denomination of €100,000), at a redemption price equal to the greater of (i) 100% of the principal amount of the 2035 Notes to be redeemed and (ii) the sum of the present values of the Remaining Scheduled Payments (as defined below) that would be due if the 2035 Notes matured on the 2035 Par Call Date, discounted to the redemption date, on an annual basis (ACTUAL/ACTUAL (ICMA)), at a rate equal to the Treasury Rate (as defined below) plus 30 basis points plus, in either case, accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

On or after the 2035 Par Call Date, the Issuers may, at their option, redeem the 2035 Notes, in whole at any time or in part from time to time (in €1,000 increments, provided that any remaining principal amount thereof shall be at least the minimum authorized denomination of €100,000), at a redemption price equal to 100% of the principal amount of the 2035 Notes to be redeemed, plus accrued and unpaid interest, if any, thereon to, but excluding the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

Certain definitions with respect to the Optional Redemption provisions of the Euro Notes:

"*Treasury Rate*" means the rate per annum (which, solely in the case of the 2027 Notes and 2032 Euro Notes, if less than zero, shall be deemed to be zero) equal to the annual equivalent yield to maturity of the Reference Bond

(as defined below), assuming a price for the Reference Bond (expressed as a percentage of its principal amount) equal to the middle market price of the Reference Bond prevailing at 11:00 a.m. (London time) on the third business day preceding such redemption date as determined by us or an independent investment bank appointed by us.

"*Reference Bond*" means, in relation to any Treasury Rate calculation, a German government bond whose maturity is closest to the maturity of the applicable series of Euro Notes, or if we or an independent investment bank appointed by us considers that such similar bond is not in issue, such other German government bond as we or an independent investment bank appointed by us, with the advice of three brokers of, and/or market makers in, German government bonds selected by us or an independent investment bank appointed by us, determine to be appropriate for determining the Treasury Rate.

"*Remaining Scheduled Payments*" means, with respect to each Euro Note to be redeemed, the remaining scheduled payments of principal of and interest on the relevant Note that would be due after the related redemption date but for the redemption. If that redemption date is not an interest payment date with respect to a Euro Note, the amount of the next succeeding scheduled interest payment on the relevant Euro Note will be reduced by the amount of interest accrued on the Euro Note to the redemption date.

USD Notes

2030 Notes

Prior to June 15, 2030 (the "*2030 Par Call Date*"), the Issuers may, at their option, redeem the 2030 Notes, in whole at any time or in part from time to time , at a redemption price equal to the greater of (i) 100% of the principal amount of the 2030 Notes to be redeemed and (ii) as determined by the Quotation Agent and delivered to the Trustee in writing, the sum of the present values of the remaining scheduled payments of principal and interest thereon that would be due if the 2030 Notes matured on the 2030 Par Call Date (exclusive of interest accrued to the redemption date), discounted to the redemption date (assuming a 360-day year consisting of twelve 30-day months) at the Adjusted Redemption Treasury Rate plus 20 basis points, plus, in either case, accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

On or after the 2030 Par Call Date, the Issuers may, at their option, redeem the 2030 Notes, in whole at any time or in part from time to time, at a redemption price equal to 100% of the principal amount of the 2030 Notes to be redeemed, plus accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

2031 Notes

Prior to June 16, 2031 (the *"2031 Par Call Date"*), the Issuers may, at their option, redeem the 2031 Notes, in whole at any time or in part from time to time , at a redemption price equal to the greater of (i) 100% of the principal amount of the 2031 Notes to be redeemed and (ii) as determined by the Quotation Agent and delivered to the Trustee in writing, the sum of the present values of the remaining scheduled payments of principal and interest thereon that would be due if the 2031 Notes matured on the 2031 Par Call Date (exclusive of interest accrued to the redemption date), discounted to the redemption date (assuming a 360-day year consisting of twelve 30-day months) at the Adjusted Redemption Treasury Rate plus 15 basis points, plus, in either case, accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

On or after the 2031 Par Call Date, the Issuers may, at their option, redeem the 2031 Notes, in whole at any time or in part from time to time, at a redemption price equal to 100% of the principal amount of the 2031 Notes to be redeemed, plus accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

2032 USD Notes

Prior to September 1, 2032 (the "2032 USD Par Call Date"), the Issuers may, at their option, redeem the 2032 USD Notes, in whole at any time or in part from time to time, at a redemption price equal to the greater of (i) 100% of the principal amount of the 2032 USD Notes to be redeemed and (ii) as determined by the Quotation Agent and delivered to the Trustee in writing, the sum of the present values of the remaining scheduled payments of principal and interest thereon that would be due if the 2032 USD Notes matured on the 2032 USD Par Call Date (exclusive of interest accrued to the redemption date), discounted to the redemption date (assuming a 360-day year consisting of twelve 30-day months) at the Adjusted Redemption Treasury Rate plus 30 basis points, plus, in either case, accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

On or after the 2032 USD Par Call Date, the Issuers may, at their option, redeem the 2032 USD Notes, in whole at any time or in part from time to time, at a redemption price equal to 100% of the principal amount of the 2032 USD Notes to be redeemed, plus accrued and unpaid interest, if any, thereon to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date).

Certain definitions with respect to the Optional Redemption provisions of the USD Notes:

"*Adjusted Redemption Treasury Rate*" means, with respect to any redemption date for the USD Notes, the rate equal to the semiannual equivalent yield to maturity or interpolated (on a 30/360 day count basis) yield to maturity of the Comparable Redemption Treasury Issue, assuming a price for the Comparable Redemption Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Redemption Treasury Price for such redemption date.

"*Comparable Redemption Treasury Issue*" means the United States Treasury security selected by the Quotation Agent as having a maturity comparable to the remaining term of such series of USD Notes to be redeemed if such series of USD Notes matured on the par call date applicable to such series of USD Notes that would be utilized at the time of selection and in accordance with customary financial practice in pricing new issues of corporate debt securities of comparable maturity to such remaining term of the applicable series of USD Notes.

"*Comparable Redemption Treasury Price,*" with respect to any redemption date for the USD Notes, means (i) the average of the Redemption Reference Treasury Dealer Quotations for such redemption date, after excluding the highest and lowest such Redemption Reference Treasury Dealer Quotations (unless there is more than one highest or lowest quotation, in which case only one such highest and/or lowest quotation shall be excluded), or (ii) if the Quotation Agent obtains fewer than four such Redemption Reference Treasury Dealer Quotations, the average of all such Redemption Reference Treasury Dealer Quotations.

"*Independent Investment Banker*" means one of the Redemption Reference Treasury Dealers appointed by JCI plc.

"*Quotation Agent*" means a Redemption Reference Treasury Dealer appointed as such by JCI plc.

"*Redemption R*eference Treasury Dealer" means (1) each of Barclays Capital Inc. and Citigroup Global Markets Inc. (with respect to the 2031 Notes), Citigroup Global Markets Inc. and BofA Securities, Inc. (with respect to the 2030 Notes); and J.P. Morgan Securities LLC, BofA Securities, Inc. and Morgan Stanley & Co. LLC (with respect to the 2032 USD Notes) (or their respective Affiliates that are Primary Treasury Dealers (as defined below)) and their respective successors and (2) two other Primary Treasury Dealers selected by JCI plc after consultation with the Independent Investment Banker; provided, however, that if any of the foregoing shall cease to be a primary U.S. government securities dealer in New York City (a "*Primary Treasury Dealer*"), JCI plc will substitute therefor another Primary Treasury Dealer.

"*Redemption Reference Treasury Dealer Quotations,*" with respect to each Redemption Reference Treasury Dealer and any redemption date for the USD Notes, means the average, as determined by the Quotation Agent, of the bid and offer prices at 11:00 a.m., New York City time, for the Comparable Redemption Treasury Issue

(expressed in each case as a percentage of its principal amount) for settlement on the redemption date quoted in writing to the Quotation Agent by such Redemption Reference Treasury Dealer on the third business day preceding such redemption date.

Redemption Upon Changes in Withholding Taxes

Either or both of the Issuers may redeem all, but not less than all, of the Notes of a series under the following conditions:

- if there is an amendment to, or change in, the laws or regulations of a Relevant Taxing Jurisdiction (as defined below) or any change in the written application or official written interpretation of such laws or regulations, including any action taken by, or a change in published administrative practice of, a taxing authority or a holding by a court of competent jurisdiction, regardless of whether such action, change or holding is with respect to either or both of the Issuers, which amendment or change is publicly announced and becomes effective on or after the date of issuance of such series of Notes (or, in the case of any Relevant Taxing Jurisdiction that becomes a Relevant Taxing Jurisdiction after such date of issuance, after such later date);
- as a result of such amendment or change, either or both of the Issuers become, or there is a material probability that either or both of the Issuers will become obligated to pay Additional Amounts (as defined below), on the next payment date with respect to such series of Notes, and such Issuer cannot avoid any such payment obligation by taking reasonable measures available (including having the other Issuer make payments on the Notes if such action would be reasonable);
- the relevant Issuer (or Issuers) delivers to the Trustee a written opinion of independent tax counsel to such Issuer (or Issuers) of recognized standing to the effect that such Issuer (or Issuers) has become, or there is a material probability that it will become, obligated to pay Additional Amounts as a result of a change or amendment described above; in addition, before the Issuer (or Issuers) mails notice of redemption of the Notes as described below, it will deliver to the Trustee an officer's certificate to the effect that the obligation to pay Additional Amounts cannot be avoided by such Issuer by taking reasonable measures available (including having the other Issuer make payments on the Notes if such action would be reasonable); and
- following the delivery of the opinion described in the previous bullet point, the relevant Issuer (or Issuers) provides notice of redemption for such series of Notes not less than 10 days, but not more than 90 days, prior to the redemption date. The notice of redemption cannot be given more than 90 days before the earliest date on which the Issuer (or Issuers) would be otherwise required to pay Additional Amounts, and the obligation to pay Additional Amounts must still be in effect when the notice is given.

Upon the occurrence of each of the bullet points above, the relevant Issuer (or Issuers) may redeem such series of Notes at a redemption price equal to 100% of the principal amount thereof, together with accrued and unpaid interest, if any, thereon to, but excluding, the redemption date and all Additional Amounts (if any) then due and that will become due on such redemption date as a result of the redemption or otherwise (subject to the right of holders of record on the relevant record date to receive interest due on an interest payment date that is prior to the redemption date and Additional Amounts (if any) in respect thereof).

The foregoing provisions shall apply *mutatis mutandis* to any Successor Company or Successor Co-Issuer (each as defined below).

Notice of Redemption

Notice of any redemption of any series of Notes will be mailed, or delivered electronically if the Notes to be redeemed are held by any depositary, at least 10 days but not more than 90 days before the date fixed for such redemption to each holder of Notes to be redeemed. If less than all of a series of Notes are to be redeemed, the Trustee will select the outstanding Notes of such series to be redeemed in accordance with a method that complies with the requirements, if any, of any stock exchange on which the Notes of such series are listed, and the applicable procedures of the depositary, if such Notes are held by any depositary; provided, however, that with respect to any

series of Notes not listed on any stock exchange and/or held by a depositary, the Trustee will select such Notes by lot or by such other method that the Trustee considers fair and appropriate.

No Euro Notes of a principal amount of €100,000 or less shall be redeemed in part. No USD Notes of a principal amount of $2,000 or less shall be redeemed in part. Unless the Issuers default in payment of the redemption price, on and after the redemption date, interest will cease to accrue on Notes or portions thereof called for redemption. Additionally, at any time, the Issuers may repurchase Notes in the open market and may hold such Notes or surrender such Notes to the trustee for cancellation.

If any redemption date of any Note is not a business day, then payment of principal and interest may be made on the next succeeding business day with the same force and effect as if made on the nominal redemption date and no interest will accrue for the period after such nominal date.

Payment of Additional Amounts

All payments in respect of the Notes will be made by (or on behalf of) the Issuers free and clear of, and without withholding or deduction for or on account of, any present or future taxes, duties, levies, imposts, assessments or governmental charges of whatever nature (including, without limitation, penalties and interest and other similar liabilities related thereto) ("*Taxes*"), unless the withholding or deduction of such Taxes is required by law.

In the event that the Issuers are required to withhold or deduct any amount for or on account of any Taxes imposed or levied by or on behalf of Ireland, Luxembourg or any other jurisdiction (other than the United States) in which either of the Issuers is incorporated, resident or doing business for tax purposes or from or through which payments by or on behalf of the Issuers are made, or any political subdivision or any authority thereof or therein (each, but not including the United States or any political subdivision or any authority thereof or therein, a "*Relevant Taxing Jurisdiction*"), from any payment made under or with respect to any Note (including, without limitation, payments of principal, redemption price, purchase price, interest or premium), the Issuers will pay such additional amounts ("*Additional Amounts*") so that the net amount received by each holder or beneficial owner of Notes (including Additional Amounts) after such withholding or deduction will equal the amount that such holder or beneficial owner would have received if such Taxes had not been required to be withheld or deducted.

Additional Amounts will not be payable with respect to a payment made to a holder or beneficial owner of Notes or a holder of beneficial interests in Global Securities where such holder or beneficial owner is subject to taxation on such payment by the Relevant Taxing Jurisdiction for or on account of:

- any Taxes that are imposed or withheld because such holder or beneficial owner (or a fiduciary, settlor, beneficiary, or member of such holder or beneficial owner if such holder or beneficial owner is an estate, trust, partnership, limited liability company or other fiscally transparent entity, or a Person holding a power over an estate or trust administered by a fiduciary holder): (i) is or was present or engaged in, or is or was treated as present or engaged in, a trade or business in the Relevant Taxing Jurisdiction or has or had a permanent establishment or other taxable presence in the Relevant Taxing Jurisdiction; or (ii) has or had any present or former connection (other than the mere fact of ownership of such Notes) with the Relevant Taxing Jurisdiction, including being or having been a national citizen or resident thereof, being treated as being or having been a resident thereof or being or having been physically present therein;
- any estate, inheritance, gift, transfer, personal property or similar Taxes imposed with respect to the Notes;
- any Taxes imposed as a result of the presentation of such Notes, where presentation is required, for payment on a date more than 30 days after the date on which such payment became due and payable or the date on which payment thereof is duly provided for, whichever is later, except to the extent that the beneficiary or holder thereof would have been entitled to the payment of Additional Amounts had such Notes been presented for payment on any date during such 30-day period;

- any Taxes imposed or withheld as a result of the failure of such holder or beneficial owner, upon a written request, made to the holder or beneficial owner in writing at least 30 days before any such withholding or deduction would be made, by an Issuer, broker or other withholding agent, to timely and accurately comply (to the extent such holder or beneficial owner is legally eligible to do so) with any applicable certification, information, documentation or other reporting requirements concerning the nationality, residence, identity or connection of the holder or beneficial owner with the Relevant Taxing Jurisdiction, if such compliance is required by statute or regulation of the Relevant Taxing Jurisdiction as a precondition to relief or exemption from such Taxes;
- any Taxes that are payable by any method other than withholding or deduction by the Issuers or any paying agent from payments in respect of such Notes;
- (with respect to the 2027 Notes and the 2032 Euro Notes) has presented the Notes for payment through a bank, encashment agent or paying agent and a withholding or deduction for Taxes arises which would not have been imposed if the Notes had been presented to another bank, encashment agent or paying agent in a different Member State of the European Union;
- any withholding or deduction required pursuant to Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986, as amended (the "*Code*"), as of the issue date of the Notes (or any amended or successor provisions of such sections that are substantively comparable and not materially more onerous to comply with), any regulations thereunder or official interpretations thereof, any agreements entered into pursuant to Section 1471(b) of the Code, or any law or regulation implemented pursuant to an intergovernmental agreement between a non-U.S. jurisdiction and the United States with respect to the foregoing; or
- any combination of the above.

Additional Amounts also will not be payable for any Taxes that are imposed with respect to any payment on a Note to any holder who is a fiduciary or partnership or person other than the sole beneficial owner of such payment to the extent that no Additional Amounts would have been payable had the beneficial owner of the applicable Note been the holder of such Note.

The Issuers also:

- will make such withholding or deduction of Taxes;
- will remit the full amount of Taxes so deducted or withheld to the relevant tax authority in accordance with all applicable laws;
- will use their commercially reasonable efforts to obtain from each relevant tax authority imposing such Taxes certified copies of tax receipts evidencing the payment of any Taxes so deducted or withheld; and
- upon request, will make available to the holders of the Notes, within 90 days after the date the payment of any Taxes deducted or withheld is due pursuant to applicable law, certified copies of tax receipts evidencing such payment by the Issuers (unless, notwithstanding the Issuers' efforts to obtain such receipts, the same are not obtainable, in which case the Issuers will provide other evidence of payments by the Issuers).

At least 30 days prior to each date on which any payment under or with respect to the Notes is due and payable, if the Issuers will be obligated to pay Additional Amounts with respect to such payment, the Issuers will deliver to the Trustee an Officer's Certificate stating the fact that such Additional Amounts will be payable, the amounts so payable and such other information as is necessary to enable the Trustee to pay such Additional Amounts to holders of such Notes on the payment date (unless such obligation to pay Additional Amounts arises less than 30 days prior to the relevant payment date, in which case the Issuers may deliver such Officer's Certificate as promptly as practicable after the date that is 30 days prior to the payment date).

In addition, the Issuers will pay for any present or future stamp, issue, registration, property, excise, transfer, court or documentary or other similar Taxes and duties, including interest, penalties and Additional Amounts with

respect thereto, payable in a Relevant Taxing Jurisdiction in respect of the creation, execution, issue, offering, enforcement, redemption or retirement of the Notes or any other document or instrument referred to therein, or the receipt of any payments with respect thereto.

Upon the Issuers' request, each holder and beneficial owner shall provide a properly completed and executed IRS Form W-9 or IRS Form W-8, as applicable, as would have been applicable if the Issuers were incorporated in the United States of America, any State thereof or the District of Columbia.

The foregoing provisions shall survive any termination or the discharge of the Indenture and shall apply *mutatis mutandis* to any Successor Company or Successor Co-Issuer.

Whenever in the Indenture, any Notes, or in this "*Description of JCI plc and TFSCA Notes*" there is mentioned, in any context, the payment of principal, premium, if any, redemption price, repurchase price, interest or any other amount payable under or with respect to any Notes, such mention shall be deemed to include the payment of Additional Amounts to the extent payable in the particular context.

Offer to Repurchase Upon Change of Control Triggering Event

Upon the occurrence of a Change of Control Triggering Event, unless we have exercised our right to redeem the Notes of such series as described above under "*—Optional Redemption*," each holder of the Notes will have the right to require us to purchase all or a portion (equal to €100,000 or an integral multiple of €1,000 in excess thereof with respect to the Euro Notes, and equal to $2,000 or an integral multiple of $1,000 in excess thereof with respect to the USD Notes) of such holder's Notes pursuant to the offer described below (the "*Change of Control Offer*"), at a purchase price equal to 101% of the principal amount thereof plus accrued and unpaid interest, if any, thereon to, but excluding, the date of purchase (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date) (the "*Change of Control Payment*"). If the Change of Control Payment Date (as defined below) falls on a day that is not a business day, the related payment of the Change of Control Payment will be made on the next business day as if it were made on the date such payment was due, and no interest will accrue on the amounts so payable for the period from and after such date to the next business day.

Within 30 days following the date upon which the Change of Control Triggering Event occurs or, at our option, prior to and conditioned on the occurrence of, any Change of Control, but after the public announcement of the pending Change of Control, we will be required to send, by first class mail, or deliver electronically if the Notes are held by any depositary, a notice to each holder of Notes, with a copy to the Trustee, which notice will govern the terms of the Change of Control Offer. Such notice will state, among other things, the purchase date, which must be no earlier than 30 days nor later than 60 days from the date such notice is mailed or delivered electronically (or, in the case of a notice mailed or delivered electronically prior to the date of consummation of a Change of Control, no earlier than the date of the occurrence of the Change of Control), other than as may be required by law (the "*Change of Control Payment Date*"). The notice, if mailed or delivered electronically prior to the date of consummation of the Change of Control, will state that the Change of Control Offer is conditioned on the Change of Control being consummated on or prior to the Change of Control Payment Date.

On the Change of Control Payment Date, we will, to the extent lawful:

- accept or cause a third party to accept for payment all Notes properly tendered pursuant to the Change of Control Offer;
- deposit or cause a third party to deposit with the applicable paying agent an amount equal to the Change of Control Payment in respect of all Notes properly tendered; and
- deliver or cause to be delivered to the Trustee the Notes properly accepted together with an Officer's Certificate stating the aggregate principal amount of Notes being repurchased.

We will not be required to make a Change of Control Offer with respect to the Notes if a third party makes such an offer in the manner, at the times and otherwise in compliance with the requirements for such an offer made by us and such third party purchases all the Notes properly tendered and not withdrawn under its offer. In addition,

we will not repurchase any Notes if there has occurred and is continuing on the Change of Control Payment Date an Event of Default under the Indenture, other than a Default in the payment of the Change of Control Payment on the Change of Control Payment Date.

We must comply in all material respects with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent those laws and regulations are applicable in connection with the repurchase of the Notes as a result of a Change of Control Triggering Event. To the extent that the provisions of any such securities laws or regulations conflict with the Change of Control Offer provisions of the Notes, we will be required to comply with those securities laws and regulations and will not be deemed to have breached our obligations under the Change of Control Offer provisions of the Indenture with respect to the Notes by virtue of any such conflict.

The definition of Change of Control includes a phrase relating to the direct or indirect sale, lease, transfer, conveyance or other disposition of "all or substantially all" of the properties or assets of JCI plc and its subsidiaries taken as a whole. Although there is a limited body of case law interpreting the phrase "substantially all," there is no precise, established definition of the phrase under applicable law. Accordingly, the applicability of the requirement that we offer to repurchase the Notes as a result of a sale, lease, transfer, conveyance or other disposition of less than all of the assets of JCI plc and its subsidiaries taken as a whole to another "person" or "group" (as those terms are used in Section 13(d)(3) of the Exchange Act) may be uncertain.

Other Provisions of the Notes

Claims against the Issuers for the payment of principal or Additional Amounts, if any, of the Notes will be prescribed ten years after the applicable due date for payment thereof. Claims against the Issuers for the payment of interest, if any, of the Notes will be prescribed five years after the applicable due date for payment of interest.

Certain Covenants

The Indenture contains the following covenants:

Limitation on Liens

JCI plc will not, and will not permit any Restricted Subsidiary to, issue, incur, assume or guarantee any Indebtedness that is secured by a mortgage, pledge, security interest, lien or encumbrance (each a "*lien*") upon any asset that at the time of such issuance, assumption or guarantee constitutes a Principal Property, or any shares of stock of or Indebtedness issued by any Restricted Subsidiary, whether now owned or hereafter acquired, without effectively providing that, for so long as such lien shall continue in existence with respect to such secured Indebtedness, the Notes and any other debt securities issued pursuant to the Base Indenture (together with, if JCI plc shall so determine, any other Indebtedness of JCI plc ranking equally with the Notes and any other debt securities issued pursuant to the Base Indenture, it being understood that for purposes hereof, Indebtedness which is secured by a lien and Indebtedness which is not so secured shall not, solely by reason of such lien, be deemed to be of different ranking) shall be equally and ratably secured by a lien ranking ratably with or equal to (or at JCI plc's option prior to) such secured Indebtedness; provided, however, that the foregoing covenant shall not apply to:

- liens existing on the date the Notes are first issued;
- liens on the stock, assets or Indebtedness of a Person existing at the time such Person becomes a Restricted Subsidiary, unless created in contemplation of such Person becoming a Restricted Subsidiary;
- liens on any assets or Indebtedness of a Person existing at the time such Person is merged with or into or consolidated with or acquired by JCI plc or a Restricted Subsidiary or at the time of a purchase, lease or other acquisition of the assets of a corporation or firm as an entirety or substantially as an entirety by JCI plc or any Restricted Subsidiary; provided, however, that no such lien shall extend to any other Principal Property of JCI plc or such Restricted Subsidiary prior to such acquisition or to any other Principal Property thereafter acquired other than additions to such acquired property;

- liens on any Principal Property existing at the time of acquisition thereof by JCI plc or any Restricted Subsidiary, or liens to secure the payment of the purchase price of such Principal Property by JCI plc or any Restricted Subsidiary, or to secure any Indebtedness incurred, assumed or guaranteed by JCI plc or a Restricted Subsidiary for the purpose of financing all or any part of the purchase price of such Principal Property or improvements or construction thereon, which Indebtedness is incurred, assumed or guaranteed prior to, at the time of or within one year after such acquisition, or in the case of real property, completion of such improvement or construction or commencement of full operation of such property, whichever is later; provided, however, that in the case of any such acquisition, construction or improvement, the lien shall not apply to any other Principal Property, other than the Principal Property so acquired, constructed or improved, and accessions thereto and improvements and replacements thereof and the proceeds of the foregoing;
- liens securing Indebtedness owing by any Restricted Subsidiary to JCI plc or a subsidiary thereof;
- liens in favor of the United States of America or any State thereof, or any department, agency or instrumentality or political subdivision of the United States of America or any State thereof, or in favor of any other country or any political subdivision thereof, to secure partial, progress, advance or other payments pursuant to any contract, statute, rule or regulation or to secure any Indebtedness incurred or guaranteed for the purpose of financing all or any part of the purchase price, or, in the case of real property, the cost of construction or improvement, of the Principal Property subject to such liens, including liens incurred in connection with pollution control, industrial revenue or similar financings;
- pledges, liens or deposits under workers' compensation or similar legislation, and liens thereunder that are not currently dischargeable, or in connection with bids, tenders, contracts, other than for the payment of money, or leases to which JCI plc or any Restricted Subsidiary is a party, or to secure the public or statutory obligations of JCI plc or any Restricted Subsidiary, or in connection with obtaining or maintaining self-insurance, or to obtain the benefits of any law, regulation or arrangement pertaining to unemployment insurance, old age pensions, social security or similar matters, or to secure surety, performance, appeal or customs bonds to which JCI plc or any Restricted Subsidiary is a party, or in litigation or other proceedings in connection with the matters heretofore referred to in this bullet, such as interpleader proceedings, and other similar pledges, liens or deposits made or incurred in the ordinary course of business;
- liens created by or resulting from any litigation or other proceeding that is being contested in good faith by appropriate proceedings, including liens arising out of judgments or awards against JCI plc or any Restricted Subsidiary with respect to which JCI plc or such Restricted Subsidiary in good faith is prosecuting an appeal or proceedings for review or for which the time to make an appeal has not yet expired; or final unappealable judgment liens which are satisfied within 15 days of the date of judgment; or liens incurred by JCI plc or any Restricted Subsidiary for the purpose of obtaining a stay or discharge in the course of any litigation or other proceeding to which JCI plc or such Restricted Subsidiary is a party;
- liens for taxes or assessments or governmental charges or levies not yet due or delinquent; or that can thereafter be paid without penalty, or that are being contested in good faith by appropriate proceedings; landlord's liens on property held under lease; and any other liens or charges incidental to the conduct of the business of JCI plc or any Restricted Subsidiary, or the ownership of their respective assets, that were not incurred in connection with the borrowing of money or the obtaining of advances or credit and that, in the opinion of the Board of Directors of JCI plc, do not materially impair the use of such assets in the operation of the business of JCI plc or such Restricted Subsidiary or the value of such Principal Property for the purposes of such business;
- liens to secure JCI plc's or any Restricted Subsidiary's obligations under agreements with respect to spot, forward, future and option transactions, entered into in the ordinary course of business;
- liens not permitted by the foregoing bullets, inclusive, if at the time of, and after giving effect to, the creation or assumption of any such lien, the aggregate amount of all outstanding Indebtedness of JCI plc and the Restricted Subsidiaries, without duplication, secured by all such liens not so permitted by the

foregoing bullets, inclusive, together with the Attributable Debt in respect of Sale and Lease-Back Transactions permitted by the first bullet under "Limitation on Sale and Lease-Back Transactions" below, do not exceed the greater of $100,000,000 and 10% of Consolidated Net Worth; and

- any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part, of any lien referred to in the foregoing bullets inclusive; provided, however, that the principal amount of Indebtedness secured thereby unless otherwise excepted under the foregoing bullets shall not exceed the principal amount of Indebtedness so secured at the time of such extension, renewal or replacement (plus any premium, fee, cost, expense or charge payable in connection with any such extension, renewal or replacement), and that such extension, renewal or replacement shall be limited to all or a part of the assets (or any replacements therefor) that secured the lien so extended, renewed or replaced, plus improvements and construction on such assets.

Limitation on Sale and Lease-Back Transactions

JCI plc will not, and will not permit any Restricted Subsidiary to, enter into any Sale and Lease-Back Transaction unless:

- JCI plc or such Restricted Subsidiary, at the time of entering into a Sale and Lease-Back Transaction, would be entitled to incur Indebtedness secured by a lien on the Principal Property to be leased in an amount at least equal to the Attributable Debt in respect of such Sale and Lease-Back Transaction, without equally and ratably securing the Notes pursuant to the covenant described under "*Limitations on Liens*" above; or
- the direct or indirect proceeds of the sale of the Principal Property to be leased are at least equal to the fair value of such Principal Property, as determined by JCI plc's Board of Directors in good faith, and an amount equal to the net proceeds from the sale of the assets so leased is applied, within 180 days of the effective date of any such Sale and Lease-Back Transaction, to the purchase or acquisition (or, in the case of real property, commencement of the construction) of assets or to the retirement (other than at maturity or pursuant to a mandatory sinking fund or mandatory redemption or prepayment provision) of the Notes and any other debt securities issued pursuant to the Base Indenture, or of Funded Indebtedness ranking on a parity with or senior to the Notes and any other debt securities issued pursuant to the Base Indenture; provided that there shall be credited to the amount of net proceeds required to be applied pursuant to this provision an amount equal to the sum of (i) the principal amount of the Notes and any other debt securities issued pursuant to the Base Indenture delivered within 180 days of the effective date of such Sale and Lease-Back Transaction to the Trustee for retirement and cancellation and (ii) the principal amount of other Funded Indebtedness voluntarily retired by JCI plc within such 180-day period, excluding retirements of the Notes and any other debt securities issued pursuant to the Base Indenture and other Funded Indebtedness at maturity or pursuant to mandatory sinking fund or mandatory redemption or prepayment provisions.

Merger and Consolidation

JCI plc will not, directly or indirectly, consolidate with or merge with or into, or convey, transfer or lease all or substantially all of its assets in one or a series of related transactions to, any Person, unless:

(1) the resulting, surviving or transferee Person (the "*Successor Company*") will be a corporation, limited liability company, public limited company, limited partnership or other entity organized and existing under the laws of (u) the United States of America, any State thereof or the District of Columbia, (v) Ireland, (w) England and Wales, (x) Jersey, (y) any member state of the European Union as in effect on the date the Notes are first issued or (z) Switzerland; provided that the Successor Company (if not the Company) will expressly assume, by a supplemental indenture, executed and delivered to the Trustee, in form reasonably satisfactory to the Trustee, all the obligations of the Company under the Notes and the Indenture;

(2) immediately after giving effect to such transaction (and treating any Indebtedness which becomes an obligation of the Successor Company or any Restricted Subsidiary as a result of such transaction as having

been incurred by the Successor Company or such Restricted Subsidiary at the time of such transaction), no Default shall have occurred and be continuing; and

(3) the Company shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that such consolidation, merger or transfer and such supplemental indenture (if any) comply with the Indenture.

Notwithstanding the foregoing, (A) any conveyance, transfer or lease of assets between or among the Company and its subsidiaries, including the Co-Issuer, shall not be prohibited under the Indenture and (B) the Company may, directly or indirectly, consolidate with or merge with or into an Affiliate incorporated solely for the purpose of reincorporating the Company in another jurisdiction within the United States of America, any State thereof or the District of Columbia, Ireland, England and Wales, Jersey, any member state of the European Union as in effect on the date the Notes are first issued or Switzerland to realize tax or other benefits.

The Successor Company will succeed to, and be substituted for, and may exercise every right and power of, the Company under the Indenture, and the predecessor issuer, other than in the case of a lease, will be automatically released from all obligations under the Notes and the Indenture, including, without limitation, the obligation to pay the principal of and interest on the Notes.

The Co-Issuer will not, directly or indirectly, consolidate with or merge with or into, or convey, transfer or lease all or substantially all of the Co-Issuer's assets in one or a series of related transactions to, any Person, unless:

(1) the resulting, surviving or transferee Person (the "*Successor Co-Issuer*") will be a corporation, limited liability company, public limited company, limited partnership or other entity organized and existing under the laws of (u) the United States of America, any State thereof or the District of Columbia, (v) Ireland, (w) England and Wales, (x) Jersey, (y) any member state of the European Union as in effect on the date the Notes are first issued or (z) Switzerland; provided that the Successor Co-Issuer (if not the Co-Issuer) will expressly assume, by a supplemental indenture, executed and delivered to the Trustee, in form reasonably satisfactory to the Trustee, all the obligations of the Co-Issuer under the Notes and the Indenture;

(2) immediately after giving effect to such transaction (and treating any Indebtedness which becomes an obligation of the Successor Co-Issuer or any Restricted Subsidiary as a result of such transaction as having been incurred by the Successor Co-Issuer or such Restricted Subsidiary at the time of such transaction), no Default shall have occurred and be continuing; and

(3) the Co-Issuer shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that such consolidation, merger or transfer and such supplemental indenture (if any) comply with the Indenture.

Notwithstanding the foregoing, the Co-Issuer may, directly or indirectly, consolidate with or merge with or into an Affiliate incorporated solely for the purpose of reincorporating the Co-Issuer in another jurisdiction within the United States of America, any State thereof or the District of Columbia, Ireland, England and Wales, Jersey, any member state of the European Union as in effect on the date the Notes are first issued or Switzerland to realize tax or other benefits.

The Successor Co-Issuer will succeed to, and be substituted for, and may exercise every right and power of, the Co-Issuer under the Indenture, and the predecessor issuer, other than in the case of a lease, will be automatically released from all obligations under the Notes and the Indenture, including, without limitation, the obligation to pay the principal of and interest on the Notes.

Reports by JCI plc

So long as any Notes are outstanding, JCI plc shall file with the Trustee, within 15 days after JCI plc is required to file with the SEC, copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the SEC may from time to time by rules and regulations prescribe) that JCI plc may be required to file with the SEC pursuant to Section 13 or Section 15(d) of the Exchange Act. JCI

plc shall be deemed to have complied with the previous sentence to the extent that such information, documents and reports are filed with the SEC via EDGAR, or any successor electronic delivery procedure; provided, however, that the Trustee shall have no obligation whatsoever to determine whether or not such information, documents or reports have been filed pursuant to the EDGAR system (or its successor). Delivery of such reports, information and documents to the Trustee is for informational purposes only and the Trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Issuers' compliance with any of their covenants under the Indenture (as to which the Trustee is entitled to rely exclusively on Officer's Certificates).

The Issuers will furnish to the Trustee on or before 120 days after the end of each fiscal year an Officer's Certificate stating that in the course of the performance by the signers of their duties as Officers of the Issuers, they would normally have knowledge of any Default by the Issuers in the performance or fulfillment or observance of any covenants or agreements contained in the Indenture during the preceding fiscal year, stating whether or not they have knowledge of any such Default and, if so, specifying each such Default of which the signers have knowledge and the nature thereof.

Listing

The Notes are listed on the New York Stock Exchange. We have no obligation to maintain such listing, and we may delist the Notes at any time.

Events of Default

As to the Notes of each series, an "*Event of Default*" means any one of the following events (whatever the reason for such Event of Default and whether it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body):

(1) failure to pay any interest on the Notes of such series when due, which failure continues for 30 days;

(2) failure to pay principal or premium, if any, with respect to the Notes of such series when due;

(3) failure on the part of the Issuers to observe or perform any other covenant, warranty or agreement in the Notes of such series, or in the Indenture as it relates to the Notes of such series, other than a covenant, warranty or agreement, a Default in whose performance or whose breach is specifically dealt with elsewhere in the section of the Indenture governing Events of Default, if the failure continues for 90 days after written notice by the Trustee or the holders of at least 25% (or 30%, solely in the case of the 2035 Notes) in aggregate principal amount of the Notes of such series then outstanding;

(4) an Event of Default with respect to any other series of debt securities issued under the Indenture or an uncured or unwaived failure to pay principal of or interest on any of our other obligations for borrowed money beyond any period of grace with respect thereto if, in either case, (a) the aggregate principal amount thereof is in excess of $300,000,000; and (b) the default in payment is not being contested by us in good faith and by appropriate proceedings; and

(5) specified events of bankruptcy, insolvency, receivership or reorganization.

However, the Event of Default in clause (4) above is subject to the following:

- if such Event of Default with respect to such other series of debt securities issued under the Indenture or such default in payment with respect to such other obligations for borrowed money shall be remedied or cured by the Issuers or waived by the requisite holders of such other series of debt securities or such other obligations for borrowed money, then the Event of Default under the Indenture by reason thereof shall be deemed likewise to have been thereupon remedied, cured or waived without further action upon the part of either the Trustee or any of the holders of Notes of such series; and

- subject to certain duties, responsibilities and rights of the Trustee under the Indenture, the Trustee shall not be charged with knowledge of any such Event of Default with respect to such other series of debt securities issued under the Indenture or such payment default with respect to such other obligations for borrowed money unless written notice thereof shall have been given to a Trust Officer of the Trustee by the Issuers, by the holder or an agent of the holder of such other obligations for borrowed money, by the trustee then acting under any indenture or other instrument under which such payment default with respect to such other obligations for borrowed money shall have occurred, or by the holders of not less than 25% (or 30%, solely in the case of the 2035 Notes) in aggregate principal amount of outstanding debt securities of such other series.

Notice and Declaration of Defaults

The Indenture provides that the Trustee will, within the later of 90 days after the occurrence of a Default with respect to any Notes of a series outstanding which is continuing and which is known to a Trust Officer of the Trustee, or 60 days after such Default is actually known to such Trust Officer of the Trustee or written notice of such Default is received by the Trustee, give to the holders of the Notes of such series notice, by mail as the names and addresses of such holders appear on the security register, or electronically if the Notes of such series are held by any depositary, of all uncured Defaults known to it, including events specified above without grace periods, unless such Defaults shall have been cured before the giving of such notice; provided that, except in the case of Default in the payment of the principal of, premium, if any, or interest on any of the Notes of a series, the Trustee shall be protected in withholding such notice to the holders if the Trustee in good faith determines that withholding of such notice is in the interests of the holders of the Notes of such series.

The Trustee or the holders of not less than 25% (or 30%, solely in the case of the 2035 Notes) in aggregate principal amount of the outstanding Notes of a series may declare the Notes of such series immediately due and payable upon the occurrence of any Event of Default. The holders of a majority in principal amount of the outstanding debt securities of all series issued under the Base Indenture affected by such waiver (voting as one class), on behalf of the holders of all of the debt securities of all such series, may waive any existing Default and its consequences, except a Default in the payment of principal, premium, if any, or interest, including sinking fund payments (provided, however, that only holders of a majority in aggregate principal amount of the debt securities of an applicable series may rescind an acceleration with respect to such series and its consequences, including any related payment default that resulted from such acceleration).

Actions upon Default

In case an Event of Default with respect to the Notes of a series occurs and is continuing, the Indenture provides that the Trustee will be under no obligation to exercise any of its rights or powers under the Indenture at the request, order or direction of any of the holders of Notes of such series unless the applicable holders have offered to the Trustee security and indemnity, satisfactory to the Trustee in its sole discretion, against any loss, liability or expense which may be incurred thereby. The right of a holder of any Note of a series to institute a proceeding with respect to the Notes of such series is subject to conditions precedent including notice and indemnity to the Trustee, but the right of any holder of any Note of such series to receive payment of the principal of, and premium, if any, and interest on their due dates or to institute suit for the enforcement thereof shall not be impaired or affected without the consent of such holder.

The holders of a majority in aggregate principal amount of the Notes of a series outstanding will have the right to direct the time, method and place for conducting any proceeding for any remedy available to the Trustee or exercising any power or trust conferred on the Trustee. Any direction by such holders will be in accordance with law and the provisions of the Indenture. Subject to certain provisions of the Indenture, the Trustee shall have the right to decline to follow any such direction if the Trustee in good faith, by a Trust Officer or Trust Officers of the Trustee, shall determine that the action or proceeding so directed may not be lawfully taken, would involve the Trustee in personal liability, would be materially or unjustly prejudicial to the rights of holders of Notes of such series not joining in such direction or would be unduly prejudicial to the interests of the holders of the debt securities issued under the Base Indenture of all series not joining in the giving of such direction. The Trustee will be under no

obligation to act in accordance with any such direction unless the applicable holders offer the Trustee reasonable security and indemnity, satisfactory to the Trustee in its sole discretion, against costs, expenses and liabilities which may be incurred thereby.

Modification of the Indenture

The Issuers and the Trustee may from time to time and at any time enter into an indenture or indentures supplemental to the Indenture, which shall conform to the provisions of the Trust Indenture Act as then in effect, without the consent of the holders of the Notes, for one or more of the following purposes:

- to cure any ambiguity, defect or inconsistency in the Indenture or the Notes, including making any such changes as are required for the Indenture to comply with the Trust Indenture Act;
- to add an additional obligor on the Notes or to add a guarantor of the Notes, or to evidence the succession of another Person to the Company or the Co-Issuer or any additional obligor or guarantor of the Notes, or successive successions, and the assumption by any Successor Company or Successor Co-Issuer of the covenants, agreements and obligations of such Company, Co-Issuer or such obligor or guarantor, as the case may be, pursuant to provisions in the Indenture concerning consolidation, merger, the sale of assets or successor entities;
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities (*provided,* that the uncertificated Notes are issued in registered form for purposes of Section 163(f) of the Code);
- to add to the covenants of the Issuers for the benefit of the holders of all or any series of Notes (and if such covenants are to be for the benefit of less than all outstanding series of debt securities, stating that such covenants are expressly being included solely for the benefit of such series) or to surrender any of the Issuers' rights or powers under the Indenture;
- to add any additional Events of Default for the benefit of the holders of the Notes of all or any series of Notes (and if such Events of Default are to be applicable to less than all outstanding series, stating that such Events of Default are expressly being included solely to be applicable to such series);
- to change or eliminate any of the provisions of the Indenture, provided that any such change or elimination shall not become effective with respect to any outstanding Notes created prior to the execution of such supplemental indenture which is entitled to the benefit of such provision;
- to secure the Notes;
- to make any other change that does not adversely affect the rights of any holder of the Notes in any material respect;
- to provide for the issuance of and establish the form and terms and conditions of a series of debt securities, to provide which, if any, of the covenants of the Issuers shall apply to such series, to provide which of the events of default set forth in the Base Indenture shall apply to such series, to add a co-issuer, to name one or more guarantors and provide for guarantees of such series, to provide for the terms and conditions upon which the guarantee by any guarantor of such series may be released or terminated, or to define the rights of the holders of such series of debt securities;
- to issue additional Notes to the extent permitted by the Indenture; provided that such additional Notes have the same terms as, and be deemed part of the same series as, the applicable series of Notes to the extent required under the Indenture; or
- to evidence and provide for the acceptance of appointment under the Indenture by a successor Trustee with respect to the Notes and to add to or change any of the provisions of the Indenture as shall be necessary to provide for or facilitate the administration of the trust thereunder by more than one Trustee.

In addition, under the Indenture, with the consent (evidenced as provided in the Indenture) of the holders of not less than a majority in aggregate principal amount of the outstanding debt securities of all series affected by such supplemental indenture or indentures (voting as one class), the Issuers and the Trustee from time to time and at any

time may enter into an indenture or indentures supplemental to the Indenture for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of the Indenture or of any supplemental indenture thereto or of modifying in any manner not covered by the immediately preceding paragraph the rights of the holders of the debt securities of each such series under the Indenture. However, the following changes may only be made with the consent of each holder of outstanding Notes of a series affected:

- extend a fixed maturity of or any installment of principal of any Notes or reduce the principal amount thereof or reduce the amount of principal of any original issue discount security that would be due and payable upon declaration of acceleration of the maturity thereof;
- reduce the rate of or extend the time for payment of interest on any Notes;
- reduce the premium payable upon the redemption of any Notes;
- make the Notes payable in currency other than that stated in the applicable debt security;
- impair the right to institute suit for the enforcement of any payment in respect of the Notes on or after the fixed maturity thereof or, in the case of redemption, on or after the redemption date;
- reduce the obligation to pay additional amounts or indemnity amounts for Taxes;
- modify the subordination provisions applicable to any Note in a manner adverse in any material respect to the holder thereof; or
- reduce the aforesaid percentage of the Notes, the holders of which are required to consent to any such supplemental indenture or indentures.

A supplemental indenture that changes or eliminates any covenant, event of default set forth in the Base Indenture or other provision of the Indenture that has been expressly included solely for the benefit of one or more particular series of debt securities, if any, or which modifies the rights of the holders of debt securities of such series with respect to such covenant, event of default or other provision, shall be deemed not to affect the rights under the Indenture of the holders of debt securities of any other series.

Notwithstanding anything herein or otherwise, the provisions under the Indenture relative to the Issuers' obligation to make any offer to repurchase the Notes as a result of a Change of Control Triggering Event as provided in Section 4.08 of the Base Indenture may be waived or modified with the written consent of the holders of a majority in principal amount of the outstanding debt securities of the applicable series or multiple affected series.

It will not be necessary for the consent of the holders of the Notes of a series to approve the particular form of any proposed supplement, amendment or waiver, but it shall be sufficient if such consent approves the substance thereof.

Information Concerning the Trustee

If an Event of Default with respect to a series of the Notes has occurred and is continuing, the Trustee shall exercise with respect to such series of Notes such of the rights and powers vested in it by the Indenture, and use the same degree of care and skill in its exercise, as a prudent Person would exercise or use under the circumstances in the conduct of such Person's own affairs. If an Event of Default has occurred and is continuing, the Trustee will be under no obligation to exercise any of its rights or powers under the Indenture at the request, order or direction of any holders of Notes of such series, unless such holders shall have offered to the Trustee security and indemnity, satisfactory to it in its sole discretion, against any loss, liability or expense which may be incurred thereby, and then only to the extent required by the terms of the Indenture. No provision of the Indenture shall require the Trustee to expend or risk its own funds or otherwise incur financial liability in the performance of any of its duties under the Indenture or in the exercise of any of its rights or powers.

The Trustee may resign with respect to the Notes by giving a written notice to the Issuers. The holders of a majority in principal amount of the outstanding Notes of a series may remove the Trustee with respect to the Notes of such series by notifying the Issuers and the Trustee in writing. The Issuers may remove the Trustee if:

- the Trustee has or acquires a "conflicting interest," within the meaning of Section 310(b) of the Trust Indenture Act, and fails to comply with the provisions of Section 310(b) of the Trust Indenture Act, or otherwise fails to comply with the eligibility requirements provided in the Indenture and fails to resign after written request therefor by the Issuers in accordance with the Indenture;
- the Trustee is adjudged a bankrupt or an insolvent or an order for relief is entered with respect to the Trustee under any bankruptcy law;
- a custodian or public officer takes charge of the Trustee or its property; or
- the Trustee becomes incapable of acting.

If the Trustee resigns or is removed or if a vacancy exists in the office of Trustee with respect to either series of the Notes for any reason, the Issuers shall promptly appoint a successor Trustee with respect to the Notes of such series.

A resignation or removal of the Trustee and appointment of a successor Trustee shall become effective only upon the successor Trustee's acceptance of the appointment as provided in the Indenture.

The Trustee and its Affiliates have engaged, currently are engaged, and may in the future engage in financial or other transactions with the Issuers and our Affiliates in the ordinary course of their respective businesses.

Payment and Paying Agents

The Issuers will pay the principal of, premium, if any, and interest on the Notes at any office of ours or any agency designated by us.

The initial paying agent for the Euro Notes is Elavon Financial Services DAC. For so long as the Euro Notes are in global form, payment of principal and interest on, and any other amount due in respect of, the Euro Notes will be made by or to the order of the paying agent on behalf of the common depositary or its nominee as the registered holder thereof. After payment by the Issuers or the paying agent of interest, principal or other amounts in respect of the Euro Notes to the common depositary (or its nominee), the Issuers will not have responsibility or liability for such amounts to Euroclear or Clearstream, or to holders or beneficial owners of book-entry interests in the Euro Notes. The initial paying agent for the USD Notes is the Trustee.

In addition, the Issuers maintain a transfer agent and a security registrar for the Notes. The initial transfer agent and security registrar is the Trustee.

The security registrar as to the Notes maintains a register reflecting ownership of the Notes outstanding from time to time, if any, and together with the applicable transfer agent, will make payments on and facilitate transfers of the Notes on behalf of the Issuers. No service charge will be made for any registration of transfer or exchange of Notes. However, we may require holders to pay any transfer taxes or other similar governmental charges payable in connection with any such transfer or exchange.

The Issuers may change or appoint any paying agent, security registrar or transfer agent with respect to the Notes without prior notice to the holders of the Notes. The Issuers or any of their subsidiaries may act as paying agent, transfer agent or security registrar in respect of any Notes.

Governing Law

The Indenture and any Notes issued thereunder shall be deemed to be a contract made under the internal laws of the State of New York, and for all purposes shall be construed in accordance with the laws of the State of New York without regard to conflicts of laws principles that would require the application of any other law. The Indenture is subject to the provisions of the Trust Indenture Act that are required to be part of the Indenture and shall, to the extent applicable, be governed by such provisions.

For the avoidance of doubt, articles 470-1 to 470-19 of the Luxembourg law of 10 August 1915 relating to commercial companies, as amended, do not apply to the Notes.

Satisfaction and Discharge of the Indenture

The Indenture shall cease to be of further effect with respect to the Notes of either series if, at any time:

(a) The Issuers have delivered or have caused to be delivered to the Trustee for cancellation all Notes of such series theretofore authenticated, other than any Notes of such series that have been destroyed, lost or stolen and that have been replaced or paid as provided in the Indenture, and Notes of such series for whose payment funds or governmental obligations have theretofore been deposited in trust or segregated and held in trust by the Issuers and thereupon repaid to the Issuers or discharged from such trust, as provided in the Indenture; or

(b) all such Notes of such series not theretofore delivered to the Trustee for cancellation have become due and payable or are by their terms to become due and payable within one year or are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption, and the Issuers shall irrevocably deposit or cause to be deposited with the Trustee as trust funds the entire amount, in funds or governmental obligations, or a combination thereof, sufficient to pay at maturity or upon redemption all Notes of such series not theretofore delivered to the Trustee for cancellation, including principal, premium, if any, and interest due or to become due on such date of maturity or redemption date, as the case may be, and if in either case the Issuers shall also pay or cause to be paid all other sums payable under the Indenture with respect to such Notes by the Issuers.

With respect to any redemption of any Notes that requires the payment of any premium, the amount deposited pursuant to the above paragraph shall be sufficient for purposes of the Indenture to the extent that an amount is so deposited with the Trustee or paying agent, as applicable, equal to such premium on such Notes calculated as of the date of the notice of redemption, with any deficit on the redemption date only required to be deposited with the Trustee or paying agent, as applicable, on or prior to the redemption date.

Notwithstanding the above, the Issuers may not be discharged from the following obligations, which will survive until the date of maturity or the redemption date, as the case may be, for the Notes:

- to make any interest or principal payments that may be required with respect to the Notes;
- to register the transfer or exchange of the Notes;
- to execute and authenticate the Notes;
- to replace stolen, lost or mutilated Notes;
- to maintain an office or agency with respect to the Notes;
- to maintain paying agencies with respect to the Notes; and
- to appoint new trustees with respect to the Notes as required by the Indenture.

The Issuers also may not be discharged from the following obligations, which will survive the defeasance and discharge of the Notes:

- to compensate and reimburse the Trustee in accordance with the terms of the Indenture;
- to receive unclaimed payments held by the Trustee for at least one year after the date upon which the principal, if any, or interest on the Notes shall have respectively come due and payable and remit those payments to the holders thereof if required; and
- to withhold or deduct taxes as provided in the Indenture.

For purposes of this description the term "*governmental obligations*" shall have the following meaning with respect to the USD Notes: securities that are (i) direct obligations of the United States of America for the payment of

which its full faith and credit is pledged or (ii) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America, the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America that, in either case, are not callable or redeemable at the option of the issuer thereof, and shall also include a depositary receipt issued by a bank (as defined in Section 3(a)(2) of the Securities Act) as custodian with respect to any such Governmental Obligation or a specific payment of principal of or interest on any such Governmental Obligation held by such custodian for the account of the holder of such depositary receipt; provided, however, that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depositary receipt from any amount received by the custodian in respect of the Governmental Obligation or the specific payment of principal of or interest on the Governmental Obligation evidenced by such depositary receipt.

For purposes of this description the term "*governmental obligations*" shall have the following meaning with respect to the Euro Notes: (x) any security which is (i) a direct obligation of the German government or (ii) an obligation of a Person controlled or supervised by and acting as an agency or instrumentality of the German government the payment of which is fully and unconditionally guaranteed by the German government, the central bank of the German government or a governmental agency of the German government, which, in either case (x)(i) or (ii), is not callable or redeemable at the option of the issuer thereof, and (y) certificates, depositary receipts or other instruments which evidence a direct ownership interest in obligations described in clause (x)(i) or (x)(ii) above or in any specific principal or interest payments due in respect thereof.

Defeasance and Discharge of Obligations

The Issuers' obligations with respect to the Notes will be discharged upon compliance with the conditions under the caption "*Covenant Defeasance*"; provided that the Issuers may not be discharged from the following obligations, which will survive until such date of maturity or the redemption date, as the case may be, for the Notes:

- to make any interest or principal payments that may be required with respect to the Notes;
- to register the transfer or exchange of the Notes;
- to execute and authenticate the Notes;
- to replace stolen, lost or mutilated Notes;
- to maintain an office or agency with respect to the Notes;
- to maintain paying agencies with respect to the Notes; and
- to appoint new trustees with respect to the Notes as required by the Indenture.

The Issuers also may not be discharged from the following obligations, which will survive the satisfaction and discharge of the Notes:

- to compensate and reimburse the Trustee in accordance with the terms of the Indenture;
- to receive unclaimed payments held by the Trustee for at least one year after the date upon which the principal, if any, or interest on the Notes shall have respectively come due and payable and remit those payments to the holders thereof if required; and
- to withhold or deduct taxes as provided in the Indenture.

Covenant Defeasance

Upon compliance with specified conditions, the Issuers may, at their option and at any time, by written notice executed by an Officer delivered to the Trustee, elect to have their obligations, to the extent applicable, under the covenants described under "*—Offer to Repurchase Upon Change of Control Triggering Event*" and "*—Certain Covenants*" above, and the operation of the Event of Default described in clause (3) of the first paragraph under the caption "*—Events of Default*" above, discharged with respect to all outstanding Notes of a series and the Indenture insofar as such Notes are concerned. For this purpose, such covenant defeasance means that, with respect to the outstanding Notes of a series, the Issuers may omit to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such covenant, whether directly or indirectly, by reason of any reference in the Indenture to any such covenant or by reason of reference in any such covenant to any other provision of the Indenture or in any other document and such omission to comply shall not constitute a Default or an Event of Default relating to the Notes of such series. These conditions are:

- the Issuers irrevocably deposit in trust with the Trustee or, at the option of the Trustee, with a trustee satisfactory to the Trustee and the Issuers, as the case may be, under the terms of an irrevocable trust agreement in form and substance satisfactory to the Trustee, funds or governmental obligations or a combination thereof sufficient to pay principal of, premium, if any, and interest on the outstanding Notes of such series to maturity or redemption, as the case may be, and to pay all other amounts payable by it under the Indenture (provided that, with respect to any redemption of any Notes of a series that requires the payment of any premium, the amount deposited pursuant to this paragraph shall be sufficient for purposes of the Indenture to the extent that an amount is so deposited with the Trustee or paying agent, as applicable, equal to such premium on such Notes calculated as of the date of the notice of redemption, with any deficit on the redemption date only required to be deposited with the Trustee or paying agent, as applicable, on or prior to the redemption date), provided that (A) the trustee of the irrevocable trust shall have been irrevocably instructed to pay such funds or the proceeds of such governmental obligations to the Trustee and (B) the Trustee shall have been irrevocably instructed to apply such funds or the proceeds of such governmental obligations to the payment of such principal, premium, if any, and interest with respect to the Notes of such series;
- the Issuers deliver to the Trustee an Officer's Certificate stating that all conditions precedent specified herein relating to defeasance or covenant defeasance, as the case may be, have been complied with, and an Opinion of Counsel to the same effect;
- no Event of Default shall have occurred and be continuing, and no event which with notice or lapse of time or both would become such an Event of Default shall have occurred and be continuing, on the date of such deposit; and
- the Issuers shall have delivered to the Trustee an Opinion of Counsel (which, in the case of a defeasance, must be based on a change in law) or a ruling received from the U.S. Internal Revenue Service to the effect that the beneficial owners of the Notes of a series will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the Issuers' exercise of such defeasance or covenant defeasance and will be subject to U.S. Federal income tax in the same amount and in the same manner and at the same times as would have been the case if such election had not been exercised.

Definitions

As used in the Notes and this "*Description of JCI plc and TFSCA Notes*," the following defined terms shall have the following meanings with respect to the Notes:

"*Affiliate*," with respect to any specified Person, means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, "*control*" when used with respect to any specified Person means the power to direct the management and policies of such Person, directly or indirectly, whether through ownership of voting securities, by contract or otherwise; and the terms "*controlling*" and "*controlled*" have meanings correlative to the foregoing.

"*Attributable Debt*," in connection with a Sale and Lease-Back Transaction, as of any particular time, means the aggregate of present values (discounted at a rate that, at the inception of the lease, represents the effective

interest rate that the lessee would have incurred to borrow over a similar term the funds necessary to purchase the leased assets) of the obligations of JCI plc or any Restricted Subsidiary for net rental payments during the remaining term of the applicable lease, including any period for which such lease has been extended or, at the option of the lessor, may be extended. The term "*net rental payments*" under any lease of any period shall mean the sum of the rental and other payments required to be paid in such period by the lessee thereunder, not including any amounts required to be paid by such lessee, whether or not designated as rental or additional rental, on account of maintenance and repairs, reconstruction, insurance, taxes, assessments, water rates or similar charges required to be paid by such lessee thereunder or any amounts required to be paid by such lessee thereunder contingent upon the amount of sales, maintenance and repairs, reconstruction, insurance, taxes, assessments, water rates or similar charges.

"*Board of Directors*" means the Board of Directors of the Company or any duly authorized committee of such Board of Directors.

"*business day*" means any day other than a Saturday or Sunday, (1) that is not a day on which banking institutions in the City of New York or London are authorized or obligated by law, executive order or regulation to close and (2) on which the Trans-European Automated Real-time Gross Settlement Express Transfer System (the TARGET2 system), or any successor thereto, is open.

"*Change of Control*" means the occurrence of any of the following after the date of issuance of the Notes:

(1) the direct or indirect sale, lease, transfer, conveyance or other disposition (other than by way of merger or consolidation), in one or a series of related transactions, of all or substantially all of the Company's assets and the assets of its subsidiaries taken as a whole to any "person" or "group" (as those terms are used in Section 13(d)(3) of the Exchange Act) other than to the Company or one of its subsidiaries, other than any such transaction or series of related transactions where holders of our Voting Stock outstanding immediately prior thereto hold Voting Stock of the transferee Person representing a majority of the voting power of the transferee Person's Voting Stock immediately after giving effect thereto;

(2) the consummation of any transaction (including, without limitation, any merger or consolidation) the result of which is that any "person" or "group" (as those terms are used in Section 13(d)(3) of the Exchange Act) (other than us or one of our subsidiaries) becomes the "beneficial owner" (as defined in Rules 13d-3 and 13d-5 under the Exchange Act), directly or indirectly, of the Company's Voting Stock representing a majority of the voting power of the Company's outstanding Voting Stock;

(3) the Company consolidates with, or merges with or into, any Person, or any Person consolidates with, or merges with or into, the Company, in any such event pursuant to a transaction in which any of the Company's outstanding Voting Stock or Voting Stock of such other Person is converted into or exchanged for cash, securities or other property, other than any such transaction where the Company's Voting Stock outstanding immediately prior to such transaction constitutes, or is converted into or exchanged for, Voting Stock representing a majority of the voting power of the Voting Stock of the surviving Person (or its parent) immediately after giving effect to such transaction; or

(4) the adoption by the Company's shareholders of a plan relating to our liquidation or dissolution.

Notwithstanding the foregoing, a transaction will not be deemed to involve a change of control under clause (2) above if (1) the Company becomes a direct or indirect wholly-owned subsidiary of a holding company or other Person and (2)(A) the direct or indirect holders of the Voting Stock of such holding company or other Person immediately following that transaction are substantially the same as the holders of the Company's Voting Stock immediately prior to that transaction or (B) immediately following that transaction no person (as that term is used in Section 13(d)(3) of the Exchange Act) (other than a holding company or other Person satisfying the requirements of this sentence) is the beneficial owner, directly or indirectly, of more than 50% of the Voting Stock of such holding company or other Person.

"*Change of Control Triggering Event*" means, with respect to the Notes of a series, such Notes cease to be rated Investment Grade by each of the Rating Agencies on any date during the period (the "*Trigger Period*") commencing 60 days prior to the first public announcement by us of any Change of Control (or pending Change of Control) and ending 60 days following consummation of such Change of Control (which Trigger Period will be

extended following consummation of a Change of Control for so long as any of the Rating Agencies has publicly announced that it is considering a possible ratings downgrade or withdrawal). However, a Change of Control Triggering Event otherwise arising by virtue of a particular reduction in, or withdrawal of, rating shall not be deemed to have occurred in respect of a particular Change of Control (and thus shall not be deemed a Change of Control Triggering Event for purposes of the definition of Change of Control Triggering Event) if the Rating Agencies making the reduction in, or withdrawal of, rating to which this definition would otherwise apply do not announce or publicly confirm or inform the Trustee in writing at our request that the reduction or withdrawal was the result, in whole or in part, of any event or circumstance comprised of or arising as a result of, or in respect of, the applicable Change of Control (whether or not the applicable Change of Control shall have occurred at the time of the Change of Control Triggering Event). If a Rating Agency is not providing a rating for the Notes at the commencement of any Trigger Period, the Notes will be deemed to have ceased to be rated Investment Grade by such Rating Agency during that Trigger Period.

Notwithstanding the foregoing, no Change of Control Triggering Event will be deemed to have occurred in connection with any particular Change of Control unless and until such Change of Control has actually been consummated.

"*Consolidated Net Worth*" at any date means total assets less total liabilities, in each case appearing on the most recently prepared consolidated balance sheet of the Company and its subsidiaries as of the end of a fiscal quarter of the Company, prepared in accordance with United States generally accepted accounting principles as in effect on the date of the consolidated balance sheet.

"*Consolidated Tangible Assets*" at any date means total assets less all intangible assets appearing on the most recently prepared consolidated balance sheet of the Company and its subsidiaries as of the end of a fiscal quarter of the Company, prepared in accordance with United States generally accepted accounting principles as in effect on the date of the consolidated balance sheet.

"*Default*" means any event, act or condition that with notice or lapse of time, or both, would constitute an Event of Default.

"*Funded Indebtedness*" means any Indebtedness of the Company or any consolidated subsidiary maturing by its terms more than one year from the date of the determination thereof, including any Indebtedness renewable or extendable at the option of the obligor to a date later than one year from the date of the determination thereof.

"*Global Security*" means a security executed by the Issuers and delivered by the Trustee to the depositary or pursuant to the depositary's instruction, all in accordance with the Indenture, which shall be registered in the name of the depositary or its nominee.

"*governmental obligations*" shall have the meaning ascribed to such term in the section "Satisfaction and Discharge of the Indenture" of this description.

"*Indebtedness*" means, without duplication, the principal amount (such amount being the face amount or, with respect to original issue discount bonds or zero coupon notes, bonds or debentures or similar securities, determined based on the accreted amount as of the date of the most recently prepared consolidated balance sheet of the Company and its subsidiaries as of the end of a fiscal quarter of the Company prepared in accordance with United States generally accepted accounting principles as in effect on the date of such consolidated balance sheet) of (i) all obligations for borrowed money, (ii) all obligations evidenced by debentures, notes or other similar instruments, (iii) all obligations in respect of letters of credit or bankers acceptances or similar instruments or reimbursement obligations with respect thereto (such instruments to constitute Indebtedness only to the extent that the outstanding reimbursement obligations in respect thereof are collateralized by cash or cash equivalents reflected as assets on a balance sheet prepared in accordance with United States generally accepted accounting principles), (iv) all obligations to pay the deferred purchase price of property or services, except (A) trade and similar accounts payable and accrued expenses, (B) employee compensation, deferred compensation and pension obligations, and other obligations arising from employee benefit programs and agreements or other similar employment arrangements, (C) obligations in respect of customer advances received and (D) obligations in connection with earnout and

holdback agreements, in each case in the ordinary course of business, (v) all obligations as lessee to the extent capitalized in accordance with United States generally accepted accounting principles and (vi) all Indebtedness of others consolidated in such balance sheet that is guaranteed by JCI plc or any of its subsidiaries or for which JCI plc or any of its subsidiaries is legally responsible or liable (whether by agreement to purchase indebtedness of, or to supply funds or to invest in, others).

"*Intangible assets*" means the amount, if any, stated under the headings "*Goodwill*" and "*Other intangible assets, net*" or under any other heading of intangible assets separately listed, in each case on the face of the most recently prepared consolidated balance sheet of the Company and its subsidiaries as of the end of a fiscal quarter of JCI plc, prepared in accordance with United States generally accepted accounting principles as in effect on the date of the consolidated balance sheet.

"*Investment Grade*" means a rating of Baa3 or better by Moody's (or its equivalent under any successor rating category of Moody's) and a rating of BBB– or better by S&P (or its equivalent under any successor rating category of S&P), and the equivalent investment grade credit rating from any replacement rating agency or rating agencies selected by us under the circumstances permitting us to select a replacement rating agency and in the manner for selecting a replacement rating agency, in each case as set forth in the definition of "*Rating Agency*."

"*Moody's*" means Moody's Investors Service, Inc., a subsidiary of Moody's Corporation, and its successors.
"*Officer*" means any manager, director, any managing director, the chairman or any vice chairman of the Board of Directors or a board of managers, as applicable, the chief executive officer, the president, the chief financial officer, any vice president, the treasurer, any assistant treasurer, the secretary or any assistant secretary, or any equivalent of the foregoing, of the Company or the Co-Issuer, as applicable, or any Person duly authorized to act for or on behalf of the Company or the Co-Issuer, as applicable.

"*Officer's Certificate*" means a certificate, signed by any Officer of JCI plc and/or the Co-Issuer, as the case may be, that is delivered to the Trustee in accordance with the terms of the Indenture.

"*Opinion of Counsel*" means a written opinion acceptable to the Trustee from legal counsel licensed in any State of the United States of America and applying the laws of such State. The counsel may be an employee of or counsel to either Issuer.

"*Person*" means any individual, corporation, partnership, limited liability company, business trust, association, joint-stock company, joint venture, trust, incorporated or unincorporated organization or government or any agency or political subdivision thereof.

"*Principal Property*" means any manufacturing, processing or assembly plant or any warehouse or distribution facility, or any office or parcel of real property (including fixtures but excluding leases and other contract rights which might otherwise be deemed real property) of JCI plc or any of its subsidiaries that is used by any U.S. Subsidiary of JCI plc and is located in the United States of America (excluding its territories and possessions and Puerto Rico) and (A) is owned by JCI plc or any subsidiary of JCI plc on the date the Notes are issued, (B) the initial construction of which has been completed after the date on which the Notes are issued, or (C) is acquired after the date on which the Notes are issued, in each case, other than any such plants, facilities, warehouses or portions thereof, that in the opinion of the Board of Directors of JCI plc, are not collectively of material importance to the total business conducted by JCI plc and its subsidiaries as an entirety, or that have a net book value (excluding any capitalized interest expense), on the date the Notes are issued in the case of clause (A) of this definition, on the date of completion of the initial construction in the case of clause (B) of this definition or on the date of acquisition in the case of clause (C) of this definition, of less than 2.0% of Consolidated Tangible Assets on the consolidated balance sheet of JCI plc and its subsidiaries as of the applicable date.

"*Rating Agency*" means each of Moody's and S&P; provided, that if any of Moody's or S&P ceases to provide rating services to issuers or investors, we may appoint another "nationally recognized statistical rating organization" as defined under Section 3(a)(62) of the Exchange Act as a replacement for such Rating Agency; provided, that we shall give notice of such appointment to the Trustee.

"*Restricted Subsidiary*" means any subsidiary of JCI plc that owns or leases a Principal Property.

"*Sale and Lease-Back Transaction*" means an arrangement with any Person providing for the leasing by JCI plc or a Restricted Subsidiary of any Principal Property whereby such Principal Property has been or is to be sold or transferred by JCI plc or a Restricted Subsidiary to such Person other than JCI plc or any of its subsidiaries; provided, however, that the foregoing shall not apply to any such arrangement involving a lease for a term, including renewal rights, for not more than three years.

"*S&P*" means Standard & Poor's Global Ratings, a division of S&P Global Inc., and its successors.

"*Trust Officer*" means any officer within the corporate trust department of the Trustee, including any vice president, senior associate, associate, trust officer or any other officer of the Trustee who customarily performs functions similar to those performed by the Persons who at the time shall be such officers, respectively, or to whom any corporate trust matter is referred because of such Person's knowledge of and familiarity with the particular subject and who shall have direct responsibility for the administration of the Indenture.

"*U.S. Subsidiary*" means any subsidiary of JCI plc that was formed under the laws of the United States of America, any State thereof or the District of Columbia (but not any territory thereof).

"*Voting Stock*" of any specified Person as of any date means the capital stock of such Person that is at the time entitled to vote generally in the election of the board of directors of such Person.

Exhibit 10.1

EXECUTION COPY

US$2,500,000,000

CREDIT AGREEMENT

dated as of

December 11, 2023

among

Johnson Controls International plc,
as the Principal Borrower and as Parent,

The Eligible Subsidiaries Referred to Herein,

The Lenders Parties Hereto

and

JPMorgan Chase Bank, N.A.,
as Administrative Agent

JPMorgan Chase Bank, N.A.,
BofA Securities, Inc.,
Barclays Bank PLC
Citibank, N.A.
and
Morgan Stanley MUFG Loan Partners, LLC,
Joint Lead Arrangers and Joint Bookrunners

Bank of America, N.A.,
Syndication Agent

ING Capital LLC,
Sustainability Structuring Agent

Barclays Bank PLC,
Citibank, N.A.
and
Morgan Stanley MUFG Loan Partners, LLC,
Documentation Agents

TABLE OF CONTENTS

COMMITMENT SCHEDULE

PRICING SCHEDULE

SCHEDULE 2.19 - Letter of Credit Fronting Sublimit
SCHEDULE 5.08 - Existing Liens

EXHIBIT A - Form of Note
EXHIBIT B - Form of Increasing Lender Supplement
EXHIBIT C - Form of New Lender Supplement
EXHIBIT D - Form of Election to Participate
EXHIBIT E - Form of Election to Terminate
EXHIBIT F - Form of Qualifying Lender Confirmation
EXHIBIT G - Form of Assignment and Assumption Agreement
EXHIBIT H - Form of Extension Agreement
EXHIBIT I - Form of Pricing Certificate

CREDIT AGREEMENT dated as of December 11, 2023 among JOHNSON CONTROLS INTERNATIONAL PLC, incorporated under the laws of Ireland with registered number 543654, as Principal Borrower and as Parent, the ELIGIBLE SUBSIDIARIES referred to herein, the LENDERS from time to time parties hereto and JPMORGAN CHASE BANK, N.A., as Administrative Agent.

The parties hereto agree as follows:

ARTICLE 1.
DEFINITIONS

Section 1.01 *Definitions.* The following terms, as used herein, have the following meanings:

"**Acquisition-Related Incremental Term Loans**" has the meaning set forth in Section 2.20.

"**Act**" has the meaning set forth in Section 11.12.

"**Adjusted Daily Simple RFR**" means, (i) with respect to any RFR Borrowing denominated in Sterling, an interest rate per annum equal to the Daily Simple RFR for Sterling and (ii) with respect to any RFR Borrowing denominated in Dollars, an interest rate per annum equal to (a) the Daily Simple RFR for Dollars, plus (b) 0.10%; provided that if the Adjusted Daily Simple RFR as so determined would be less than the Floor, such rate shall be deemed to be equal to the Floor for the purposes of this Agreement.

"**Additional Letter of Credit**" means a letter of credit issued hereunder by an Issuing Lender on or after the Closing Date.

"**Adjusted EURIBO Rate**" means, with respect to any Term Benchmark Borrowing denominated in Euro for any Interest Period, an interest rate per annum equal to (a) the EURIBO Rate for such Interest Period multiplied by (b) the Statutory Reserve Rate; provided that if the Adjusted EURIBO Rate as so determined would be less than the Floor, such rate shall be deemed to be equal to the Floor for the purposes of this Agreement.

"**Adjusted Term SOFR Rate**" means, with respect to any Term Benchmark Borrowing denominated in Dollars for any Interest Period, an interest rate per annum equal to (a) the Term SOFR Rate for such Interest Period, plus (b) 0.10%; provided that if the Adjusted Term SOFR Rate as so determined would be less than the Floor, such rate shall be deemed to be equal to the Floor for the purposes of this Agreement.

"**Administrative Agent**" means JPMorgan Chase Bank, N.A. (including its branches and affiliates, as applicable) in its capacity as administrative agent for the Lenders hereunder, and its successors in such capacity.

"**Administrative Questionnaire**" means, with respect to each Lender, an administrative questionnaire in the form prepared by the Administrative Agent and submitted to the Administrative Agent (with a copy to the Principal Borrower) duly completed by such Lender.

"**Affected Financial Institution**" has the meaning set forth in Section 11.14.

"**Affiliate**" has the meaning set forth in the definition of "Lender Affiliate".

"**Agent**" means any of the Administrative Agent, the Syndication Agent, the Documentation Agents or the Sustainability Structuring Agent.

"**Agent-Related Person**" has the meaning set forth in Section 11.03(d).

"**Agreed Currency**" means Dollars and each Alternative Currency.

"**Agreement**" means this Credit Agreement (including, for the avoidance of doubt, all Schedules and Exhibits hereto), as amended, amended and restated, supplemented, waived or otherwise modified from time to time.

"**Alternative Currency**" means (i) Euro, (ii) Sterling and (iii) any other currency that is (A) a lawful currency (other than Dollars) that is readily available and freely transferable and convertible into Dollars and (B) agreed to by the Administrative Agent and each of the Lenders.

"**Alternative Currency Lending Office**" means, as to each Lender, its office, branch or affiliate located at its address set forth in its Administrative Questionnaire (or identified in its Administrative Questionnaire as its Alternative Currency Lending Office) or such other office, branch or affiliate of such Lender as it may hereafter designate as its Alternative Currency Lending Office by notice to the Principal Borrower and the Administrative Agent; provided that any Lender may from time to time by notice to the Principal Borrower and the Administrative Agent designate separate Alternative Currency Lending Offices for its Loans in different currencies and/or to different Borrowers, in which case all references herein to the Alternative Currency Lending Office of such Lender shall be deemed to refer to any or all of such offices, as the context may require.

"**Alternative Currency Loan**" means a Loan that is made in an Alternative Currency.

"**Ancillary Document**" has the meaning set forth in Section 11.09.

"**Anti-Corruption Laws**" means all laws, rules, and regulations of any jurisdiction applicable to the Parent or any of its Subsidiaries from time to time concerning or relating to bribery or corruption.

"**Applicable Lending Office**" means, with respect to any Lender, (i) in the case of its Base Rate Loans, its Domestic Lending Office and (ii) in the case of its Term Benchmark Loans and its RFR Loans, its Alternative Currency Lending Office.

"**Applicable Margins**" has the meaning set forth in the Pricing Schedule.

"**Applicable Parties**" has the meaning set forth in Section 7.11(c).

"**Applicable Percentage**" means, with respect to any Lender, the percentage of the total Commitments represented by such Lender's Commitment; provided that in the case of Section 2.21 when a Defaulting Lender shall exist, "Applicable Percentage" shall mean the percentage of the total Commitments (disregarding any Defaulting Lender's Commitment) represented by such Lender's Commitment. If the Commitments have terminated or expired, the Applicable Percentages shall be determined based upon the Commitments most recently in effect, giving effect to any assignments and to any Lender's status as a Defaulting Lender at the time of determination.

"**Applicable Rate**" means, for any day, with respect to any Base Rate Loan, Term Benchmark Loan or RFR Loan, or with respect to the facility fees payable hereunder, as the case may be, the applicable Base Rate Margin, Term Benchmark Margin, RFR Margin or the Facility Fee Rate, respectively, in each case as determined for such day in accordance with the Pricing Schedule.

"**Approved Electronic Platform**" has the meaning set forth in Section 7.11(a).

"**Approved Jurisdiction**" means (i) Ireland, (ii) Luxembourg, (iii) the United States and (iv) any other jurisdiction approved for this purpose by each of the Lenders.

"**Assignee**" has the meaning set forth in Section 11.06(c).

"**Available Tenor**" means, as of any date of determination and with respect to the then-current Benchmark for any Agreed Currency, as applicable, any tenor for such Benchmark (or component thereof) or payment period for interest calculated with reference to such Benchmark (or component thereof), as applicable, that is or may be used for determining the length of an Interest Period for any term rate or otherwise, for determining any frequency of making payments of interest calculated pursuant to this Agreement as of such date and not including, for the avoidance of doubt, any tenor for such Benchmark that is then-removed from the definition of "Interest Period" pursuant to clause (e) of Section 8.01.

"**Bail-In Action**" has the meaning set forth in Section 11.14.

"**Bail-In Legislation**" has the meaning set forth in Section 11.14.

"**Bail-In Lender**" has the meaning set forth in Section 8.06(b).

"**Bankruptcy Code**" means Title 11 of the United States Code entitled "Bankruptcy", as now and hereafter in effect, or any successor statute.

"**Bankruptcy Event**" means, with respect to any Person, such Person becomes the subject of a voluntary or involuntary bankruptcy or insolvency proceeding, or has had a receiver, conservator, trustee, administrator, custodian, assignee for the benefit of creditors or similar Person charged with the reorganization or liquidation of its business appointed for it, or, in the good faith determination of the Administrative Agent, has taken any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any such proceeding or appointment or has had any order for relief in such proceeding entered in respect thereof, provided that a Bankruptcy Event shall not result solely by virtue of any ownership interest, or the acquisition of any ownership interest, in such Person by a Governmental Authority or instrumentality thereof, provided, further, that such ownership interest does not result in or provide such Person with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Person (or such Governmental Authority or instrumentality) to reject, repudiate, disavow or disaffirm any contracts or agreements made by such Person.

"**Base Rate**" means, for any day, a rate per annum equal to the highest of (a) the Prime Rate in effect on such day, (b) the NYFRB Rate in effect on such day plus ½ of 1% and (c) the Adjusted Term SOFR Rate for a one month Interest Period as published two U.S. Government Securities Business Days prior to such day (or if such day is not a U.S. Government Securities Business Day, the immediately preceding U.S. Government Securities Business Day) plus 1%; provided that for the purpose of this definition, the Adjusted Term SOFR Rate for any day shall be based on the Term SOFR Reference Rate at approximately 5:00 a.m., Chicago time, on such day (or any amended publication time for the Term SOFR Reference Rate, as specified by the CME Term SOFR Administrator in the Term SOFR Reference Rate methodology). Any change in the Base Rate due to a change in the Prime Rate, the NYFRB Rate or the Adjusted Term SOFR Rate shall be effective from and including the effective date of such change in the Prime Rate, the NYFRB Rate or the Adjusted Term SOFR Rate, respectively. If the Base Rate is being used as an alternate rate of interest pursuant to Section 8.01 (for the avoidance of doubt, only until the Benchmark Replacement has been determined pursuant to Section 8.01(b)), then the Base Rate shall be the greater of clauses (a) and (b) above and shall be determined without reference to clause (c) above. For the avoidance of doubt, if the Base Rate as determined pursuant to the foregoing would be less than 1.00% per annum, such rate shall be deemed to be 1.00% per annum for purposes of this Agreement.

"**Base Rate Loan**" means a Loan which bears interest at the Base Rate pursuant to the applicable Notice of Borrowing or Notice of Interest Rate Election or the provisions of Section 2.06(a) or Article 8.

"**Base Rate Margin**" means, at any date, the applicable rate per annum determined in accordance with the Pricing Schedule.

"**Benchmark**" means, initially, with respect to any (i) RFR Loan in any Agreed Currency, the applicable Relevant Rate for such Agreed Currency or (ii) Term Benchmark Loan in any Agreed Currency, the Relevant Rate for such Agreed Currency; provided that if a Benchmark Transition Event, and the related Benchmark Replacement Date have occurred with respect to the applicable Relevant Rate or the then-current Benchmark for such Agreed Currency, then "Benchmark" means the applicable Benchmark Replacement to the extent that such Benchmark Replacement has replaced such prior benchmark rate pursuant to clause (b) of Section 8.01.

"**Benchmark Replacement**" means, for any Available Tenor, the first alternative set forth in the order below that can be determined by the Administrative Agent for the applicable Benchmark Replacement Date; provided that, in the case of any Loan denominated in an Alternative Currency, "Benchmark Replacement" shall mean the alternative set forth in (2) below:

(1) in the case of any Loan denominated in Dollars, the Adjusted Daily Simple RFR for RFR Borrowings denominated in Dollars; or

(2) the sum of: (a) the alternate benchmark rate that has been selected by the Administrative Agent and the Principal Borrower as the replacement for the then-current Benchmark for the applicable Corresponding Tenor giving due consideration to (i) any selection or recommendation of a replacement benchmark rate or the mechanism for determining such a rate by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a benchmark rate as a replacement for the then-current Benchmark for syndicated credit facilities denominated in the applicable Agreed Currency at such time in the United States and (b) the related Benchmark Replacement Adjustment;

provided that, if the Benchmark Replacement as determined pursuant to clause (1) or clause (2) above would be less than the Floor, the Benchmark Replacement will be deemed to be the Floor for the purposes of this Agreement and the other Loan Documents.

"**Benchmark Replacement Adjustment**" means, with respect to any replacement of the then current Benchmark with an Unadjusted Benchmark Replacement for any applicable Interest Period and Available Tenor for any setting of such Unadjusted Benchmark Replacement, the spread adjustment, or method for calculating or determining such spread adjustment (which may be a positive or negative value or zero), that has been selected by the Administrative Agent and the Principal Borrower for the applicable Corresponding Tenor giving due consideration to (i) any selection or recommendation of a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of such Benchmark with the applicable Unadjusted Benchmark Replacement by the Relevant Governmental Body on the applicable Benchmark Replacement Date and/or (ii) any evolving or then prevailing market convention for determining a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of such Benchmark with the applicable Unadjusted Benchmark Replacement for syndicated credit facilities denominated in the applicable Agreed Currency at such time.

"**Benchmark Replacement Conforming Changes**" means, with respect to any Benchmark Replacement and/or any Term Benchmark Loan denominated in Dollars, any technical, administrative or operational changes (including changes to the definition of "Base Rate," the definition of "Business Day," the definition of "U.S. Government Securities Business Day," the definition of "RFR Business Day," the

definition of "Interest Period," timing and frequency of determining rates and making payments of interest, timing of borrowing requests or prepayment, conversion or continuation notices, length of lookback periods, the applicability of breakage provisions, and other technical, administrative or operational matters) that the Administrative Agent, in consultation with the Principal Borrower, decides in its reasonable good faith discretion may be appropriate to reflect the adoption and implementation of such Benchmark and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent decides in its reasonable good faith discretion that adoption of any portion of such market practice is not administratively feasible or if the Administrative Agent determines in its reasonable good faith discretion that no market practice for the administration of such Benchmark exists, in such other manner of administration as the Administrative Agent, in consultation with the Principal Borrower, decides is reasonably necessary in connection with the administration of this Agreement and the other Loan Documents).

"**Benchmark Replacement Date**" means, with respect to any Benchmark, the earliest to occur of the following events with respect to such then-current Benchmark:

(1) in the case of clause (1) or (2) of the definition of "Benchmark Transition Event," the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of such Benchmark (or the published component used in the calculation thereof) permanently or indefinitely ceases to provide all Available Tenors of such Benchmark (or such component thereof); or

(2) in the case of clause (3) of the definition of "Benchmark Transition Event," the first date on which such Benchmark (or the published component used in the calculation thereof) has been or, if such Benchmark is a term rate, all Available Tenors of such Benchmark (or component thereof) have been determined and announced by the regulatory supervisor for the administrator of such Benchmark (or such component thereof) to be no longer representative; provided, that such non-representativeness will be determined by reference to the most recent statement or publication referenced in such clause (3) and even if such Benchmark (or component thereof) or, if such Benchmark is a term rate, any Available Tenor of such Benchmark (or such component thereof) continues to be provided on such date.

For the avoidance of doubt, (i) if the event giving rise to the Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such determination and (ii) the "Benchmark Replacement Date" will be deemed to have occurred in the case of clause (1) or (2) with respect to any Benchmark upon the occurrence of the applicable event or events set forth therein with respect to all then-current Available Tenors of such Benchmark (or the published component used in the calculation thereof).

"**Benchmark Transition Event**" means, with respect to any Benchmark, the occurrence of one or more of the following events with respect to such then-current Benchmark:

(1) a public statement or publication of information by or on behalf of the administrator of such Benchmark (or the published component used in the calculation thereof) announcing that such administrator has ceased or will cease to provide all Available Tenors of such Benchmark (or such component thereof), permanently or indefinitely as of a specific date, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide such Benchmark (or such component thereof) or, if such Benchmark is a term rate, any Available Tenor of such Benchmark (or such component thereof);

(2) a public statement or publication of information by the regulatory supervisor for the administrator of such Benchmark (or the published component used in the calculation thereof), the Board, the NYFRB, the CME Term SOFR Administrator, the central bank for the Agreed Currency applicable to such Benchmark, an insolvency official with jurisdiction over the administrator for such Benchmark (or such component), a resolution authority with jurisdiction over the administrator for such Benchmark (or such component) or a court or an entity with similar insolvency or resolution authority over the administrator for such Benchmark (or such component), in each case which states that the administrator of such Benchmark (or such component) has ceased or will cease to provide such Benchmark (or such component thereof) or, if such Benchmark is a term rate, all Available Tenors of such Benchmark (or such component thereof) permanently or indefinitely as of a specific date; *provided* that, at the time of such statement or publication, there is no successor administrator that will continue to provide such Benchmark (or such component thereof) or, if such Benchmark is a term rate, any Available Tenor of such Benchmark (or such component thereof); or

(3) a public statement or publication of information by the regulatory supervisor for the administrator of such Benchmark (or the published component used in the calculation thereof) announcing that such Benchmark (or such component thereof) or, if such Benchmark is a term rate, all Available Tenors of such Benchmark (or such component thereof) are no longer, or as of a specified future date will no longer be, representative.

For the avoidance of doubt, a "Benchmark Transition Event" will be deemed to have occurred with respect to any Benchmark if a public statement or publication of information set forth above has occurred with respect to each then-current Available Tenor of such Benchmark (or the published component used in the calculation thereof).

"**Benchmark Unavailability Period**" means, with respect to any Benchmark, the period (if any) (x) beginning at the time that a Benchmark Replacement Date pursuant to clauses (1) or (2) of that definition has occurred if, at such time, no Benchmark Replacement has replaced such then-current Benchmark for all purposes hereunder and under any Loan Document in accordance with Section 8.01 and (y) ending at the time that a Benchmark Replacement has replaced such then-current Benchmark for all purposes hereunder and under any Loan Document in accordance with Section 8.01.

"**Beneficial Ownership Certification**" means a certification regarding beneficial ownership as required by the Beneficial Ownership Regulation.

"**Beneficial Ownership Regulation**" means 31 C.F.R. § 1010.230.

"**Benefit Arrangement**" means at any time an employee benefit plan within the meaning of Section 3(3) of ERISA which is not a Plan or a Multiemployer Plan and which is maintained or otherwise contributed to by any member of the ERISA Group.

"**Benefit Plan**" means any of (a) an "employee benefit plan" (as defined in Section 3(3) of ERISA) that is subject to Title I of ERISA, (b) a "plan" as defined in Section 4975 of the Internal Revenue Code to which Section 4975 of the Internal Revenue Code applies, and (c) any Person whose assets include (for purposes of the Plan Asset Regulations or otherwise for purposes of Title I of ERISA or Section 4975 of the Internal Revenue Code) the assets of any such "employee benefit plan" or "plan".

"**BHC Act Affiliate**" of a party means an "affiliate" (as such term is defined under, and interpreted in accordance with, 12 U.S.C. 1841(k)) of such party.

"**Blocking Regulation**" has the meaning set forth in Section 4.10.

"**Board**" means the Board of Governors of the Federal Reserve System of the United States of America.

"**Borrower**" means the Principal Borrower or any Eligible Subsidiary, as the context may require, and their respective successors, and "**Borrowers**" means all of the foregoing. When used in relation to any Loan or Letter of Credit, references to "**the Borrower**" are to the particular Borrower to which such Loan is or is to be made or at whose request such Letter of Credit is or is to be issued.

"**Borrowing**" has the meaning set forth in Section 1.03.

"**Business Day**" means any day (other than a Saturday or a Sunday) on which banks are open for business in New York City; provided that, in addition to the foregoing, a Business Day shall be (a) in relation to Loans denominated in Euro and in relation to the calculation or computation of the EURIBO Rate, any day which is a TARGET Day, (b) in relation to RFR Loans and any interest rate settings, fundings, disbursements, settlements or payments of any such RFR Loan, or any other dealings in the applicable Agreed Currency of such RFR Loan, any such day that is only a RFR Business Day and (c) in relation to Loans referencing the Adjusted Term SOFR Rate and any interest rate settings, fundings, disbursements, settlements or payments of any such Loans referencing the Adjusted Term SOFR Rate or any other dealings of such Loans referencing the Adjusted Term SOFR Rate, any such day that is a U.S. Government Securities Business Day.

"**Cash Collateralize**" means to (i) pledge and deposit with or deliver to the applicable Issuing Lender, as collateral for the applicable outstanding Letter of Credit, cash or deposit account balances pursuant to documentation in form and substance reasonably satisfactory to the applicable Issuing Lender in an amount equal to 105% of the face amount of such Letter of Credit or, except in the case of Section 6.03, (ii) deliver to the Administrative Agent a letter of credit, from a financial institution and in a form, in each case, reasonably satisfactory to the Administrative Agent and the applicable Issuing Lender, to support the Borrower's obligations with respect to the applicable outstanding Letter of Credit. Each Borrower hereby grants to the applicable Issuing Lender, for the benefit of such Issuing Lender and the Lenders, a security interest in all of its right, title and interest (if any) in such cash, deposit accounts and all balances therein and all proceeds of the foregoing. Cash collateral shall be maintained in blocked interest bearing (to the extent available) deposit accounts at the applicable Issuing Lender.

"**CBR Loan**" means a Loan that bears interest at a rate determined by reference to the Central Bank Rate.

"**CBR Margin**" means the Applicable Rate applicable to a Loan that is replaced by a CBR Loan.

"CDP Water Disclosure Reporting Guidelines" means the Water Security Reporting Guidance as most recently published by the CDP, as may be amended from time to time.

"**Central Bank Rate**" means, the greater of (i) (A) for any Loan denominated in (a) Sterling, the Bank of England (or any successor thereto)'s "Bank Rate" as published by the Bank of England (or any successor thereto) from time to time, (b) Euro, one of the following three rates as may be selected by the Administrative Agent reasonably and in good faith: (1) the fixed rate for the main refinancing operations of the European Central Bank (or any successor thereto), or, if that rate is not published, the minimum bid rate for the main refinancing operations of the European Central Bank (or any successor thereto), each as published by the European Central Bank (or any successor thereto) from time to time, (2) the rate for the marginal lending facility of the European Central Bank (or any successor thereto), as published by the European Central Bank (or any successor thereto) from time to time or (3) the rate for the deposit facility of the central banking system of the Participating Member States, as published by the European Central Bank

(or any successor thereto) from time to time and (c) any other Alternative Currency determined after the Closing Date, a central bank rate as determined by the Administrative Agent in its reasonable good faith discretion; plus (B) the applicable Central Bank Rate Adjustment and (ii) the Floor.

"**Central Bank Rate Adjustment**" means for any Loan denominated in (a) Sterling, a rate equal to the difference (which may be a positive or negative value or zero) of (i) the average of the Adjusted Daily Simple RFR for Sterling Borrowings for the last five (5) RFR Business Days for which the Adjusted Daily Simple RFR for Sterling Borrowings was available (excluding, from such averaging, the highest and the lowest such Adjusted Daily Simple RFR applicable during such period of five RFR Business Days) minus (ii) the Central Bank Rate in respect of Sterling on the last RFR Business Day in such period, (b) Euro, a rate equal to the difference (which may be a positive or negative value or zero) of (i) the average of the EURIBO Rate for the last five (5) Business Days for which the EURIBO Rate was available (excluding, from such averaging, the highest and the lowest EURIBO Rate applicable during such period of five Business Days) minus (ii) the Central Bank Rate in respect of Euro on the last Business Day in such period and (c) any other Alternative Currency determined after the Closing Date, an adjustment as determined by the Administrative Agent in its reasonable good faith discretion designed to represent the reserve ratio or analogous requirement of any central banking or financial regulatory authority imposed in respect of the maintenance of the Commitments or the funding of the Loans. For purposes of this definition, (x) the term Central Bank Rate shall be determined disregarding clause (i)(B) of the definition of such term and (y) the EURIBO Rate on any day shall be based on the EURIBO Screen Rate on such day at approximately the time referred to in the definition of such term for deposits in the applicable Agreed Currency for a maturity of one month.

"**Certificate Inaccuracy Payment Date**" has the meaning set forth in the Pricing Schedule.

"**Change in Law**" means the occurrence, after the Closing Date (or, with respect to any Lender, if later, the date on which such Lender becomes a Lender), of any of the following: (a) the adoption or taking effect of any law, rule, regulation or treaty, (b) any change in any law, rule, regulation or treaty or in the administration, interpretation or application thereof by any Governmental Authority, or (c) the making or issuance of any request, rules, guideline, requirement or directive (whether or not having the force of law) by any Governmental Authority; provided, however, that notwithstanding anything herein to the contrary (and except to the extent merely proposed and not in effect), (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines, requirements and directives thereunder, issued in connection therewith or in implementation thereof, and (ii) all requests, rules, guidelines, requirements and directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a "Change in Law" regardless of the date enacted, adopted, issued or implemented.

"**Class**", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are Revolving Loans.

"**Closing Date**" means the date on which the conditions set forth in Section 3.01 of this Agreement are satisfied (or waived in accordance with Section 11.05).

"**CME Term SOFR Administrator**" means CME Group Benchmark Administration Limited as administrator of the forward-looking term Secured Overnight Financing Rate (SOFR) (or a successor administrator).

"**Combination**" has the meaning set forth in Section 2.08(b).

"**Combined Companies**" means the Parent and its Consolidated Subsidiaries.

"**Combined Lender**" has the meaning set forth in Section 2.08(b).

"**Commitment**" means, for each Lender, the obligation of such Lender to make Loans and purchase participations in Letter of Credit Liabilities, in an aggregate principal amount at any one time outstanding not to exceed the amount, (i) with respect to each Lender as of the Closing Date, set forth opposite the name of such Lender on the Commitment Schedule, (ii) with respect to any New Lender, assumed by it pursuant to Section 2.20 and (iii) with respect to any Assignee, of the transferor Lender's obligation to make Loans and purchase participations in Letter of Credit Liabilities assigned to such Assignee pursuant to Section 11.06(c), in each case as such amount may be changed from time to time pursuant to Section 2.09, 2.20 or 11.06(c). The initial amount of each Lender's Commitment is set forth on the Commitment Schedule, or in the Assignment and Assumption or other documentation or record (as such term is defined in Section 9-102(a)(70) of the New York Uniform Commercial Code) as provided in Section 12.04(b)(ii)(C) or other documentation contemplated hereby pursuant to which such Lender shall have assumed its Commitment, as applicable. The initial aggregate amount of the Lenders' Commitments as of the Closing Date is $2,500,000,000.

"**Commitment Schedule**" means the Schedule attached hereto identified as such.

"**Communications**" means, collectively, any notice, demand, communication, information, document or other material provided by or on behalf of any Loan Party pursuant to any Loan Document or the transactions contemplated therein which is distributed by the Administrative Agent or any Lender by means of electronic communications pursuant to Section 7.11(c), including through an Approved Electronic Platform.

"**Conduit**" means a special purpose corporation which is engaged in making, purchasing or otherwise investing in commercial loans in the ordinary course of its business.

"**Conduit Designation**" has the meaning set forth in Section 11.06(f).

"**Consolidated Shareholders' Equity**" means at any date the shareholders' or members' equity of the Parent determined on a consolidated basis as of such date in accordance with GAAP; provided that, for purposes hereof, the consolidated shareholders' or members' equity of the Parent shall be calculated (i) without giving effect to (x) the application of Accounting Standards Codification 715-60, "Defined Benefit Plans – Other Postretirement", (y) the cumulative foreign currency translation adjustment or (z) any accumulated other comprehensive income or loss, in each case as reflected on such consolidated balance sheet of the Parent and its Subsidiaries determined in accordance with GAAP and (ii) to include non-controlling interests.

"**Consolidated Subsidiary**" shall mean, as to any Person, each Subsidiary of such Person (whether now existing or hereafter created or acquired) the financial statements of which shall be (or should have been) consolidated with the financial statements of such Person in accordance with GAAP.

"**Corresponding Tenor**" with respect to any Available Tenor means, as applicable, either a tenor (including overnight) or an interest payment period having approximately the same length (disregarding business day adjustment) as such Available Tenor.

"**Covered Entity**" means any of the following:

(i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);

(ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or

(iii) a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

"**Covered Party**" has the meaning set forth in Section 11.16.

"**Credit Event**" means a Borrowing, the issuance or extension of a Letter of Credit, the amendment of a Letter of Credit that increases the face amount thereof, a Letter of Credit Disbursement or any of the foregoing.

"**Credit Exposure**" means, with respect to any Lender at any time, (i) the amount of its Commitment (whether used or unused) at such time or (ii) if the Commitments have terminated in their entirety, the sum of the aggregate Dollar Amount of its Loans at such time plus the aggregate Dollar Amount of its Letter of Credit Liabilities at such time.

"**Credit Party**" means the Administrative Agent, the Issuing Lenders or any other Lender.

"**Daily Simple RFR**" means, for any day (an "**RFR Interest Day**"), an interest rate per annum equal to, for any RFR Loan denominated in (i) Sterling, SONIA for the day that is five (5) RFR Business Days prior to (A) if such RFR Interest Day is an RFR Business Day, such RFR Interest Day or (B) if such RFR Interest Day is not an RFR Business Day, the RFR Business Day immediately preceding such RFR Interest Day and (ii) Dollars, Daily Simple SOFR.

"**Daily Simple SOFR**" means, for any day (a "**SOFR Rate Day**"), a rate per annum equal to SOFR for the day (such date, a "**SOFR Determination Date**") that is five (5) RFR Business Days prior to (i) if such SOFR Rate Day is an RFR Business Day, such SOFR Rate Day or (ii) if such SOFR Rate Day is not an RFR Business Day, the RFR Business Day immediately preceding such SOFR Rate Day, in each case, as such SOFR is published by the SOFR Administrator on the SOFR Administrator's Website. Any change in Daily Simple SOFR due to a change in SOFR shall be effective from and including the effective date of such change in SOFR without notice to the Principal Borrower. If by 5:00 p.m. (New York City time) on the second (2^{nd}) RFR Business Day immediately following any SOFR Determination Date, SOFR in respect of such SOFR Determination Date has not been published on the SOFR Administrator's Website and a Benchmark Replacement Date with respect to the Daily Simple SOFR has not occurred, then SOFR for such SOFR Determination Date will be SOFR as published in respect of the first preceding RFR Business Day for which such SOFR was published on the SOFR Administrator's Website.

"**Debt**" of any Person means at any date, without duplication, (i) all obligations of such Person for borrowed money, (ii) all obligations of such Person evidenced by bonds, debentures, notes or other similar instruments, (iii) all obligations of such Person to pay the deferred purchase price of property, except trade and similar payables and accrued expenses or liabilities arising in the ordinary course of business, (iv) all obligations of such Person as lessee which are capitalized in accordance with GAAP as in effect on December 14, 2018, (v) all Debt (as defined in one of the other clauses of this definition) of others secured by a Lien on any asset of such Person, whether or not such Debt is assumed by such Person; provided that, for purposes of determining the amount of any Debt of the type described in this clause (v), if recourse with respect to such Debt is limited to such asset, the amount of such Debt shall be limited to the lesser of (A) the greater of (x) the book value of such asset or (y) the fair market value of such asset or (B) the amount of such Debt and (vi) all Debt of others Guaranteed by such Person (each such Guarantee to constitute Debt in an amount equal to the lesser of (A) the stated maximum amount of such Guarantee, if any, or (B) the amount of such other Person's Debt Guaranteed thereby); provided that Debt shall not include (1)

obligations in respect of letters of credit to secure the performance of bids, trade contracts (other than for Debt), operating leases (determined in accordance with GAAP as in effect on December 14, 2018), any customary purchase price adjustments, earnouts, holdbacks and deferred payments of a similar nature in connection with an acquisition (including deferred compensation representing consideration or other contingent obligations incurred in connection with an acquisition), statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature incurred in the ordinary course of business, (2) letters of credit issued in connection with the Combined Companies' self-insurance programs for workman's compensation, product liability and general liability, (3) any Debt that has been defeased, discharged and/or redeemed, provided that funds in an amount equal to all such Debt (including interest and any other amounts required to be paid to the holders thereof in order to give effect to such defeasance, discharge and/or redemption) have been irrevocably deposited with a trustee or other comparable escrow agent for the benefit of the relevant holders of such Debt, (4) intercompany loans or other advances from the Parent or any of its Subsidiaries to the Parent or any of its Subsidiaries, (5) any obligations in respect of customer advances held in the ordinary course of business or (6) interest, fees, make-whole amounts, premiums, charges or expenses, if any, relating to the principal amount of Debt. For all purposes of this Agreement, the amount of Debt of the Parent and its Subsidiaries shall be calculated without duplication of guaranty obligations of the Parent or any Subsidiary in respect thereof.

"**Debtor Relief Laws**" means the Bankruptcy Code, and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization, or similar debtor relief laws of the United States or other applicable jurisdictions from time to time in effect and affecting the rights of creditors generally.

"**Default**" means any condition or event which constitutes an Event of Default or which with the giving of notice or lapse of time or both would, unless cured or waived, become an Event of Default.

"**Default Right**" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

"**Defaulting Lender**" means any Lender that (a) has failed, within two Business Days of the date required to be funded or paid, to (i) fund all or any portion of its Loans, (ii) fund all or any portion of its participations in Letters of Credit or (iii) pay over to the Administrative Agent or any Lender any other amount required to be paid by it hereunder, unless, in the case of clause (i) above, such Lender notifies the Administrative Agent and the Principal Borrower in writing that such failure is the result of such Lender's reasonable determination that a condition precedent to funding (specifically identified and including the particular default, if any) has not been satisfied, (b) has notified the Principal Borrower or the Administrative Agent in writing, or has made a public statement to the effect, that it does not intend or expect to comply with all or any portion of its funding obligations under this Agreement (unless such writing or public statement indicates that such position is based on such Lender's reasonable determination that a condition precedent (specifically identified and including the particular default, if any) to funding under this Agreement cannot be satisfied) or generally under other agreements in which it commits to extend credit, (c) has failed, within three Business Days after written request by the Administrative Agent, acting in good faith, to provide a certification in writing from an authorized officer of such Lender that it will comply with its obligations to fund Loans and participations in then outstanding Letters of Credit under this Agreement, provided that such Lender shall cease to be a Defaulting Lender pursuant to this clause (c) upon the Administrative Agent's receipt of such certification in form and substance reasonably satisfactory to it, or (d) has become, or has a direct or indirect Lender Parent that has become, the subject of a Bankruptcy Event or a Bail-In Action.

"**Disqualified Institutions**" means, on any date, (i) those Persons identified by the Principal Borrower to the Administrative Agent and the Lenders in writing prior to the Closing Date, (ii) those Persons that are reasonably determined by the Principal Borrower to be competitors of the Principal Borrower or any of its Subsidiaries and that have been specifically identified by the Principal Borrower to the Administrative Agent and the Lenders in writing prior to the Closing Date and (iii) in the case of each of clauses (i) and (ii) (and any supplements thereto as contemplated below), any of their respective Affiliates, to the extent any such Affiliate (x) is clearly identifiable as an Affiliate of the applicable Person solely by similarity of such Affiliate's name and (y) is not a bona fide debt investment fund that is an Affiliate of such Person; provided that, the Principal Borrower, by notice to the Administrative Agent and the Lenders after the Closing Date, shall be permitted to supplement from time to time in writing by name the list of Persons that are Disqualified Institutions to the extent that the Persons added by such supplements are determined by the Principal Borrower to be competitors of the Principal Borrower or any of its Subsidiaries (or Affiliates of such competitors that are not bona fide debt investment funds). Each such supplement shall become effective three (3) Business Days after delivery thereof to the Administrative Agent and the Lenders (including through an Approved Electronic Platform) in accordance with Section 11.01, but shall not apply retroactively to disqualify any Persons that have previously acquired an assignment or participation interest in the Loans (but solely with respect to such Loans). It is understood and agreed that (A) the Administrative Agent shall have no responsibility, liability or duty, to ascertain, inquire, monitor or enforce whether any Lender or potential Lender is a Disqualified Institution, (B) the Principal Borrower's failure to deliver such list (or supplement thereto) in accordance with Section 11.01 shall render such list (or supplement) not received and not effective and (C) "Disqualified Institution" shall exclude any Person that the Principal Borrower has designated as no longer being a "Disqualified Institution" by written notice delivered to the Administrative Agent (which notice may be distributed to the Lenders) from time to time in accordance with Section 11.01.

"Diverse Supplier Spend" means, for any Reference Year, the sum of the Parent's and its Subsidiaries' total diverse supplier spend with minority-owned, woman-owned, veteran-owned, LGBTQAI+ owned and disability-owned businesses, with (i) measurements, quantifications and reporting of Overall Supplier Spend verified to a level of reasonable assurance in conformity with the reporting criteria in the Parent's annual Form 10-K, and (ii) collections and reporting of third-party supplier diversity certifications for identified Overall Supplier Spend involving desk audits and site visits independently verified. It is hereby understood and agreed that the Diverse Supplier Spend KPI for any Reference Year shall be assessed by (1) measuring the nominal increase of diverse supplier spend in Dollars, and (2) determining whether the diverse supplier spend surpasses the growth in total revenue, as a binary (yes or no) determination.

"Diverse Supplier Spend Fee Adjustment Amount" means, subject to the provisions of the Pricing Schedule, with respect to any period between Sustainability Pricing Adjustment Dates, as determined for the applicable Reference Year:

(a) positive 0.25 bps, if both (i) the nominal increase of Diverse Supplier Spend for the applicable Reference Year as set forth in the Pricing Certificate is less than the Diverse Supplier Spend Threshold C for such Reference Year, and (ii) the increase in the Diverse Supplier Spend for the applicable Reference Year as set forth in the Pricing Certificate is less than the growth in total revenue for such Reference Year, marked with a "No" classification;

(b) negative 0.25 bps, if both (i) the nominal increase of Diverse Supplier Spend for the applicable Reference Year as set forth in the Pricing Certificate is more than or equal to the Diverse Supplier Spend Target C for such Reference Year, and (ii) the increase in Diverse Supplier Spend for the applicable Reference Year as set forth in the Pricing Certificate is more than or equal to the growth in total revenue for such Reference Year, marked with a "Yes" classification; and

(c) 0.0 bps, for any other combination not falling under the immediately preceding clauses (a) or (b) of this definition.

"Diverse Supplier Spend Margin Adjustment Amount" means, subject to the provisions of the Pricing Schedule, with respect to any period between Sustainability Pricing Adjustment Dates, as determined for the applicable Reference Year:

(a) positive 1.41666 bps, if either (i) the nominal increase of Diverse Supplier Spend for the applicable Reference Year as set forth in the Pricing Certificate is less than the Diverse Supplier Spend Threshold C for such Reference Year, or (ii) the increase in the Diverse Supplier Spend for the applicable Reference Year as set forth in the Pricing Certificate is less than the growth in total revenue for such Reference Year, marked with a "No" classification;

(b) negative 1.41666 bps, if both (i) the nominal increase of Diverse Supplier Spend for the applicable Reference Year as set forth in the Pricing Certificate is more than or equal to the Diverse Supplier Spend Target C for such Reference Year, and (ii) the increase in Diverse Supplier Spend for the applicable Reference Year as set forth in the Pricing Certificate is more than or equal to the growth in total revenue for such Reference Year, marked with a "Yes" classification; and

(c) 0.0 bps, for any other combination not falling under the immediately preceding clauses (a) or (b) of this definition.

"Diverse Supplier Spend Target C" means, with respect to any Reference Year, the Diverse Supplier Spend Target C for such Reference Year as set forth in the Sustainability Table.

"Diverse Supplier Spend Threshold C" means, with respect to any Reference Year, the Diverse Supplier Spend Threshold C for such Reference Year as set forth in the Sustainability Table.

"**Documentation Agents**" means Barclays Bank PLC, Citibank, N.A. and Morgan Stanley MUFG Loan Partners, LLC, acting through Morgan Stanley Senior Funding, Inc. and MUFG Bank, Ltd., in their capacity as Documentation Agents in connection with the credit facility provided hereunder.

"**Dollar Amount**" of any amount of any currency means, at the time of determination thereof, (a) if such amount is expressed in Dollars, such amount, (b) if such amount is expressed in an Alternative Currency, the equivalent of such amount in Dollars determined by using the rate of exchange for the purchase of Dollars with such Alternative Currency last provided (either by publication or otherwise provided to the Administrative Agent) by the applicable Reuters source on the Business Day (New York City time) immediately preceding the date of determination or if such service ceases to be available or ceases to provide a rate of exchange for the purchase of Dollars with such Alternative Currency, as provided by such other publicly available information service which provides that rate of exchange at such time in place of Reuters chosen by the Administrative Agent in its reasonable good faith discretion (or if such service ceases to be available or ceases to provide such rate of exchange, the equivalent of such amount in Dollars as reasonably determined in good faith by the Administrative Agent, in consultation with the Principal Borrower, using any reasonable method of determination it deems reasonably appropriate) and (c) if such amount is denominated in any other currency, the equivalent of such amount in Dollars as reasonably determined in good faith by the Administrative Agent, in consultation with the Principal Borrower, using any reasonable method of determination it deems reasonably appropriate.

"**Dollar-Denominated Loan**" means a Loan that is made in Dollars pursuant to the applicable Notice of Borrowing.

"**Dollars**" and the sign "**$**" mean lawful currency of the United States.

"**Domestic Lending Office**" means, as to each Lender, its office located at its address set forth in its Administrative Questionnaire (or identified in its Administrative Questionnaire as its Domestic Lending Office) or such other office as such Lender may hereafter designate as its Domestic Lending Office by notice to the Principal Borrower and the Administrative Agent.

"**DQ List**" has the meaning set forth in Section 11.06(h)(iv).

"**EEA Financial Institution**" has the meaning set forth in Section 11.14.

"**EEA Member Country**" has the meaning set forth in Section 11.14.

"**EEA Resolution Authority**" has the meaning set forth in Section 11.14.

"**Election to Participate**" means an Election to Participate substantially in the form of Exhibit D hereto.

"**Election to Terminate**" means an Election to Terminate substantially in the form of Exhibit E hereto.

"**Electronic Signature**" means an electronic sound, symbol, or process attached to, or associated with, a contract or other record and adopted by a Person with the intent to sign, authenticate or accept such contract or record.

"**Eligible Subsidiary**" means any Wholly-Owned Consolidated Subsidiary of the Parent organized under the laws of an Approved Jurisdiction as to which an Election to Participate shall have been delivered to the Administrative Agent by the Principal Borrower and as to which an Election to Terminate shall not have been subsequently delivered to the Administrative Agent. Each such Election to Participate and Election to Terminate shall be duly executed on behalf of the relevant Wholly-Owned Consolidated Subsidiary and the Principal Borrower in such number of copies as the Administrative Agent may reasonably request. If at any time a Subsidiary theretofore designated as an Eligible Subsidiary no longer qualifies as a Wholly-Owned Consolidated Subsidiary, the Principal Borrower shall cause to be delivered to the Administrative Agent an Election to Terminate terminating the status of such Subsidiary as an Eligible Subsidiary. The delivery of an Election to Terminate shall not affect any obligation of an Eligible Subsidiary theretofore incurred. The Administrative Agent shall promptly give notice to the Lenders of the receipt of any Election to Participate or Election to Terminate.

"**Environmental Laws**" means all laws, rules, regulations, codes, ordinances, orders, decrees, judgments, injunctions, notices or binding agreements issued, promulgated or entered into by any Governmental Authority, relating in any way to the environment, preservation or reclamation of natural resources, or the management, disposal, release or threatened release of any Hazardous Material.

"**Environmental Liability**" means any liability, contingent or otherwise (including any liability for damages, costs of environmental remediation, fines, penalties or indemnities), of any Loan Party or any of its Subsidiaries directly or indirectly resulting from or based upon (a) violation of any Environmental Law, (b) the generation, use, handling, transportation, storage, treatment or disposal of any Hazardous Materials, (c) exposure to any Hazardous Materials, (d) the release or threatened release of any Hazardous Materials into the environment or (e) any contract, agreement or other consensual arrangement pursuant to which liability is assumed or imposed with respect to any of the foregoing.

"**Equity Interests**" means shares of capital stock, partnership interests, membership interests in a limited liability company, beneficial interests in a trust or other equity ownership interests in a Person, and any warrants, options or other rights entitling the holder thereof to purchase or acquire any such equity interest.

"**ERISA**" means the Employee Retirement Income Security Act of 1974, as amended, or any successor statute.

"**ERISA Group**" means the Parent, any Consolidated Subsidiary and all members of a controlled group of corporations or other entities and all trades or businesses (whether or not incorporated) under common control which, together with the Parent or any Consolidated Subsidiary, are treated as a single employer under Section 414 of the Internal Revenue Code.

"ESG Standards" means the CDP Water Disclosure Reporting Guidelines, GHG Protocol and the GRI Standards.

"**EU Bail-In Legislation Schedule**" has the meaning set forth in Section 11.14.

"**EURIBO Rate**" means, with respect to any Term Benchmark Borrowing denominated in Euro and for any Interest Period, the EURIBO Screen Rate two (2) TARGET Days prior to the commencement of such Interest Period.

"**EURIBO Screen Rate**" means the Euro interbank offered rate administered by the European Money Markets Institute (or any other person which takes over the administration of that rate) for Euro for the relevant period displayed (before any correction, recalculation or republication by the administrator) on page EURIBOR01 of the Reuters screen (or any replacement Reuters page which displays that rate) or on the appropriate page of such other information service which publishes that rate from time to time in place of Reuters as published at approximately 11:00 a.m. Brussels time two TARGET Days prior to the commencement of such Interest Period. If such page or service ceases to be available, the Administrative Agent may specify another commercially recognized page or service displaying the relevant rate after consultation with the Principal Borrower.

"**Euro**" means the single currency of the Participating Member States.

"**Event of Default**" has the meaning set forth in Section 6.01.

"**Excluded Taxes**" has the meaning set forth in Section 8.04(a).

"**Existing Agreement**" means the $2,500,000,000 Credit Agreement dated as of December 5, 2019, among the Principal Borrower, the Eligible Subsidiaries referred to therein, the lenders parties thereto, and JPMorgan Chase Bank, N.A., as Administrative Agent, as amended, restated, supplemented or otherwise modified from time to time prior to the date hereof.

"**Existing Letters of Credit**" means the letters of credit issued by an Issuing Lender under the Existing Agreement before the Closing Date.

"**Extension Agreement**" has the meaning set forth in Section 2.01(c).

"**Extension Date**" has the meaning set forth in Section 2.01(c).

"**Facility Fee Rate**" means, at any date, the applicable rate per annum determined in accordance with the Pricing Schedule.

"**FATCA**" means Sections 1471 through 1474 of the Internal Revenue Code, as of the Closing Date (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreement entered into pursuant to Section 1471(b)(1) of the Internal Revenue Code, and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among Governmental Authorities and implementing such Sections of the Internal Revenue Code.

"**Federal Funds Rate**" means, for any day, the rate calculated by the NYFRB based on such day's federal funds transactions by depositary institutions, as determined in such manner as shall be set forth on the NYFRB's Website from time to time, and published on the next succeeding Business Day by the NYFRB as the effective federal funds rate; provided that if the Federal Funds Rate as so determined would be less than zero, such rate shall be deemed to be zero for the purposes of this Agreement.

"**Fee Letters**" means the JPMorgan Fee Letter and the Lead Arranger Fee Letters.

"**Financial Officer**" means the chief financial officer, principal accounting officer, treasurer or assistant treasurer.

"**Floor**" means the benchmark rate floor, if any, provided in this Agreement (as of the execution of this Agreement, the modification, amendment or renewal of this Agreement or otherwise) with respect to the Adjusted Term SOFR Rate, the Adjusted EURIBO Rate, each Adjusted Daily Simple RFR or the Central Bank Rate, as applicable. For the avoidance of doubt, the initial Floor for each of the Adjusted Term SOFR Rate, the Adjusted EURIBO Rate, each Adjusted Daily Simple RFR or the Central Bank Rate shall be 0%.

"**Foreign Subsidiary**" means a Subsidiary of the Parent not organized under the laws of a jurisdiction located in the United States of America, or any state thereof or the District of Columbia.

"**GAAP**" shall mean U.S. generally accepted accounting principles as in effect from time to time.

"GHG Protocol" means the World Resources Institute/World Business Council for Sustainable Development Greenhouse Gas (GHG) Protocol, Corporate Accounting and Reporting Standard, Revised Edition (Scope 1 and 2) and the GHG Protocol Scope 2 Guidance, an amendment to the GHG Protocol Corporate Standard, most recently published and as may be amended from time to time.

"GRI Standards" means the Global Reporting Initiative (GRI) reporting guidelines for organizations to report on economic, environmental and social performance, as most recently published and as may be amended from time to time.

"**Governmental Authority**" means the government of the United States of America, Ireland, any other nation or any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra-national bodies such as the European Union or the European Central Bank).

"**Group of Loans**" means, at any time, a group of Loans consisting of (i) all Loans to the same Borrower which are Base Rate Loans at such time, (ii) all Loans which are Term Benchmark Loans in the same currency to the same Borrower having the same Interest Period at such time or (iii) all Loans which are RFR Loans in the same currency to the same Borrower, provided that, if a Loan of any particular Lender is

converted to or made as a Base Rate Loan pursuant to Article 8, such Loan shall be included in the same Group of Loans or Groups of Loans from time to time as it would have been in if it had not been so converted or made.

"**Guarantee**" by any Person means, without duplication, any obligation, contingent or otherwise, of such Person directly or indirectly guaranteeing any Debt of any other Person and, without limiting the generality of the foregoing, any obligation, direct or indirect, contingent or otherwise, of such Person (i) to purchase or pay (or advance or supply funds for the purchase or payment of) such Debt (whether arising by virtue of partnership arrangements, by agreement to keep-well, to purchase assets, goods, securities or services, to take-or-pay, or to maintain financial statement conditions or otherwise) or (ii) entered into for the purpose of assuring in any other manner the holder of such Debt of the payment thereof or to protect such holder against loss in respect thereof (in whole or in part); provided that the term Guarantee shall not include endorsements for collection or deposit in the ordinary course of business. The term "**Guarantee**" used as a verb has a corresponding meaning. It is understood that the amount of any Guarantee of or by any Person shall be deemed to be the lower of (a) the amount of Debt in respect of which such Guarantee exists and (b) the maximum amount for which such Person may be liable pursuant to the instrument embodying such Guarantee.

"**Hazardous Materials**" means all explosive or radioactive substances or wastes and all hazardous or toxic substances, wastes or other pollutants, including petroleum or petroleum distillates, asbestos or asbestos containing materials, polychlorinated biphenyls, radon gas, infectious or medical wastes and all other substances or wastes of any nature regulated pursuant to any Environmental Law.

"**Holding Company**" means a corporation or other legal entity organized under the laws of a country that is a member of the Organization for Economic Cooperation and Development which becomes the direct or indirect owner of the equity interests of the Parent and its Subsidiaries pursuant to a Holding Company Reorganization.

"**Holding Company Reorganization**" means a transaction or series of transactions pursuant to which the Parent becomes a direct or indirect wholly-owned subsidiary of the Holding Company.

"**Increasing Lender**" has the meaning set forth in Section 2.20.

"**Increasing Lender Supplement**" means a supplement to this Agreement substantially in the form of Exhibit B attached hereto.

"**Incremental Term Loan**" has the meaning set forth in Section 2.20.

"**Incremental Term Loan Amendment**" has the meaning set forth in Section 2.20.

"**Indemnified Person**" has the meaning set forth in Section 11.03(b).

"**Ineligible Institution**" means (a) a natural person, (b) a Defaulting Lender or its Lender Parent, (c) the Principal Borrower, any of its Subsidiaries or any of its Affiliates, (d) a company, investment vehicle or trust for, or owned and operated for the primary benefit of, a natural person or relative(s) thereof or (e) a Disqualified Institution.

"**Information**" has the meaning set forth in Section 11.11(a).

"**Initial Issuing Lender**" means each of JPMorgan Chase Bank, N.A., Bank of America, N.A., Barclays Bank PLC, Citibank, N.A., MUFG Bank, Ltd. and Morgan Stanley Bank, N.A.

"**Insolvency Regulation**" shall mean the Regulation EU 2015/848 of the European Parliament and of the Council of 20 May 2015 on insolvency proceedings (recast), as amended.

"**Interest Period**" means, with respect to each Term Benchmark Loan, the period commencing on the date of borrowing specified in the applicable Notice of Borrowing or on the date specified in an applicable Notice of Interest Rate Election and ending one, three or six months thereafter (or such other period of time as may at the time be mutually agreed by the Borrower and all of the Lenders) (in each case, subject to the availability for the Benchmark applicable to the relevant Loan or Commitment for any Agreed Currency), as the Borrower may elect in such notice; provided that:

(a) any Interest Period which would otherwise end on a day which is not a Business Day shall be extended to the next succeeding Business Day unless such Business Day falls in another calendar month, in which case such Interest Period shall end on the next preceding Business Day; and

(b) any Interest Period which begins on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the calendar month at the end of such Interest Period) shall end on the last Business Day of a calendar month;

(c) no tenor that has been removed from this definition pursuant to Section 8.01(f) (and not reinstated pursuant to Section 8.01(f)) shall be available for specification in any Notice of Borrowing or Notice of Interest Rate Election; and

(d) any Interest Period applicable to any Loan of any Lender which would otherwise end after the Termination Date shall end on the Termination Date.

"**Internal Revenue Code**" means the Internal Revenue Code of 1986, as amended, or any successor statute.

"**Irish Treaty**" has the meaning set forth in the definition of "Irish Treaty State".

"**Irish Treaty State**" means a jurisdiction having a double taxation agreement (a "Treaty") with Ireland (an "Irish Treaty") that has force of law and makes provision for full exemption from tax imposed by Ireland on interest.

"**Issuing Lender**" means each Initial Issuing Lender and any other Lender that may agree to issue letters of credit hereunder pursuant to an instrument in form reasonably satisfactory to the Principal Borrower, such Lender and the Administrative Agent, in its capacity as issuer of a Letter of Credit hereunder. Each Issuing Lender may, in its discretion, arrange for one or more Letters of Credit to be issued by Affiliates or branches of such Issuing Lender, in which case the term "Issuing Lender" shall include any such Affiliate or branch, as applicable, with respect to Letters of Credit issued by such Affiliate or branch, as applicable. Each reference herein to the "Issuing Lender" in connection with a Letter of Credit or other matter shall be deemed to be a reference to the relevant Issuing Lender with respect thereto, and, further, references herein to "the Issuing Lender" shall be deemed to refer to each of the Issuing Lenders or the relevant Issuing Lender, as the context requires. Unless the contest otherwise requires, any reference herein to a "**Lender**" includes each Issuing Lender.

"**JCI**" means Johnson Controls, Inc., a Wisconsin corporation.

"**JPMorgan Fee Letter**" means that certain JPMorgan Fee Letter, dated November 3, 2023, among JPMorgan and the Principal Borrower.

"KPI Metric" means each of the Diverse Supplier Spend, Scope 1 and 2 GHG Emissions and the Total Water Withdrawals in Water-Stressed Locations.

"**LC Sublimit**" means (i) as to aggregate Letter of Credit Liabilities with respect to all Letters of Credit, $300,000,000 and (ii) as to aggregate Letter of Credit Liabilities with respect to the Letters of Credit issued by any individual Issuing Lender, such Issuing Lender's Letter of Credit Fronting Sublimit.

"**LC Termination Date**" means, at any time, the fifth Business Day prior to the earliest Termination Date then in effect as to any Lender.

"**Lead Arranger Fee Letters**" means those certain fee letters among certain of the Lead Arrangers and the Principal Borrower relating to the credit facility evidenced by this Agreement.

"**Lead Arrangers**" means JPMorgan Chase Bank, N.A., BofA Securities, Inc., Barclays Bank PLC, Citibank, N.A. and Morgan Stanley MUFG Loan Partners, LLC, acting through Morgan Stanley Senior Funding, Inc. and MUFG Bank, Ltd., in their capacity as joint lead arrangers and joint bookrunners for the credit facility provided hereunder.

"**Lender**" means each Person listed in the Commitment Schedule, each New Lender or Assignee which becomes a Lender pursuant to Section 2.20 or 11.06(c) or other documentation contemplated hereby, and their respective successors, other than any such Person that ceases to be a party hereto pursuant to Section 11.06(c) or other documentation contemplated hereby.

"**Lender Affiliate**" means, (a) with respect to any Lender, (i) an Affiliate of such Lender or (ii) any entity (whether a corporation, partnership, trust or otherwise) that is engaged in making, purchasing, holding or otherwise investing in bank loans and similar extensions of credit in the ordinary course of its business and is administered or managed by such Lender or an Affiliate of such Lender and (b) with respect to any Lender that is a fund which invests in bank loans and similar extensions of credit, any other fund that invests in bank loans and similar extensions of credit and is managed by the same investment advisor as such Lender or by an Affiliate of such investment advisor. As used in this Agreement, (x) "**Affiliate**" means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with such specified Person and (y) "**Control**" means possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a Person, whether through the ability to exercise voting power, by contract or otherwise (and "**Controlled**" has a meaning correlative thereto).

"**Lender Parent**" means, with respect to any Lender, any Person controlling such Lender.

"**Lender-Related Person**" has the meaning set forth in Section 11.03(c).

"**Letter of Credit**" means any Existing Letter of Credit or Additional Letter of Credit.

"**Letter of Credit Agreement**" has the meaning set forth in Section 2.19(b).

"**Letter of Credit Disbursement**" means a payment made by an Issuing Lender pursuant to a Letter of Credit.

"**Letter of Credit Fronting Sublimit**" means (x) for each Initial Issuing Lender, the amount set forth as such Initial Issuing Lender's Fronting Sublimit on Schedule 2.19 and (y) for each other Issuing Lender, the amount agreed by such Issuing Lender as its Letter of Credit Fronting Sublimit which, subject to the prior written consent of the Principal Borrower, shall ratably reduce the Letter of Credit Fronting

Sublimit of each then-existing Issuing Lender, as each of the foregoing amounts may be decreased or increased from time to time with the written consent of the Principal Borrower, the Administrative Agent and the Issuing Lenders (provided that any increase in the Letter of Credit Fronting Sublimit with respect to any Issuing Lender shall only require the consent of the Principal Borrower and such Issuing Lender).

"**Letter of Credit Liabilities**" means, for any Lender and at any time, such Lender's ratable participation in the sum of (x) the amounts then owing by the Borrowers in respect of amounts drawn under Letters of Credit and (y) the aggregate amount then available for drawing under all Letters of Credit. For all purposes of this Agreement, if on any date of determination a Letter of Credit has expired by its terms but any amount may still be drawn thereunder by reason of the operation of Article 29(a) of the Uniform Customs and Practice for Documentary Credits, International Chamber of Commerce Publication No. 600 (or such later version thereof as may be in effect at the applicable time) or Rule 3.13 or Rule 3.14 of the International Standby Practices, International Chamber of Commerce Publication No. 590 (or such later version thereof as may be in effect at the applicable time) or similar terms of the Letter of Credit itself, or if compliant documents have been presented but not yet honored, such Letter of Credit shall be deemed to be "outstanding" and "undrawn" in the amount so remaining available to be paid, and the obligations of the Borrowers and each Lender shall remain in full force and effect until the relevant Issuing Lender and the Lenders shall have no further obligations to make any payments or disbursements under any circumstances with respect to any such Letter of Credit.

"**Liabilities**" has the meaning set forth in Section 11.09.

"**Lien**" means, with respect to any asset, any mortgage, lien, pledge, charge, security interest or encumbrance of any kind in respect of such asset. For the purposes of this Agreement, the Parent or any Consolidated Subsidiary shall be deemed to own subject to a Lien any asset which it has acquired or holds subject to the interest of a vendor or lessor under any conditional sale agreement, capital lease (determined in accordance with GAAP as in effect on December 14, 2018) or other title retention agreement relating to such asset (other than an operating lease (determined in accordance with GAAP as in effect on December 14, 2018)).

"**Limited Conditionality Acquisition**" has the meaning set forth in Section 2.20.

"**Limited Conditionality Acquisition Agreement**" has the meaning set forth in Section 2.20.

"**Loan**" means a loan made by a Lender pursuant to Section 2.01; provided that, if any such loan or loans (or portions thereof) are combined or subdivided pursuant to a Notice of Interest Rate Election, the term "**Loan**" shall refer to the combined principal amount resulting from such combination or to each of the separate principal amounts resulting from such subdivision, as the case may be.

"**Loan Documents**" means this Agreement, each Election to Participate and any Notes issued to any Lender hereunder.

"**Loan Parties**" means the Borrowers.

"**London Office**" means the office of the Administrative Agent identified on the signature pages hereof as its London office, or such other office of the Administrative Agent as it may specify for such purpose by notice to the other parties hereto.

"**Luxembourg**" means the Grand Duchy of Luxembourg.

"**Luxembourg Borrower**" means each Eligible Subsidiary that (x) is organized under the laws of Luxembourg, (y) has its center of main interests, within the meaning of the Insolvency Regulation, in Luxembourg or (z) has an establishment, within the meaning of the Insolvency Regulation, in Luxembourg.

"**Luxembourg Commercial Code**" means the Luxembourg *code de commerce*.

"**Luxembourg Debtor Relief Laws**" means (i) bankruptcy (*faillite*) within the meaning of Articles 437 *et seq*. of the Luxembourg Commercial Code, (ii) courts orders pertaining to a debts relief (*effacement de dettes*), (iii) controlled management (*gestion contrôlée*) within the meaning of the Luxembourg grand-ducal regulation of May 24, 1935 on controlled management, (iv) voluntary arrangement with creditors (*concordat préventif de la faillite*) within the meaning of the Luxembourg law of April 14, 1886 on arrangements to prevent insolvency amended, (v) suspension of payments (*sursis de paiement*) within the meaning of Articles 593 *et seq* of the Luxembourg Commercial Code, (vi) voluntary or compulsory liquidation pursuant to the Luxembourg law of August 10, 1915 on commercial companies, as amended and (vii) judicial decisions regarding judicial reorganization proceeding (*procédure de réorganisation*).

"**Luxembourg Relief**" means bankruptcy (*faillite*), courts orders pertaining to a debts relief (*effacement de dettes*), controlled management (*gestion contrôlée*), voluntary arrangement with creditors (*concordat préventif de la faillite*), suspension of payments (*sursis de paiement*) and voluntary or compulsory liquidation, as such terms are understood within the Luxembourg Debtor Relief Laws, and also means any other proceedings affecting the rights of creditors generally or the appointment of an interim administrator (*administrateur provisoire*).

"**Material Adverse Effect**" means a material adverse effect on (a) the business, assets, operations or financial condition of the Parent and its Subsidiaries taken as a whole, (b) the ability of the Loan Parties to perform any of their material obligations under the Loan Documents or (c) the validity or enforceability against the Loan Parties of, or the rights of or remedies available to the Lenders against the Loan Parties under, the Loan Documents; provided, however, that events, circumstances, changes, effects or conditions with respect to the Parent and its Subsidiaries disclosed in any Form 10-K, Form 10-Q or Form 8-K filed by the Parent with the Securities and Exchange Commission prior to the Closing Date shall not constitute a "Material Adverse Effect" to the extent so disclosed.

"**Material Debt**" means Debt (other than the Loans) of the Parent and/or one or more of its Consolidated Subsidiaries, arising in one or more related or unrelated transactions, in an aggregate principal amount exceeding $300,000,000.

"**Multiemployer Plan**" means at any time an employee pension benefit plan within the meaning of Section 4001(a)(3) of ERISA to which any member of the ERISA Group is then making or accruing an obligation to make contributions or has within the preceding five plan years made contributions, including for these purposes any Person which ceased to be a member of the ERISA Group during such five year period.

"**New Lender**" has the meaning set forth in Section 2.20.

"**New Lender Supplement**" means a supplement to this Agreement substantially in the form of Exhibit C attached hereto.

"**New York Office**" means the office of the Administrative Agent identified on the signature pages hereof as its New York office, or such other office of the Administrative Agent as it may specify for such purpose by notice to the other parties hereto.

"**Notes**" means promissory notes of a Borrower, substantially in the form of Exhibit A hereto, evidencing the obligation of such Borrower to repay the Loans made to it, and "**Note**" means any one of such promissory notes issued hereunder.

"**Notice of Borrowing**" has the meaning set forth in Section 2.02.

"**Notice of Interest Rate Election**" has the meaning set forth in Section 2.15(a).

"**Notice of Issuance**" has the meaning set forth in Section 2.19(c).

"**NYFRB**" means the Federal Reserve Bank of New York.

"**NYFRB Rate**" means, for any day, the greater of (a) the Federal Funds Rate in effect on such day and (b) the Overnight Bank Funding Rate in effect on such day (or for any day that is not a Business Day, for the immediately preceding Business Day); provided that if none of such rates are published for any day that is a Business Day, the term "NYFRB Rate" means the rate quoted for such day for a federal funds transaction quoted at 11:00 a.m. (New York City time) on such day received by the Administrative Agent from a federal funds broker unaffiliated with the Administrative Agent of recognized standing selected by it; provided, further, that if any of the aforesaid rates as so determined would be less than zero, such rate shall be deemed to be zero for purposes of this Agreement.

"**NYFRB's Website**" means the website of the NYFRB at http://www.newyorkfed.org, or any successor source.

"**Other Connection Taxes**" means, with respect to the Administrative Agent or a Lender, Taxes imposed as a result of a present or former connection between the Administrative Agent or such Lender and the jurisdiction imposing such Tax (other than connections arising from the Administrative Agent or such Lender having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

"**Other Currency**" has the meaning set forth in Section 2.18.

"**Other Taxes**" has the meaning set forth in Section 8.04(b).

"**Outstanding Amount**" means, as to any Lender at any time, the sum of (i) the aggregate Dollar Amount of Loans made by it outstanding at such time plus (ii) the aggregate Dollar Amount of its Letter of Credit Liabilities at such time.

"**Overall Supplier Spend**" means the total supplier spend in any given year for the Parent and its Subsidiaries.

"**Overnight Bank Funding Rate**" means, for any day, the rate comprised of both overnight federal funds and overnight eurodollar transactions denominated in Dollars by U.S.-managed banking offices of depository institutions, as such composite rate shall be determined by the NYFRB as set forth on the NYFRB's Website from time to time, and published on the next succeeding Business Day by the NYFRB as an overnight bank funding rate.

"**Overnight Rate**" means, for any day, (a) with respect to any amount denominated in Dollars, the NYFRB Rate and (b) with respect to any amount denominated in an Alternative Currency, an overnight rate

reasonably determined by the Administrative Agent in accordance with banking industry rules on interbank compensation.

"**Parent**" means Johnson Controls International plc, with company number 543654, an Irish public limited company, and its successors; provided that upon consummation of a Holding Company Reorganization in compliance with Section 5.09, the Holding Company shall thereafter be the Parent for purposes hereof, except that any reference made to the Parent as of a specific date prior to any such Holding Company Reorganization shall continue to refer to Johnson Controls International plc.

"**Participant**" has the meaning set forth in Section 11.06(b).

"**Participant Register**" has the meaning set forth in Section 11.06(b).

"**Participating Member States**" means those members of the European Union from time to time which adopt a single, shared currency.

"**Payee**" has the meaning set forth in Section 2.18.

"**Payment**" has the meaning set forth in Section 7.07(b).

"**Payment Notice**" has the meaning set forth in Section 7.07(b).

"**PBGC**" means the Pension Benefit Guaranty Corporation or any entity succeeding to any or all of its functions under ERISA.

"**Person**" means an individual, a corporation, a limited liability company, a partnership, an association, a trust, a limited liability company or any other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

"**Plan**" means at any time an employee pension benefit plan (other than a Multiemployer Plan) which is covered by Title IV of ERISA or subject to the minimum funding standards under Section 412 of the Internal Revenue Code and either (i) is maintained, or contributed to, by any member of the ERISA Group for employees of any member of the ERISA Group or (ii) has at any time within the preceding five years been maintained, or contributed to, by any Person which was at such time a member of the ERISA Group for employees of any Person which was at such time a member of the ERISA Group.

"**Plan Asset Regulations**" means 29 CFR § 2510.3-101 *et seq.*, as modified by Section 3(42) of ERISA, as amended from time to time.

"**Pricing Certificate**" means a certificate signed by a Financial Officer of the Parent (substantially in the form of Exhibit I) (a) setting forth the Sustainability Margin Adjustment and the Sustainability Fee Adjustment and calculations in reasonable detail of the KPI Metrics, in each case, for the Reference Year covered thereby, (b) attaching a true and complete copy of the Parent's Sustainability Report for the applicable Reference Year and (c) attaching a true and complete report of the Sustainability Metric Auditor, which report (i) measures, verifies, calculates and certifies each KPI Metric set forth in the Pricing Certificate or the Sustainability Report, as applicable, for the applicable Reference Year and (ii) confirms that (A) in the case of limited assurance for reporting data on Scope 1 and 2 GHG Emissions and Total Water Withdrawals in Water-Stressed Locations, the Sustainability Metric Auditor is not aware of any modifications that should be made to such computations in order for them to be presented in all material respects in conformity with the applicable reporting criteria and ESG Standards, (B) in the case of reasonable assurance for reporting data on supplier spend, all assertions in regards to the Overall Supplier

Spend are materially correct and are a fair representation of the data and information, and (C) in the case of the diversity status of suppliers, the certifications are externally verified and reviewed by the Parent's internal audit program.

"Pricing Certificate Inaccuracy" has the meaning set forth in the Pricing Schedule.

"**Pricing Schedule**" means the Schedule attached hereto identified as such.

"**Prime Rate**" means the rate of interest last quoted by The Wall Street Journal as the "Prime Rate" in the U.S. or, if The Wall Street Journal ceases to quote such rate, the highest per annum interest rate published by the Board in Federal Reserve Statistical Release H.15 (519) (Selected Interest Rates) as the "bank prime loan" rate or, if such rate is no longer quoted therein, any similar rate quoted therein (as determined reasonably and in good faith by the Administrative Agent) or any similar release by the Board (as determined reasonably and in good faith by the Administrative Agent). Each change in the Prime Rate shall be effective from and including the date such change is publicly announced or quoted as being effective.

"**Principal Borrower**" means the Parent.

"**Proceeding**" has the meaning set forth for such term in Section 11.03(b).

"**PTE**" means a prohibited transaction class exemption issued by the U.S. Department of Labor, as any such exemption may be amended from time to time.

"**QFC**" has the meaning assigned to the term "qualified financial contract" in, and shall be interpreted in accordance with, 12 U.S.C. 5390(c)(8)(D).

"**QFC Credit Support**" has the meaning set forth in Section 11.16.

"**Qualifying Lender**" means a Lender or Participant, as the case may be, which is beneficially entitled to interest paid to it in respect of an advance under any Loan Document, and is:

(a) a bank within the meaning of section 246 TCA which is carrying on a bona fide banking business in Ireland for the purposes of section 246(3) TCA and whose Applicable Lending Office is located in Ireland; or

(b) (i) a body corporate that is resident for the purposes of tax in a member state of the European Union (other than Ireland) or in a territory with which Ireland has signed a Treaty which is in effect or which will come into effect once all the ratification procedures set out in section 826(1) TCA have been completed (residence for these purposes to be determined in accordance with the laws of the territory of which the Lender or Participant, as the case may be, claims to be resident) where that member state or territory imposes a tax that generally applies to interest receivable in that member state or territory by companies from sources outside that member state or territory; (ii) a company where interest payable on any Loan Document: (A) is exempted from the charge to income tax under an Irish Treaty having the force of law under the procedures set out in section 826(1) TCA; or (B) would be exempted from the charge to Irish income tax under an Irish Treaty entered into on or before the payment date of that interest if that Irish Treaty had the force of law under the provisions set out in section 826(1) TCA at that date; (iii) a United States of America ("U.S.") company, provided the U.S. company is incorporated in the U.S. and taxed in the U.S. on its worldwide income; or (iv) a U.S. limited liability company ("LLC"), provided the ultimate recipients of the interest would, if they were themselves lenders, be Qualifying Lenders within

paragraph (b)(i), (b)(ii) or (b)(iii) of this definition and the business conducted through the LLC is so structured for non-tax commercial reasons and not for tax avoidance purposes; provided in each case at (i), (ii) or (iii) the Lender is not carrying on a trade or business in Ireland through an agency or branch with which the interest payment is connected; or

(c) a body corporate: (i) which advances money in the ordinary course of a trade which includes the lending of money; and (ii) in whose hands any interest payable in respect of monies so advanced is taken into account in computing the trading income of that company; and (iii) which has complied with all of the provisions of section 246(5)(a) TCA, including making the appropriate notifications thereunder and (iv) whose Applicable Lending Office is located in Ireland; or

(d) a qualifying company within the meaning of section 110 TCA and whose Applicable Lending Office is located in Ireland; or

(e) an investment undertaking within the meaning of section 739B TCA and whose Applicable Lending Office is located in Ireland; or

(f) entitled to receive a payment under this Agreement without any Tax Deduction in Luxembourg.

"**Qualifying Lender Confirmation**" means a confirmation substantially in the form of Exhibit F.

"**Quarterly Payment Date**" means each March 31, June 30, September 30 and December 31.

"**Reference Time**" with respect to any setting of the then-current Benchmark means (i) if such Benchmark is the Term SOFR Rate, 5:00 a.m., Chicago time, on the day that is two (2) U.S. Government Securities Business Days preceding the date of such setting, (ii) if such Benchmark is the EURIBO Rate, 11:00 a.m., Brussels time two (2) TARGET Days preceding the date of such setting, (iii) if the RFR for such Benchmark is SONIA, then four (4) RFR Business Days prior to such setting, (iv) if the RFR for such Benchmark is Daily Simple SOFR, then four (4) RFR Business Days prior to such setting or (v) if such Benchmark is none of the Term SOFR Rate, Daily Simple SOFR, the EURIBO Rate or SONIA, the time determined by the Administrative Agent in its reasonable good faith discretion.

"Reference Year" means, with respect to any Pricing Certificate, the fiscal year of the Parent ending immediately prior to the date of such Pricing Certificate.

"**Register**" has the meaning set forth in Section 11.06(c).

"**Regulation U**" means Regulation U of the Board, as in effect from time to time.

"**Reimbursement Obligation**" has the meaning set forth in Section 2.19(e).

"**Related Parties**" means, with respect to any specified Person, such Person's Affiliates and the respective directors, officers, employees, agents and advisors of such Person and such Person's Affiliates.

"**Related Person**" has the meaning set forth in Section 11.03(b).

"**Relevant Governmental Body**" means (i) with respect to a Benchmark Replacement in respect of Loans denominated in Dollars, the Board and/or the NYFRB, or a committee officially endorsed or convened by the Board and/or the NYFRB or, in each case, any successor thereto, (ii) with respect to a Benchmark Replacement in respect of Loans denominated in Sterling, the Bank of England, or a committee

officially endorsed or convened by the Bank of England or, in each case, any successor thereto, (iii) with respect to a Benchmark Replacement in respect of Loans denominated in Euro, the European Central Bank, or a committee officially endorsed or convened by the European Central Bank or, in each case, any successor thereto or (iv) with respect to a Benchmark Replacement in respect of Loans denominated in any other currency, (a) the central bank for the currency in which such Benchmark Replacement is denominated or any central bank or other supervisor which is responsible for supervising either (1) such Benchmark Replacement or (2) the administrator of such Benchmark Replacement or (b) any working group or committee officially endorsed or convened by (1) the central bank for the currency in which such Benchmark Replacement is denominated, (2) any central bank or other supervisor that is responsible for supervising either (A) such Benchmark Replacement or (B) the administrator of such Benchmark Replacement, (3) a group of those central banks or other supervisors or (4) the Financial Stability Board or any part thereof.

"**Relevant Rate**" means (i) with respect to any Term Benchmark Borrowing denominated in Dollars, the Adjusted Term SOFR Rate, (ii) with respect to any Term Benchmark Borrowing denominated in Euro, the Adjusted EURIBO Rate or (iii) with respect to any RFR Borrowing denominated in Sterling or Dollars, the Adjusted Daily Simple RFR, as applicable.

"**Relevant Screen Rate**" means (i) with respect to any Term Benchmark Borrowing denominated in Dollars, the Term SOFR Reference Rate or (ii) with respect to any Term Benchmark Borrowing denominated in Euro, the EURIBO Screen Rate, as applicable.

"**Replacement Lender**" has the meaning set forth in Section 2.08(b).

"**Required Currency**" has the meaning set forth in Section 2.18.

"**Required Lenders**" means, subject to Section 2.21, at any time, Lenders having Credit Exposures representing more than 50% of the sum of the total Credit Exposures at such time; provided that for the purpose of determining the Required Lenders needed for any waiver, amendment, modification or consent of or under this Agreement or any other Loan Document, any Lender that is the Parent or an Affiliate of the Parent shall be disregarded.

"**Resolution Authority**" has the meaning set forth in Section 11.14.

"**Retired Commitments**" has the meaning set forth in Section 2.08(b).

"**Reuters**" means Thomson Reuters Corp., Refinitiv or any successor thereto.

"**Revolving Loan**" means a revolving loan made by a Lender pursuant to Section 2.01.

"**RFR**" means, for any RFR Loan denominated in (a) Sterling, SONIA and (b) Dollars, Daily Simple SOFR, and when used in reference to any Loan or Borrowing, means that such Loan, or the Loans comprising such Borrowing, bears interest at a rate determined by reference to the applicable Adjusted Daily Simple RFR.

"**RFR Borrowing**" means, as to any Borrowing, the RFR Loans comprising such Borrowing.

"**RFR Business Day**" means, for any Loan denominated in (a) Sterling, any day except for (i) a Saturday, (ii) a Sunday or (iii) a day on which banks are closed for general business in London and (b) Dollars, a U.S. Government Securities Business Day.

"**RFR Interest Day**" has the meaning specified in the definition of "Daily Simple RFR".

"**RFR Loan**" means a Loan that bears interest at a rate based on the Adjusted Daily Simple RFR.

"**RFR Margin**" means, at any date, the applicable rate per annum determined in accordance with the Pricing Schedule.

"**Sanctioned Country**" means, at any time, a country, region or territory which is itself the subject or target of any comprehensive Sanctions (at the time of this Agreement, the so-called Donetsk People's Republic, the so-called Luhansk People's Republic, the Crimea Region of Ukraine, the Russian-controlled Kherson and Zaporizhzhia regions of Ukraine, Cuba, Iran, North Korea and Syria).

"**Sanctioned Person**" means, at any time, any Person that is the subject or target of any Sanctions, including (a) any Person listed in any Sanctions-related list of designated Persons maintained by the U.S. government, including by Office of Foreign Assets Control of the U.S. Department of the Treasury, the U.S. Department of State, the U.S. Department of State or by the United Nations Security Council, the European Union, His Majesty's Treasury of the United Kingdom or Canada, (b) any Person organized or resident in a Sanctioned Country in violation of Sanctions and (c) any Person 50% or greater owned or controlled by any such Person or Persons described in the foregoing clauses (a) or (b) (including, without limitation for purposes of defining a Sanctioned Person, as ownership and control may be defined and/or established in and/or by any applicable laws, rules, regulations, or orders).

"**Sanctions**" means any international economic sanctions, trade embargoed or similar restrictions imposed, administered or enforced by (a) the U.S. government, including those administered by the U.S. Department of the Treasury's Office of Foreign Assets Control or the U.S. Department of State, or (b) the United Nations Security Council, the European Union, His Majesty's Treasury (UK) or Canada.

"Scope 1 and 2 GHG Emissions" means, for any Reference Year, the sum of the Parent's and its Subsidiaries' total absolute (a) scope 1 emissions and (b) scope 2 market-based emissions (as such terms are identified and determined in accordance with the GHG Protocol) under operational control, with all measurements, quantifications and reporting of greenhouse gas (GHG) emissions completed in accordance with the GHG Protocol and third-party verified to a level of limited assurance in accordance with ISO 14064-3 (2019-04).

"Scope 1 and 2 GHG Emissions Fee Adjustment Amount" means, subject to the provisions of the Pricing Schedule, with respect to any period between Sustainability Pricing Adjustment Dates, as determined for the applicable Reference Year:

(a) positive 0.25 bps, if the Scope 1 and 2 GHG Emissions for the applicable Reference Year as set forth in the Pricing Certificate is more than the Scope 1 and 2 GHG Emissions Threshold A for such Reference Year;

(b) 0.0 bps, if the Scope 1 and 2 GHG Emissions for the applicable Reference Year as set forth in the Pricing Certificate is less than or equal to the Scope 1 and 2 GHG Emissions Threshold A for such Reference Year but more than the Scope 1 and 2 GHG Emissions Target A for such Reference Year; and

(c) negative 0.25 bps, if the Scope 1 and 2 GHG Emissions for the applicable Reference Year as set forth in the Pricing Certificate is less than or equal to the Scope 1 and 2 GHG Emissions Target A for such Reference Year.

"Scope 1 and 2 GHG Emissions Margin Adjustment Amount" means, subject to the provisions of the Pricing Schedule, with respect to any period between Sustainability Pricing Adjustment Dates, as determined for the applicable Reference Year:

(a) positive 1.41666 bps, if the Scope 1 and 2 GHG Emissions for the applicable Reference Year as set forth in the Pricing Certificate is more than the Scope 1 and 2 GHG Emissions Threshold A for such Reference Year;

(b) 0.0 bps, if the Scope 1 and 2 GHG Emissions for the applicable Reference Year as set forth in the Pricing Certificate is less than or equal to the Scope 1 and 2 GHG Emissions Threshold A for such Reference Year but more than the Scope 1 and 2 GHG Emissions Target A for such Reference Year; and

(c) negative 1.41666 bps, if the Scope 1 and 2 GHG Emissions for the applicable Reference Year as set forth in the Pricing Certificate is less than or equal to the Scope 1 and 2 GHG Emissions Target A for such Reference Year.

"Scope 1 and 2 GHG Emissions Target A" means, with respect to any Reference Year, the Scope 1 and 2 GHG Emissions Target A for such Reference Year as set forth in the Sustainability Table.

"Scope 1 and 2 GHG Emissions Threshold A" means, with respect to any Reference Year, the Scope 1 and 2 GHG Emissions Threshold A for such Reference Year as set forth in the Sustainability Table.

"**Significant Subsidiary**" means any Consolidated Subsidiary of the Parent (which term, as used in this definition, includes such Subsidiary's Consolidated Subsidiaries) which meets any of the following conditions:

(i) the Parent's and the Parent's other Subsidiaries' outstanding investments in and advances to such Subsidiary exceed 10% of the consolidated total assets of the Parent, in each case as of the end of the most recently completed fiscal year of the Parent for which financial statements have been delivered pursuant to Section 5.01(a) (or, prior to the first such delivery, Section 4.04(a)) (the "**Most Recent Financial Statements**");

(ii) the total assets (after intercompany eliminations) of such Subsidiary exceed 10% of the consolidated total assets of the Parent as of the end of the most recently completed fiscal year of the Parent for which the Most Recent Financial Statements have been delivered;

(iii) the net sales of such Subsidiary (after intercompany eliminations) exceed 10% of the consolidated net sales of the Parent for the most recently completed fiscal year of the Parent for which the Most Recent Financial Statements have been delivered; or

(iv) any Consolidated Subsidiary with or into which a Significant Subsidiary is merged or which has acquired all or substantially all the assets of a Significant Subsidiary in either case pursuant to a transaction permitted by Section 5.09; provided, however, that such Subsidiary shall cease to be a Significant Subsidiary at the time of delivery pursuant to Section 5.01(a) of financial statements covering the fiscal year in which such transaction occurred unless one of the conditions set forth in clauses (i), (ii) or (iii) above is satisfied with respect to such Subsidiary.

"**SOFR**" means a rate per annum equal to the secured overnight financing rate as administered by the SOFR Administrator.

"**SOFR Administrator**" means the NYFRB (or a successor administrator of the secured overnight financing rate).

"**SOFR Administrator's Website**" means the NYFRB's website, currently at http://www.newyorkfed.org, or any successor source for the secured overnight financing rate identified as such by the SOFR Administrator from time to time.

"**SOFR Determination Date**" has the meaning specified in the definition of "Daily Simple SOFR".

"**SOFR Rate Day**" has the meaning specified in the definition of "Daily Simple SOFR".

"**SONIA**" means, with respect to any Business Day, a rate per annum equal to the Sterling Overnight Index Average for such Business Day published by the SONIA Administrator on the SONIA Administrator's Website on the immediately succeeding Business Day.

"**SONIA Administrator**" means the Bank of England (or any successor administrator of the Sterling Overnight Index Average).

"**SONIA Administrator's Website**" means the Bank of England's website, currently at http://www.bankofengland.co.uk, or any successor source for the Sterling Overnight Index Average identified as such by the SONIA Administrator from time to time.

"**Statutory Reserve Rate**" means a fraction (expressed as a decimal), the numerator of which is the number one and the denominator of which is the number one minus the aggregate of the maximum reserve percentage (including any marginal, special, emergency or supplemental reserves) expressed as a decimal established by the Board to which the Administrative Agent is subject with respect to the Adjusted EURIBO Rate for eurocurrency funding (currently referred to as "Eurocurrency liabilities" in Regulation D) or any other reserve ratio or analogous requirement of any central banking or financial regulatory authority imposed in respect of the maintenance of the Commitments or the funding of the Loans. Such reserve percentage shall include those imposed pursuant to Regulation D. Term Benchmark Loans for which the associated Benchmark is adjusted by reference to the Statutory Reserve Rate (per the related definition of such Benchmark) shall be deemed to constitute eurocurrency funding and to be subject to such reserve requirements without benefit of or credit for proration, exemptions or offsets that may be available from time to time to any Lender under Regulation D or any comparable regulation. The Statutory Reserve Rate shall be adjusted automatically on and as of the effective date of any change in any reserve percentage, and the Administrative Agent shall notify the Principal Borrower promptly of any such adjustment.

"**Sterling**" means the lawful currency of the United Kingdom.

"**Stop Issuance Notice**" has the meaning set forth in Section 2.19(i).

"**Subsidiary**" means, with respect to any Person, any corporation, association or other business entity of which more than 50% of the total voting power of shares of stock (or comparable ownership interests) entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of the Person or a combination thereof.

"**Supported QFC**" has the meaning set forth in Section 11.16.

"**Surviving Commitment**" has the meaning set forth in Section 2.08(b).

"**Surviving Lender**" has the meaning set forth in Section 2.08(b).

"**Sustainability Fee Adjustment**" means, with respect to any Pricing Certificate for any period between Sustainability Pricing Adjustment Dates, an amount (whether positive, negative or zero), expressed as a number of basis points, equal to the sum of (a) the Diverse Supplier Spend Fee Adjustment Amount (whether positive, negative or zero), plus (b) the Scope 1 and 2 GHG Emissions Fee Adjustment Amount (whether positive, negative or zero), plus (c) the Total Water Withdrawals in Water-Stressed Locations Fee Adjustment Amount (whether positive, negative or zero) in each case for such period.

"**Sustainability Margin Adjustment**" with respect to any Pricing Certificate for any period between Sustainability Pricing Adjustment Dates, an amount (whether positive, negative or zero), expressed as a number of basis points, equal to the sum of (a) the Diverse Supplier Spend Margin Adjustment Amount (whether positive, negative or zero), plus (b) the Scope 1 and 2 GHG Emissions Margin Adjustment Amount (whether positive, negative or zero), plus (c) the Total Water Withdrawals in Water-Stressed Locations Margin Adjustment Amount (whether positive, negative or zero) in each case for such period.

"Sustainability Metric Auditor" means (i) Apex for Scope 1 and 2 GHG Emissions and Total Water Withdrawals in Water-Stressed Locations, and (ii) PricewaterhouseCoopers and Gainfront for Diverse Supplier Spend, or, in each case, any replacement sustainability metric auditor thereof as designated from time to time by the Parent; provided that any such replacement Sustainability Metric Auditor (a) shall be (1) a qualified external reviewer (other than an Affiliate of the Parent), with relevant expertise, such as an auditor, environmental consultant and/or independent ratings agency of recognized national standing or (2) another firm designated by the Parent and approved by the Administrative Agent, the Sustainability Structuring Agent and the Required Lenders, and (b) shall apply auditing standards and methodology that are the same as or substantially consistent with the auditing standards and methodology used in the Parent's Sustainability Report for the Reference Year ending September 30, 2022, except for any changes to such standards and/or methodology that (x) are consistent with then generally accepted industry standards or (y) if not so consistent, are proposed by the Parent and approved by the Administrative Agent, the Sustainability Structuring Agent and the Required Lenders.

"**Sustainability Pricing Adjustment Date**" has the meaning set forth in the Pricing Schedule.

"**Sustainability Recalculation Event**" has the meaning set forth in the Pricing Schedule.

"**Sustainability-Related Information**" has the meaning set forth in Section 4.13.

"**Sustainability Report**" means the annual non-financial disclosure report prepared in accordance with the ESG Standards publicly reported by the Parent and published on an Internet or intranet website to which each Lender and the Administrative Agent have been granted access free of charge (or at the expense of the Parent), it being understood and agreed that the applicable Sustainability Report shall be such disclosure report as in effect and available on the date of delivery of the applicable Pricing Certificate.

"**Sustainability Structuring Agent**" means ING Capital LLC, in its capacity as Sustainability Structuring Agent in connection with the credit facility provided hereunder.

"**Sustainability Table**" means the Sustainability Table attached hereto as Schedule 1.01, as the same may be amended from time to time in connection with a Sustainability Recalculation Event as described in, and pursuant to the terms and conditions of, the Pricing Schedule.

"**Swap Agreement**" means any agreement with respect to any swap, forward, future or derivative transaction or option or similar agreement involving, or settled by reference to, one or more rates, currencies,

commodities, equity or debt instruments or securities, or economic, financial or pricing indices or measures of economic, financial or pricing risk or value or any similar transaction or any combination of these transactions; provided that no phantom stock or similar plan providing for payments only on account of services provided by current or former directors, officers, employees or consultants of the Parent or the Subsidiaries shall be a Swap Agreement.

"**Syndication Agent**" means Bank of America, N.A., in its capacity as Syndication Agent in connection with the credit facility provided hereunder.

"**T2**" means the real time gross settlement system operated by the Eurosystem, or any successor system.

"**TARGET Day**" means any day on which T2 (or, if such payment system ceases to be operative, such other payment system, if any, reasonably determined by the Administrative Agent to be a suitable replacement, such determination to be consistent with such determination generally under other syndicated credit facilities for which it acts as administrative agent) is open for the settlement of payments in Euro.

"**Tax Deduction**" means a deduction or withholding for or on account of Tax from a payment under a Loan Document.

"**Taxes**" has the meaning set forth in Section 8.04(a).

"**TCA**" means the Taxes Consolidation Act, 1997 of Ireland.

"**Term Benchmark**", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are bearing interest at a rate determined by reference to the Adjusted Term SOFR Rate (except pursuant to clause (c) of the definition of "Base Rate") or the Adjusted EURIBO Rate.

"**Term Benchmark Margin**" has the meaning assigned to such term in the Pricing Schedule.

"**Term SOFR Determination Day**" has the meaning assigned to it under the definition of Term SOFR Reference Rate.

"**Term SOFR Rate**" means, with respect to any Term Benchmark Borrowing denominated in Dollars and for any tenor comparable to the applicable Interest Period, the Term SOFR Reference Rate at approximately 5:00 a.m., Chicago time, two U.S. Government Securities Business Days prior to the commencement of such tenor comparable to the applicable Interest Period, as such rate is published by the CME Term SOFR Administrator.

"**Term SOFR Reference Rate**" means, for any day and time (such day, the "**Term SOFR Determination Day**"), with respect to any Term Benchmark Borrowing denominated in Dollars and for any tenor comparable to the applicable Interest Period, the rate per annum published by the CME Term SOFR Administrator and identified reasonably and in good faith by the Administrative Agent as the forward-looking term rate based on SOFR. If by 5:00 p.m. (New York City time) on such Term SOFR Determination Day, the "Term SOFR Reference Rate" for the applicable tenor has not been published by the CME Term SOFR Administrator and a Benchmark Replacement Date with respect to the Term SOFR Rate has not occurred, then, so long as such day is otherwise a U.S. Government Securities Business Day, the Term SOFR Reference Rate for such Term SOFR Determination Day will be the Term SOFR Reference Rate as published in respect of the first preceding U.S. Government Securities Business Day for which such Term SOFR Reference Rate was published by the CME Term SOFR Administrator, so long as such first

preceding U.S. Government Securities Business Day is not more than five (5) U.S. Government Securities Business Days prior to such Term SOFR Determination Day.

"**Termination Date**" means, as to each Lender, December 11, 2028 or, in the case of any Lender, such later date to which the Commitment of such Lender shall have been extended pursuant to Section 2.01(c) (or, if any of the foregoing days is not a Business Day, the next preceding Business Day).

"**Terminating Lender**" has the meaning set forth in Section 2.01(c).

"**Total Outstanding Amount**" means, at any time, the aggregate Dollar Amount of all Loans outstanding at such time plus the aggregate Dollar Amount of the Letter of Credit Liabilities of all Lenders at such time.

"Total Water Withdrawals in Water-Stressed Locations" means, for any Reference Year, the sum of the Parent's and its Subsidiaries' total water withdrawals in water-stressed locations under operational control (identified and determined in accordance with the CDP Water Disclosure Reporting Guidelines and GRI Standards), with all measurements, quantifications and reporting of water withdrawals in water-stressed locations completed in accordance with the CDP Water Disclosure Reporting Guidelines and GRI Standards, and third-party verified to a level of limited assurance in accordance with ISAE 3000. Water-stressed locations are identified and determined in alignment with the Aqueduct™ 3.0 water risk framework and tool of the World Resource Institute.

"Total Water Withdrawals in Water-Stressed Locations Fee Adjustment Amount" means, subject to the provisions of the Pricing Schedule, with respect to any period between Sustainability Pricing Adjustment Dates, as determined for the applicable Reference Year:

(a) positive 0.25 bps, if the Total Water Withdrawals in Water-Stressed Locations for the applicable Reference Year as set forth in the Pricing Certificate is more than the Total Water Withdrawals in Water-Stressed Locations Threshold B for such Reference Year;

(b) 0.0 bps, if the Total Water Withdrawals in Water-Stressed Locations for the applicable Reference Year as set forth in the Pricing Certificate is less than or equal to the Total Water Withdrawals in Water-Stressed Locations Threshold B for such Reference Year but more than the Total Water Withdrawals in Water-Stressed Locations Target B for such Reference Year; and

(c) negative 0.25 bps, if the Total Water Withdrawals in Water-Stressed Locations for the applicable Reference Year as set forth in the Pricing Certificate is less than or equal to the Total Water Withdrawals in Water-Stressed Locations Target B for such Reference Year.

"Total Water Withdrawals in Water-Stressed Locations Margin Adjustment Amount" means, subject to the provisions of the Pricing Schedule, with respect to any period between Sustainability Pricing Adjustment Dates, as determined for the applicable Reference Year:

(a) positive 1.41666 bps, if the Total Water Withdrawals in Water-Stressed Locations for the applicable Reference Year as set forth in the Pricing Certificate is more than the Total Water Withdrawals in Water-Stressed Locations Threshold B for such Reference Year;

(b) 0.0 bps, if the Total Water Withdrawals in Water-Stressed Locations for the applicable Reference Year as set forth in the Pricing Certificate is less than or equal to the Total Water Withdrawals in Water-Stressed Locations Threshold B for such Reference Year but more than the Total Water Withdrawals in Water-Stressed Locations Target B for such Reference Year; and

(c) negative 1.41666 bps, if the Total Water Withdrawals in Water-Stressed Locations for the applicable Reference Year as set forth in the Pricing Certificate is less than or equal to the Total Water Withdrawals in Water-Stressed Locations Target B for such Reference Year.

"Total Water Withdrawals in Water-Stressed Locations Target B" means, with respect to any Reference Year, the Total Water Withdrawals in Water-Stressed Locations Target B for such Reference Year as set forth in the Sustainability Table.

"Total Water Withdrawals in Water-Stressed Locations Threshold B" means, with respect to any Reference Year, the Total Water Withdrawals in Water-Stressed Locations Threshold B for such Reference Year as set forth in the Sustainability Table.

"**Trade Date**" has the meaning set forth in Section 11.06(h)(i).

"**Transactions**" means the execution, delivery and performance by the Borrowers of the Loan Documents, the borrowing of Loans and the issuance of Letters of Credit hereunder.

"**Type**" when used in reference to any Loan or Borrowing, refers to whether the rate of interest on such Loan, or on the Loans comprising such Borrowing, is determined by reference to the Adjusted Term SOFR Rate, the Adjusted EURIBO Rate, the Base Rate, the Adjusted Daily Simple RFR or the Central Bank Rate.

"**UK Financial Institution**" has the meaning set forth in Section 11.14.

"**UK Resolution Authority**" has the meaning set forth in Section 11.14.

"**Unadjusted Benchmark Replacement**" means the applicable Benchmark Replacement excluding the related Benchmark Replacement Adjustment.

"**Unfunded Liabilities**" means, with respect to any Plan at any time, the amount (if any) by which (i) the present value of all benefits under such Plan exceeds (ii) the fair market value of all Plan assets allocable to such benefits (excluding any accrued but unpaid contributions), all determined as of the then most recent valuation date for such Plan, but only to the extent that such excess represents a potential liability of a member of the ERISA Group to the PBGC or any other Person under Title IV of ERISA.

"**United States**" means the United States of America, including the States and the District of Columbia, but excluding its territories and possessions.

"**U.S. Government Securities Business Day**" means any day except for (i) a Saturday, (ii) a Sunday or (iii) a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in United States government securities.

"**U.S. Special Resolution Regime**" has the meaning set forth in Section 11.16.

"**Wholly-Owned Consolidated Subsidiary**" means, with respect to any Person at any time, any Consolidated Subsidiary all of the shares of capital stock or other ownership interests of which (except directors' qualifying shares) are at the time directly or indirectly owned by such Person at such time.

"**Withholding Agent**" has the meaning set forth in Section 8.04(a).

"**Write-Down and Conversion Powers**" has the meaning set forth in Section 11.14.

Section 1.02 *Accounting Terms and Determinations.* Unless otherwise specified herein, all accounting terms used herein shall be interpreted, all accounting determinations hereunder shall be made, and all financial statements required to be delivered hereunder shall be prepared in accordance with GAAP as in effect from time to time, applied on a basis consistent (except for changes concurred in by the Parent's independent public accountants) with the most recent audited consolidated financial statements of the Parent and its Consolidated Subsidiaries delivered to the Lenders; provided that, if the Parent notifies the Administrative Agent that the Parent wishes to amend any covenant in Article 5 to eliminate the effect of any change in GAAP or the application thereof on the operation of such covenant (or if the Administrative Agent notifies the Parent that the Required Lenders wish to amend Article 5 for such purpose), then the Parent's compliance with such covenant shall be determined on the basis of GAAP without giving effect to the relevant change in GAAP or the application thereof, until either such notice is withdrawn or such covenant is amended in a manner satisfactory to the Parent and the Required Lenders. Notwithstanding any other provision contained herein, all terms of an accounting or financial nature used herein shall be construed, and all computations of amounts and ratios referred to herein (including computations in respect of compliance with Section 5.07) shall be made (i) without giving effect to any election under Accounting Standards Codification 825-10-25 (or any other Accounting Standards Codification or Financial Accounting Standard having a similar result or effect) to value any Debt or other liabilities of the Parent or any Subsidiary at "fair value", as defined therein, (ii) without giving effect to any treatment of Debt under Accounting Standards Codification 470-20 or 2015-03 (or any other Accounting Standards Codification or Financial Accounting Standard having a similar result or effect) to value any such Debt in a reduced or bifurcated manner as described therein, and such Debt shall at all times be valued at the full stated principal amount thereof and (iii) without giving effect to any change to, or modification of, GAAP (including any future phase-in of changes to GAAP that have been approved as of December 14, 2018) which would require the capitalization of leases characterized as "operating leases" as of December 14, 2018 (it being understood and agreed, for the avoidance of doubt, financial statements delivered pursuant to Sections 5.01(a) and 5.01(b) shall be prepared without giving effect to this sentence).

Section 1.03 *Types of Loans and Borrowings.* The term "**Borrowing**" denotes the aggregation of Loans of one or more Lenders to be made to a single Borrower pursuant to Article 2 on the same date, all of which Loans are of the same Type, Class and currency and, in the case of Term Benchmark Loans, have the same initial Interest Period. Identification of a Borrowing by Type (*e.g.*, a "Term Benchmark Borrowing") indicates that such Borrowing is comprised of Loans of such Type.

Section 1.04 *Terms Generally*. The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation". The word "will" shall be construed to have the same meaning and effect as the word "shall". Unless the context requires otherwise, (a) any definition of or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, amended and restated, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein), (b) any reference herein to any Person shall be construed to include such Person's successors and assigns (subject to any restrictions on assignment set forth herein), (c) the words "herein", "hereof" and "hereunder", and words of similar import, shall be construed to refer to this Agreement in its entirety and not to any particular provision hereof, (d) all references herein to Articles, Sections, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Exhibits and Schedules to, this Agreement and (e) the words "asset" and "property" shall be construed to have the same

meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts and contract rights.

Section 1.05 *Interest Rates; Benchmark Notification*. The interest rate on a Loan denominated in Dollars or an Alternative Currency may be derived from an interest rate benchmark that may be discontinued or is, or may in the future become, the subject of regulatory reform. Upon the occurrence of a Benchmark Transition Event, Section 8.01(b) provides a mechanism for determining an alternative rate of interest. The Administrative Agent does not warrant or accept any responsibility for, and shall not have any liability with respect to, the administration, submission, performance or any other matter related to any interest rate used in this Agreement, or with respect to any alternative or successor rate thereto, or replacement rate thereof, including without limitation, whether the composition or characteristics of any such alternative, successor or replacement reference rate will be similar to, or produce the same value or economic equivalence of, the existing interest rate being replaced or have the same volume or liquidity as did any existing interest rate prior to its discontinuance or unavailability (other than, for the avoidance of doubt, in each case with respect to its obligation to apply the definition of such rate in accordance with its terms and comply with its obligations in Article 2 and Section 8.01 of this Agreement). The Administrative Agent and its affiliates and/or other related entities may engage in transactions that affect the calculation of any interest rate used in this Agreement or any alternative, successor or alternative rate (including any Benchmark Replacement) and/or any relevant adjustments thereto, in each case, in a manner adverse to the Borrowers. The Administrative Agent may select information sources or services commonly used in the banking industry for such purposes in its reasonable good faith discretion to ascertain any interest rate used in this Agreement, any component thereof, or rates referenced in the definition thereof, in each case pursuant to the terms of this Agreement, and shall have no liability to the Borrowers, any Lender or any other person or entity for damages of any kind, including direct or indirect, special, punitive, incidental or consequential damages, costs, losses or expenses (whether in tort, contract or otherwise and whether at law or in equity), for any error or calculation of any such rate (or component thereof) provided by any such information source or service.

Section 1.06 *Certain Calculations*. No Default or Event of Default shall arise as a result of any limitation or threshold set forth in Dollars in Sections 5.08, 5.09 and 5.10 and Article 6 under this Agreement being exceeded solely as a result of changes in currency exchange rates from those rates applicable on the last day of the fiscal quarter of the Parent immediately preceding the fiscal quarter of the Parent in which the applicable transaction or occurrence requiring a determination occurs.

Section 1.07 *Divisions*. For all purposes under the Loan Documents, in connection with any division or plan of division under Delaware law (or any comparable event under a different jurisdiction's laws): (a) if any asset, right, obligation or liability of any Person becomes the asset, right, obligation or liability of a different Person, then it shall be deemed to have been transferred from the original Person to the subsequent Person, and (b) if any new Person comes into existence, such new Person shall be deemed to have been organized and acquired on the first date of its existence by the holders of its Equity Interests at such time.

Section 1.08 *Luxembourg Terms*. Notwithstanding any other provision of this Agreement to the contrary, in this Agreement where it relates to a Luxembourg Borrower, a reference to: (a) a receiver, liquidator, trustee in bankruptcy, administrator, judicial custodian, assignee for the benefit of creditors, compulsory manager, receiver, administrative receiver, administrator or similar officer includes any: (i) insolvency receiver (*curateur*) or *juge-commissaire* appointed under the Luxembourg Commercial Code; (ii) *liquidateur* appointed under Articles 1100-1 to 1100-15 (inclusive) of the Luxembourg act dated 10 August 1915 on commercial companies, as amended; (iii) *liquidateur* or *juge-commissaire* appointed under Article 1200-1 of the Luxembourg act dated 10 August 1915 on commercial companies, as amended; and (iv) *conciliateur d'entreprise*, *mandataire de justice*, *juge délégué* or *administrateur pro*visoire appointed under the Luxembourg act dated 7 August 2023 on business continuity and the modernisation of bankruptcy (the **Luxembourg Business Continuity Act**); (b) a winding-up, administration, liquidation, bankruptcy, moratorium, dissolution or any similar proceedings includes, without limitation, bankruptcy (*faillite*), suspension of payments (*sursis de paiement*), liquidation and administrative dissolution without liquidation (*dissolution administrative sans liquidation*); (c) a reorganisation includes, without limitation, judicial reorganisation (*réorganisation judiciaire*); (d) a person being unable to pay its debts includes that person being in a state of cessation of payments (*cessation de paiem*ents) or having lost or meeting the criteria to lose its commercial creditworthiness (*ébranlement de credit*); (e) attachments or similar creditors process means an executory attachment (*saisie exécutoire*) or conservatory attachment (*saisie arrêt*); (f) a "set-off" includes, for purposes of Luxembourg law, contractual set-off and legal set-off; and (g) commencing negotiations with one or more of its creditors with a view to rescheduling any of its indebtedness includes any such negotiations conducted in order to reach an amicable agreement (*accord amiable*) with creditors pursuant to the Luxembourg Business Continuity Act.

ARTICLE 2.
THE CREDITS

Section 2.01 *Commitments to Lend*.

(a) Committed Loans. From and after the Closing Date, each Lender severally agrees, on the terms and conditions set forth in this Agreement, to make loans (which may be denominated in Dollars or an Alternative Currency as the Borrower elects pursuant to Section 2.02) to the Borrowers pursuant to this Section 2.01(a) from time to time prior to its Termination Date in amounts such that (i) the Outstanding Amount of such Lender shall at no time exceed the amount of such Lender's Commitment and (ii) the Total Outstanding Amount shall at no time exceed the aggregate amount of the Commitments. Within the foregoing limits, any Borrower may borrow under this Section, repay or, to the extent permitted by Section 2.10, prepay Loans and reborrow at any time prior to the Termination Date for any Lender under this Section 2.01. Subject to 8.01, each Borrowing shall be comprised (i) in the case of Borrowings in Dollars, entirely of Base Rate Loans or Term Benchmark Loans and (ii) in the case of Borrowings in any other Agreed Currency, entirely of Term Benchmark Loans or RFR Loans, as applicable, in each case of the same Agreed Currency, as the relevant Borrower may request in accordance herewith; provided that each Base Rate Loan shall only be made in Dollars. Borrowings of more than one Type may be outstanding at the same time; provided that there shall not at any time be more than a total of ten (10) Term Benchmark Borrowings or RFR Borrowings outstanding.

(b) Minimum Borrowings. Each Borrowing under this Section 2.01 shall be in an aggregate Dollar Amount of not less than $10,000,000 (except that any such Borrowing may be in the aggregate Dollar Amount of the available Commitments) and shall be made from the several Lenders ratably in proportion to their respective Commitments.

(c) Extension of Commitments. (i) Each Lender's Commitment may be extended, if at the time no Event of Default has occurred and is continuing, in the manner set forth in this subsection (c), on not more than two occasions (any such occasion, an "**Extension Date**") for a period of one year after the date on which the Commitment of such Lender would have been terminated; provided that no such extension request shall result in a Termination Date for any Lender that is more than five years after the relevant Extension Date. If the Principal Borrower wishes to request an extension of each Lender's Commitment, it shall give notice to that effect to the Administrative Agent not less than 45 days and not more than 90 days prior to the applicable Extension Date, whereupon the Administrative Agent shall promptly notify each of the Lenders of such request. Each Lender will use its best efforts to respond to such request, whether affirmatively or negatively, as it may elect in its discretion, within 30 days of such request (or such longer period as the Principal Borrower and the Administrative Agent may reasonably agree) to the Administrative Agent. If any Lender shall not have responded affirmatively within such 30-day period (or such longer period, if applicable), such Lender shall be deemed to have rejected the Principal Borrower's proposal to extend its Commitment, and only the Commitments of those Lenders which have responded affirmatively shall be extended, subject to receipt by the Administrative Agent of counterparts of an Extension Agreement in substantially the form of Exhibit H hereto (an "**Extension Agreement**") duly completed and signed by the Principal Borrower, the Administrative Agent and all of the Lenders which have responded affirmatively. The Administrative Agent shall provide to the Principal Borrower, no later than 10 days prior to the Extension Date for any such request, a list of the Lenders which have responded affirmatively. The Extension Agreement shall be executed and delivered no later than five days prior to the Extension Date, and no extension of the Commitments pursuant to this subsection (c) shall be legally binding on any party hereto unless and until such Extension Agreement is so executed and delivered by Lenders having at least 51% of the aggregate amount of the Commitments.

(ii) If any Lender rejects, or is deemed to have rejected, the Principal Borrower's proposal to extend its Commitment (A) this Agreement shall terminate on the Termination Date with respect to such Lender, (B) the Borrower shall pay to such Lender on the Termination Date any amounts due and payable to such Lender on such date and (C) the Principal Borrower may, if it so elects, designate a Person not theretofore a Lender and reasonably acceptable to the Administrative Agent to become a Lender, or agree with an existing Lender that such Lender's Commitment shall be increased; provided that the aggregate amount of the Commitments following any designation or agreement may not exceed the aggregate amount of the Commitments as in effect immediately prior to the relevant request. Upon execution and delivery by the Principal Borrower and such replacement Lender or other Person of an instrument of assumption in form and amount reasonably satisfactory to the Administrative Agent and execution and delivery of the Extension Agreement pursuant to subsection (c)(i), such existing Lender shall have a Commitment as therein set forth or such other Person shall become a Lender with a Commitment as therein set forth and all the rights and obligations of a Lender with such a Commitment hereunder.

(iii) The Administrative Agent shall promptly notify the Lenders and the Principal Borrower of the effectiveness of each extension of the Commitments pursuant to this subsection (c).

(iv) If, by reason of the operation of this subsection (c), the Termination Date of any Lender (a "**Terminating Lender**") occurs prior to the Termination Date of any other Lender, then (i) upon such earlier Termination Date, the participations of the Terminating Lender in all then outstanding Letters of Credit shall be reallocated among the other Lenders and/or cash collateralized in the same manner as contemplated by Section 2.21(d) and (ii) subject to implementation of clause (i), the participation of the Terminating Lender in each then outstanding Letter of Credit shall terminate.

Section 2.02 *Notice of Borrowing.* The Borrower shall give the Administrative Agent notice (a "**Notice of Borrowing**") (1) at its New York Office not later than 10:30 a.m. (New York City time) on (y)

the date of each Base Rate Borrowing and (z) the third U.S. Government Securities Business Day before each Term Benchmark Borrowing denominated in Dollars or Euro and (2) at its New York Office and its London Office not later than 11:00 a.m. (New York City time) on the fifth Business Day before each Borrowing of RFR Loans, specifying:

(i) the date of such Borrowing, which shall be a Business Day;

(ii) the currency and aggregate amount (in such currency) of such Borrowing;

(iii) whether such Borrowing is to be a Base Rate Borrowing, a Term Benchmark Borrowing or an RFR Borrowing; and

(iv) in the case of a Term Benchmark Borrowing, the duration of the initial Interest Period applicable thereto, subject to the provisions of the definition of Interest Period.

Section 2.03 *Notice to Lenders; Funding of Loans*.

(a) Upon receipt of a Notice of Borrowing, the Administrative Agent shall promptly notify each Lender of the contents thereof and of such Lender's share of such Borrowing and such Notice of Borrowing shall not thereafter be revocable by the Borrower.

(b) On the date of each Borrowing, each Lender participating therein shall make available its ratable share of such Borrowing:

(A) if such Borrowing is to be made in Dollars, not later than 2:00 p.m. (New York City time), in Federal or other funds immediately available in New York City, to the Administrative Agent at its New York Office; or

(B) if such Borrowing is to be made in an Alternative Currency, in such Alternative Currency (in such funds as may then be customary for the settlement of international transactions in such Alternative Currency) to the account of the Administrative Agent at its London Office.

Unless the Administrative Agent determines that any applicable condition specified in Article 3 has not been satisfied or waived in accordance with Section 11.05, the Administrative Agent will make the funds so received from the Lenders available to the Borrower on the date of each Borrowing as directed by the Borrower.

(c) Unless the Administrative Agent shall have received at its New York Office notice from a Lender prior to the date (or in the case of a Base Rate Borrowing, prior to 2:00 p.m. (New York City time) on the date of such Borrowing) of any Borrowing that such Lender will not make available to the Administrative Agent such Lender's share of such Borrowing, the Administrative Agent may assume that such Lender has made such share available to the Administrative Agent on the date of such Borrowing in accordance with subsection (b) of this Section 2.03 and the Administrative Agent may, in reliance upon such assumption, make available to the Borrower on such date a corresponding amount. If and to the extent that such Lender shall not have so made such share available to the Administrative Agent, such Lender (and, if such Lender shall not have paid such amount to the Administrative Agent within two Business Days of the Administrative Agent's demand therefor, the Borrower) agrees to repay to the Administrative Agent forthwith on demand such corresponding amount together with interest thereon, for each day from the date such amount is made available to the Borrower until the date such amount is repaid to the Administrative Agent, (i) in the case of such Lender, the greater of the applicable Overnight Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation or (ii) in the

case of the Borrower, the interest rate applicable under this Agreement to such Loans, or in the case of Alternative Currencies, in accordance with such market practice, in each case, as applicable. If such Lender shall repay to the Administrative Agent such corresponding amount, such amount so repaid shall constitute such Lender's Loan included in such Borrowing for purposes of this Agreement.

(d) The failure of any Lender to make any Loan to be made by it on the date specified therefor shall not relieve any other Lender of any obligation to make a Loan on such date.

(e) Each Lender may, at its option, make any Loan available to any Borrower by causing any foreign or domestic branch or affiliate of such Lender to make such Loan; provided that any exercise of such option shall not affect the obligation of such Borrower to repay such Loan in accordance with the terms of this Agreement.

Section 2.04 *Notes*.

(a) Each Lender may, on and from time to time after the Closing Date, by notice to the Principal Borrower and the Administrative Agent, request (i) that its Loans to any Borrower be evidenced by a single Note of such Borrower payable to such Lender for the account of its Applicable Lending Office in an amount equal to the aggregate unpaid principal amount of such Lender's Loans to such Borrower or (ii) that its Loans of a particular Type or currency to any Borrower be evidenced by a separate Note of such Borrower in an amount equal to the aggregate unpaid principal amount of such Loans. Each such Note shall be in substantially the form of Exhibit A hereto with appropriate modifications to reflect the fact that it evidences solely Loans of the relevant Type or currency. Each reference in this Agreement to the "Notes" of such Lender shall be deemed to refer to and include any or all of such Notes, as the context may require.

(b) Each Lender shall record the date, amount, Type, currency and maturity of each Loan made by it and the date and amount of each payment of principal made with respect thereto, and may, if such Lender so elects in connection with any transfer or enforcement of its Note, endorse on the schedule forming a part thereof appropriate notations to evidence the foregoing information with respect to each such Loan then outstanding; provided that the failure of any Lender to make any such recordation or endorsement shall not affect the obligations of any Borrower hereunder or under the Notes. Each Lender is hereby irrevocably authorized by the Borrowers so to endorse its Notes and to attach to and make a part of any Note a continuation of any such schedule as and when required.

Section 2.05 *Maturity of Loans.* Each Loan of each Lender shall mature, and the principal amount thereof shall be due and payable (together with interest accrued thereon), on the Termination Date of such Lender.

Section 2.06 *Interest Rates*.

(a) Each Base Rate Loan shall bear interest on the outstanding principal amount thereof, for each day from the date such Loan is made until it becomes due, at a rate per annum equal to the sum of the Base Rate Margin and the Base Rate for each such day. Such interest shall be payable at maturity, quarterly in arrears on each Quarterly Payment Date prior to maturity and, with respect to the principal amount of any Base Rate Loan converted to a Term Benchmark Loan, on the date such amount is so converted. Any overdue principal of or interest on any Base Rate Loan shall bear interest, payable on demand, for each day from and including the date payment thereof was due to but excluding the date of actual payment, at a rate per annum equal to the sum of 2% plus the rate otherwise applicable to Base Rate Loans for each such day.

(b) Each Term Benchmark Loan shall bear interest on the outstanding principal amount thereof, for each day during each Interest Period applicable thereto, at a rate per annum equal to the sum of the Term Benchmark Margin for such day plus the Adjusted Term SOFR Rate or the Adjusted EURIBO Rate, as applicable, for such Interest Period. Such interest shall be payable for each Interest Period on the last day thereof and, if such Interest Period is longer than three months, at intervals of three months after the first day thereof.

(c) Each RFR Loan shall bear interest on the outstanding principal amount thereof, for each day from the date such Loan is made until it becomes due, at a rate per annum equal to the sum of the RFR Margin and the Adjusted Daily Simple RFR for each such day. Such interest shall be payable at maturity and on each date that is on the numerically corresponding day in each calendar month that is one month after the Borrowing of such RFR Loan (or, if there is no such numerically corresponding day in such month, then the last day of such month). Any overdue principal of or interest on any RFR Loan shall bear interest, payable on demand, for each day from and including the date payment thereof was due to but excluding the date of actual payment, at a rate per annum equal to the sum of 2% plus the sum of the RFR Margin for such day plus Adjusted Daily Simple RFR otherwise applicable to RFR Loans for each such day.

(d) Any overdue principal of or interest on any Term Benchmark Loan shall bear interest, payable on demand, for each day from and including the date payment thereof was due to but excluding the date of actual payment, at a rate per annum equal to the sum of 2% plus the sum of the Term Benchmark Margin for such day plus the Adjusted Term SOFR Rate or the Adjusted EURIBO Rate, as applicable, that is applicable to such Loan on the day before such payment was due.

(e) The Administrative Agent shall determine each interest rate applicable to the Loans hereunder. The Administrative Agent shall give prompt notice to the Borrower and the Lenders of each rate of interest so determined, and its determination thereof shall be conclusive in the absence of demonstrable error.

(f) Interest in respect of Loans denominated in Dollars shall be paid in Dollars, and interest in respect of Loans denominated in an Alternative Currency shall be paid in such Alternative Currency.

Section 2.07 *Fees.* (a) The Principal Borrower shall pay to the Administrative Agent for the account of the Lenders ratably a facility fee in Dollars at the Facility Fee Rate (determined daily in accordance with the Pricing Schedule) on the daily aggregate amount of the Credit Exposures. Such facility fee shall accrue from and including the Closing Date to but excluding the date on which the Credit Exposures are permanently reduced to zero.

(b) The Borrower shall pay to the Administrative Agent (i) for the account of the Lenders ratably a letter of credit fee in Dollars accruing daily on the aggregate Dollar Amount of all outstanding Letters of Credit at a rate per annum equal to the Term Benchmark Margin or, in the case of performance standby Letters of Credit with respect to nonfinancial contractual obligations, a rate per annum equal to 50% of the Term Benchmark Margin (determined daily in accordance with the Pricing Schedule) and (ii) for the account of each Issuing Lender a letter of credit fronting fee accruing daily on the aggregate Dollar Amount of all Letters of Credit issued by such Issuing Lender at a rate per annum mutually agreed from time to time by the Principal Borrower and such Issuing Lender, as well as such Issuing Lender's standard fees and commissions with respect to the issuance, amendment, cancellation, negotiation, transfer, presentment or extension of any Letter of Credit or processing of drawings thereunder.

(c) Accrued fees under this Section 2.07 shall be payable quarterly in arrears on the fifteenth (15^{th}) day following each Quarterly Payment Date and on the date of termination of the Commitments in their entirety (and, if later, the date the Credit Exposures are permanently reduced to zero). All fees payable

hereunder shall be paid on the dates due, in immediately available funds in Dollars (except as expressly provided in this Section), to the Administrative Agent (or to the relevant Issuing Lender, in the case of fees payable to it) for distribution, in the case of facility fees and participation fees, to the Lenders. Fees paid shall not be refundable under any circumstances.

(d) The Principal Borrower shall pay to the appropriate Persons for their own respective accounts fees in the amounts and at the times specified in the Fee Letters.

Section 2.08 *Optional Termination or Reduction of Commitments.*

(a) The Principal Borrower may, upon at least three Business Days' notice (which notice may be conditioned upon the effectiveness of other credit facilities or other matters specified therein, in which case such notice may be rescinded by the Principal Borrower (by notice to the Administrative Agent on or prior to the specified effective date) if such condition is not satisfied) to the Administrative Agent at its New York Office, (i) terminate the Commitments at any time, if no Loans or Letter of Credit Liabilities are outstanding at such time or (ii) ratably reduce from time to time by an aggregate amount of $10,000,000 or any larger multiple thereof, so long as (x) the aggregate amount of the Commitments shall not exceed the Total Outstanding Amount and (y) the Outstanding Amount of each Lender shall not exceed the amount of such Lender's Commitment, in each case after giving effect thereto. Promptly after receiving a notice pursuant to this Section, the Administrative Agent shall notify each Lender of the contents thereof.

(b) Notwithstanding the foregoing, upon the acquisition of one Lender by another Lender, or the merger, consolidation or other combination of any two or more Lenders (any such acquisition, merger, consolidation or other combination being referred to hereinafter as a "**Combination**" and each Lender which is a party to such Combination being hereinafter referred to as a "**Combined Lender**"), the Principal Borrower may notify the Administrative Agent that it desires to reduce the Commitment of the Lender surviving such Combination (the "**Surviving Lender**") to an amount equal to the Commitment of that Combined Lender which had the largest Commitment of each of the Combined Lenders party to such Combination (such largest Commitment being the "**Surviving Commitment**" and the Commitments of the other Combined Lenders being hereinafter referred to, collectively, as the "**Retired Commitments**"). If the Required Lenders (determined as set forth below) and the Administrative Agent agree to such reduction in the Surviving Lender's Commitment, then (i) the aggregate amount of the Commitments shall be reduced by the Retired Commitments effective upon the effective date of the Combination (or such later date as the Principal Borrower may specify in its request), provided, that, on or before such date the Borrowers have paid in full the outstanding principal amount of the Loans and funded participations in Letters of Credit, accrued interest thereon, accrued fees and all other amounts payable to it hereunder of each of the Combined Lenders other than the Combined Lender whose Commitment is the Surviving Commitment, (ii) from and after the effective date of such reduction, the Surviving Lender shall have no obligation with respect to the Retired Commitments, and (iii) the Principal Borrower shall notify the Administrative Agent whether it wants such reduction to be a permanent reduction or a temporary reduction. If such reduction is to be a temporary reduction, then the Principal Borrower shall be responsible for finding one or more financial institutions (which for the avoidance of doubt may be an existing Lender) (each, a "**Replacement Lender**"), acceptable to the Administrative Agent (such acceptance not to be unreasonably withheld, conditioned or delayed), willing to assume the obligations of a Lender hereunder with aggregate Commitments up to the amount of the Retired Commitments. The Administrative Agent may require the Replacement Lenders to execute such documents, instruments or agreements as the Administrative Agent reasonably deems necessary or desirable to evidence such Replacement Lenders' agreement to become parties hereunder. For purposes of this Section 2.08(b), Required Lenders shall be determined as if the reduction in the aggregate amount of the Commitments requested by the Principal Borrower had occurred (i.e., the Combined Lenders

shall be deemed to have a single Commitment equal to the Surviving Commitment and the aggregate amount of the Commitments shall be deemed to have been reduced by the Retired Commitments).

Section 2.09 *Mandatory Termination of Commitments.* The Commitment of each Lender shall terminate on its Termination Date.

Section 2.10 *Optional Prepayments*.

(a) Subject in the case of Term Benchmark Loans to Section 2.12, the Borrower may upon notice to the Administrative Agent (which notice may be conditioned upon the effectiveness of other credit facilities or other matters specified therein, in which case such notice may be rescinded by the Principal Borrower (by notice to the Administrative Agent on or prior to the specified effective date) if such condition is not satisfied subject to Section 2.12) (i) at its New York Office not later than 10:30 a.m. (New York City time) on any Business Day for prepayment on that date of any Group of Loans consisting of Base Rate Loans, (ii) at its New York Office not later than 10:30 a.m. (New York City time) on the third Business Day before the date of prepayment of any Group of Loans consisting of Term Benchmark Loans denominated in Dollars, (iii) at its London Office not later than 10:30 a.m. (New York City time) on the third Business Day before the date of prepayment of any Group of Loans consisting of Term Benchmark Loans denominated in euro, prepay any such Group of Loans, (iv) at its London Office not later than 11:00 a.m. (New York City time) on the fifth RFR Business Day before the date of prepayment, prepay any Group of Loans consisting of RFR Loans denominated in Sterling, and (v) at its New York Office not later than 11:00 a.m. (New York City time) on the fifth RFR Business Day before the date of prepayment, prepay any Group of Loans consisting of RFR Loans denominated in Dollars, in each case in whole at any time, or from time to time in part in Dollar Amounts aggregating not less than $10,000,000, by paying the principal amount to be prepaid together with accrued interest thereon to but not including the date of prepayment. Each such optional prepayment shall be applied to prepay ratably the Loans of the several Lenders included in such Group of Loans.

(b) Upon receipt of a notice of prepayment pursuant to this Section, the Administrative Agent shall promptly notify each Lender of the contents thereof and of such Lender's ratable share of such prepayment and once notice is so given to the Lenders, the Borrower's notice of prepayment shall not thereafter be revocable by the Borrower (except as provided in Section 2.10(a)).

Section 2.11 *General Provisions as to Payments*.

(a) Each Borrower, as applicable, shall make payments of principal of, and interest on, the Dollar-Denominated Loans made to it, of Letter of Credit Liabilities in respect of Letters of Credit denominated in Dollars issued for its account and of fees owing by it hereunder, not later than 2:00 p.m. (New York City time) on the date when due, in Federal or other funds immediately available in New York City, without set-off, counterclaim or other deduction, to the Administrative Agent at its New York Office. Each Borrower, as applicable, shall make payments of principal of, and interest on, the Alternative Currency Loans made to it and of Letter of Credit Liabilities in respect of Letters of Credit denominated in an Alternative Currency issued for its account, in the relevant Alternative Currency in such funds as may then be customary for the settlement of international transactions in such Alternative Currency, without set-off, counterclaim or other deduction, to the Administrative Agent at its London Office. The Administrative Agent will promptly distribute to each Lender its ratable share of each such payment received by the Administrative Agent for the respective accounts of the Lenders. Whenever any payment of principal of, or interest on, the Base Rate Loans or of fees shall be due on a day which is not a Business Day, the date for payment thereof shall be extended to the next succeeding Business Day. Whenever any payment of principal of, or interest on, the Term Benchmark Loans shall be due on a day which is not a Business Day, the date for payment thereof

shall be extended to the next succeeding Business Day unless such Business Day falls in another calendar month, in which case the date for payment thereof shall be the next preceding Business Day. Whenever any payment of principal of, or interest on, the RFR Loans or of fees shall be due on a day which is not a Business Day, the date for payment thereof shall be extended to the next succeeding Business Day. If the date for any payment of principal is extended by operation of law or otherwise, interest thereon shall be payable for such extended time.

(b) Unless the Administrative Agent shall have received notice from the Borrower prior to the date on which any payment is due to the Lenders hereunder that the Borrower will not make such payment in full, the Administrative Agent may assume that the Borrower has made such payment in full to the Administrative Agent on such date and the Administrative Agent may, in reliance upon such assumption, cause to be distributed to each Lender on such due date an amount equal to the amount then due such Lender. If and to the extent that the Borrower shall not have so made such payment, each Lender shall repay to the Administrative Agent forthwith on demand such amount distributed to such Lender together with interest thereon, for each day from the date such amount is distributed to such Lender until the date such Lender repays such amount to the Administrative Agent, at the applicable Overnight Rate.

(c) If any Lender shall fail to make any payment required to be made by it pursuant to Section 2.03(b), 2.11(b), 2.19(e) or 7.06 and has not cured the payment within two (2) Business Days, then the Administrative Agent may, in its discretion and notwithstanding any contrary provision hereof, (i) apply any amounts thereafter received by the Administrative Agent for the account of such Lender for the benefit of the Administrative Agent or the applicable Issuing Lenders to satisfy such Lender's obligations to it under such Section until all such unsatisfied obligations are fully paid, and/or (ii) hold any such amounts in a segregated account as cash collateral for, and application to, any future funding obligations of such Lender under any such Section, in the case of each of clauses (i) and (ii) above, in any order as determined by the Administrative Agent in its discretion. Such cash collateral shall be returned to the Lender (x) if such Lender is a Defaulting Lender, once it ceases to be a Defaulting Lender or (y) upon termination of this Agreement; provided that, in each of clause (x) and (y), the Lender has made all payments required to be made hereunder.

Section 2.12 *Funding Losses.*

(a) With respect to Loans that are not RFR Loans, in the event of (i) the payment of any principal of any Term Benchmark Loan other than on the last day of an Interest Period applicable thereto (including as a result of an Event of Default or as a result of any prepayment pursuant to Section 2.10), (ii) the conversion of any Term Benchmark Loan other than on the last day of the Interest Period applicable thereto, (iii) the failure to borrow, convert, continue or prepay any Term Benchmark Loan on the date specified in any notice delivered pursuant hereto (regardless of whether such notice may be revoked under Section 2.10(a) and is revoked in accordance therewith), (iv) the assignment of any Term Benchmark Loan other than on the last day of the Interest Period applicable thereto as a result of a request by the Borrower pursuant to Section 8.06(b) or (v) the failure by the Borrower to make any payment of any Loan (or interest due thereof) denominated in an Alternative Currency on its scheduled due date or any payment thereof in a different currency, then, in any such event, the Borrower shall compensate each Lender for the loss (excluding loss of margin), cost and expense attributable to such event. A certificate of any Lender setting forth any amount or amounts that such Lender is entitled to receive pursuant to this Section and the calculation of such amount or amounts in reasonable detail shall be delivered to the Borrower and shall be conclusive absent clearly demonstrable error. The Borrower shall pay such Lender the amount shown as due on any such certificate free of clearly demonstrable error within 10 days after receipt thereof.

(b) With respect to RFR Loans, in the event of (i) the payment of any principal of any RFR Loan other than on the interest payment date for such RFR Loan pursuant to the terms of Section 2.06(c) applicable thereto (including as a result of an Event of Default or as a result of any prepayment pursuant to Section 2.10), (ii) the failure to borrow, convert, continue or prepay any RFR Loan on the date specified in any notice delivered pursuant hereto (regardless of whether such notice may be revoked under Section 2.10(a) and is revoked in accordance therewith), (iii) the assignment of any RFR Loan other than on the interest payment date for such RFR Loan pursuant to the terms of Section 2.06(c) applicable thereto as a result of a request by the Borrower pursuant to Section 8.06(b) or (iv) the failure by the Borrower to make any payment of any Loan (or interest due thereof) denominated in an Alternative Currency on its scheduled due date or any payment thereof in a different currency, then, in any such event, the Borrower shall compensate each Lender for the loss, cost and expense attributable to such event. A certificate of any Lender setting forth any amount or amounts that such Lender is entitled to receive pursuant to this Section and the calculation of such amount or amounts in reasonable detail shall be delivered to the Borrower and shall be conclusive absent clearly demonstrable error. The Borrower shall pay such Lender the amount shown as due on any such certificate free of clearly demonstrable error within 10 days after receipt thereof.

Section 2.13 *Computation of Interest and Fees* Interest computed by reference to the Adjusted Term SOFR Rate or the EURIBO Rate hereunder shall be computed on the basis of a year of 360 days. Interest computed by reference to the Daily Simple RFR with respect to Sterling or the Base Rate at times when the Base Rate is based on the Prime Rate shall be computed on the basis of a year of 365 days (or 366 days in a leap year). In each case interest shall be payable for the actual number of days elapsed (including the first day but excluding the last day). All interest hereunder on any Loan shall be computed on a daily basis based upon the outstanding principal amount of such Loan as of the applicable date of determination. The applicable Base Rate, Adjusted Term SOFR Rate, Term SOFR Rate, Adjusted EURIBO Rate, EURIBO Rate, Adjusted Daily Simple RFR or Daily Simple RFR shall be determined by the Administrative Agent, and such determination shall be conclusive absent demonstrable error.

Section 2.14 *[Reserved].*

Section 2.15 *Method of Electing Interest Rates*.

(a) Each Borrowing shall initially be of the Type specified by the Borrower in the applicable Notice of Borrowing. Thereafter, the Borrower may from time to time elect to change or continue the Type of each such Group of Loans (subject to subsection 2.15(d) of this Section and the provisions of Article 8), as follows:

(i) if such Loans are Base Rate Loans, the Borrower may elect to convert such Loans to Term Benchmark Loans denominated in Dollars as of any Business Day; and

(ii) if such Loans are Term Benchmark Loans denominated in Dollars, the Borrower may elect to convert such Loans to Base Rate Loans or elect to continue such Loans as Term Benchmark Loans denominated in Dollars for an additional Interest Period, subject to Section 2.12 if any such conversion is effective on any day other than the last day of an Interest Period applicable to such Loans.

Each such election shall be made by delivering a notice (a "**Notice of Interest Rate Election**") to the Administrative Agent at its New York Office not later than 10:30 a.m. (New York City time) on the third Business Day before the conversion or continuation selected in such notice is to be effective. A Notice of Interest Rate Election may, if it so specifies, apply to only a portion of the aggregate principal amount of the relevant Group of Loans; provided that (i) such portion is allocated ratably among the Loans comprising such Group of Loans and (ii) the portion to which such Notice of Interest Rate Election applies, and the

remaining portion to which it does not apply, are each in an aggregate Dollar Amount of not less than $10,000,000 (unless such portion is comprised of Base Rate Loans). If no such notice is timely received before the end of an Interest Period for any Group of Loans consisting of Term Benchmark Loans denominated in Dollars, the Borrower shall be deemed to have elected that such Group of Loans be converted to Base Rate Loans at the end of such Interest Period. Notwithstanding any contrary provision herein, this Section shall not be construed to permit any Borrower to (i) change the currency of any Borrowing or (ii) convert any Borrowing to a Borrowing of a Type not available under the Class of Commitments pursuant to which such Borrowing was made.

(b) Each Notice of Interest Rate Election shall specify:

(i) the Group of Loans (or portion thereof) to which such notice applies;

(ii) the date on which the conversion or continuation selected in such notice is to be effective, which shall comply with the applicable clause of Section 2.15(a) above;

(iii) if the Loans comprising such Group of Loans are to be converted, the new Type of Loans and, if the Loans resulting from such conversion are to be Term Benchmark Loans denominated in Dollars, the duration of the next succeeding Interest Period applicable thereto; and

(iv) if such Loans are to be continued as Term Benchmark Loans denominated in Dollars for an additional Interest Period, the duration of such additional Interest Period.

Each Interest Period specified in a Notice of Interest Rate Election shall comply with the provisions of the definition of Interest Period.

(c) Promptly after receiving a Notice of Interest Rate Election from the Borrower pursuant to subsection (a) above, the Administrative Agent shall notify each Lender of the contents thereof and such notice shall not thereafter be revocable by the Borrower.

(d) The Borrower shall not be entitled to elect to convert any Loans to, or continue any Loans for an additional Interest Period as, Term Benchmark Loans denominated in Dollars if (i) the aggregate Dollar Amount of any Group of Loans consisting of Term Benchmark Loans denominated in Dollars created or continued as a result of such election would be less than $10,000,000 or (ii) a Default shall have occurred and be continuing when the Borrower delivers notice of such election to the Administrative Agent.

(e) The initial Interest Period for each Borrowing of Term Benchmark Loans denominated in Euro shall be specified by the Borrower in the applicable Notice of Borrowing. The Borrower may specify the duration of each subsequent Interest Period applicable to such Group of Loans by delivering to the Administrative Agent at its London Office not later than 11:00 a.m. (London time) on the third Business Day before the end of the immediately preceding Interest Period, a notice specifying the Group of Loans to which such notice applies and the duration of such subsequent Interest Period (which shall comply with the provisions of the definition of Interest Period). Such notice may, if it so specifies, apply to only a portion of the aggregate principal amount of the relevant Group of Loans; provided that (i) such portion is allocated ratably among the Loans comprising such Group of Loans and (ii) the Dollar Amounts of the portion to which such notice applies, and the remaining portion to which it does not apply, are each at least $10,000,000. If no such notice is timely received by the Administrative Agent before the end of any applicable Interest Period, the Borrower shall be deemed to have elected that the subsequent Interest Period for such Group of Loans shall have a duration of one month (subject to the provisions of the definition of Interest Period).

(f) If the relevant Borrower fails to deliver a timely Notice of Interest Rate Election with respect to a Term Benchmark Borrowing denominated in Dollars prior to the end of the Interest Period applicable thereto, then, unless such Borrowing is repaid as provided herein, at the end of such Interest Period such Borrowing shall be continued as a Term Benchmark Borrowing in Dollars with an Interest Period of one month's duration. If the relevant Borrower fails to deliver a timely and complete Notice of Interest Rate Election with respect to a Term Benchmark Borrowing denominated in an Alternative Currency prior to the end of the Interest Period therefor, then, unless such Term Benchmark Borrowing is repaid as provided herein, such Borrower shall be deemed to have selected that such Term Benchmark Borrowing shall automatically be continued as a Term Benchmark Borrowing in its original Agreed Currency with an Interest Period of one month at the end of such Interest Period. Notwithstanding any contrary provision hereof, if an Event of Default has occurred and is continuing and the Administrative Agent, at the request of the Required Lenders, so notifies the applicable Borrower, then, so long as an Event of Default is continuing (i) no outstanding Borrowing may be converted to or continued as a Term Benchmark Borrowing or an RFR Borrowing and (ii) unless repaid, (x) (A) each Term Benchmark Borrowing denominated in Dollars shall be converted to a Base Rate Borrowing at the end of the Interest Period applicable thereto and (B) each RFR Borrowing denominated in Dollars shall be converted to a Base Rate Borrowing immediately and (y) each Term Benchmark Borrowing or RFR Borrowing denominated in an Alternative Currency shall bear interest at the Central Bank Rate for the applicable Agreed Currency plus the CBR Margin; *provided* that, if the Administrative Agent reasonably and in good faith determines (which determination shall be conclusive and binding absent demonstrable error) that the Central Bank Rate for the applicable Agreed Currency cannot be determined, any outstanding affected Term Benchmark Loans or RFR Loans denominated in any Alternative Currency shall either be (A) converted to a Base Rate Borrowing denominated in Dollars (in an amount equal to the Dollar Amount of such Alternative Currency) at the end of the Interest Period or on the Interest Payment Date, as applicable, therefor or (B) prepaid at the end of the applicable Interest Period or on the Interest Payment Date, as applicable, in full; *provided* that if no election is made by the relevant Borrower by the earlier of (x) the date that is three (3) Business Days after receipt by the Principal Borrower of such notice and (y) the last day of the current Interest Period for the applicable Term Benchmark Loan, such Borrower shall be deemed to have elected clause (A) above.

Section 2.16 *Determining Dollar Amounts; Related Mandatory Prepayments*.

(a) The Administrative Agent shall determine the Dollar Amount of:

(i) any Loan denominated in an Alternative Currency, on each of the following: (i) the date of the Borrowing of such Loan and (ii) (A) with respect to any Term Benchmark Loan, each date of a conversion or continuation of such Loan pursuant to the terms of this Agreement and (B) with respect to an RFR Loan, each date that is on the numerically corresponding day in each calendar month that is one month after the Borrowing of such Loan (or, if there is no such numerically corresponding day in such month, then the last day of such month),

(ii) any Letter of Credit denominated in an Alternative Currency, on each of the following: (i) the date on which such Letter of Credit is issued, (ii) the first Business Day of each calendar month and (iii) the date of any amendment of such Letter of Credit that has the effect of increasing the face amount thereof, and

(iii) any Credit Event, on any additional date as the Administrative Agent may determine at any time when an Event of Default exists.

(b) Each determination of a Dollar Amount pursuant to clauses (a)(i), (a)(ii) or (a)(iii) above shall be conclusive in the absence of demonstrable error.

(c) If after giving effect to any such determination of a Dollar Amount, the Total Outstanding Amount exceeds the aggregate amount of the Commitments, the Borrowers shall within five Business Days prepay outstanding Loans (as selected by the Principal Borrower and notified to the Lenders through the Administrative Agent not less than three Business Days prior to the date of prepayment) or take other action to the extent necessary to eliminate any such excess.

Section 2.17 *[Reserved]*.

Section 2.18 *Judgment Currency.* If, under any applicable law and whether pursuant to a judgment being made or registered against any Borrower or for any other reason, any payment under or in connection with this Agreement is made or satisfied in a currency (the "**Other Currency**") other than that in which the relevant payment is due (the "**Required Currency**") then, to the extent that the payment (when converted into the Required Currency at the rate of exchange on the date of payment or, if it is not practicable for the party entitled thereto (the "**Payee**") to purchase the Required Currency with the Other Currency on the date of payment, at the rate of exchange as soon thereafter as it is practicable for it to do so) actually received by the Payee falls short of the amount due under the terms of this Agreement, such Borrower shall, to the extent permitted by law, as a separate and independent obligation, indemnify and hold harmless the Payee against the amount of such short-fall. For the purpose of this Section, "**rate of exchange**" means the rate at which the Payee is able on the relevant date to purchase the Required Currency with the Other Currency and shall take into account any premium and other costs of exchange.

Section 2.19 *Letters of Credit.* (a) On the Closing Date, without further action by any party hereto, the applicable Issuing Lenders shall be deemed to have granted to each Lender, and each Lender shall be deemed to have acquired from the applicable Issuing Lenders, a participation in each Existing Letter of Credit equal to such Lender's Applicable Percentage of (i) the aggregate amount available to be drawn thereunder and (ii) the aggregate unpaid amount of any outstanding reimbursement obligations in respect thereof. Such participations shall be on all the same terms and conditions as participations granted in Additional Letters of Credit under Section 2.19(b).

(b) Subject to the terms and conditions hereof, each Issuing Lender agrees to issue Additional Letters of Credit hereunder denominated in Dollars or in an Alternative Currency from time to time after the Closing Date upon the request of any Borrower; provided that, immediately after each Additional Letter of Credit is issued (i) the Total Outstanding Amount shall not exceed the aggregate amount of the Commitments, (ii) the Outstanding Amount of such Lender shall at no time exceed the amount of such Lender's Commitment, (iii) the aggregate Dollar Amount of Letter of Credit Liabilities under Letters of Credit issued by such Issuing Lender shall not exceed such Issuing Lender's Letter of Credit Fronting Sublimit, (iv) the aggregate Dollar Amount of Letter of Credit Liabilities shall not exceed any applicable LC Sublimit and (v) neither Barclays Bank PLC nor Morgan Stanley Bank, N.A., in its capacity as an Issuing Lender, shall not be obligated to issue trade or commercial Letters of Credit hereunder. Upon the date of issuance by an Issuing Lender of an Additional Letter of Credit, such Issuing Lender shall be deemed, without further action by any party hereto, to have sold to each Lender, and each Lender shall be deemed, without further action by any party hereto, to have purchased from such Issuing Lender, a participation in such Letter of Credit and the related Letter of Credit Liabilities in the proportion their respective Commitments bear to the aggregate Commitments. If required by the applicable Issuing Lender, as a condition to any such Letter of Credit issuance, the Principal Borrower shall have entered into a continuing agreement (or other letter of credit agreement) for the issuance of letters of credit and/or shall submit a letter of credit application, in a form agreed to by the Principal Borrower and the applicable Issuing Lender in connection with any request for a Letter of Credit (each, a "**Letter of Credit Agreement**"). In the event of any inconsistency between the terms and conditions of this Agreement and the terms and conditions of any Letter of Credit Agreement, the terms and conditions of this Agreement shall control. An Issuing Lender

shall not be under any obligation to issue, amend or extend any Letter of Credit if: (i) any order, judgment or decree of any Governmental Authority or arbitrator shall by its terms purport to enjoin or restrain such Issuing Lender from issuing, amending or extending such Letter of Credit, or any law applicable to such Issuing Lender shall prohibit, or require that such Issuing Lender refrain from, the issuance, amendment or extension of letters of credit generally or such Letter of Credit in particular or shall impose upon such Issuing Lender with respect to such Letter of Credit any restriction, reserve or capital requirement (for which such Issuing Lender is not otherwise compensated hereunder) not in effect on the Closing Date, or shall impose upon such Issuing Lender any unreimbursed loss, cost or expense that was not applicable on the Closing Date and that such Issuing Lender in good faith deems material to it; or (ii) the issuance, amendment or extension of such Letter of Credit would violate one or more policies of such Issuing Lender applicable to letters of credit generally.

(c) The Borrower shall give the applicable Issuing Lender notice at least five Business Days prior to the requested issuance of a Letter of Credit (or such lesser notice as may be acceptable to the applicable Issuing Lender) specifying the date such Letter of Credit is to be issued, and describing the terms of such Letter of Credit and the nature of the transactions to be supported thereby (such notice, including any such notice given in connection with the extension or amendment of a Letter of Credit, a "**Notice of Issuance**"). Upon receipt of a Notice of Issuance, the applicable Issuing Lender shall promptly notify the Administrative Agent, and the Administrative Agent shall promptly notify each Lender of the contents thereof and of the amount of such Lender's participation in such Letter of Credit. The issuance by the applicable Issuing Lender of each Letter of Credit shall, in addition to the conditions precedent set forth in Article 3, be subject to the conditions precedent that (i) such Letter of Credit shall be in such form and contain such terms as shall be reasonably satisfactory to the applicable Issuing Lender and the Borrower shall have executed and delivered such other instruments and agreements relating to such Letter of Credit as the applicable Issuing Lender shall have reasonably requested and (ii) no Stop Issuance Notice shall be in effect. The Borrower shall also pay to the applicable Issuing Lender for its own account issuance, drawing, amendment and extension charges in the amounts and at the times as agreed between the Borrower and the applicable Issuing Lender.

(d) The extension or amendment to increase the amount of any Letter of Credit shall be deemed to be an issuance of such Letter of Credit, and if any Letter of Credit contains a provision pursuant to which it is deemed to be extended unless notice of termination is given by the applicable Issuing Lender, the applicable Issuing Lender shall timely give such notice of termination unless it has theretofore timely received a Notice of Issuance and the other conditions to issuance of a Letter of Credit have also theretofore been met with respect to such extension. Each Letter of Credit shall expire at or before the close of business on the date that is one year after such Letter of Credit is issued (or, in the case of any extension thereof, one year after such extension); provided that (i) a Letter of Credit may contain a provision pursuant to which it is deemed to be extended on an annual basis unless notice of termination is given by the applicable Issuing Lender and (ii) in no event will a Letter of Credit expire (including pursuant to an extension thereof) on a date later than the LC Termination Date unless Cash Collateralized or backed by a standby letter of credit in a manner reasonably satisfactory to the applicable Issuing Lender.

(e) Each Issuing Lender shall, within the time period stipulated by the terms and conditions of the applicable Letter of Credit following its receipt thereof (and, if no time period is so stipulated, promptly), examine all documents purporting to represent a demand for payment under a Letter of Credit. After such examination, such Issuing Lender shall promptly notify the Administrative Agent and the Principal Borrower by telephone (confirmed by telecopy or email in accordance with Section 11.01) of such demand for payment and whether such Issuing Lender has made or will make an LC Disbursement thereunder; provided that any failure to give or delay in giving such notice shall not relieve the Principal Borrower of its obligation to reimburse such Issuing Lender and the Lenders with respect to any such LC Disbursement in accordance with this Section 2.19(e), and the Administrative Agent shall promptly notify the Lenders as to

the amount to be paid as a result of such demand or drawing and the payment date. If an Issuing Lender shall make any Letter of Credit Disbursement in respect of a Letter of Credit, the Borrower shall reimburse such Letter of Credit Disbursement by paying to the Administrative Agent an amount equal to such Letter of Credit Disbursement (the "**Reimbursement Obligation**") in the currency of such Letter of Credit Disbursement (i) if such Letter of Credit Disbursement shall have been denominated in Dollars, not later than 2:00 p.m. (New York City time) on the date that such Letter of Credit Disbursement is made, if the Borrower shall have received notice of such Letter of Credit Disbursement prior to 9:00 a.m. (New York City time) on such date, or, if such notice has not been received by the Borrower prior to such time on such date, then not later than 2:00 p.m. (New York City time) on the Business Day immediately following the day that the Borrower receives such notice and (ii) if such Letter of Credit Disbursement shall have been denominated in an Alternative Currency, not later than 12:00 noon (London time) on the Business Day following the date that such Letter of Credit Disbursement is made, if the Borrower shall have received notice of such Letter of Credit Disbursement prior to 4:00 p.m. (London time) on the date such Letter of Credit Disbursement is made, or, if such notice has not been received by the Borrower prior to such time on such date, then not later than 12:00 noon (London time) on the second Business Day immediately following the day that the Borrower receives such notice (it being understood that, subject to the terms and conditions otherwise applicable to a Borrowing hereunder, such payment may, in each case, be financed with a Borrowing hereunder). If the Borrower fails to make such payment when due, the Administrative Agent shall notify each Lender of the applicable Letter of Credit Disbursement payment then due from the Borrower in respect thereof and such Lender's Applicable Percentage thereof. Promptly following receipt of such notice, each Lender shall pay to the Administrative Agent its Applicable Percentage of the payment then due from the Borrower, in the same manner as provided in Section 2.03 with respect to Loans made by such Lender (and Section 2.03 shall apply, *mutatis mutandis*, to the payment obligations of the Lenders), and the Administrative Agent shall promptly pay to the applicable Issuing Lender the amounts so received by it from the Lenders. Promptly following receipt by the Administrative Agent of any payment from the Borrower pursuant to this paragraph, the Administrative Agent shall distribute such payment to the applicable Issuing Lender or, to the extent that Lenders have made payments pursuant to this paragraph to reimburse the applicable Issuing Lender, then to such Lenders and the applicable Issuing Lender as their interests may appear. Any payment made by a Lender pursuant to this paragraph to reimburse the applicable Issuing Lender for any Letter of Credit Disbursement (other than the funding of a Borrowing as contemplated above) shall not constitute a Loan and shall not relieve the Borrower of its obligation to reimburse such Letter of Credit Disbursement.

(f) If an Issuing Lender shall make any Letter of Credit Disbursement, then, unless the Borrower shall reimburse such Letter of Credit Disbursement in full on the date such Letter of Credit Disbursement is made, the unpaid amount thereof shall bear interest, for each day from and including the date such Letter of Credit Disbursement is made to but excluding the date that the Borrower reimburses such Letter of Credit Disbursement, (i) if such amount is denominated in Dollars, at the rate per annum equal to the sum of the Base Rate Margin and the Base Rate for such day, (ii) if such amount is denominated in an Alternative Currency, at the rate per annum equal to the sum of the Term Benchmark Margin plus the rate per annum at which one-day deposits in relevant currency in an amount approximately equal to such unpaid amount are offered by the London Office of the Administrative Agent in the London interbank market for such day; provided that, if the Borrower fails to reimburse such Letter of Credit Disbursement when due pursuant to paragraph (e) of this Section, then 2% per annum shall be added to the applicable rate specified above. Interest accrued pursuant to this paragraph shall be for the account of the applicable Issuing Lender, except that interest accrued on and after the date of payment by any Lender pursuant to paragraph (e) of this Section to reimburse the applicable Issuing Lender shall be for the account of such Lender to the extent of such payment.

(g) The obligations of the Borrower and each Lender under Section 2.19(e) above shall be absolute, unconditional and irrevocable, and shall be performed strictly in accordance with the terms of this Agreement, under all circumstances whatsoever, including without limitation the following circumstances:

(i) any lack of validity or enforceability of this Agreement or any Letter of Credit or any document related hereto or thereto;

(ii) any amendment or waiver of or any consent to departure from all or any of the provisions of this Agreement or any Letter of Credit or any document related hereto or thereto, provided by any party affected thereby;

(iii) the use which may be made of the Letter of Credit by, or any acts or omission of, a beneficiary of a Letter of Credit (or any Person for whom the beneficiary may be acting);

(iv) the existence of any claim, set-off, defense or other rights that the Borrower may have at any time against a beneficiary of a Letter of Credit (or any Person for whom the beneficiary may be acting), the Lenders (including the applicable Issuing Lender) or any other Person, whether in connection with this Agreement or the applicable Letter of Credit or any document related hereto or thereto or any unrelated transaction;

(v) any statement or any other document presented under a Letter of Credit proving to be forged, fraudulent or invalid in any respect or any statement therein being untrue or inaccurate in any respect whatsoever;

(vi) payment under a Letter of Credit to the beneficiary of such Letter of Credit against presentation to the applicable Issuing Lender of a draft or certificate that does not comply with the terms of the Letter of Credit;

(vii) any termination of the Commitments prior to, on or after the payment date for any Letter of Credit, whether at the scheduled termination thereof, by operation of Article 6 or otherwise; or

(viii) any other act or omission to act or delay of any kind by any Lender (including the applicable Issuing Lender), the Administrative Agent or any other Person or any other event or circumstance whatsoever that might, but for the provisions of this subsection (viii), constitute a legal or equitable discharge of the Borrower's or the Lender's obligations hereunder.

(h) The Borrower hereby indemnifies and holds harmless each Lender (including the applicable Issuing Lender) and the Administrative Agent from and against any and all claims, damages, losses, liabilities, costs or expenses which such Lender or the Administrative Agent may incur (including, without limitation, any claims, damages, losses, liabilities, costs or expenses which the applicable Issuing Lender may incur by reason of or in connection with the failure of any other Lender to fulfill or comply with its obligations to such Issuing Lender hereunder (but nothing herein contained shall affect any rights the Borrower may have against such defaulting Lender)), and none of the Lenders (including the applicable Issuing Lender) nor the Administrative Agent nor any of their officers or directors or employees or agents shall be liable or responsible, by reason of or in connection with the execution and delivery or transfer of or payment or failure to pay under any Letter of Credit, including without limitation any of the circumstances enumerated in subsection Section 2.19(g) above, as well as (i) any error, omission, interruption or delay in transmission or delivery of any messages, by mail, cable, telegraph, telex or otherwise, (ii) any loss or delay in the transmission of any document required in order to make a drawing under a Letter of Credit, and (iii) any consequences arising from causes beyond the control of the applicable Issuing Lender, including without limitation any government acts, or any other circumstances whatsoever in making or failing to make payment under such Letter of Credit; provided that the Borrower shall not be required to indemnify the

applicable Issuing Lender for any claims, damages, losses, liabilities, costs or expenses, and the Borrower shall have a claim for direct (but not consequential) damage suffered by it, to the extent found by a court of competent jurisdiction to have been caused by (i) the bad faith, willful misconduct or gross negligence of the applicable Issuing Lender or any of its Related Persons or (ii) a material breach by the applicable Issuing Lender or any Related Person thereof of its obligations under the Loan Documents. Nothing in this subsection Section 2.19(h) is intended to limit the obligations of the Borrower under any other provision of this Agreement. To the extent the Borrower does not indemnify the applicable Issuing Lender as required by this subsection, the Lenders agree to do so ratably in accordance with their Commitments.

(i) If the Required Lenders reasonably determine at any time that the conditions set forth in Section 3.02 would not be satisfied in respect of a Borrowing at such time, then the Required Lenders may request that the Administrative Agent issue a "**Stop Issuance Notice**", and the Administrative Agent shall issue such notice to each Issuing Lender. Such Stop Issuance Notice shall be withdrawn upon a determination by the Required Lenders that the circumstances giving rise thereto no longer exist. No Letter of Credit shall be issued while a Stop Issuance Notice is in effect. The Required Lenders may request issuance of a Stop Issuance Notice only if there is a reasonable basis therefor, and shall consider reasonably and in good faith a request from the Borrower for withdrawal of the same on the basis that the conditions in Section 3.02 are satisfied; provided that the Administrative Agent and the Issuing Lenders may and shall conclusively rely upon any Stop Issuance Notice while it remains in effect.

(j) Unless otherwise specified herein, the amount of a Letter of Credit at any time shall be deemed to be the stated amount of such Letter of Credit in effect at such time; provided, however, that with respect to any Letter of Credit that, by its terms or the terms of any document related thereto, provides for one or more automatic increases in the stated amount thereof, the amount of such Letter of Credit shall be deemed to be the maximum stated amount of such Letter of Credit after giving effect to all such increases, whether or not such maximum stated amount is in effect at such time.

(k) Unless otherwise expressly agreed by the applicable Issuing Lender and the Borrower when a Letter of Credit is issued (including any such agreement applicable to an Existing Letter of Credit), (i) the rules of the International Standby Practices 1998 published by the Institute of International Banking Law & Practice, Inc. shall apply to each standby Letter of Credit and (ii) the rules of the Uniform Customs and Practice for Documentary Credits, as most recently published by the International Chamber of Commerce at the time of issuance, shall apply to each commercial Letter of Credit.

(l) Each Issuing Lender may be replaced at any time by written agreement among the Principal Borrower, the Administrative Agent and the successor Issuing Lender. The Administrative Agent shall notify the Lenders of any such replacement of an Issuing Lender. At the time any such replacement shall become effective, the Principal Borrower shall pay all unpaid fees accrued for the account of the replaced Issuing Lender pursuant to Section 2.07(b). From and after the effective date of any such replacement, (i) the successor Issuing Lender shall have all the rights and obligations of an Issuing Lender under this Agreement with respect to Letters of Credit to be issued thereafter and (ii) references herein to the term "Issuing Lender" shall be deemed to refer to such successor or to any previous Issuing Lender, or to such successor and all previous Issuing Lenders, as the context shall require. After the replacement of an Issuing Lender hereunder, the replaced Issuing Lender shall remain a party hereto and shall continue to have all the rights and obligations of an Issuing Lender under this Agreement with respect to Letters of Credit then outstanding and issued by it prior to such replacement, but shall not be required to issue additional Letters of Credit. Subject to the appointment and acceptance of a successor Issuing Lender, any Issuing Lender may resign as an Issuing Lender at any time upon thirty days' prior written notice to the Administrative Agent, the Principal Borrower and the Lenders, in which case, such resigning Issuing Lender shall be replaced in accordance with this Section 2.19(l).

Section 2.20 *Increased Commitments, Incremental Term Loans.* The Principal Borrower may from time to time elect to increase the Commitments or enter into one or more tranches of term loans (each an "**Incremental Term Loan**"), in each case in minimum increments of $10,000,000, so long as, after giving effect thereto, the aggregate amount of such increases and all such Incremental Term Loans does not exceed $1,250,000,000. The Principal Borrower may arrange for any such increase or tranche to be provided by one or more Lenders (each Lender so agreeing to an increase in its Commitment, or to participate in such Incremental Term Loans, an "**Increasing Lender**"), or by one or more new banks, financial institutions or other entities (each such new bank, financial institution or other entity, a "**New Lender**"; provided that no Ineligible Institution may be a New Lender), which agree to increase their existing Commitments, or to participate in such Incremental Term Loans, or provide new Commitments, as the case may be; provided that (i) each New Lender shall be subject to the approval of the Principal Borrower, the Administrative Agent, and in the case of an increase in the Commitments, each Issuing Lender (each such consent, not to be unreasonably withheld, conditioned or delayed) and (ii) (x) in the case of an Increasing Lender, the Principal Borrower and such Increasing Lender execute an Increasing Lender Supplement, and (y) in the case of a New Lender, the Principal Borrower and such New Lender execute a New Lender Supplement. No consent of any Lender (other than the Lenders participating in the increase or any Incremental Term Loan) shall be required for any increase in Commitments or Incremental Term Loan pursuant to this Section 2.20. Increases and new Commitments and Incremental Term Loans created pursuant to this Section 2.20 shall become effective on the date agreed by the Principal Borrower, the Administrative Agent and the relevant Increasing Lenders or New Lenders, and the Administrative Agent shall notify each Lender thereof. Notwithstanding the foregoing, no increase in the Commitments (or in the Commitment of any Lender) or tranche of Incremental Term Loans shall become effective under this paragraph unless, (i) on the proposed date of the effectiveness of such increase or Incremental Term Loans, (A) the conditions set forth in paragraphs (b) and (c) of Section 3.02 shall be satisfied or waived by the Required Lenders and the Administrative Agent shall have received a certificate to that effect dated such date and executed by a Financial Officer of the Principal Borrower and (B) the Parent shall be in compliance (on a pro forma basis) with the covenant contained in Section 5.07 and (ii) the Administrative Agent shall have received (x) documents and opinions consistent with those delivered on the Closing Date as to the organizational power and authority of the Borrowers to borrow hereunder after giving effect to such increase or Incremental Term Loans, as the case may be and (y) a reaffirmation from the Principal Borrower; provided that, with respect to any Incremental Term Loans incurred for the purpose of financing an acquisition for which the Principal Borrower has determined, in good faith, that limited conditionality is reasonably necessary (any such acquisition, a "**Limited Conditionality Acquisition**" and such Incremental Term Loans, "**Acquisition-Related Incremental Term Loans**"), (x) clause (i)(A) of this sentence shall be deemed to have been satisfied so long as (1) as of the date of execution of the definitive acquisition documentation in respect of a Limited Conditionality Acquisition (a "**Limited Conditionality Acquisition Agreement**") by the parties thereto, no Default or Event of Default shall have occurred and be continuing or would result from entry into such documentation, (2) as of the date of the borrowing of such Acquisition-Related Incremental Term Loans, no Event of Default under Section 6.01(a), (h) or (i) is in existence immediately before or immediately after giving effect (including on a pro forma basis) to such borrowing and to any concurrent transactions and any substantially concurrent use of proceeds thereof, (3) the representations and warranties set forth in Article 4 shall be true and correct in all material respects (except to the extent such representation or warranty is already qualified by materiality or Material Adverse Effect, in which case, in all respects) as of the date of execution of the applicable Limited Conditionality Acquisition Agreement by the parties thereto, except to the extent any such representation and warranty expressly relates to an earlier date in which case such representation and warranty shall be true and correct in all material respects as of such earlier date (except to the extent such representation or warranty is already qualified by materiality or Material Adverse Effect, in which case, in all respects) as of such earlier date and (4) as of the date of the borrowing of such Acquisition-Related Incremental Term Loans, customary "Sungard" representations and warranties (with such representations and warranties to be reasonably determined by the Lenders providing

such Acquisition-Related Incremental Term Loans) shall be true and correct in all material respects (except to the extent such representation or warranty is already qualified by materiality or Material Adverse Effect, in which case, in all respects) immediately prior to, and immediately after giving effect to, the incurrence of such Acquisition-Related Incremental Term Loans, except to the extent any such representation and warranty expressly relates to an earlier date in which case such representation and warranty shall be true and correct in all material respects as of such earlier date (except to the extent such representation or warranty is already qualified by materiality or Material Adverse Effect, in which case, in all respects) as of such earlier date and (y) clause (i)(B) of this sentence shall be deemed to have been satisfied so long as the Parent shall be in compliance (on a pro forma basis) with the covenant contained in Section 5.07 as of the date of execution of the related Limited Conditionality Acquisition Agreement by the parties thereto. On the effective date of any increase in the Commitments or any Incremental Term Loans being made, (i) each relevant Increasing Lender and New Lender shall make available to the Administrative Agent such amounts in immediately available funds as the Administrative Agent shall determine, for the benefit of the other Lenders, as being required in order to cause, upon giving effect to such increase and the use of such amounts to make payments to such other Lenders, each Lender's portion of the outstanding Loans of all the Lenders to equal its Applicable Percentage of such outstanding Loans, and (ii) the applicable Borrowers shall be deemed to have repaid and reborrowed all outstanding Loans as of the date of any increase in the Commitments (with such reborrowing to consist of the Types of Loans, with related Interest Periods if applicable, specified in a notice delivered by the applicable Borrower, or the Principal Borrower on behalf of the applicable Borrower, in accordance with the requirements of Section 2.02). The deemed payments made pursuant to clause (ii) of the immediately preceding sentence shall be accompanied by payment of all accrued interest on the amount prepaid and, in respect of each Term Benchmark Loan, shall be subject to indemnification by the applicable Borrowers pursuant to the provisions of Section 2.12 if the deemed payment occurs other than on the last day of the related Interest Periods. The Incremental Term Loans (a) shall rank pari passu in right of payment with the Loans, (b) shall not mature earlier than the Termination Date (but may have amortization prior to such date) and (c) shall be treated substantially the same as (and in any event no more favorably than) the Loans; provided that (i) the terms and conditions applicable to any tranche of Incremental Term Loans maturing after the Termination Date may provide for material additional or different financial or other covenants or prepayment requirements applicable only during periods after the Termination Date and (ii) the Incremental Term Loans may be priced differently than the Loans. Incremental Term Loans may be made hereunder pursuant to an amendment or restatement (an "**Incremental Term Loan Amendment**") of this Agreement and, as appropriate, the other Loan Documents, executed by the applicable Borrowers, each Increasing Lender participating in such tranche, each New Lender participating in such tranche, if any, and the Administrative Agent. The Incremental Term Loan Amendment may, without the consent of any other Lenders, effect such amendments to this Agreement and the other Loan Documents as may be necessary or appropriate, in the reasonable opinion of the Administrative Agent, to effect the provisions of this Section 2.20. Nothing contained in this Section 2.20 shall constitute, or otherwise be deemed to be, a commitment on the part of any Lender to increase its Commitment hereunder, or provide Incremental Term Loans, at any time.

Section 2.21 *Defaulting Lenders.* If any Lender becomes a Defaulting Lender, then the following provisions shall apply for so long as such Lender is a Defaulting Lender:

(a) fees shall cease to accrue on the unused portion of the Commitment of such Defaulting Lender pursuant to Section 2.07(a);

(b) any payment of principal, interest, fees or other amounts received by the Administrative Agent for the account of such Defaulting Lender (whether voluntary or mandatory, at maturity or otherwise) or received by the Administrative Agent from a Defaulting Lender pursuant to Section 11.17 shall be applied at such time or times as may be reasonably determined by the Administrative Agent (but as promptly as

commercially practicable) as follows: first, to the payment of any amounts owing by such Defaulting Lender to the Administrative Agent hereunder; second, to the payment on a pro rata basis of any amounts owing by such Defaulting Lender to any Issuing Lender hereunder; third, to cash collateralize the Issuing Lenders Letter of Credit Liabilities with respect to such Defaulting Lender in accordance with this Section; fourth, as the Principal Borrower may request (so long as no Default or Event of Default exists), to the funding of any Loan in respect of which such Defaulting Lender has failed to fund its portion thereof as required by this Agreement, as reasonably determined by the Administrative Agent; fifth, if so determined by the Administrative Agent and the Principal Borrower, to be held in a deposit account and released pro rata in order to (x) satisfy such Defaulting Lender's potential future funding obligations with respect to Loans under this Agreement and (y) cash collateralize the Issuing Lenders' future Letter of Credit Liabilities with respect to such Defaulting Lender with respect to future Letters of Credit issued under this Agreement, in accordance with this Section; sixth, to the payment of any amounts owing to the Lenders or the Issuing Lenders as a result of any judgment of a court of competent jurisdiction obtained by any Lender or the Issuing Lenders against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement or under any other Loan Document; seventh, so long as no Default or Event of Default exists, to the payment of any amounts owing to any Borrower as a result of any judgment of a court of competent jurisdiction obtained by such Borrower against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement or under any other Loan Document; and eighth, to such Defaulting Lender or as otherwise directed by a court of competent jurisdiction; provided that if (x) such payment is a payment of the principal amount of any Loans or Letter of Credit Disbursements in respect of which such Defaulting Lender has not fully funded its appropriate share, and (y) such Loans were made or the related Letters of Credit were issued at a time when the conditions set forth in Section 3.02 were satisfied or waived, such payment shall be applied solely to pay the Loans of, and Letter of Credit Disbursements owed to, all non-Defaulting Lenders on a pro rata basis prior to being applied to the payment of any Loans of, or Letter of Credit Disbursements owed to, such Defaulting Lender until such time as all Loans and funded and unfunded participations in the Borrowers' obligations corresponding to such Defaulting Lender's Letter of Credit Liabilities are held by the Lenders pro rata in accordance with the Commitments without giving effect to clause (d) below. Any payments, prepayments or other amounts paid or payable to a Defaulting Lender that are applied (or held) to pay amounts owed by a Defaulting Lender or to post cash collateral pursuant to this Section shall be deemed paid to and redirected by such Defaulting Lender, and each Lender irrevocably consents hereto;

(c) the Commitment and Credit Exposure of such Defaulting Lender shall not be included in determining whether the Required Lenders have taken or may take any action hereunder (including any consent to any amendment, waiver or other modification permitted to be effected by the Required Lenders pursuant to Section 11.05);

(d) if any Letter of Credit Liabilities exist at the time such Lender becomes a Defaulting Lender then:

(i) the Letter of Credit Liabilities of such Defaulting Lender shall be automatically reallocated among the non-Defaulting Lenders in accordance with their respective Applicable Percentages but only to the extent the sum of all non-Defaulting Lenders' Credit Exposures plus such Defaulting Lender's Letter of Credit Liabilities does not exceed the total of all non-Defaulting Lenders' Commitments;

(ii) if the reallocation described in clause (i) above cannot, or can only partially, be effected, the Principal Borrower shall within three Business Days following notice by the Administrative Agent either (x) procure the reduction or termination of the Defaulting Lender's Letter of Credit Liabilities (after giving effect to any partial reallocation pursuant to clause (i) above) or (y) Cash Collateralize for the benefit of the applicable Issuing Lender only the Borrowers' obligations corresponding to such Defaulting Lender's Letter of Credit Liabilities (after giving effect to any partial reallocation pursuant to clause (i)

above) in accordance with the procedures set forth in Section 6.03 for so long as such Letter of Credit Liabilities are outstanding;

(iii) if the Borrower Cash Collateralizes any portion of such Defaulting Lender's Letter of Credit Liabilities pursuant to clause (ii) above, the Borrower shall not be required to pay any fees to such Defaulting Lender pursuant to Section 2.07(b) with respect to such Defaulting Lender's Letter of Credit Liabilities during the period such Defaulting Lender's Letter of Credit Liabilities are Cash Collateralized;

(iv) to the extent that the Letter of Credit Liabilities of the Defaulting Lender are reallocated among the non-Defaulting Lenders pursuant to clause (i) above, the letter of credit fees otherwise payable to the Defaulting Lender pursuant to Section 2.07(b) in respect of such reallocated Letter of Credit Liabilities shall be payable to the non-Defaulting Lenders in accordance with such non-Defaulting Lenders' Applicable Percentages; and

(v) if all or any portion of such Defaulting Lender's Letter of Credit Liabilities is not reallocated, reduced, terminated nor Cash Collateralized pursuant to clause (i) or (ii) above, then, without prejudice to any rights or remedies of the Issuing Lenders or any other Lender hereunder, all letter of credit fees payable under Section 2.07(b) with respect to such Defaulting Lender's Letter of Credit Liabilities shall be payable to the applicable Issuing Lender until and to the extent that such Letter of Credit Liabilities are reallocated, reduced, terminated and/or Cash Collateralized; and

(e) so long as such Lender is a Defaulting Lender, the Issuing Lenders shall not be required to issue, extend or increase any Letter of Credit, unless the Defaulting Lender's then outstanding Letter of Credit Liabilities after giving effect thereto will be 100% covered by the Commitments of the non-Defaulting Lenders and/or prepaid, reduced, terminated and/or Cash Collateralized in accordance with Section 2.21(d), and participating interests in any newly issued or increased Letter of Credit shall be allocated among non-Defaulting Lenders in a manner consistent with Section 2.21(d)(i) (and such Defaulting Lender shall not participate therein).

If (i) a Bankruptcy Event or a Bail-In Action with respect to a Lender Parent shall occur following the date hereof and for so long as such event shall continue or (ii) an Issuing Lender has a good faith belief that any Lender has defaulted in fulfilling its funding obligations under one or more other agreements in which such Lender commits to extend credit, such Issuing Lender shall not be required to issue, extend or increase any Letter of Credit, unless such Issuing Lender shall have entered into arrangements with the Principal Borrower or such Lender, reasonably satisfactory to such Issuing Lender to defease any risk to such Issuing Lender in respect of such Lender hereunder relating to Letter of Credit Liabilities.

In the event that the Administrative Agent, the Principal Borrower and the Issuing Lenders each agrees that a Defaulting Lender has adequately remedied all matters that caused such Lender to be a Defaulting Lender, then the Letter of Credit Liabilities of the Lenders shall be readjusted to reflect the inclusion of such Lender's Commitment and on such date such Lender shall purchase at par such of the Loans of the other Lenders as the Administrative Agent shall determine is necessary in order for such Lender to hold such Loans in accordance with its Applicable Percentage; provided that there shall be no retroactive effect on fees reallocated pursuant to Section 2.21(d)(iv) and (v).

ARTICLE 3.
CONDITIONS

Section 3.01 *Closing Date*. The obligations of the Lenders to make Loans and of the Issuing Lenders to issue Letters of Credit hereunder shall not become effective until the date on which each of the following conditions is satisfied (or waived in accordance with Section 11.05):

(a) receipt by the Administrative Agent of counterparts hereof signed by each of the parties hereto (which, subject to Section 11.09, may include any Electronic Signatures transmitted by telecopy, emailed .pdf or any other electronic means that reproduces an image of an actual executed signature page);

(b) receipt by the Administrative Agent of opinions of Irish counsel and US counsel to the Borrowers, covering customary legal matters for an unsecured bank loan financing;

(c) receipt by the Administrative Agent of: (i) copies of each Loan Party's charter (or equivalent formation document) and by-laws (or equivalent organizational document), and any amendments thereto, certified in each instance by any of a director, its Secretary or Assistant Secretary (or analogous Person with respect to such Loan Party), (ii) copies of the resolutions or similar authorizing documentation of the governing body of each Loan Party authorizing such Loan Party to enter into and perform its obligations under the Loan Documents, certified by any of a director, its Secretary or Assistant Secretary (or analogous Person with respect to such Loan Party), (iii) a good standing certificate (or the equivalent thereof, if any, in any foreign jurisdiction) dated a date reasonably close to the Closing Date from the jurisdiction of formation of each Loan Party, to the extent generally available in such jurisdiction and (iv) a customary certificate of any of a director, the Secretary or Assistant Secretary of each Loan Party (or analogous Person with respect to such Loan Party) certifying the names and true signatures of such Loan Party's authorized persons, officers and employees authorized to sign this Agreement and the other documents to be delivered by such Loan Party hereunder;

(d) (i) arrangements reasonably satisfactory to the Administrative Agent shall have been made for the payment of all principal of any loans outstanding under, and all accrued interest and fees under, the Existing Agreement and (ii) the commitments under the Existing Agreement shall have been terminated;

(e) payment by the Principal Borrower of (i) all fees and (ii) other amounts due and payable to the Agents and the Lenders on or before the Closing Date and for which, in the case of this clause (ii), invoices have been received by the Principal Borrower not later than the second Business Day prior to the Closing Date;

(f) [reserved];

(g) (i) at least three (3) Business Days prior to the Closing Date, the Principal Borrower shall have provided the documentation and other information relating to the Borrowers to the Administrative Agent that is required by bank regulatory authorities under applicable "know your customer" and anti-money laundering rules and regulations, including without limitation, the Act, to the extent such information was reasonably requested by a Lender or the Administrative Agent at least ten (10) Business Days prior to the Closing Date and (ii) to the extent any Borrower qualifies as a "legal entity customer" under the Beneficial Ownership Regulation, at least five (5) days prior to the Closing Date, any Lender that has requested, in a written notice to the Principal Borrower at least ten (10) days prior to the Closing Date, a Beneficial Ownership Certification in relation to such Borrower shall have received such Beneficial Ownership Certification (provided that, upon the execution and delivery by such Lender of its signature page to this Agreement, the conditions set forth in this clause (g) shall be deemed to be satisfied);

(h) no Default shall have occurred and be continuing on the Closing Date;

(i) the representations and warranties of the Principal Borrower contained in this Agreement shall be true in all material respects on and as of the Closing Date, except to the extent any such representation and warranty (i) expressly relates to an earlier date in which case such representation and warranty shall be true and correct in all material respects as of such earlier date or (ii) is qualified by materiality, in which case such representation and warranty shall be true and correct in all respects; and

(j) the Administrative Agent shall have received a certificate from an officer of the Parent certifying to the accuracy of the conditions precedent contained in clauses (h) and (i) of this Section 3.01 above.

The Administrative Agent shall promptly notify the Principal Borrower, the Lenders and each other party to this Agreement of the Closing Date, and such notice shall be conclusive and binding.

Section 3.02 *Borrowings and Issuances of Letters of Credit.* The obligation of any Lender to make a Loan on the occasion of any Borrowing and the obligation of an Issuing Lender to issue, extend or increase any Letter of Credit is subject to the satisfaction of the following conditions:

(a) receipt by the Administrative Agent of a Notice of Borrowing as required by Section 2.02 or receipt by the applicable Issuing Lender of a Notice of Issuance as required by Section 2.19(c), as the case may be;

(b) the fact that, immediately before and immediately after such Borrowing or issuance, extension or increase of such Letter of Credit, no Default shall have occurred and be continuing; and

(c) the fact that the representations and warranties of the Principal Borrower and, if the applicable Borrower is other than the Principal Borrower, the Borrower, contained in this Agreement (except the representations and warranties set forth in Sections 4.04(b), 4.05 and 4.07) shall be true in all material respects on and as of the date of such Borrowing or issuance, extension or increase, as applicable, except to the extent any such representation and warranty (i) expressly relates to an earlier date in which case such representation and warranty shall be true and correct in all material respects as of such earlier date or (ii) is qualified by materiality, in which case such representation and warranty shall be true and correct in all respects.

Each Borrowing and each issuance, extension and increase of a Letter of Credit hereunder shall be deemed to be a representation and warranty by the Borrower (and by the Principal Borrower if it is not the Borrower) on the date of such Borrowing as to the facts specified in clauses 3.02(b) and 3.02(c).

Section 3.03 *First Borrowing by Each Eligible Subsidiary*.

(a) The obligation of each Lender to make a Loan, and the obligation of an Issuing Lender to issue a Letter of Credit, on the occasion of the first Borrowing by or issuance of a Letter of Credit for the account of each Eligible Subsidiary is subject to the receipt by the Administrative Agent of the following documents and subject to the satisfaction of the conditions set forth in clauses (b) and (c) below:

(i) an opinion of counsel for such Eligible Subsidiary (which may include internal counsel for such Eligible Subsidiary) (covering customary legal matters for an unsecured bank loan financing);

(ii) receipt by the Administrative Agent of: (i) copies of such Eligible Subsidiary's charter (or equivalent formation document) and by-laws (or equivalent organizational document), and any amendments thereto, certified in each instance by its Secretary or Assistant Secretary (or analogous Person with respect to such Eligible Subsidiary), (ii) copies of the resolutions or similar authorizing documentation of the governing body of such Eligible Subsidiary authorizing such Eligible Subsidiary to enter into and perform its obligations under the Loan Documents, certified by its Secretary or Assistant Secretary (or analogous Person with respect to such Eligible Subsidiary), (iii) a good standing certificate (or the equivalent thereof, if any, in any foreign jurisdiction) from the jurisdiction of formation of such Eligible Subsidiary and (iv) a customary certificate of the Secretary or Assistant Secretary of such Eligible Subsidiary (or analogous Person with respect to such Eligible Subsidiary) certifying the names and true signatures of such Eligible

Subsidiary's authorized persons, officers and employees authorized to sign this Agreement and the other documents to be delivered by such Eligible Subsidiary hereunder; and

(iii) in the event such Eligible Subsidiary is organized under the laws of Luxembourg, (i) an excerpt (*extrait*) issued by the Luxembourg Trade and Companies Register (*Registre de commerce et des sociétés, Luxembourg*) dated no earlier than one (1) Business Day prior to the date of its designation and (ii) a certificate on non-registration of a judicial decision or administrative dissolution without liquidation (*certificat de non-inscription d'une décision judiciaire ou de dissolution administrative sans liquidation*) issued by the Luxembourg Trade and Companies Register (*Registre de commerce et des sociétés, Luxembourg*) regarding the absence of judicial proceedings dated no earlier than one (1) Business Day prior to the date of its designation.

(b) Following the giving of any Election to Participate, if the designation of such Eligible Subsidiary obligates the Administrative Agent or any Lender to comply with "know your customer" or similar identification procedures in circumstances where the necessary information is not already available to it, the Principal Borrower shall, promptly upon the request of the Administrative Agent or any Lender, supply such documentation (including, to the extent such Eligible Subsidiary qualifies as a "legal entity customer" under the Beneficial Ownership Regulation, a Beneficial Ownership Certification) and other evidence as is reasonably requested by the Administrative Agent or any Lender in order for the Administrative Agent or such Lender to carry out and be satisfied it has complied with all necessary "know your customer" or other similar checks under all applicable laws and regulations.

(c) Any extension of credit to an Eligible Subsidiary which is not organized under the laws of the United States or any political subdivision thereof shall not contravene any law or regulation applicable to the Lender extending such credit.

ARTICLE 4.
REPRESENTATIONS AND WARRANTIES OF THE LOAN PARTIES

The Principal Borrower represents and warrants on the Closing Date and on each date thereafter as required by Section 3.02 that:

Section 4.01 *Legal Existence and Power.* Each of the Loan Parties is an entity duly organized, validly existing and (to the extent the concept exists under the laws of that jurisdiction) in good standing under the laws of its jurisdiction of organization, and has all corporate powers and all governmental licenses, authorizations, consents and approvals required to carry on its business as now conducted except where the failure to have such power or possess such licenses, authorizations, consents and approvals would not have a Material Adverse Effect.

Section 4.02 *Legal and Governmental Authorization; No Contravention*. The execution, delivery and performance by each of the Loan Parties of this Agreement and its Notes are within the Loan Parties' legal powers, have been duly authorized by all necessary legal action, require no action by or in respect of, or filing with, any Governmental Authority and do not materially contravene, or constitute a material default under, any provision of applicable law or regulation or of the organizational documents, by-laws or articles of association of any of the Loan Parties or of any agreement, judgment, injunction, order, decree or other instrument binding upon the Loan Parties or result in the creation or imposition of any Lien on any asset of the Loan Parties or any of its Consolidated Subsidiaries (other than under any Loan Document).

Section 4.03 *Binding Effect.* This Agreement constitutes a valid and binding agreement of the Loan Parties, and each Note, if and when executed and delivered in accordance with this Agreement, will

constitute valid and binding obligations of the Borrower, in each case subject to applicable bankruptcy, insolvency, receivership, examinership, rescue process, moratorium, reorganization and other similar laws of general application affecting creditors' rights, by any mandatory applicable provisions of Luxembourg law of general application and general principles of equity, regardless of whether considered in a proceeding in equity or at law.

Section 4.04 *Financial Information*.

(a) The audited consolidated balance sheets and related statements of income, shareholders' equity and cash flows of the Parent and its Consolidated Subsidiaries for the fiscal year ended September 30, 2022, a copy of which has been delivered to the Administrative Agent, fairly present in all material respects, in conformity with GAAP, the consolidated financial position of the Parent and its Consolidated Subsidiaries as of such date and their consolidated results of operations and cash flows for such fiscal year.

(b) Since September 30, 2022 there has been no material adverse change in the business, financial position or results of operations of the Combined Companies, considered as a whole.

Section 4.05 *Litigation.* Except as set forth in the Parent's reports on Form 8-K, Form 10-K and Form 10-Q filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, there is no action, suit or proceeding pending against, or to the knowledge of the Loan Parties threatened in writing against, the Parent or any of its Consolidated Subsidiaries before any court or arbitrator or any governmental body, agency or official in which there is a reasonable possibility of an adverse decision which could reasonably be expected to materially adversely affect the business, consolidated financial position or consolidated results of operations of the Parent and its Consolidated Subsidiaries, considered as a whole, or which in any manner draws into question the validity of this Agreement or the Notes.

Section 4.06 *Compliance with ERISA.* Except to the extent the following could not reasonably be expected to have a Material Adverse Effect, each member of the ERISA Group has fulfilled its obligations under the minimum funding standards of ERISA and the Internal Revenue Code with respect to each Plan and is in compliance in all material respects with the presently applicable provisions of ERISA and the Internal Revenue Code with respect to each Plan. Except to the extent the following could not reasonably be expected to have a Material Adverse Effect, no member of the ERISA Group has (i) sought a waiver of the minimum funding standard under Section 412 of the Internal Revenue Code in respect of any Plan, (ii) failed to make any contribution or payment to any Plan or Multiemployer Plan or in respect of any Benefit Arrangement, or made any amendment to any Plan or Benefit Arrangement, in each case, which has resulted or could reasonably be expected to result in the imposition of a Lien or the posting of a bond or other security under ERISA or the Internal Revenue Code or (iii) incurred any liability under Title IV of ERISA other than a liability to the PBGC for premiums under Section 4007 of ERISA.

Section 4.07 *Environmental Matters.* Except with respect to any matters that, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect, no Loan Party nor any of their respective Subsidiaries (i) has failed to comply with any Environmental Law or to obtain, maintain or comply with any permit, license or other approval required under any Environmental Law, (ii) is or has become subject to any Environmental Liability, (iii) has received written notice of any claim with respect to any Environmental Liability or (iv) knows of any basis for any Environmental Liability.

Section 4.08 *Not an Investment Company.* No Loan Party is an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

Section 4.09 *Full Disclosure.* All information heretofore furnished in writing by the Loan Parties to the Administrative Agent or any Lender for purposes of or in connection with this Agreement or the Transactions is, and all such information hereafter furnished in writing by the Loan Parties to the Administrative Agent or any Lender pursuant to the terms of, or in connection with, this Agreement (including, for the avoidance of doubt, any Pricing Certificate (to the knowledge of the Parent with respect to information contained in any Pricing Certificate that is prepared by any party other than the Parent or any of its Affiliates)) was, when taken as a whole, true and correct in all material respects as of the date such information was furnished to the Lenders or the Administrative Agent, as applicable (and as of the Closing Date, with respect to information provided prior thereto) or as of such date as otherwise stated therein and did not, taken as a whole, contain any untrue statement of a material fact as of any such date or omit to state a material fact necessary in order to make the statements contained therein, taken as a whole, not materially misleading in light of the circumstances under which such statements were made (giving effect to all supplements and updates provided thereto), it being understood that any projections and other forward looking information prepared by or on behalf of the Parent and that have been made available to any Lenders or the Administrative Agent in connection with this Agreement or the Transactions have been prepared in good faith based upon assumptions believed by the Parent to be reasonable as of the date thereof (it being understood that such projections and other forward looking information are as to future events and are not to be viewed as facts, such projections and other forward looking information are subject to significant uncertainties and contingencies and that actual results during the period or periods covered by any such projections or other forward looking information may differ significantly from the projected results, and that no assurance can be given that the projected results will be realized) and as of the date such projections and information were furnished to the Lenders or the Administrative Agent (it being further understood and agreed that any representation made pursuant to this Section 4.09 in respect of information provided with respect to any entity or assets acquired or to be acquired by the Parent or any of its Subsidiaries, for all periods prior to the date of the consummation of such acquisition is being made to the knowledge of the Parent). As of the Closing Date, to the best knowledge of the Parent, the information included in the Beneficial Ownership Certifications provided on or prior to the Closing Date to any Lender in connection with this Agreement is true and correct in all material respects.

Section 4.10 *Anti-Corruption Laws and Sanctions*. The Parent has implemented and maintains in effect policies and procedures reasonably designed to promote and achieve compliance in all material respects by the Parent, its Subsidiaries and their respective directors, officers and employees with Anti-Corruption Laws and applicable Sanctions. Neither the Parent nor any Subsidiary of the Parent or, to the knowledge of the Parent, any director, officer, agent, employee or Affiliate of the Parent or any of its Subsidiaries that, in the case of directors, officers, employees, agents or Affiliates, is acting or directly benefitting in any capacity in connection with the Loans, (i) is currently the subject of any Sanctions or (ii) is located, organized or residing in any Sanctioned Country in violation of Sanctions. Neither the Parent nor any Subsidiary of the Parent will, directly or, to its knowledge, indirectly, use or lend, contribute, provide or otherwise make available the proceeds of any extension of credit made pursuant to the terms of this Agreement to any subsidiary, joint venture partner, or other Person, (a) in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any Person in violation of any Anti-Corruption Laws, (b) except to the extent permissible for a Person required to comply with Sanctions, to fund any activity or business in, of or with, any Sanctioned Country or to fund any activity or business of or with any Person who, at the time of such funding, is the subject of Sanctions, or (c) in a manner that will, to the knowledge of the Parent, result in any violation by the Parent or any Subsidiary of the Parent or such Subsidiary of Sanctions, to the extent such violation in this clause (c) is reasonably expected to have a Material Adverse Effect. The foregoing representations in this Section 4.10

will not apply to any party hereto to which Council Regulation (EC) 2271/96 (the "**Blocking Regulation**") applies, if and to the extent that such representations are or would be unenforceable by or in respect of that party pursuant to, or would otherwise result in a breach and/or violation of, (i) any provision of the Blocking Regulation (or any law or regulation implementing the Blocking Regulation in any member state of the European Union) or (ii) any similar blocking or anti-boycott law in the United Kingdom.

Section 4.11 *Domiciliation; Centre of Main Interests*. In the case of an Eligible Subsidiary organized under the laws of Luxembourg, (i) it complies in all material respects with all legal requirements of the Luxembourg law of 31 May 1999, as amended, regarding the domiciliation of companies and (ii) its head office (*administration centrale*) and its place of effective management (*siège de direction effective*) are located at the place of its registered office (*siège statutaire*) in Luxembourg and, for the purposes of the Insolvency Regulation, its centre of main interests (*centre des intérêts principaux*) is located at the place of its registered office (*siège statutaire*) in Luxembourg.

Section 4.12 *Taxes and Qualifying Lenders.* On the date of this Agreement, the Loan Parties are not required to make any deduction for or on account of any Tax from any payment it may make under this Agreement to a Lender which is a Qualifying Lender.

Section 4.13 *Sustainability-Related Information*. All information about the Parent's sustainability initiatives or strategy, including, without limitation, the KPI Metrics and any thresholds or targets with respect thereto, which have been or may be provided to the Administrative Agent, the Sustainability Structuring Agent or any Lender by or on behalf of the Parent, or which have been or may be approved by the Parent (collectively, including the Pricing Certificate and any Sustainability Reports, the **"Sustainability-Related Information"**), is true and accurate in all material respects as of the date it is provided or approved and as of the date (if any) of which it is stated. These representations and warranties are deemed to be made by the Principal Borrower daily by reference to the facts and circumstances then existing commencing on the Closing Date and continuing until this Agreement terminates; provided that it is understood and agreed that any breach of this Section 4.13 shall not constitute a Default or Event of Default or otherwise result in the failure of any condition precedent to any Borrowing or the issuance, extension or increase of any Letter of Credit.

ARTICLE 5.
COVENANTS

The Parent agrees, from and after the Closing Date, that, so long as any Lender has any Commitment hereunder or any principal, interest or fees payable hereunder remain unpaid:

Section 5.01 *Information.* The Parent will deliver to the Administrative Agent for further distribution to each of the Lenders:

(a) as soon as available and in any event within 95 days after the end of each fiscal year of the Parent, a consolidated statement of financial position of the Parent and its Consolidated Subsidiaries as of the end of such fiscal year and the related consolidated statements of income, cash flow and shareholders' or members' equity for such fiscal year, setting forth in each case in comparative form the figures for the previous fiscal year, all set forth in accordance with generally accepted accounting principles and reported on in a manner acceptable to the Securities and Exchange Commission by PricewaterhouseCoopers LLP or other independent public accountants of nationally recognized standing;

(b) as soon as available and in any event within 50 days after the end of each of the first three quarters of each fiscal year of the Parent, a consolidated statement of financial position of the Parent and its

Consolidated Subsidiaries as of the end of such quarter and the related consolidated statements of income, cash flow and shareholders' or members' equity for such quarter and for the portion of the Parent's fiscal year ended at the end of such quarter, setting forth in each case in comparative form the figures for the corresponding quarter and the corresponding portion of the Parent's previous fiscal year, all certified (subject to normal year-end audit adjustments and the absence of footnotes) as to fairness of presentation in all material respects, generally accepted accounting principles and consistency (except as otherwise indicated therein) by the chief financial officer or the chief accounting officer of the Parent;

(c) simultaneously with the delivery of each set of financial statements referred to in clauses (a) and (b) above, a certificate of the chief financial officer or the chief accounting officer of the Parent (i) stating whether any Default exists on the date of such certificate and, if any Default then exists, setting forth the details thereof and the action which the Parent is taking or proposes to take with respect thereto and (ii) setting forth in reasonable detail the calculations required to establish whether the Loan Parties were in compliance with the requirements of Section 5.07 on the date of such financial statements;

(d) as soon as practicable under the circumstances, after any executive officer of the Parent obtains knowledge of any Default, if such Default is then continuing, a certificate of the chief financial officer or the chief accounting officer of the Parent setting forth the details thereof and the action which the Parent is taking or proposes to take with respect thereto;

(e) promptly upon the mailing thereof to the shareholders of the Parent generally, copies of all financial statements, reports and proxy statements so mailed;

(f) promptly upon the filing thereof, copies of all registration statements (other than the exhibits thereto and any registration statements on Form S-8 or its equivalent) and reports on Forms 10-K, 10-Q and 8-K (or their equivalents) which the Parent shall have filed with the Securities and Exchange Commission;

(g) as soon as available and in any event within 120 days following the end of each calendar year of the Parent (commencing with the calendar year ending December 31, 2024), a Pricing Certificate for the Reference Year most recently then ended (commending with the Reference Year ending September 30, 2024); provided, however, that for any Reference Year the Parent may elect not to deliver a Pricing Certificate, and such election shall not constitute a Default or Event of Default under this Agreement (but such failure to so deliver a Pricing Certificate by the end of such 120-day period shall result in the Sustainability Fee Adjustment and the Sustainability Margin Adjustment being applied as set forth in the Pricing Schedule in respect of situations where the Pricing Certificate is not so delivered by the end of such period until such Pricing Certificate is delivered) (it being understood and agreed that in the event the Parent's fiscal year is changed to a calendar year, following prior written notice to the Administrative Agent and the Lenders, the Parent will be permitted to adjust the timing of delivery of the Pricing Certificate at its election in a manner intended to maintain consistency with the foregoing);

(h) if and when any member of the ERISA Group (i) gives or is required to give notice to the PBGC of any "reportable event" (as defined in Section 4043 of ERISA) with respect to any Plan which could reasonably be expected to constitute grounds for a termination of such Plan under Title IV of ERISA, or knows that the plan administrator of any Plan has given or is required to give notice of any such reportable event, a copy of the notice of such reportable event given or required to be given to the PBGC; (ii) receives notice of complete or partial withdrawal liability under Title IV of ERISA or notice that any Multiemployer Plan is in reorganization, is insolvent or has been terminated, a copy of such notice; (iii) receives notice from the PBGC under Title IV of ERISA of an intent to terminate, impose any material liability (other than for premiums under Section 4007 of ERISA) in respect of, or appoint a trustee to administer any Plan, a copy of such notice; (iv) applies for a waiver of the minimum funding standard under

Section 412 of the Internal Revenue Code, a copy of such application; (v) gives notice of intent to terminate any Plan under Section 4041(c) of ERISA, a copy of such notice and other information filed with the PBGC; (vi) gives notice of withdrawal from any Plan pursuant to Section 4063 of ERISA, a copy of such notice; or (vii) fails to make any material payment or contribution to any Plan or Multiemployer Plan or in respect of any Benefit Arrangement or makes any amendment to any Plan or Benefit Arrangement, in each case, which, alone or together with any other such events set forth in the foregoing clauses (i) through (vii) which have occurred, could reasonably be expected to result in a Material Adverse Effect, a certificate of the chief financial officer or the chief accounting officer of the Parent setting forth details as to such occurrence and the action, if any, which the Parent or applicable member of the ERISA Group is required or proposes to take with respect to such occurrence;

(i) from time to time such information and documentation reasonably requested by the Administrative Agent or any Lender for purposes of compliance with applicable "know your customer" and anti-money laundering rules and regulations, including the Patriot Act and the Beneficial Ownership Regulation;

(j) promptly after the occurrence thereof, notice to the applicable Lender of any change in the information provided in the Beneficial Ownership Certification delivered to such Lender that would result in a change to the list of beneficial owners identified in such certification; and

(k) from time to time such additional information regarding the financial position or business of the Parent and its Consolidated Subsidiaries as the Administrative Agent, at the request of any Lender, may reasonably request (it being understood and agreed that neither the Parent nor any of its Subsidiaries shall be required to disclose or discuss, or permit the inspection, examination or making of extracts of, any records, books, information or account or other matter (1) in respect of which disclosure to the Administrative Agent, any Lender or their representatives is then prohibited by applicable law or any agreement binding on the Parent or its Subsidiaries, (2) that is protected from disclosure by the attorney-client privilege or the attorney work product doctrine or (3) that constitutes non-financial trade secrets or non-financial proprietary information).

Information required to be delivered pursuant to subsections (a), (b), (e) or (f) above shall be deemed to have been delivered on the date on which (x) such information has been posted on the Internet by the Securities and Exchange Commission at https://www.sec.gov/edgar/searchedgar/webusers.htm (or any successor website) or (y) the Principal Borrower provides notice to the Administrative Agent that such information has been posted on the Principal Borrower's website on the Internet at www.johnsoncontrols.com or at another website identified in such notice and accessible by the Lenders without charge; provided that such notice may be included in a certificate delivered pursuant to subsection 5.01(c). Notwithstanding the above, if any report, certificate or other information required under this Section 5.01 is due on a day that is not a Business Day, then such report, certificate or other information shall be required to be delivered on the first day after such day that is a Business Day.

Section 5.02 *Payment of Taxes.* The Parent will pay and discharge, and will cause each of its Consolidated Subsidiaries to pay and discharge, by when such become due, all income and other taxes, assessments and governmental charges or levies imposed upon it or upon its income or profits or in respect of its property, except (i) where the same may be contested in good faith by appropriate action and/or (ii) if the failure to pay or discharge could not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, and will maintain, and will cause each of its Consolidated Subsidiaries to maintain, in accordance with generally accepted accounting principles, appropriate reserves for the accrual of any of the same.

Section 5.03 *Maintenance of Property; Insurance*.

(a) The Parent will, to the best of its ability, keep, and will cause each of its Consolidated Subsidiaries to keep, all material property useful and necessary in its business in good working order and condition, ordinary wear and tear excepted, except to the extent the failure to do so could not reasonably be expected to have a Material Adverse Effect.

(b) The Parent will, and will cause each of its Consolidated Subsidiaries to, maintain (either in the name of the Parent or in such Consolidated Subsidiary's own name) insurance on all their respective properties in at least such amounts, and with such reasonable amounts of self-insurance, and against at least such risks (and with such risk retention) as are usually insured against in the same general area by companies of established repute engaged in the same or a similar business, except, in all of the foregoing cases, where the failure to maintain such insurance could not reasonably be expected to have a Material Adverse Effect; and will furnish to the Administrative Agent upon its request therefor information presented in reasonable detail as to the insurance so carried.

Section 5.04 *Conduct of Business and Maintenance of Existence.* (a) The Parent will preserve, renew and keep in full force and effect, and will cause each of its Significant Subsidiaries to preserve, renew and keep in full force and effect, their respective legal existence; provided that nothing in this Section 5.04(a) shall prohibit (i) any transaction expressly permitted by Section 5.09 or (ii) the termination of the legal existence of any Significant Subsidiary if the Parent in good faith determines that such termination (x) is in the best interest of the Parent and (y) is not materially disadvantageous to the Lenders.

(b) The Parent will preserve, renew and keep in full force and effect, and will cause each of its Consolidated Subsidiaries to preserve, renew and keep in full force and effect their respective rights, privileges and franchises necessary or desirable in the normal conduct of business, except to the extent the failure to do so could not reasonably be expected to have a Material Adverse Effect.

Section 5.05 *Compliance with Laws.* The Parent will comply, and cause each of its Consolidated Subsidiaries to comply, in all material respects with all applicable laws, ordinances, rules, regulations, and requirements of governmental authorities (including, without limitation, Environmental Laws and ERISA and the rules and regulations thereunder) except where the necessity of compliance therewith is contested in good faith by appropriate action and except where the failure to so comply could not reasonably be expected to have a Material Adverse Effect. The Parent will implement and maintain in effect and enforce policies and procedures reasonably designed to promote and achieve compliance in all material respects by the Parent, its Subsidiaries and their respective directors, officers and employees with Anti-Corruption Laws and applicable Sanctions.

Section 5.06 *Inspection of Property, Books and Records.* The Parent will keep, and will cause each of its Consolidated Subsidiaries to keep, proper books of record and account in which full, true and correct in all material respects entries shall be made of all dealings and transactions in relation to its business and activities; and will permit, and will cause each of its Consolidated Subsidiaries to permit, representatives of any Lender at such Lender's expense to visit and inspect any of their respective properties, to examine any of their respective books and records and to discuss their respective affairs, finances and accounts with their respective officers and independent public accountants in the presence of such officers, all at such reasonable times and as often as may reasonably be desired; provided that (i) unless an Event of Default has occurred and is continuing, the Parent and its Consolidated Subsidiaries, taken as a whole, shall only be required to reimburse the Administrative Agent and each Lender in the aggregate for the expenses incurred by the Administrative Agent and each Lender for one such visit and inspection by the Administrative Agent and each Lender in any calendar year and (ii) it is understood and agreed that neither the Parent nor any of its

Consolidated Subsidiaries shall be required to disclose or discuss, or permit the inspection, examination or making of extracts of, any records, books, information or account or other matter (1) in respect of which disclosure to the Administrative Agent, any Lender or their representatives is then prohibited by applicable law or any agreement binding on the Parent or its Subsidiaries, (2) that is protected from disclosure by the attorney-client privilege or the attorney work product doctrine or (3) that constitutes non-financial trade secrets or non-financial proprietary information.

Section 5.07 *Minimum Consolidated Shareholders' Equity.* Consolidated Shareholders' Equity will not be less than $3,500,000,000 as of the end of any fiscal quarter of the Parent.

Section 5.08 *Negative Pledge.* Neither the Parent nor any Significant Subsidiary of the Parent will create, assume or suffer to exist any Lien on any asset now owned or hereafter acquired by it, except:

(a) Liens existing on the date of this Agreement securing Debt outstanding or committed for on the date of this Agreement and, to the extent securing Debt in an aggregate principal amount in excess of $10,000,000, set forth on Schedule 5.08;

(b) any Lien existing on any asset of any entity at the time such entity becomes a Consolidated Subsidiary and not created in contemplation of such event;

(c) any Lien on any asset securing Debt incurred or assumed for the purpose of financing an amount not to exceed all or any part of the cost of acquiring or constructing such asset, provided that such Lien attaches to such asset concurrently with or within 270 days after (i) the acquisition of such asset or (ii) the later of (x) the completion of such construction of such asset and (y) the date of commencement of the commercial operation of the asset constructed, as applicable;

(d) any Lien on any asset of any entity existing at the time such entity is merged or consolidated with or into the Parent or a Consolidated Subsidiary and not created in contemplation of such event;

(e) any Lien existing on any asset prior to the acquisition thereof by the Parent or a Consolidated Subsidiary of the Parent and not created in contemplation of such acquisition;

(f) any Lien arising out of the refinancing, extension, renewal or refunding of any Debt secured by any Lien permitted by any of the foregoing clauses of this Section 5.08, to the extent that the outstanding principal amount thereof is not increased (except as grossed-up for the customary fees and expenses incurred in connection with such refinancing, extension, renewal or refunding and except as a result of the capitalization or accretion of interest) and is not secured by any additional assets (it being understood that a Lien covering all assets of a particular type, such as "all inventory", may cover additional assets of the relevant type);

(g) Liens arising in the ordinary course of its business which (i) do not secure Debt, (ii) in the case of judgment, attachment or other similar Liens in connection with legal proceedings, do not secure any obligation in an amount exceeding $300,000,000 and (iii) do not in the aggregate materially detract from the value of its assets or materially impair the use thereof in the operation of its business;

(h) Liens on proceeds of any assets permitted to be subject to any Lien permitted by this Section 5.08;

(i) Liens arising in connection with the defeasance, discharge and/or redemption of Debt as contemplated by the definition of Debt;

(j) Liens on any amounts held by a trustee or other escrow agent under any indenture or other debt agreement issued in escrow pursuant to customary escrow arrangements pending the release thereof, or under any indenture or other debt agreement pursuant to customary discharge, redemption or defeasance provisions;

(k) options, put and call arrangements, rights of first refusal and similar rights relating to investments in joint ventures, partnerships and other similar investments not prohibited by this Agreement, and Liens on equity interests of joint ventures securing obligations of such joint ventures;

(l) Liens on accounts receivable and related assets in connection with receivables financing facilities in an aggregate principal amount at any time outstanding not to exceed $1,000,000,000;

(m) Liens on assets of Foreign Subsidiaries of the Parent securing obligations in an aggregate principal amount at any time outstanding not to exceed $1,000,000,000; and

(n) Liens not otherwise permitted by the foregoing clauses of this Section 5.08 securing Debt or other obligations in an aggregate principal amount at any time outstanding not to exceed on the date of incurrence thereof the greater of (i) $2,000,000,000 and (ii) 10% of Consolidated Shareholders' Equity.

For purposes of determining compliance with this Section 5.08, no Default shall be deemed to have occurred solely as a result of changes in exchange rates for an obligation denominated in a currency other than Dollars (provided that calculations made for a subsequent obligation incurred shall take into account such changes in exchange rates) occurring after the time any Lien is created or assumed.

Section 5.09 *Consolidation, Mergers and Sales of Assets.* No Loan Party shall (i) consolidate or merge with or into any other Person or (ii) sell, lease or otherwise transfer (excluding, for the avoidance of doubt, the creation of any Lien permitted under Section 5.08), directly or indirectly, all or substantially all of the assets of the Parent and its Consolidated Subsidiaries, taken as a whole, to any other Person; provided that (A) a Loan Party may consolidate or merge with another Person (other than a Loan Party) if such Loan Party is the entity surviving such consolidation or merger and if, immediately after giving effect to such merger or consolidation, no Default shall have occurred and be continuing, (B) any Loan Party may consolidate or merge with any other Loan Party if immediately after giving effect to such consolidation or merger, no Default shall have occurred and be continuing; provided that, in any such consolidation or merger to which the Principal Borrower is a party, if the Principal Borrower is not the Person surviving such merger, such surviving Person (1) is a corporation or other legal entity organized under the laws of a country that is a member of the Organization for Economic Cooperation and Development and (2) shall have assumed all obligations of the Principal Borrower under this Agreement and any Note pursuant to an instrument reasonably satisfactory in form and substance to the Administrative Agent, (C) any Eligible Subsidiary may consolidate or merge with any other Eligible Subsidiary, so long as an Eligible Subsidiary is the Person surviving such consolidation or merger, (D) the Parent may consummate a Holding Company Reorganization so long as after giving effect thereto, (v) no Default shall have occurred and be continuing, (w) the Holding Company shall have assumed, pursuant to an instrument in form and substance reasonably satisfactory to the Administrative Agent, the obligations of the Parent under this Agreement, (x) the Administrative Agent shall have received an opinion of counsel with respect to the Holding Company (which, in the case of certain customary matters pertaining to the Holding Company, may include internal counsel for the Holding Company) (covering customary legal matters for an unsecured bank loan financing) and such other evidence of compliance herewith as the Administrative Agent may reasonably request in form and substance reasonably satisfactory to the Administrative Agent and (y) the Parent shall have provided the Administrative Agent and the Lenders 30 days prior notice of the Holding Company Reorganization, and the Holding Company shall, promptly upon the request of the Administrative Agent or any Lender, supply such documentation and other information relating to such Holding Company that is

required by bank regulatory authorities under applicable "know your customer" and anti-money laundering rules and regulations, including without limitation, the Act and, if the Holding Company qualifies as a "legal entity customer" under the Beneficial Ownership Regulation, a Beneficial Ownership Certification, (E) any Loan Party (other than the Parent) may sell, lease or otherwise transfer its assets to the Parent or to a Consolidated Subsidiary and (F) the Parent or any Consolidated Subsidiary may create any Lien permitted under Section 5.08.

Section 5.10 *Use of Proceeds.* The proceeds of the Loans made under this Agreement will be used by the Borrowers for general business purposes (including, without limitation, share buybacks in respect of the Parent's equity interests in accordance with applicable law). None of such proceeds will be used, directly or indirectly, for the purpose, whether immediate, incidental or ultimate, of buying or carrying any "margin stock" (within the meaning of Regulation U) in violation of Regulation U. None of the Loan Parties will request any Borrowing or Letter of Credit, and none of the Loan Parties shall use, and each of the Loan Parties shall procure that none of its Subsidiaries nor its or their respective directors, officers, employees and agents shall use, the proceeds of any Borrowing or Letter of Credit (A) in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any Person in violation of any Anti-Corruption Laws, (B) for the purpose of funding or financing any activities, business or transaction of or with any Sanctioned Person, or in any Sanctioned Country, in each case to the extent such activities, business or transaction would violate Sanctions if conducted by a company organized in the United States or by a company organized in a European Union member state, the United Kingdom or Canada, or (C) in any other manner that would result in liability to any Lender, the Administrative Agent or any Issuing Lender under any applicable Sanctions or the violation of any Sanctions by any Lender, the Administrative Agent or any Issuing Lender. The foregoing clauses (B) and (C) of this Section 5.10 will not apply to any party hereto to which the Blocking Regulation applies, if and to the extent that such representations are or would be unenforceable by or in respect of that party pursuant to, or would otherwise result in a breach and/or violation of, (i) any provision of the Blocking Regulation (or any law or regulation implementing the Blocking Regulation in any member state of the European Union) or (ii) any similar blocking or anti-boycott law in the United Kingdom.

Section 5.11 *Sustainability-Related Information*.

(a) The Parent will furnish the Administrative Agent, the Sustainability Structuring Agent and the Lenders with all Sustainability-Related Information and provide such access to the directors, officers, employees and advisers of the Parent and its Affiliates (together "**Representatives**"), in each case as the Administrative Agent, the Sustainability Structuring Agent or any Lender may reasonably request in connection therewith. In addition, the Parent shall ensure that the Representatives are available, upon the Administrative Agent's, the Sustainability Structuring Agent's or any Lender's reasonable request, to discuss the Sustainability-Related Information (it being understood and agreed that neither the Parent nor any of its Subsidiaries shall be required to disclose or discuss, or permit the inspection, examination or making of extracts of, any records, books, information or account or other matter (1) in respect of which disclosure to the Administrative Agent, any Lender or their representatives is then prohibited by applicable law or any agreement binding on the Parent or its Subsidiaries, (2) that is protected from disclosure by the attorney-client privilege or the attorney work product doctrine or (3) that constitutes non-financial trade secrets or non-financial proprietary information). The Parent acknowledges and agrees that (x) the Administrative Agent, the Sustainability Structing Agent and the Lenders may rely, without independent verification, upon the accuracy, adequacy and completeness of the Sustainability-Related Information furnished by the Parent or its Affiliates to the Administrative Agent, the Sustainability Structuring Agent or any Lender or approved by the Parent for use in connection with this Agreement, and (y) neither the Administrative Agent, the Sustainability Structuring Agent nor any Lender assumes any responsibility or has any liability therefor or has an obligation to conduct any appraisal of any Sustainability-Related Information.

(b) The Parent shall:

(i) within five (5) Business Days after the Parent's determination that there was a Pricing Certificate Inaccuracy, deliver written notice to the Administrative Agent thereof;

(ii) promptly notify the Administrative Agent, the Sustainability Structuring Agent and the Lenders of (A) any change in the Parent's sustainability strategy or initiatives or its internal policies related to sustainability, in each case to the extent material to the sustainability-related provisions of this Agreement, (B) if any Sustainability-Related Information furnished by the Parent or any of its Affiliates to the Administrative Agent, the Sustainability Structuring Agent or any Lender or approved by the Parent or its Affiliates for use in connection with this Agreement is or becomes inaccurate, untrue, incomplete or misleading in any material respect and (C) the appointment of any successor Sustainability Metric Auditor; and

(iii) supplement the Sustainability-Related Information promptly from time to time to ensure that the representations and warranties made under Section 4.13 are true, correct and complete in all material respects as of the date when such Sustainability-Related Information is supplemented and/or the representations and warranties are deemed to be made;

provided that it is understood and agreed that any breach of this 5.11(b) shall not constitute a Default or Event of Default or otherwise result in the failure of any condition precedent to any Borrowing or the issuance, extension or increase of any Letter of Credit.

ARTICLE 6.
DEFAULTS

Section 6.01 *Events of Default.* If, on or after the Closing Date, one or more of the following events (each an "**Event of Default**") shall have occurred and be continuing:

(a) any principal of any Loan or any Reimbursement Obligation shall not be paid when due and in the Agreed Currency required hereunder, or any interest, any fees or any other amount payable hereunder, shall not be paid within five Business Days of the due date therefor and in the Agreed Currency required hereunder;

(b) any Loan Party shall fail to observe or perform any covenant contained in Sections 5.01(d), 5.04(a) (with respect to the Parent's existence) or 5.07 to 5.10, inclusive;

(c) any Loan Party shall fail to observe or perform any covenant or agreement contained in this Agreement (other than those covered by clause (a) or (b) above and other than Section 5.01(g)) for 30 days after written notice thereof has been given to the Principal Borrower by the Administrative Agent at the request of any Lender;

(d) the guaranty provided by the Parent under Section 10.01 of this Agreement shall cease to be in full force and effect (other than, for the avoidance of doubt, in accordance with the terms of this Agreement);

(e) any representation, warranty, certification or statement made by any Loan Party in this Agreement or in any certificate, financial statement or other document delivered pursuant to this Agreement shall prove to have been incorrect in any material respect when made (or deemed made);

(f) any Loan Party or any Consolidated Subsidiary shall fail to make any payment of principal or premium or interest in respect of any Material Debt when due or within any applicable grace period;

(g) any event or condition shall occur which results in the acceleration of the maturity of any Material Debt or enables (any applicable grace or cure period having expired) the holder of such Debt or any Person acting on such holder's behalf to accelerate the maturity thereof; provided that none of the following shall give rise to a Default: (i) the obligation of any Loan Party or any Subsidiary thereof to prepay or repurchase, or offer to prepay or repurchase, Debt of an acquired Person pursuant to change-of-control provisions in the documentation governing such Debt, (ii) any Default under Debt of an acquired Person that is cured, or which Debt is repaid, within 60 days after the consummation of the acquisition of such Person; (iii) secured Debt that becomes due as a result of the voluntary transfer of assets securing such Debt or a casualty or similar event; (iv) prepayments of Debt which are mandatory under the terms of the documentation governing such Debt by reason of the receipt of net cash proceeds of other Debt, of dispositions (including, without limitation, as the result of casualty events and governmental takings) or of equity issuances or by reason of excess cash flow; (v) prepayments required by the terms of Debt as a result of customary provisions in respect of illegality, replacement of lenders and gross-up provisions for Taxes, increased costs, capital adequacy and other similar customary requirements and (vi) any voluntary prepayment, redemption or other satisfaction of Debt that becomes mandatory in accordance with the terms of such Debt solely as the result of the Parent or any Subsidiary delivering a prepayment, redemption or similar notice with respect to such prepayment, redemption or other satisfaction;

(h) the Parent or any Significant Subsidiary of the Parent shall commence a voluntary case or other proceeding seeking liquidation, reorganization or other relief (including, in the case of any Luxembourg Borrower, any Luxembourg Relief) with respect to itself or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, examiner, process advisor, custodian or other similar official of it or any substantial part of its property, or shall consent to any such relief or to the appointment of or taking possession by any such official in an involuntary case or other proceeding commenced against it, or shall make a general assignment for the benefit of creditors, or shall fail generally to pay its debts as they become due, or shall take any legal action to authorize any of the foregoing;

(i) an involuntary case or other proceeding shall be commenced against the Parent or any Significant Subsidiary of the Parent seeking liquidation, reorganization or other relief (including, in the case of any Luxembourg Borrower, any Luxembourg Relief) with respect to it or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, examiner, process advisor, custodian or other similar official of it or any substantial part of its property, and such involuntary case or other proceeding shall remain undismissed and unstayed for a period of 60 days; or an order for relief shall be entered against any Loan Party or any Significant Subsidiary of a Loan Party under the federal bankruptcy laws as now or hereafter in effect;

(j) any member of the ERISA Group shall fail to pay when due an amount which it shall have become liable to pay under Title IV of ERISA; or notice of intent to terminate a Plan shall be filed under Title IV of ERISA by any member of the ERISA Group, any plan administrator or any combination of the foregoing; or the PBGC shall institute proceedings under Title IV of ERISA to terminate, to impose liability (other than for premiums under Section 4007 of ERISA) in respect of, or to cause a trustee to be appointed to administer any Plan; or a condition shall exist by reason of which the PBGC would be entitled to obtain a decree adjudicating that any Plan must be terminated; or there shall occur a complete or partial withdrawal from, or a default, within the meaning of Section 4219(c)(5) of ERISA, with respect to, one or more Multiemployer Plans, and in each of the foregoing cases, such event or condition could reasonably be expected to have a Material Adverse Effect;

(k) a judgment or order for the payment of money in excess of $300,000,000 shall be rendered against any Loan Party or any Significant Subsidiary of a Loan Party and such judgment or order shall continue unsatisfied and unstayed for the shorter of (x) a period of 30 days and (y) the period during which a

request or proceeding for stay of enforcement of such judgment or order is permitted under the rules of the relevant jurisdiction; provided, however, that any such judgment shall not be included in the calculation under this clause (k) if and for so long as (i) the amount of such judgment is covered by a valid and binding policy of insurance between the defendant and the insurer covering payment thereof and (ii) such insurer, which shall be rated at least "A" by A.M. Best Company, has been notified of, and has not disputed the claim made for payment of, the amount of such judgment; or

(l) (i) any person or group of persons (within the meaning of Section 13 or 14 of the Securities Exchange Act of 1934, as amended) shall have acquired beneficial ownership (within the meaning of Rule 13d-3 promulgated by the Securities and Exchange Commission under said Act) of 40% or more of the outstanding ordinary shares of the Parent; (ii) during any period of 18 consecutive calendar months (commencing with the Closing Date for the first such period until 18 calendar months has elapsed since the Closing Date), individuals who were directors of the Parent on the first day of such period (together with any new directors whose election by the Parent's board of directors or whose nomination for election by the Parent's shareholders was approved by a vote of at least two-thirds of the directors who either were directors at the beginning of such period or whose election or nomination was previously so approved) shall cease to constitute at least a majority of the board of directors of the Parent; or (iii) the Parent shall cease to own, directly or indirectly and legally and beneficially, 100% of the voting interests of any other Borrower's outstanding shares of common stock (or the equivalent); provided that (I) notwithstanding the foregoing, a transaction will not be deemed to constitute an Event of Default under clause (i) above if (A) the Parent becomes a direct or indirect wholly-owned Subsidiary of a Holding Company pursuant to a Holding Company Reorganization and (B)(1) the direct or indirect holders of the voting interests of the outstanding shares of common stock (or the equivalent) of such Holding Company immediately following that transaction are substantially the same as the holders of the voting interests of the Parent's outstanding ordinary shares immediately prior to that transaction or (2) immediately following that transaction no person or group of persons (defined as provided in clause (i) above) (other than a Holding Company satisfying the requirements of this sentence) is the beneficial owner, directly or indirectly, of more than 40% of the voting interests of the outstanding shares of common stock (or the equivalent) of such Holding Company and (II) if a Holding Company Reorganization shall have occurred, clause (ii) above shall apply as if the Parent prior thereto and the Parent subsequent thereto were the same Person;

then, and in every such event, the Administrative Agent shall (i) if requested by Lenders having more than 50% in aggregate amount of the Commitments, by notice to the Principal Borrower terminate the Commitments and they shall thereupon terminate, and (ii) if requested by Lenders holding more than 50% in aggregate principal amount of the Loans, by notice to the Principal Borrower declare the Loans (together with accrued interest thereon) to be, and the Loans shall thereupon become, immediately due and payable without presentment, demand, protest or other notice (except as set forth herein) of any kind, all of which are hereby waived by each Borrower; provided that in the case of any of the Events of Default specified in Section 6.01(h) or 6.01(i) above with respect to the Parent, without any notice to any Loan Party or any other act by the Administrative Agent or the Lenders, the Commitments shall thereupon terminate and the Loans (together with accrued interest thereon) shall become immediately due and payable without presentment, demand, protest or other notice of any kind, all of which are hereby waived by each Borrower.

Section 6.02 *Notice of Default.* The Administrative Agent shall give notice to the Principal Borrower under Section 6.01(c) promptly upon being requested to do so by any Lender and shall thereupon notify all the Lenders thereof.

Section 6.03 *Cash Cover.* Each Borrower agrees, in addition to the provisions in Section 6.01, that upon the occurrence and during the continuance of any Event of Default, it shall, if requested by the Administrative Agent upon the instruction of the Required Lenders or any Issuing Lender having an outstanding Letter of Credit, Cash Collateralize all Letters of Credit for such Borrower's account outstanding

at such time (or, in the case of a request by an Issuing Lender, such Letters of Credit issued by it), provided that, upon the occurrence of any Event of Default specified in Section 6.01(h) or (i) above with respect to any such Borrower, such Borrower shall Cash Collateralize all outstanding Letters of Credit for its account forthwith without any notice or demand or any other act by the Administrative Agent, any Issuing Lender or any Lender.

ARTICLE 7.
THE ADMINISTRATIVE AGENT

Section 7.01 *Appointment and Authorization.* Each Lender irrevocably appoints and authorizes the Administrative Agent to take such action as agent on its behalf and to exercise such powers under this Agreement and the Notes as are delegated to the Administrative Agent by the terms hereof or thereof, together with all such powers as are reasonably incidental thereto.

Section 7.02 *Administrative Agent and Affiliates.* JPMorgan Chase Bank, N.A., shall have the same rights and powers under this Agreement as any other Lender and may exercise or refrain from exercising the same as though it were not the Administrative Agent, and JPMorgan Chase Bank, N.A. and its affiliates may accept deposits from, lend money to, and generally engage in any kind of business with any Loan Party or any Consolidated Subsidiary or affiliate of any Loan Party as if it were not the Administrative Agent.

Section 7.03 *Action by Administrative Agent.* The obligations of the Administrative Agent hereunder are only those expressly set forth herein. Without limiting the generality of the foregoing, the Administrative Agent shall not be required to take any action with respect to any Default, except as expressly provided in Article 6.

Section 7.04 *Consultation with Experts.* The Administrative Agent shall not be liable for any action taken or omitted to be taken by it in good faith in accordance with the advice of legal counsel (who may be counsel for any Loan Party), independent public accountants and other experts selected by it.

Section 7.05 *Liability of Administrative Agent.* Neither the Administrative Agent nor any of its affiliates nor any of their respective directors, officers, agents or employees shall be liable for any action taken or not taken by it in connection herewith (i) with the consent or at the request of the Required Lenders or (ii) in the absence of its own gross negligence or willful misconduct. Neither the Administrative Agent nor any of its affiliates nor any of their respective directors, officers, agents or employees shall be responsible for or have any duty to ascertain, inquire into or verify (i) any statement, warranty or representation made in connection with this Agreement or any Borrowing or issuance of a Letter of Credit hereunder; (ii) the performance or observance of any of the covenants or agreements of any Loan Party; (iii) the satisfaction of any condition specified in Article 3 except receipt of items required to be delivered to the Administrative Agent; or (iv) the validity, effectiveness or genuineness of this Agreement, the Notes, the Letters of Credit or any other instrument or writing furnished in connection herewith (including, for the avoidance of doubt, in connection with the Administrative Agent's reliance on any Electronic Signature transmitted by telecopy, emailed .pdf, or any other electronic means that reproduces an image of an actual executed signature page). The Administrative Agent shall not incur any liability by acting in reliance upon any notice, consent, certificate, statement, or other writing (which may be a bank wire or similar writing) believed by it to be genuine or to be signed by the proper party or parties. The motivations of the Administrative Agent are commercial in nature and not to invest in the general performance or operations of the Principal Borrower.

Section 7.06 *Indemnification.* Each Lender shall, ratably in accordance with its Commitment, indemnify the Administrative Agent and each Issuing Lender, their affiliates and their respective directors,

officers, agents and employees (to the extent not reimbursed by the Loan Parties) against any cost, expense (including counsel fees and disbursements), claim, demand, action, loss or liability (except such as result from such indemnitees' gross negligence or willful misconduct as found by a final, non-appealable judgment of a court of competent jurisdiction) that such indemnitees may suffer or incur in connection with this Agreement or any Letter of Credit or any action taken or omitted by such indemnitees hereunder or thereunder.

Section 7.07 *Credit Decision.*

(a) Each Lender represents and warrants that (i) the Loan Documents set forth the terms of a commercial lending facility, (ii) in participating as a Lender, it is engaged in making, acquiring or holding commercial loans and in providing other facilities set forth herein as may be applicable to such Lender in the ordinary course of its business and is making the Loans hereunder as commercial loans in the ordinary course of its business, and not for the purpose of investing in the general performance of the Principal Borrower, or for the purposes of purchasing, acquiring or holding any other type of financial instrument such as a security (and each Lender agrees not to assert a claim in contravention of the foregoing, such as a claim under the federal or state securities law), (iii) it has, independently and without reliance upon any Agent, any Lead Arranger or any other Lender, or any of the Related Parties of any of the foregoing, and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement as a Lender, and to make, acquire or hold Loans hereunder and (iv) it is sophisticated with respect to decisions to make, acquire and/or hold commercial loans and to provide other facilities set forth herein, as may be applicable to such Lender, and either it, or the Person exercising discretion in making its decision to make, acquire and/or hold such commercial loans or to provide such other facilities, is experienced in making, acquiring or holding such commercial loans or providing such other facilities. Each Lender also acknowledges that it will, independently and without reliance upon any Agent, any Lead Arranger or any other Lender, or any of the Related Parties of any of the foregoing, and based on such documents and information (which may contain material, non-public information within the meaning of the United States securities laws concerning the Principal Borrower and its Affiliates) as it shall from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder. Each Lender and each Issuing Lender also acknowledges and agrees that (a) none of the Agents or Lead Arrangers acting in such capacities have made any assurances as to (i) whether the credit facility evidenced by this Agreement (the "**Facility**") meets such Lender's or such Issuing Lender's criteria or expectations with regard to environmental impact and sustainability performance, (ii) whether any characteristics of the Facility, including the characteristics of the relevant key performance indicators to which the Parent will link a potential margin step-up or step-down, including their environmental and sustainability criteria, meet any industry standards or market expectations for sustainability-linked credit facilities or (iii) whether the relevant KPI Metrics or thresholds or targets with respect thereto will be attainable or able to be maintained by the Parent and (b) such Lender and such Issuing Lender has performed its own independent investigation and analysis of the Facility and whether the Facility meets its own criteria or expectations with regard to environmental impact and/or sustainability performance.

(b)

(i) Each Lender hereby agrees that (x) if the Administrative Agent notifies such Lender that the Administrative Agent has determined in its sole discretion that any funds received by such Lender from the Administrative Agent or any of its Affiliates (whether as a payment, prepayment or repayment of principal, interest, fees or otherwise; individually and collectively, a "**Payment**") were erroneously transmitted to such Lender (whether or not known to such Lender), and demands the return of such Payment (or a portion thereof), such Lender shall promptly, but in no event later than one (1) Business Day thereafter (or such later

date as the Administrative Agent, may, in its sole discretion, specify in writing), return to the Administrative Agent the amount of any such Payment (or portion thereof) as to which such a demand was made in same day funds, together with interest thereon (except to the extent waived in writing by the Administrative Agent) in respect of each day from and including the date such Payment (or portion thereof) was received by such Lender to the date such amount is repaid to the Administrative Agent at the greater of the NYFRB Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation from time to time in effect, and (y) to the extent permitted by applicable law, such Lender shall not assert, and hereby waives, as to the Administrative Agent, any claim, counterclaim, defense or right of set-off or recoupment with respect to any demand, claim or counterclaim by the Administrative Agent for the return of any Payments received, including without limitation any defense based on "discharge for value" or any similar doctrine. A notice of the Administrative Agent to any Lender under this Section 7.07(b) shall be conclusive, absent manifest error.

(ii) Each Lender hereby further agrees that if it receives a Payment from the Administrative Agent or any of its Affiliates (x) that is in a different amount than, or on a different date from, that specified in a notice of payment sent by the Administrative Agent (or any of its Affiliates) with respect to such Payment (a "**Payment Notice**") or (y) that was not preceded or accompanied by a Payment Notice, it shall be on notice, in each such case, that an error has been made with respect to such Payment. Each Lender agrees that, in each such case, or if it otherwise becomes aware a Payment (or portion thereof) may have been sent in error, such Lender shall promptly notify the Administrative Agent of such occurrence and, upon demand from the Administrative Agent, it shall promptly, but in no event later than one (1) Business Day thereafter (or such later date as the Administrative Agent, may, in its sole discretion, specify in writing), return to the Administrative Agent the amount of any such Payment (or portion thereof) as to which such a demand was made in same day funds, together with interest thereon (except to the extent waived in writing by the Administrative Agent) in respect of each day from and including the date such Payment (or portion thereof) was received by such Lender to the date such amount is repaid to the Administrative Agent at the greater of the NYFRB Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation from time to time in effect.

(iii) The Principal Borrower and each other Loan Party hereby agrees that (x) in the event an erroneous Payment (or portion thereof) is not recovered from any Lender that has received such Payment (or portion thereof) for any reason, the Administrative Agent shall be subrogated to all the rights of such Lender with respect to such amount and (y) an erroneous Payment shall not pay, prepay, repay, discharge or otherwise satisfy any obligation under the Loan Documents owed by the Principal Borrower or any other Loan Party, except in each case, to the extent such erroneous Payment is, and solely with respect to the amount of such erroneous Payment that is, comprised of funds received by the Administrative Agent from the Principal Borrower or any other Loan Party for the purpose of satisfying an obligation under the Loan Documents owed by the Principal Borrower or any other Loan Party.

(iv) Each party's obligations under this Section 7.07(b) shall survive the resignation or replacement of the Administrative Agent or any transfer of rights or obligations by, or the replacement of, a Lender, the termination of the Commitments or the repayment, satisfaction or discharge of all obligations of the Borrowers under any Loan Document.

Section 7.08 *Successor Administrative Agent.*

(a) Subject to the appointment and acceptance of a successor Administrative Agent as provided in this Section 7.08, the Administrative Agent may resign at any time by giving written notice thereof to the Lenders and the Principal Borrower, whether or not a successor Administrative Agent has been appointed. Upon any such resignation, the Required Lenders shall have the right, with the consent of the Principal

Borrower so long as no Event of Default exists under clauses (a), (h) or (i) of Section 6.01, to appoint a successor Administrative Agent. If no successor Administrative Agent shall have been so appointed by the Required Lenders, and shall have accepted such appointment, within 30 days after the retiring Administrative Agent gives notice of resignation, then the retiring Administrative Agent may, on behalf of the Lenders, appoint a successor Administrative Agent, which shall be a commercial bank organized or licensed under the laws of the United States of America or of any State thereof and having a combined capital and surplus of at least $50,000,000. Upon the acceptance of its appointment as Administrative Agent hereunder by a successor Administrative Agent, such successor Administrative Agent shall thereupon succeed to and become vested with all the rights and duties of the retiring Administrative Agent, and the retiring Administrative Agent shall be discharged from its duties and obligations hereunder. The fees payable by the Principal Borrower to a successor Administrative Agent shall be the same as those payable to its predecessor unless otherwise agreed between the Principal Borrower and such successor. After any retiring Administrative Agent's resignation hereunder as Administrative Agent, the provisions of this Article and Section 11.03 shall inure to the benefit of such retiring Administrative Agent, its sub-agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while it was acting as Administrative Agent. Prior to any retiring Administrative Agent's resignation hereunder as Administrative Agent, the retiring Administrative Agent shall take such action as may be reasonably necessary to assign to the successor Administrative Agent its rights as Administrative Agent under the Loan Documents.

(b) Notwithstanding paragraph (a) of this Section, in the event no successor Administrative Agent shall have been so appointed and shall have accepted such appointment within 30 days after the retiring Administrative Agent gives notice of its intent to resign, the retiring Administrative Agent may give notice of the effectiveness of its resignation to the Lenders, the Issuing Lenders and the Principal Borrower, whereupon, on the date of effectiveness of such resignation stated in such notice, (i) the retiring Administrative Agent shall be discharged from its duties and obligations hereunder and under the other Loan Documents and (ii) the Required Lenders shall succeed to and become vested with all the rights, powers, privileges and duties of the retiring Administrative Agent; provided that (A) all payments required to be made hereunder or under any other Loan Document to the Administrative Agent for the account of any Person other than the Administrative Agent shall be made directly to such Person and (B) all notices and other communications required or contemplated to be given or made to the Administrative Agent shall directly be given or made to each Lender and each Issuing Lender. Following the effectiveness of the Administrative Agent's resignation from its capacity as such, the provisions of this Article and Section 11.03, as well as any exculpatory, reimbursement and indemnification provisions set forth in any other Loan Document, shall continue in effect for the benefit of such retiring Administrative Agent, its sub-agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while the retiring Administrative Agent was acting as Administrative Agent.

Section 7.09 *Administrative Agent's Fee.* The Principal Borrower shall pay to the Administrative Agent for its own account fees in the amounts and at the times previously agreed upon between the Principal Borrower and the Administrative Agent.

Section 7.10 *Other Agents.* Nothing in the Loan Documents shall impose on any Agent other than the Administrative Agent, in its capacity as an Agent, any obligation or duty whatsoever in such capacity under this Agreement or any other Loan Document and shall incur no liability hereunder or thereunder in such capacity, but all such persons shall have the benefit of the indemnities provided for hereunder.

Section 7.11 *Posting of Communications*.

(a) The Principal Borrower agrees that the Administrative Agent may, but shall not be obligated to, make any Communications available to the Lenders and the Issuing Lenders by posting the Communications on IntraLinks™, DebtDomain, SyndTrak, ClearPar or any other similar electronic platform chosen by the Administrative Agent reasonably and in good faith to be its electronic transmission system and used by it for such purpose with respect to its credit facilities generally (the "Approved Electronic Platform").

(b) Although the Approved Electronic Platform and its primary web portal are secured with generally-applicable security procedures and policies implemented or modified by the Administrative Agent from time to time (including, as of the Closing Date, a user ID/password authorization system) and the Approved Electronic Platform is secured through a per-deal authorization method whereby each user may access the Approved Electronic Platform only on a deal-by-deal basis, each of the Lenders, the Issuing Lenders and the Principal Borrower acknowledges and agrees that the distribution of material through an electronic medium is not necessarily secure, that the Administrative Agent is not responsible for approving or vetting the representatives or contacts of any Lender that are added to the Approved Electronic Platform, and that there may be confidentiality and other risks associated with such distribution. Each of the Lenders, the Issuing Lenders and the Principal Borrower hereby approves distribution of the Communications through the Approved Electronic Platform and understands and assumes the risks of such distribution, other than risks arising from the gross negligence, bad faith or willful misconduct of any of the foregoing parties (as determined by a court of competent jurisdiction by a final and nonappealable judgment).

(c) THE APPROVED ELECTRONIC PLATFORM AND THE COMMUNICATIONS ARE PROVIDED "AS IS" AND "AS AVAILABLE". THE APPLICABLE PARTIES (AS DEFINED BELOW) DO NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE COMMUNICATIONS, OR THE ADEQUACY OF THE APPROVED ELECTRONIC PLATFORM AND EXPRESSLY DISCLAIM LIABILITY FOR ERRORS OR OMISSIONS IN THE APPROVED ELECTRONIC PLATFORM AND THE COMMUNICATIONS. NO WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY RIGHTS OR FREEDOM FROM VIRUSES OR OTHER CODE DEFECTS, IS MADE BY THE APPLICABLE PARTIES IN CONNECTION WITH THE COMMUNICATIONS OR THE APPROVED ELECTRONIC PLATFORM. IN NO EVENT SHALL THE ADMINISTRATIVE AGENT, ANY LEAD ARRANGER, ANY DOCUMENTATION AGENT, ANY SYNDICATION AGENT, THE SUSTAINABILITY STRUCTURING AGENT OR ANY OF THEIR RESPECTIVE RELATED PARTIES (COLLECTIVELY, "APPLICABLE PARTIES") HAVE ANY LIABILITY TO ANY LOAN PARTY, ANY LENDER, ANY ISSUING LENDER OR ANY OTHER PERSON OR ENTITY FOR DAMAGES OF ANY KIND, INCLUDING DIRECT OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSSES OR EXPENSES (WHETHER IN TORT, CONTRACT OR OTHERWISE) ARISING OUT OF ANY LOAN PARTY'S OR THE ADMINISTRATIVE AGENT'S TRANSMISSION OF COMMUNICATIONS THROUGH THE INTERNET OR THE APPROVED ELECTRONIC PLATFORM, OTHER THAN DIRECT ACTUAL DAMAGES ARISING FROM THE GROSS NEGLIGENCE, BAD FAITH OR WILLFUL MISCONDUCT OF ANY APPLICABLE PARTY (AS DETERMINED BY A COURT OF COMPETENT JURISDICTION BY A FINAL AND NONAPPEALABLE JUDGMENT).

(d) Each Lender and each Issuing Lender agrees that notice to it (as provided in the next sentence) specifying that Communications have been posted to the Approved Electronic Platform shall constitute effective delivery of the Communications to such Lender for purposes of the Loan Documents. Each Lender and each Issuing Lender agrees (i) to notify the Administrative Agent in writing (which could be in the form of electronic communication) from time to time of such Lender's or such Issuing Lender's (as

applicable) email address to which the foregoing notice may be sent by electronic transmission and (ii) that the foregoing notice may be sent to such email address.

(e) Each of the Lenders, each of the Issuing Lenders and the Principal Borrower agrees that the Administrative Agent may, but (except as may be required by applicable law) shall not be obligated to, store the Communications on the Approved Electronic Platform in accordance with the Administrative Agent's generally applicable document retention procedures and policies.

(f) Nothing herein shall prejudice the right of the Administrative Agent, any Lender or any Issuing Lender to give any notice or other communication pursuant to any Loan Document in any other manner specified in such Loan Document.

Section 7.12 *Certain ERISA Matters*.

(a) Each Lender (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent, and each Lead Arranger and their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Principal Borrower or any other Loan Party, that at least one of the following is and will be true:

(i) such Lender is not using "plan assets" (within the meaning of the Plan Asset Regulations) of one or more Benefit Plans in connection with the Loans, the Letters of Credit or the Commitments;

(ii) the transaction exemption set forth in one or more PTEs, such as PTE 84-14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91-38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement;

(iii) (A) such Lender is an investment fund managed by a "Qualified Professional Asset Manager" (within the meaning of Part VI of PTE 84-14), (B) such Qualified Professional Asset Manager made the investment decision on behalf of such Lender to enter into, participate in, administer and perform the Loans, the Letters of Credit, the Commitments and this Agreement, (C) the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84-14 and (D) to the best knowledge of such Lender, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement; or

(iv) such other representation, warranty and covenant as may be agreed in writing between the Administrative Agent, in its sole discretion, and such Lender.

(b) In addition, unless sub-clause (i) in the immediately preceding clause (a) is true with respect to a Lender or such Lender has provided another representation, warranty and covenant as provided in sub-clause (iv) in the immediately preceding clause (a), such Lender further (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of,

the Administrative Agent, and the Lead Arrangers, the Syndication Agent, the Documentation Agents or any of their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Principal Borrower or any other Loan Party, that none of the Administrative Agent, or the Lead Arrangers, the Syndication Agent, the Documentation Agents or any of their respective Affiliates is a fiduciary with respect to the assets of such Lender (including in connection with the reservation or exercise of any rights by the Administrative Agent under this Agreement, any Loan Document or any documents related hereto or thereto).

(c) The Administrative Agent and each Lead Arranger hereby informs the Lenders that each such Person is not undertaking to provide impartial investment advice, or to give advice in a fiduciary capacity, in connection with the transactions contemplated hereby, and that such Person has a financial interest in the transactions contemplated hereby in that such Person or an Affiliate thereof (i) may receive interest or other payments with respect to the Loans, the Letters of Credit, the Commitments, this Agreement and any other Loan Documents, (ii) may recognize a gain if it extended the Loans, the Letters of Credit or the Commitments for an amount less than the amount being paid for an interest in the Loans, the Letters of Credit or the Commitments by such Lender or (iii) may receive fees or other payments in connection with the transactions contemplated hereby, the Loan Documents or otherwise, including structuring fees, commitment fees, arrangement fees, facility fees, upfront fees, underwriting fees, ticking fees, agency fees, administrative agent fees or collateral agent fees, utilization fees, minimum usage fees, letter of credit fees, fronting fees, deal-away or alternate transaction fees, amendment fees, processing fees, term out premiums, banker's acceptance fees, breakage or other early termination fees or fees similar to the foregoing.

Section 7.13 *Sustainability Matters*. Each party hereto hereby agrees that no Agent shall have (x) any duty to ascertain, inquire into or otherwise independently verify any Sustainability-Related Information or any other information or materials provided by the Parent and used in connection with the sustainability provisions of the credit facility described in this Agreement, including with respect to the applicable KPI Metrics nor (y) any responsibility for (or liability in respect of) the completeness or accuracy of such information. Each party hereto hereby agrees that no Agent or any Lead Arranger shall have any responsibility for (or liability in respect of) reviewing, auditing or otherwise evaluating any calculation by the Parent of any Sustainability Fee Adjustment or any Sustainability Margin Adjustment (or any of the data or computations that are part of or related to any such calculation) set forth in any Pricing Certificate or notice as to a Pricing Certificate Inaccuracy (and the Administrative Agent and the Sustainability Structuring Agent may rely conclusively on any such certificate or notice, without further inquiry).

Section 7.14 *Successor Sustainability Structuring Agent*. The Sustainability Structuring Agent may at any time give notice of its resignation to the Administrative Agent, the Lenders, the Issuing Lenders and the Parent, which resignation shall be effective on the date set forth in such notice (the **"Sustainability Structuring Agent Resignation Effective Date"**). Upon receipt of any such notice of resignation, the Parent shall have the right to appoint a successor, which may be a Lender or Affiliate of a Lender; provided that in no event shall any such successor Sustainability Structuring Agent be a Defaulting Lender or a Disqualified Institution. With effect from the Sustainability Structuring Agent Resignation Effective Date, the retiring Sustainability Structuring Agent shall be discharged from any duties and obligations hereunder and under the other Loan Documents. Upon the acceptance of a successor's appointment as Sustainability Structuring Agent hereunder, such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring Sustainability Structuring Agent (other than any rights to indemnity payments owed to the retiring Sustainability Structuring Agent), and the retiring Sustainability Structuring Agent shall be discharged from any duties and obligations hereunder or under the other Loan Documents. After the retiring Sustainability Structuring Agent's resignation hereunder and under the other Loan Documents, the provisions of this Article, Section 11.03 and any relevant exculpatory provisions shall continue in effect for the benefit of such retiring Sustainability Structuring Agent, its sub agents and their

respective Related Parties in respect of any actions taken or omitted to be taken by any of them while the retiring Sustainability Structuring Agent was acting as Sustainability Structuring Agent.

ARTICLE 8.
CHANGE IN CIRCUMSTANCES

Section 8.01 *Alternate Rate of Interest*.

(a) Subject to clauses (b), (c), (d), (e) and (f) of this Section 8.01:

(i) if the Administrative Agent determines (which determination shall be conclusive and binding absent demonstrable error) (A) prior to the commencement of any Interest Period for a Term Benchmark Borrowing, that adequate and reasonable means do not exist for ascertaining the Adjusted Term SOFR Rate, the Term SOFR Rate, the Adjusted EURIBO Rate or the EURIBO Rate (including because the Relevant Screen Rate is not available or published on a current basis) for the applicable currency and such Interest Period or (B) at any time, that adequate and reasonable means do not exist for ascertaining the applicable Adjusted Daily Simple RFR, Daily Simple RFR or RFR for the applicable Agreed Currency; or

(ii) if the Administrative Agent is advised by the Required Lenders that (A) prior to the commencement of any Interest Period for a Term Benchmark Borrowing, the Adjusted Term SOFR Rate or the Adjusted EURIBO Rate for the applicable Agreed Currency and such Interest Period will not adequately and fairly reflect the cost to such Lenders of making or maintaining their Loans included in such Borrowing for the applicable Agreed Currency and for such Interest Period or (B) at any time, the applicable Adjusted Daily Simple RFR for the applicable Agreed Currency will not adequately and fairly reflect the cost to such Lenders of making or maintaining their Loans included in such Borrowing for the applicable Agreed Currency,

then the Administrative Agent shall give notice (in reasonable detail) thereof to the applicable Borrower and the Lenders of the applicable Class prior to the commencement of such Interest Period by telephone, facsimile or e-mail in accordance with Section 11.01 as promptly as practicable thereafter and, until (x) the Administrative Agent notifies the applicable Borrower and the Lenders of the applicable Class that the circumstances giving rise to such notice no longer exist (which notice the Administrative Agent hereby agrees to provide promptly after its determination of such circumstances ceasing to exist) with respect to the relevant Benchmark and (y) the applicable Borrower delivers a new Notice of Interest Rate Election in accordance with the terms of Section 2.15 or a new Notice of Borrowing in accordance with the terms of Section 2.02, (A) for Loans denominated in Dollars, any Notice of Interest Rate Election that requests the conversion of any Borrowing to, or continuation of any Borrowing as, a Term Benchmark Borrowing and any Notice of Borrowing that requests a Term Benchmark Borrowing shall instead be deemed to be an Notice of Interest Rate Election or a Notice of Borrowing, as applicable, for (x) an RFR Borrowing denominated in Dollars so long as the Adjusted Daily Simple RFR for Dollar-denominated Borrowings is not also the subject of Section 8.01(a)(i) or (ii) above or (y) a Base Rate Borrowing if the Adjusted Daily Simple RFR for Dollar-denominated Borrowings also is the subject of Section 8.01(a)(i) or (ii) above and (B) for Loans denominated in an Alternative Currency, any Notice of Interest Rate Election that requests the conversion of any Borrowing to, or continuation of any Borrowing as, a Term Benchmark Borrowing and any Notice of Borrowing that requests a Term Benchmark Borrowing or an RFR Borrowing, in each case, for the relevant Benchmark, shall be ineffective; provided that if the circumstances giving rise to such notice affect only one Type of Borrowing, then all other Types of Borrowings shall be permitted. Furthermore, if any Term Benchmark Loan or RFR Loan in any Agreed Currency is outstanding on the date of the applicable Borrower's receipt of the notice from the Administrative Agent referred to in this Section 8.01(a) with respect to a Relevant Rate applicable to such Term Benchmark Loan or RFR Loan, then until (x) the

Administrative Agent notifies the Principal Borrower and the Lenders that the circumstances giving rise to such notice no longer exist (which notice shall be given by the Administrative Agent promptly after such circumstances cease to exist) with respect to the relevant Benchmark and (y) the applicable Borrower delivers a new Notice of Interest Rate Election in accordance with the terms of Section 2.15 or a new Notice of Borrowing in accordance with the terms of Section 2.02, (A) for Loans denominated in Dollars, any Term Benchmark Loan shall on the last day of the Interest Period applicable to such Loan (or the next succeeding Business Day if such day is not a Business Day), be converted by the Administrative Agent to, and shall constitute, (x) an RFR Borrowing denominated in Dollars so long as the Adjusted Daily Simple RFR for Dollar-denominated Borrowings is not also the subject of Section 8.01(a)(i) or (ii) above or (y) a Base Rate Loan if the Adjusted Daily Simple RFR for Dollar-denominated Borrowings also is the subject of Section 8.01(a)(i) or (ii) above, on such day and (B) for Loans denominated in an Alternative Currency, (1) any Term Benchmark Loan shall, on the last day of the Interest Period applicable to such Loan (or the next succeeding Business Day if such day is not a Business Day) bear interest at the Central Bank Rate for the applicable Alternative Currency plus the CBR Margin; provided that, if the Administrative Agent determines reasonably and in good faith (which determination shall be conclusive and binding absent demonstrable error) that the Central Bank Rate for the applicable Alternative Currency cannot be determined, any outstanding affected Term Benchmark Loans denominated in such Alternative Currency shall, at the applicable Borrower's election prior to such day: (A) be prepaid by such Borrower on such day or (B) solely for the purpose of calculating the interest rate applicable to such Term Benchmark Loan, such Term Benchmark Loan denominated in such Alternative Currency shall be deemed to be a Term Benchmark Loan denominated in Dollars and shall accrue interest at the same interest rate applicable to Term Benchmark Loans denominated in Dollars at such time and (2) any RFR Loan shall bear interest at the Central Bank Rate for the applicable Alternative Currency plus the CBR Margin; provided that, if the Administrative Agent determines reasonably and in good faith (which determination shall be conclusive and binding absent demonstrable error) that the Central Bank Rate for the applicable Alternative Currency cannot be determined, any outstanding affected RFR Loans denominated in any Alternative Currency, at such Borrower's election, shall either (A) be converted into Base Rate Loans denominated in Dollars (in an amount equal to the Dollar Amount of such Alternative Currency) immediately or (B) be prepaid in full immediately.

(b) Notwithstanding anything to the contrary herein or in any other Loan Document, if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred prior to the Reference Time in respect of any setting of the then current Benchmark, then (x) if a Benchmark Replacement is determined in accordance with clause (1) of the definition of "Benchmark Replacement" with respect to Dollars for such Benchmark Replacement Date, such Benchmark Replacement will replace such Benchmark for all purposes hereunder and under any Loan Document in respect of such Benchmark setting and subsequent Benchmark settings without any amendment to, or further action or consent of any other party to, this Agreement or any other Loan Document and (y) if a Benchmark Replacement is determined in accordance with clause (2) of the definition of "Benchmark Replacement" with respect to any Agreed Currency for such Benchmark Replacement Date, such Benchmark Replacement will replace such Benchmark for all purposes hereunder and under any Loan Document in respect of any Benchmark setting at or after 5:00 p.m., New York City time, on the fifth (5th) Business Day after the date notice of such Benchmark Replacement is provided to the Lenders and the Principal Borrower without any amendment to, or further action or consent of any other party to, this Agreement or any other Loan Document so long as the Administrative Agent has not received, by such time, written notice of objection to such Benchmark Replacement from Lenders comprising the Required Lenders.

(c) In connection with the implementation of a Benchmark Replacement, the Administrative Agent will have the right to make Benchmark Replacement Conforming Changes from time to time and, notwithstanding anything to the contrary herein or in any other Loan Document, any amendments

implementing such Benchmark Replacement Conforming Changes will become effective without any further action or consent of any other party to this Agreement or any other Loan Document.

(d) The Administrative Agent will promptly notify the Principal Borrower and the Lenders of (i) any occurrence of a Benchmark Transition Event, (ii) the implementation of any Benchmark Replacement, (iii) the effectiveness of any Benchmark Replacement Conforming Changes, (iv) the removal or reinstatement of any tenor of a Benchmark pursuant to clause (e) below and (v) the commencement or conclusion of any Benchmark Unavailability Period. Except as expressly provided in this Agreement, any determination, decision or election that may be made by the Administrative Agent or, if applicable, any Lender (or group of Lenders) pursuant to this Section 8.01, including any determination with respect to a tenor, rate or adjustment or of the occurrence or non occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection, will be conclusive and binding absent demonstrable error and may be made in its or their sole reasonable good faith discretion and without consent from any other party to this Agreement or any other Loan Document, except, in each case, as expressly required pursuant to this Section 8.01.

(e) Notwithstanding anything to the contrary herein or in any other Loan Document, at any time (including in connection with the implementation of a Benchmark Replacement), (i) if the then current Benchmark is a term rate (including the Term SOFR Rate or the EURIBO Rate) and either (A) any tenor for such Benchmark is not displayed on a screen or other information service commonly used in the banking industry for such purpose that publishes such rate from time to time as selected by the Administrative Agent in its reasonable discretion and consistent with such selection generally under other substantially similar syndicated credit facilities for which it acts as administrative agent or (B) the regulatory supervisor for the administrator of such Benchmark has provided a public statement or publication of information announcing that any tenor for such Benchmark is or will be no longer representative, then the Administrative Agent may modify the definition of "Interest Period" for any Benchmark settings at or after such time to remove such unavailable or non representative tenor and (ii) if a tenor that was removed pursuant to clause (i) above either (A) is subsequently displayed on a screen or information service for a Benchmark (including a Benchmark Replacement) or (B) is not, or is no longer, subject to an announcement that it is or will no longer be representative for a Benchmark (including a Benchmark Replacement), then the Administrative Agent may modify the definition of "Interest Period" for all Benchmark settings at or after such time to reinstate such previously removed tenor.

(f) Upon the Principal Borrower's receipt of notice of the commencement of a Benchmark Unavailability Period, and until a Benchmark Replacement is determined in accordance with this Section 8.01, the applicable Borrower may revoke any request for (i) a Term Benchmark Borrowing, conversion to or continuation of Term Benchmark Loans to be made, converted or continued or (ii) an RFR Borrowing or conversion to RFR Loans, during any Benchmark Unavailability Period and, failing that, either (x) such Borrower will be deemed to have converted any request for a Term Benchmark Borrowing or RFR Borrowing, as applicable, denominated in Dollars into a request for a Borrowing of or conversion to (A) an RFR Borrowing denominated in Dollars so long as the Adjusted Daily Simple RFR for Dollar-denominated Borrowings is not the subject of a Benchmark Transition Event or (B) a Base Rate Borrowing if the Adjusted Daily Simple RFR for Dollar-denominated Borrowings is the subject of a Benchmark Transition Event or (y) any request for a Term Benchmark Borrowing or RFR Borrowing denominated in an Alternative Currency shall be ineffective. During any Benchmark Unavailability Period or at any time that a tenor for the then current Benchmark is not an Available Tenor, the component of the Base Rate based upon the then current Benchmark or such tenor for such Benchmark, as applicable, will not be used in any determination of the Base Rate. Furthermore, if any Term Benchmark Loan or RFR Loan in any Agreed Currency is outstanding on the date of the Principal Borrower's receipt of notice of the commencement of a Benchmark Unavailability Period with respect to a Relevant Rate applicable to such Term Benchmark Loan or RFR

Loan, then until such time as a Benchmark Replacement for such Agreed Currency is implemented pursuant to this Section 8.01, (A) for Loans denominated in Dollars any Term Benchmark Loan shall on the last day of the Interest Period applicable to such Loan (or the next succeeding Business Day if such day is not a Business Day), be converted by the Administrative Agent to, and shall constitute, (x) an RFR Borrowing denominated in Dollars so long as the Adjusted Daily Simple RFR for Dollar-denominated Borrowings is not the subject of a Benchmark Transition Event or (y) a Base Rate Loan if the Adjusted Daily Simple RFR for Dollar-denominated Borrowings is the subject of a Benchmark Transition Event, on such day and (B) for Loans denominated in an Alternative Currency, (1) any Term Benchmark Loan shall, on the last day of the Interest Period applicable to such Loan (or the next succeeding Business Day if such day is not a Business Day) bear interest at the Central Bank Rate for the applicable Alternative Currency plus the CBR Margin; provided that, if the Administrative Agent determines reasonably and in good faith (which determination shall be conclusive and binding absent demonstrable error) that the Central Bank Rate for the applicable Alternative Currency cannot be determined, any outstanding affected Term Benchmark Loans denominated in any Alternative Currency shall, at the applicable Borrower's election prior to such day: (A) be prepaid by the Borrower on such day or (B) solely for the purpose of calculating the interest rate applicable to such Term Benchmark Loan, such Term Benchmark Loan denominated in any Alternative Currency shall be deemed to be a Term Benchmark Loan denominated in Dollars and shall accrue interest at the same interest rate applicable to Term Benchmark Loans denominated in Dollars at such time and (2) any RFR Loan shall bear interest at the Central Bank Rate for the applicable Alternative Currency plus the CBR Margin; provided that, if the Administrative Agent determines reasonably and in good faith (which determination shall be conclusive and binding absent demonstrable error) that the Central Bank Rate for the applicable Alternative Currency cannot be determined, any outstanding affected RFR Loans denominated in any Alternative Currency, at such Borrower's election, shall either (A) be converted into Base Rate Loans denominated in Dollars (in an amount equal to the Dollar Amount of such Alternative Currency) immediately or (B) be prepaid in full immediately.

Section 8.02 *Illegality.* If a Change in Law shall make it unlawful or impossible for any Lender (or its Applicable Lending Office) to make, maintain or fund its Term Benchmark Loans or RFR Loans, as applicable, to any Borrower in any currency and such Lender shall so notify the Administrative Agent, the Administrative Agent shall forthwith give notice thereof to the other Lenders and the Principal Borrower, whereupon until such Lender notifies the Principal Borrower and the Administrative Agent that the circumstances giving rise to such suspension no longer exist (which notice such Lender shall give promptly after such circumstances cease to exist), the obligation of such Lender to make Term Benchmark Loans or RFR Loans, as applicable, to a Borrower in such currency shall be suspended. Before giving any notice to the Administrative Agent pursuant to this Section 8.02, such Lender shall designate a different Applicable Lending Office if such designation will avoid the need for giving such notice and will not, in the judgment of such Lender, be otherwise materially disadvantageous to such Lender. If such notice is given, each affected Term Benchmark Loan or RFR Loan, as applicable, of such Lender then outstanding shall be converted to a Base Rate Loan (in the case of an Alternative Currency Loan, in a principal amount equal to the Dollar Amount thereof on the date of conversion) either (a) with respect to a Term Benchmark Loan (i) on the last day of the then current Interest Period applicable to such Term Benchmark Loan if such Lender may lawfully continue to maintain and fund such Loan as a Term Benchmark Loan to such day or (ii) immediately if such Lender shall determine that it may not lawfully continue to maintain and fund such Loan as a Term Benchmark Loan to such day or (b) with respect to an RFR Loan (i) on the interest payment date for such RFR Loan pursuant to the terms of Section 2.06(c) applicable to such RFR Loan if such Lender may lawfully continue to maintain and fund such Loan as an RFR Loan to such day or (ii) immediately if such Lender shall determine that it may not lawfully continue to maintain and fund such Loan as an RFR Loan to such day.

Section 8.03 *Increased Cost and Reduced Return*.

(a) If a Change in Law shall impose, modify or deem applicable any reserve (including, without limitation, any such requirement imposed by the Board, but excluding with respect to any Term Benchmark Loan any such requirement with respect to which such Lender is entitled to compensation during the relevant Interest Period under Section 2.14), special deposit, liquidity, insurance assessment or similar requirement against assets of, deposits with or for the account of, or credit extended by, such Lender (or its Applicable Lending Office) or shall impose on any Lender (or its Applicable Lending Office) or on the London or other applicable offshore interbank market for the Applicable Currency any other condition affecting its Loans (other than with respect to taxes), its Note(s) or its obligation to make Loans or its obligations hereunder in respect of Letters of Credit and the result of any of the foregoing is to increase the cost to such Lender (or its Applicable Lending Office) of making or maintaining any Loan or of issuing or participating in any Letter of Credit, or to reduce the amount of any sum received or receivable by such Lender (or its Applicable Lending Office) under this Agreement or under its Note(s) with respect thereto, by an amount deemed by such Lender to be material, then, within 30 days after demand by such Lender (with a copy to the Administrative Agent), the Principal Borrower shall pay to such Lender such additional amount or amounts as will compensate such Lender for such increased cost or reduction.

(b) If any Lender shall have determined that a Change in Law (other than with respect to taxes) has or would have the effect of reducing the rate of return on capital of such Lender (or its Lender Parent) as a consequence of such Lender's obligations hereunder to a level below that which such Lender (or its Lender Parent) could have achieved but for such Change in Law (taking into consideration its policies with respect to capital adequacy or liquidity) by an amount deemed by such Lender to be material, then from time to time, within 30 days after demand by such Lender (with a copy to the Administrative Agent), the Principal Borrower shall pay to such Lender such additional amount or amounts as will compensate such Lender (or its Lender Parent) for such reduction.

(c) If after the date of this Agreement, a Change in Law shall subject any Lender to any taxes (including any interest, additions to tax or penalties applicable) (other than Taxes imposed on or with respect to any payment made by a Loan Party hereunder or under any Notes and Excluded Taxes) on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto, and the result shall be to increase the cost to such Lender of making or maintaining any Loan (or of maintaining its obligation to make any such Loan) or to increase the cost to such Lender of participating in, issuing or maintaining any Letter of Credit or to reduce the amount of any sum received or receivable by such Lender hereunder (whether of principal, interest or otherwise), then the Principal Borrower will pay to such Lender such additional amount or amounts as will compensate such Lender for such additional costs incurred or reduction suffered.

(d) Each Lender will promptly notify the Principal Borrower and the Administrative Agent of any event of which it has knowledge, occurring after the date hereof, and/or any Change in Law which will entitle such Lender to compensation pursuant to this Section 8.03 and will designate a different Applicable Lending Office if such designation will avoid the need for, or reduce the amount of, such compensation and will not, in the judgment of such Lender, be otherwise materially disadvantageous to such Lender. A certificate of any Lender claiming compensation under this Section 8.03 and setting forth the additional amount or amounts to be paid to it hereunder and the calculation of such amount or amounts in reasonable detail shall be delivered to the Principal Borrower contemporaneously with any demand for payment hereunder and shall be conclusive in the absence of clearly demonstrable error. In determining such amount, such Lender may use any reasonable averaging and attribution methods.

(e) Failure or delay on the part of any Lender or an Issuing Lender to demand compensation pursuant to this Section 8.03 shall not constitute a waiver of such Lender's or such Issuing Lender's right to demand such compensation, as the case may be; provided that the Borrower shall not be required to

compensate a Lender or an Issuing Lender pursuant to this Section 8.03 for any increased costs or reductions incurred more than 90 days prior to the date that such Lender or such Issuing Lender, as the case may be, notifies the Borrower of the Change in Law giving rise to such increased costs or reductions and of such Lender's or such Issuing Lender's intention to claim compensation therefor and of the amount of such compensation; provided, further that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the 90-day period referred to above shall be extended to include the period of retroactive effect thereof.

(f) No Lender or Issuing Lender, as applicable, shall demand compensation pursuant to this Section 8.03 unless such Lender or Issuing Lender, as applicable, certifies in writing to the Principal Borrower that it is making corresponding demands on similarly situated borrowers in comparable credit facilities to which such Lender or Issuing Lender, as applicable, is a party.

(g) This Section 8.03 (i) shall not entitle any Lender to compensation in respect of any Excluded Taxes, (ii) shall not apply to (A) Taxes for which any Borrower is required to provide indemnification under Section 8.04 or (B) Other Taxes, or (C) Taxes covered by Section 8.04(n), it being understood that such Taxes and Other Taxes shall be governed by Section 8.04, and (iii) shall not relieve any Lender of any obligation pursuant to Section 8.04.

Section 8.04 *Taxes*.

(a) Except as required by applicable law, any and all payments by any Loan Party to or for the account of any Lender or the Administrative Agent hereunder or under any Loan Document shall be made free and clear of and without deduction for any and all present or future taxes, duties, levies, imposts, deductions, charges or withholdings, and all fees or charges imposed by any Governmental Authority (including any interest, additions to tax or penalties applicable), *excluding*, (i) in the case of each Lender and the Administrative Agent, taxes imposed on or measured by its net income, and franchise, branch profits or similar taxes, in each case, (x) imposed on it, by the jurisdiction under the laws of which such Lender or the Administrative Agent (as the case may be) is organized or any political subdivision thereof or (y) that are Other Connection Taxes, (ii) in the case of each Lender, taxes imposed on or measured by its net income, and franchise, branch profits or similar taxes imposed on it, by the jurisdiction of such Lender's Applicable Lending Office or any political subdivision thereof, (iii) any withholding taxes imposed under FATCA, (iv) any deduction or withholding on account of Tax on payments of interest or similar income made or ascribed by a paying agent established in Luxembourg to a Luxembourg resident individual in accordance with the Luxembourg law of December 23, 2005, as amended and (v) any Luxembourg registration duties (*droits d'enregistrement*) payable in the case of a voluntary registration of any Loan Documents by the Lenders with the *Administration de l'Enregistrement, des Domaines et de la TVA in Luxembourg*, when such registration is not required to enforce their rights under the Loan Documents (all such non-excluded taxes, duties, levies, imposts, deductions, charges, withholdings and liabilities (including any interest, additions or tax or penalties applicable) being hereinafter referred to as "**Taxes**", and all such excluded taxes being hereinafter referred to as "**Excluded Taxes**"). If a Loan Party or the Administrative Agent (the "**Withholding Agent**") shall be required by law to deduct any Taxes or Excluded Taxes from or in respect of any sum payable hereunder or under any Loan Document to any Lender or the Administrative Agent, (i) if such deduction or withholding is made with respect to Taxes, the sum payable by the applicable Loan Party shall be increased as necessary so that after making all required deductions (including deductions applicable to additional sums payable under this Section 8.04) such Lender or the Administrative Agent (as the case may be) receives an amount equal to the sum it would have received had no such deductions been made; provided, however, in no event will a payment be increased under this clause (i) by reason of a deduction on account of Taxes imposed by Luxembourg on payments by or on behalf of a Borrower organized or incorporated in Luxembourg, if on the date on which the payment falls due a deduction is required under the Luxembourg

law of 23 December 2005, as amended, (ii) such Withholding Agent shall make such deductions, (iii) such Withholding Agent shall pay the full amount deducted to the relevant taxation authority or other authority in accordance with applicable law and (iv) if the Withholding Agent is a Loan Party, such Loan Party shall furnish to the Administrative Agent, at its address referred to in Section 11.01, the original or a certified copy of a receipt evidencing payment thereof, or other evidence reasonably acceptable to the Administrative Agent.

(b) In addition, the Loan Parties agree to pay any present or future stamp or documentary taxes and any other excise or property taxes, or charges or similar levies which arise from any payment made hereunder or under any Loan Document or from the execution or delivery of, or otherwise with respect to, this Agreement or any Note, except any Luxembourg registration duties (*droits d'enregistrement*) and/or stamp duties (*droits de timbre*) payable in the case of voluntary registration, submission or filing of any document with respect to this Agreement or any Note with the *Administration de l'Enregistrement, des Domaines et de la TVA* in Luxembourg, which shall mean that such registration, submission or filing is (i) not mandatory or (ii) not required to maintain, defend or preserve the rights of a party under any document with respect to this Agreement or any Note (hereinafter referred to as "**Other Taxes**").

(c) The Loan Parties agree to, jointly and severally, indemnify each Lender and the Administrative Agent for the full amount of Taxes or Other Taxes (including, without limitation, any Taxes or Other Taxes imposed or asserted by any jurisdiction on amounts payable under this Section 8.04) paid or payable by such Lender or the Administrative Agent (as the case may be) and any liability (including penalties, interest and expenses) arising therefrom or with respect thereto; provided, the Loan Parties shall not be obligated to indemnify any party hereunder pursuant to this Section for penalties, interest or similar liabilities arising therefrom or with respect thereto to the extent such penalties, interest or similar liabilities are attributable to the gross negligence or willful misconduct by such party. In addition, the Loan Parties agree to indemnify the Administrative Agent and each Lender for all Excluded Taxes and any liability (including penalties, interest and expenses) arising therefrom or with respect thereto, in each case to the extent that such Excluded Taxes result from any payment or indemnification pursuant to this Section 8.04(c) for Taxes or Other Taxes imposed by any jurisdiction other than the United States, Ireland or Luxembourg. This indemnification shall be made within 30 days from the date such Lender or the Administrative Agent (as the case may be) makes demand therefor in reasonable detail.

(d) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to the Principal Borrower and the Administrative Agent, at the time or times reasonably requested by the Principal Borrower or the Administrative Agent, such properly completed and executed documentation or information reasonably requested by the Principal Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding, or evidence of an entitlement to exemption from or reduction of withholding tax (provided that, a Participant shall also comply with this paragraph as if it were a Lender to the extent such compliance is required by law for reduced withholding or exemption from withholding). In addition, any Lender, if requested by the Principal Borrower or the Administrative Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by the Principal Borrower or the Administrative Agent, or information reasonably requested by the Principal Borrower or the Administrative Agent, as will enable the Principal Borrower or the Administrative Agent to determine whether or not such Lender is subject to any withholding (including backup withholding) or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Sections 8.04(e), (f), (g) and (h) below) shall not be required if in the Lender's judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(e) Without limiting the foregoing, at the times indicated herein, each Lender organized under the laws of a jurisdiction outside the United States shall provide the Principal Borrower and the Administrative Agent with executed copies of Internal Revenue Service form W-8BEN, W-8BEN-E, W-8IMY (accompanied by a form W-8ECI, W-8BEN, W-8BEN-E, W-9 and other certification documents from each beneficial owner, as applicable) or W-8ECI (in each case accompanied by any statements which may be required under applicable Treasury regulations), as appropriate, or any successor form prescribed by the Internal Revenue Service. Such forms shall certify that such Lender is entitled to receive payments under this Agreement (i) without deduction or withholding of any United States federal income taxes or (ii) subject to a reduced rate of United States federal withholding tax, unless, in each case of clause (i) and (ii) of this Section 8.04(e), an event (including, without limitation, any change in treaty, law or regulation) has occurred prior to the date on which any such delivery would otherwise be required which renders such forms inapplicable or which would prevent the Lender from duly completing and delivering any such form with respect to it and the Lender advises the Principal Borrower and the Administrative Agent that it is not capable of receiving payments without any deduction or withholding of such taxes. Such forms shall be provided (x) on or prior to the date of the Lender's execution and delivery of this Agreement in the case of each Lender listed on the signature pages hereof, and on or prior to the date on which it becomes a Lender in the case of each other Lender, and (y) on or before the date that such form expires or becomes obsolete or after the occurrence of any event requiring a change in the most recent form so delivered by the Lender. If the form provided by a Lender at the time such Lender first becomes a party to this Agreement indicates a United States interest withholding tax rate in excess of zero, United States withholding tax at such rate shall be considered excluded from "Taxes" as defined in Section 8.04(a), unless the assignor of such Lender was entitled, at the time of such assignment, to receive additional amounts from a Borrower with respect to such withholding taxes pursuant to Section 8.04(a). In addition, to the extent that for reasons other than a change of treaty, law or regulation any Lender becomes subject to an increased rate of United States interest withholding tax while it is a party to this Agreement, United States withholding tax at such increased rate shall be considered excluded from "Taxes" as defined in Section 8.04(a).

(f) Any Lender that is a "United States person" within the meaning of Section 7701(a)(30) of the Internal Revenue Code shall deliver to the Principal Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the request of the Principal Borrower or the Administrative Agent), executed copies of Internal Revenue Service form W-9 certifying, to the extent such Lender is legally entitled to do so, that such Lender is exempt from U.S. Federal backup withholding tax.

(g) If a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Internal Revenue Code, as applicable), such Lender shall deliver to the Principal Borrower and the Administrative Agent at the time or times prescribed by law and at such time or times reasonably requested by the Principal Borrower or the Administrative Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Internal Revenue Code) and such additional documentation reasonably requested by the Principal Borrower or the Administrative Agent as may be necessary for the Principal Borrower or the Administrative Agent to comply with its obligations under FATCA, to determine that such Lender has or has not complied with such Lender's obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for the purposes of this Section 8.04(g), "FATCA" shall include any amendments made to FATCA after the date of this Agreement, whether or not included in the definition of FATCA.

(h) Each Lender agrees that if any form, information or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form, information or

certification or promptly notify the Principal Borrower and the Administrative Agent in writing of its legal inability to do so.

(i) For any period with respect to which a Lender has failed to provide the Principal Borrower with the appropriate form or information in accordance with Section 8.04 (unless such failure is excused by the terms of this Section 8.04), such Lender shall not be entitled to indemnification under this Section 8.04 with respect to Taxes imposed as a result of such Lender's failure to provide such form or information; provided, however, that should a Lender, which is otherwise exempt from or subject to a reduced rate of withholding tax, become subject to Taxes because of its failure to deliver a form or information required hereunder, the Principal Borrower shall take such steps as such Lender shall reasonably request to assist such Lender to recover such Taxes.

(j) Each Lender shall severally indemnify the Administrative Agent for any Taxes and Excluded Taxes (but only to the extent that the Principal Borrower has not already indemnified the Administrative Agent for such Taxes and Excluded Taxes and without limiting the obligation, if any, of the Principal Borrower to do so), in each case attributable to such Lender that are paid or payable by the Administrative Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes or Excluded Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Administrative Agent to the Lender from any other source against any amount due to the Administrative Agent under this paragraph (j). This indemnification shall be made within 15 days from the date the Administrative Agent makes demand therefor.

(k) Each party's obligations under this Section 8.04 shall survive any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all other obligations under any Loan Document.

(l) If the Administrative Agent or a Lender determines, in its sole discretion, that it has received a refund of any Taxes, Excluded Taxes or Other Taxes as to which it has been indemnified by any Loan Party or with respect to which any Loan Party has paid additional amounts pursuant to this Section, it shall pay over such refund to such Loan Party (but only to the extent of indemnity payments made, or additional amounts paid, by the Loan Party under this Section with respect to the Taxes, Excluded Taxes or Other Taxes giving rise to such refund), net of all out-of-pocket expenses with respect to such refund of the Administrative Agent or such Lender and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund); provided that the Loan Party, upon the request of the Administrative Agent or such Lender, agrees to repay the amount paid over to the Loan Party (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) to the Administrative Agent or such Lender in the event the Administrative Agent or such Lender is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this paragraph (l), in no event will the Administrative Agent or Lender be required to pay any amount to the Loan Parties pursuant to this paragraph (l) the payment of which would place the Administrative Agent or Lender in a less favorable net after-tax position than such party would have been in if the Tax or Excluded Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax or Excluded Tax had never been paid. This Section shall not be construed to require the Administrative Agent or any Lender to make available its tax returns (or any other information relating to its taxes which it deems confidential) to the Principal Borrower or any other Person.

(m) A payment shall not be increased under Section 8.04(a) above by reason of a deduction or withholding of any Tax imposed by Ireland or Luxembourg from any such payment, where on the date on which the payment falls due the payment could have been made to the relevant Lender or Participant, as the case may be, without any such deduction or withholding if the Lender or Participant, as the case may be, had been a Qualifying Lender, but on that date that Lender or Participant, as the case may be, is not or has ceased to be a Qualifying Lender other than as a result of any change after the date it became a Lender or Participant, as the case may be, under this Agreement in (or in the interpretations, administration or application of) any law or published practice of published concession of any relevant taxing authority.

(n) An indemnity payment shall not be payable under Section 8.04(c) above with respect to any Tax imposed by Ireland or Luxembourg and assessed on a Lender or Participant, as the case may be, to the extent that Tax:

(i) is compensated for by an increased payment under Section 8.04(a); or

(ii) would have been compensated for by an increased payment under Section 8.04(a) but was not so compensated solely because of the exclusion in Section 8.04(m).

(o) Each Lender, on or prior to the date it becomes a party hereto, shall inform the Principal Borrower and the Administrative Agent whether it is a Qualifying Lender by completing and providing to the Administrative Agent and the Principal Borrower a Qualifying Lender Confirmation. Each Lender party hereto as of the Closing Date hereby confirms to the Principal Borrower that such Lender is a Qualifying Lender, and the Principal Borrower hereby acknowledges and agrees that no such Lender shall be required to complete or provide such Qualifying Lender Confirmation. Each Lender shall upon reasonable written request from the Principal Borrower or Administrative Agent provide an updated Qualifying Lender Confirmation.

(p) If the Lender fails to provide a Qualifying Lender Confirmation in accordance with Section 8.04(o) above, then that Lender shall be treated for the purposes of this Agreement (including by the Principal Borrower) as if it is not a Qualifying Lender until such time as it notifies the Principal Borrower which category applies. Each Lender, upon reasonable written request from the Principal Borrower from time to time shall, if applicable, provide such information as may be required to enable the Principal Borrower to comply with Sections 891A, 891E, 891F and 891G TCA (and any regulations made thereunder).

Section 8.05 *Base Rate Loans Substituted for Affected Term Benchmark Loans.* If (i) the obligation of any Lender to make, or to continue or convert outstanding Loans as or to, Term Benchmark Loans to any Borrower in any currency has been suspended pursuant to Section 8.02 or (ii) any Lender has demanded compensation under Section 8.03 or 8.04 with respect to its Term Benchmark Loans in any currency and the Principal Borrower shall, by at least five Business Days' prior notice to such Lender through the Administrative Agent, have elected that the provisions of this Section shall apply to such Lender, then, unless and until such Lender notifies the Principal Borrower that the circumstances giving rise to such suspension or demand for compensation no longer exist, all Loans which would otherwise be made by such Lender as (or continued as or converted to) Term Benchmark Loans in such currency to such Borrower shall instead be Base Rate Loans (in the case of Alternative Currency Loans, in the same Dollar Amount as the Term Benchmark Loan that such Lender would otherwise have made in the Alternative Currency) on which interest and principal shall be payable contemporaneously with the related Term Benchmark Loans of the other Lenders. If such Lender notifies the Principal Borrower that the circumstances giving rise to such suspension or demand for compensation no longer exist, the principal amount of each such Base Rate Loan shall be converted into a Term Benchmark Loan on the first day of the next succeeding Interest Period

applicable to the related Term Benchmark Loans of the other Lenders. If such Loan is converted into an Alternative Currency Loan, such Lender, the Administrative Agent and the Borrower shall make such arrangements as shall be required (including increasing or decreasing the amount of such Alternative Currency Loan) so that such Alternative Currency Loan shall be in the same amount as it would have been if the provisions of this Section had never applied thereto.

Section 8.06 *Mitigation Obligations; Replacement of Lenders.* (a) If any Lender requests compensation (or provides notice of an intent to request compensation) under Section 8.03, or if any Borrower is required to pay any additional amount to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 8.04, or if any Lender invokes Section 3.03(c), then such Lender shall use reasonable efforts to designate a different Applicable Lending Office for funding or booking its Loans hereunder or to assign its rights and obligations hereunder to another of its offices, branches or affiliates, if, in the judgment of such Lender, such designation or assignment (i) would eliminate or reduce amounts payable pursuant to Section 8.03 or 8.04, as the case may be, in the future or with respect to Section 3.03(c) would eliminate the contravention of law or regulation and (ii) would not subject such Lender to any unreimbursed cost or expense and would not otherwise be materially disadvantageous to such Lender. The Principal Borrower hereby agrees to pay all reasonable costs and expenses incurred by any Lender in connection with any such designation or assignment.

(b) If any Lender or its Participant requests compensation (or provides notice of an intent to request compensation) under Section 8.03, or if any Borrower is required to pay any additional amount to any Lender or its Participant or any Governmental Authority for the account of any Lender (or its Participant) pursuant to Section 8.04, or if any Lender becomes a Defaulting Lender or invokes Section 3.03(c) or 8.02, or if any Lender shall reject a requested additional Approved Jurisdiction or a requested additional Alternative Currency or refuse to consent to any waiver, amendment or other modification that would otherwise require such Lender's consent but to which the Required Lenders have consented, or if the credit (or similar) rating of any Lender (or a Lender Parent thereof) by one or more of S&P, Moody's, Fitch or any other nationally recognized statistical rating organization shall at any time be lower than BBB/Baa2/BBB (or the equivalent), or if, as to any Lender, such Lender or its Lender Parent thereof shall at any time have no credit (or similar) rating in effect by at least one such organization, or if any Lender or its Lender Parent has become the subject of a Bail-In Action (or any case or other proceeding in which a Bail-In Action may occur), or if any Lender that is an Issuing Lender shall (A) resign in its capacity as such, (B) fail to promptly approve the assignment of a Commitment that the Administrative Agent has approved as contemplated by clause (i) of the proviso below or (C) fail to promptly approve a New Lender that the Administrative Agent has approved in the case of an increase in the Commitments as contemplated by Section 2.20, or if any Lender is a Disqualified Institution at the time it becomes a Lender or any Lender assigns or participates all or any portion of its Loans and/or Commitments to a Disqualified Institution in violation of Section 12.04, without the written consent of the Principal Borrower, then the Principal Borrower may, at its sole expense and effort, upon notice to such Lender and the Administrative Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in Section 11.06), all its interests, rights and obligations under this Agreement to an assignee that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment); provided that (i) the Principal Borrower shall have received the prior written consent of the Administrative Agent (and if a Commitment is being assigned, the Issuing Lenders), which consent shall not unreasonably be withheld, conditioned or delayed and (ii) such Lender shall have received payment of an amount equal to the outstanding principal of its Loans and funded participations in Letter of Credit Disbursements, accrued interest thereon, accrued fees and all other amounts payable to it hereunder, from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Principal Borrower or the relevant Borrower (in the case of all other amounts). Each party hereto agrees that (i) an assignment required pursuant to this paragraph may be effected pursuant to an Assignment and Assumption executed by

the Principal Borrower, the Administrative Agent and the assignee (or, to the extent applicable, an agreement incorporating an Assignment and Assumption by reference pursuant to an Approved Electronic Platform as to which the Administrative Agent and such parties are participants), and (ii) the Lender required to make such assignment need not be a party thereto in order for such assignment to be effective and shall be deemed to have consented to and be bound by the terms thereof; provided that, following the effectiveness of any such assignment, the other parties to such assignment agree to execute and deliver such documents necessary to evidence such assignment as reasonably requested by the applicable Lender, provided that any such documents shall be without recourse to or warranty by the parties thereto. Notwithstanding any other provision of this Agreement to the contrary, if a Lender has become the subject of a Bail-In Action (or any case or other proceeding in which a Bail-In Action may occur) (each, a "**Bail-In Lender**"), then the Principal Borrower may terminate such Bail-In Lender's Commitment hereunder, provided that (A) no Default or Event of Default shall have occurred and be continuing at the time of such Commitment termination, (B) in the case of a Bail-In Lender, the Principal Borrower shall concurrently terminate the Commitment of each other Lender that is a Bail-In Lender at such time, (C) the Administrative Agent and the Required Lenders shall have consented to each such Commitment termination (such consents not to be unreasonably withheld, conditioned or delayed, but may include consideration of the adequacy of the liquidity of the Principal Borrower and its Subsidiaries) and (D) such Bail-In Lender shall have been paid all amounts then due to it under this Agreement and each other Loan Document (which, for the avoidance of doubt, the respective Borrowers may pay in connection with any such termination without making ratable payments to any other Lender (other than another Lender that has a Commitment that concurrently is being terminated under this Section 8.06(b))).

ARTICLE 9.
REPRESENTATIONS AND WARRANTIES OF ELIGIBLE SUBSIDIARIES

Each Eligible Subsidiary shall be deemed by the execution and delivery of its Election to Participate to have represented and warranted as of the date thereof that:

Section 9.01 *Legal Existence and Power.* It is duly organized, validly existing and (where the concept exists under the laws of that jurisdiction) in good standing under the laws of its jurisdiction of organization and is and will continue to be a Wholly-Owned Consolidated Subsidiary of Parent and of JCI.

Section 9.02 *Legal and Governmental Authorization; No Contravention.* The execution and delivery by it of its Election to Participate and its Notes, and the performance by it of this Agreement and its Notes, are within its legal powers, have been duly authorized by all necessary legal action, require no action by or in respect of, or filing with, any Governmental Authority and do not materially contravene, or constitute a material default under, any provision of applicable law or regulation or of its organizational documents or of any agreement, judgment, injunction, order, decree or other instrument binding upon the Principal Borrower or such Eligible Subsidiary or result in the creation or imposition of any Lien on any asset of the Parent or any of its Consolidated Subsidiaries.

Section 9.03 *Binding Effect.* This Agreement constitutes a valid and binding agreement of such Eligible Subsidiary and its Notes, if and when executed and delivered in accordance with this Agreement, will constitute valid and binding obligations of such Eligible Subsidiary.

Section 9.04 *Taxes.* There is no income, stamp or other tax of any country, or any taxing authority thereof or therein, imposed by or in the nature of withholding or otherwise, which is imposed on any payment to be made by such Eligible Subsidiary pursuant hereto or on its Notes, or is imposed on or by virtue of the execution, delivery or enforcement of its Election to Participate or of its Notes, except:

(a) as disclosed in such Election to Participate;

(b) for a nominal registration duty or an ad valorem duty (of, for instance, 0.24% (zero point twenty four per cent.) of the amount of the payment obligation mentioned in the Loan Document which is registered, depending on the nature of the document to be registered, which is payable in Luxembourg upon the registration of the Loan Documents with the *Administration de l'enregistrement, des domaines et de la TVA* which is required where the Loan Documents are physically attached (*annexé(s)*) to a public deed or to any other document subject to mandatory registration; and

(c) any deduction or withholding for or on account of tax imposed by Luxembourg on payments by or on behalf of a Borrower organized or incorporated in Luxembourg required under the Luxembourg law of 23 December 2005, as amended.

ARTICLE 10.
GUARANTY

Section 10.01 *The Guaranty*.

(a) The Parent hereby unconditionally guarantees the full and punctual payment (whether at stated maturity, upon acceleration or otherwise) of the principal of, and interest and fees on, each Loan made to and each Reimbursement Obligation incurred by any Eligible Subsidiary pursuant to this Agreement, and the full and punctual payment of all other amounts payable by any Eligible Subsidiary under this Agreement. Upon failure by any Eligible Subsidiary to pay punctually any such amount, the Parent shall forthwith on demand pay the amount not so paid at the place and in the manner specified in this Agreement. The guaranty in this Section 10.01(a) does not apply to the extent that it would result in the guarantee constituting unlawful financial assistance within the meaning of section 82 of the Companies Act 2014 of Ireland.

Section 10.02 *Guaranty Unconditional.* The obligations of the Parent hereunder shall be unconditional and absolute and, without limiting the generality of the foregoing, shall not be released, discharged or otherwise affected by:

(a) any extension, renewal, settlement, compromise, waiver or release in respect of any obligation of any Borrower under this Agreement or any Note, by operation of law or otherwise (except to the extent the foregoing expressly releases the Parent's obligations under this Article 10);

(b) any modification or amendment of or supplement to this Agreement or any Note (other than any modification, amendment or supplement of this Article 10 effected in accordance with Section 11.05);

(c) any release, impairment, non-perfection or invalidity of any direct or indirect security for any obligation of any Borrower under this Agreement or any Note;

(d) any change in the legal existence, structure or ownership of any Borrower, or any insolvency, bankruptcy, reorganization or other similar proceeding affecting any Borrower or its assets or any resulting release or discharge of any obligation of any Borrower contained in this Agreement or any Note;

(e) the existence of any claim, set-off or other rights which the Parent may have at any time against any Borrower, the Administrative Agent, any Lender or any other Person, whether in connection

herewith or any unrelated transactions, provided that nothing herein shall prevent the assertion of any such claim by separate suit or compulsory counterclaim;

(f) any invalidity or unenforceability relating to or against any Borrower for any reason of this Agreement or any Note, or any provision of applicable law or regulation purporting to prohibit the payment by any Borrower of the principal of or interest on any Loan or any other amount payable by it under this Agreement; or

(g) any other act or omission to act or delay of any kind by any Borrower, the Administrative Agent, any Lender or any other Person or any other circumstance whatsoever which might, but for the provisions of this paragraph, constitute a legal or equitable discharge of or defense to the Parent's obligations hereunder (in each case other than payment in full of the obligations guaranteed hereunder).

Section 10.03 *Discharge Only Upon Payment In Full; Reinstatement In Certain Circumstances.* The Parent's obligations hereunder shall remain in full force and effect until the Commitments shall have terminated and the principal of and interest on the Loans, the Reimbursement Obligations and all other amounts payable by the Borrowers under this Agreement shall have been paid in full. If at any time any payment of the principal of or interest on any Loan or any other amount payable by any Borrower under this Agreement is rescinded or must be otherwise restored or returned upon the insolvency, bankruptcy or reorganization of any Borrower or otherwise, the Parent's obligations hereunder with respect to such payment shall be reinstated at such time as though such payment had been due but not made at such time.

Section 10.04 *Waiver by the Parent.* The Parent irrevocably waives acceptance hereof, presentment, demand (except as provided in Section 10.01), protest and any notice not provided for herein, as well as, solely for purposes of Article 10, any requirement that at any time any action be taken by any Person against any Borrower or any other Person. The Parent's guaranty hereunder is a guaranty of payment and not merely of collection.

Section 10.05 *Subrogation.* Upon making any payment with respect to any Borrower hereunder, the Parent shall be subrogated to the rights of the payee against such Borrower with respect to such payment; provided that the Parent shall not enforce any payment by way of subrogation unless all principal and interest on the Loans to such Borrower and all other amounts payable by such Borrower under this Agreement have been paid in full in cash.

Section 10.06 *Stay of Acceleration.* In the event that acceleration of the time for payment of any amount payable by any Borrower under this Agreement or its Notes is stayed upon insolvency, bankruptcy or reorganization of such Borrower, all such amounts otherwise subject to acceleration under the terms of this Agreement shall nonetheless be payable by the Parent hereunder forthwith on demand by the Administrative Agent made at the request of the Required Lenders.

Section 10.07 *Continuing Guaranty*. The Parent's guaranty hereunder is a continuing guaranty, shall be binding on the Parent and its successors and assigns, and shall be enforceable by the Lenders. If all or part of any Lender's interest in any obligation guaranteed by the Parent is assigned or otherwise transferred in accordance with the terms of this Agreement, the transferor's rights under the Parent's guaranty, to the extent applicable to the obligation so transferred, shall automatically be transferred with such obligation.

ARTICLE 11.
MISCELLANEOUS

Section 11.01 *Notices*.

(a) All notices, requests and other communications to any party hereunder shall be in writing (including bank wire, facsimile transmission or similar writing) and shall be given to such party: (a) in the case of the Principal Borrower at its address or facsimile number set forth below, (b) in the case of the Administrative Agent, at its address or facsimile number set forth below, (c) in the case of an Eligible Subsidiary, at its address or facsimile number set forth in its Election to Participate, (d) in the case of any Lender, at its address or facsimile number set forth in its Administrative Questionnaire or (e) in the case of any party, such other address or facsimile number as such party may hereafter specify for the purpose by notice to the Administrative Agent and the Principal Borrower. Each such notice, request or other communication shall be effective (i) if given by facsimile, when such facsimile is transmitted to the facsimile number specified in this Section 11.01 and the appropriate answerback is received, (ii) if given by mail, 72 hours after such communication is deposited in the mails with first class postage prepaid, addressed as aforesaid or (iii) if given by any other means, when delivered at the address specified in this Section 11.01; provided that notices to the Administrative Agent or an Issuing Lender under Article 2 or Article 8 shall not be effective until received.

Principal Borrower's Address:

Johnson Controls International plc
c/o Johnson Controls, Inc.
Attention: Pieter Lens, Vice President and Treasurer
5757 North Green Bay Avenue, X-40
Milwaukee, WI 53209
Email: [redacted]@b

Administrative Agent's Address:

JPMorgan Chase Bank, N.A.
500 Stanton Christiana Road
NCC5 / 1st Floor
Newark, DE 19713
Attention: Loan & Agency Services Group
Tel: +1-302-455-3768
Email: bryan.a.cook@jpmchase.com

with a copy to:

JPMorgan Chase Bank, N.A.
8181 Communications Pkwy
Building B, Floor 6
Plano, TX 75024
Attention: Will Price
Email: will.price@jpmorgan.com

JPMorgan Chase Bank, N.A., in its capacity as an Initial Issuing Lender:

JPMorgan Chase Bank, N.A.
10420 Highland Manor Dr. 4th Floor
Tampa, FL 33610
Attention: Standby LC Unit
Tel: 800-364-1969

Fax: 856-294-5267
Email: GTS.Client.Services@jpmchase.com

With a copy to:

JPMorgan Chase Bank, N.A.
500 Stanton Christiana Rd.
NCC5 / 1st Floor
Newark, DE 19713
Attention: Loan & Agency Services Group
Tel: +1-302-455-3768
Email: bryan.a.cook@jpmchase.com

and in the case of a notification of the DQ List, to JPMDQ_Contact@jpmorgan.com

Notices sent by hand or overnight courier service, or mailed by certified or registered mail, shall be deemed to have been given when received; notices sent by facsimile shall be deemed to have been given when sent (except that, if not given during normal business hours for the recipient, shall be deemed to have been given at the opening of business on the next business day for the recipient). Notices delivered through Approved Electronic Platforms, to the extent provided in paragraph (b) below, shall be effective as provided in said paragraph (b).

(b) Notices and other communications to the Lenders and the Issuing Lenders hereunder may be delivered or furnished by using Approved Electronic Platforms pursuant to procedures approved by the Administrative Agent; provided that the foregoing shall not apply to notices pursuant to Article 2 unless otherwise agreed by the Administrative Agent and the applicable Lender. The Administrative Agent or the Principal Borrower may, in its discretion, agree to accept notices and other communications to it hereunder by electronic communications pursuant to procedures approved by it; provided that approval of such procedures may be limited to particular notices or communications.

(c) Unless the Administrative Agent otherwise prescribes in writing upon reasonable advance notice, (i) notices and other communications sent to an email address shall be deemed received upon the sender's receipt of an acknowledgement from the intended recipient (such as by the "return receipt requested" function, as available, return email or other written acknowledgement), and (ii) notices or communications posted to an Internet or intranet website shall be deemed received upon the deemed receipt by the intended recipient, at its email address as described in the foregoing clause (i), of notification that such notice or communication is available and identifying the website address therefor; provided that, for both clauses (i) and (ii) above, if such notice, email or other communication is not sent during the normal business hours of the recipient, such notice or communication shall be deemed to have been sent at the opening of business on the next business day for the recipient.

(d) Any party hereto may change its address or telecopy number for notices and other communications hereunder by notice to the other parties hereto.

(e) The Principal Borrower hereby irrevocably designates and appoints JCI as its authorized agent to accept and acknowledge on its behalf, service of any and all process which may be served in any suit, action or proceeding in connection with this Agreement and the other Loan Documents and hereby consents to process being served upon JCI in any such suit, action or proceeding. The Principal Borrower irrevocably waives, to the fullest extent permitted by law, all claim of error by reason of any such service and agrees that such service shall be deemed in every respect effective service of process upon it in any such suit, action or proceeding and shall, to the fullest extent permitted by law, be taken and held to be valid and

personal service upon and personal delivery to it. Nothing in this provision shall affect the right of the Administrative Agent or the Lenders to serve process in any other manner permitted by law or limit the right of the Administrative Agent or the Lenders to bring proceedings against the Principal Borrower in the courts of any jurisdiction or jurisdictions. Such designation and appointment shall be irrevocable until all obligations under the Loan Documents shall have been paid in full in accordance with the provisions hereof. If such agent shall cease so to act, the Principal Borrower covenants and agrees to designate irrevocably and appoint without delay another such agent reasonably satisfactory to the Administrative Agent and to deliver promptly to the Administrative Agent evidence in writing of such other agent's acceptance of such appointment.

Section 11.02 *No Waivers.* No failure or delay by the Administrative Agent or any Lender in exercising any right, power or privilege hereunder or under any Note shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies herein provided shall be cumulative and not exclusive of any rights or remedies provided by law.

Section 11.03 *Expenses; Indemnification*.

(a) The Principal Borrower shall reimburse (i) all reasonable, documented and invoiced out-of-pocket expenses of the Administrative Agent, the Sustainability Structuring Agent and each Lead Arranger (including due diligence expenses, syndication expenses, travel expenses and reasonable, documented and invoiced fees, charges and disbursements of one firm of counsel for the Administrative Agent and the Lead Arrangers (and if reasonably necessary, one local counsel in any relevant jurisdiction) and, solely in the case of an actual or potential conflict of interest, of one additional counsel (and, if reasonably necessary, one additional local counsel in any relevant jurisdiction)) incurred in connection with the preparation of this Agreement and any related documentation or the administration, amendment, modification or waiver hereof or thereof and (ii) if an Event of Default occurs, all reasonable, documented and invoiced out-of-pocket expenses incurred by the Administrative Agent and each Lender, including the fees and disbursements of one firm of counsel (and if reasonably necessary, one local counsel in any relevant jurisdiction) and, solely in the case of an actual or potential conflict of interest, of one additional counsel (and, if reasonably necessary, one additional local counsel in any relevant jurisdiction) in connection with such Event of Default and collection, bankruptcy, insolvency and other enforcement proceedings resulting therefrom.

(b) The Principal Borrower agrees to indemnify and hold harmless each Lender, each Issuing Lender, the Administrative Agent, the Sustainability Structuring Agent, each Lead Arranger and each of their respective affiliates and their respective officers, directors, employees, advisors, and agents (each, an "**Indemnified Person**") from and against any and all losses, claims, damages and liabilities (including Environmental Liabilities) to which any such Indemnified Person may become subject arising out of or in connection with the Loan Documents, the use of the proceeds of Loans and Letters of Credit hereunder or any related transaction or any claim, litigation, investigation, arbitration or proceeding relating to any of the foregoing, regardless of whether any Indemnified Person is a party thereto and regardless of whether brought by a third party or by the Parent or any of its affiliates (any of the foregoing, a "**Proceeding**"), and to reimburse each Indemnified Person upon demand for any reasonable and documented legal or other expenses incurred in connection with investigating or defending any of the foregoing; provided that (i) the foregoing indemnity will not, as to any Indemnified Person, apply to losses, claims, damages, liabilities or related expenses (A) to the extent they are found by a final, non-appealable judgment of a court of competent jurisdiction to arise from the bad faith, willful misconduct or gross negligence of such Indemnified Person or any of its Related Persons, (B) to the extent resulting from any Proceeding that does not involve an act or omission of the Parent and its Consolidated Subsidiaries or any of their respective affiliates and that is brought by an Indemnified Person solely against another Indemnified Person, other than claims against any Lender or Lead Arranger or the Administrative Agent in its capacity in fulfilling its role as an agent or

arranger under the Loan Documents, in each case as found by a final, non-appealable judgment of a court of competent jurisdiction or (C) to the extent resulting from a material breach by such Indemnified Person or any Related Person thereof (as determined by a final non-appealable judgment of a court of competent jurisdiction) of its obligations under the Loan Documents as found by a final, non-appealable judgment of a court of competent jurisdiction. For purposes hereof, a "**Related Person**" of an Indemnified Person means (a) any controlling person, controlled affiliate or subsidiary of such Indemnified Person, (b) the respective directors, officers or employees of such Indemnified Person or any of its subsidiaries, controlled affiliates or controlling persons and (c) the respective agents and advisors of such Indemnified Person or any of its subsidiaries, controlled affiliates or controlling persons; provided, that each reference to a controlled affiliate, controlling person, director, officer or employee in this sentence pertains to a controlled affiliate, controlling person, director, officer or employee involved in the negotiation of the Loan Documents. The Principal Borrower shall not be liable to the Administrative Agent, the Sustainability Structuring Agent, the Lead Arrangers or any Indemnified Person for any special, indirect, consequential or punitive damages in connection with the Loan Documents; provided that this sentence shall not limit the Principal Borrower's indemnification obligations as set forth in this paragraph.

(c) None of the Administrative Agent, the Sustainability Structuring Agent, any Lead Arranger, and any Lender, and any Related Party of any of the foregoing Persons (each such Person being called a "**Lender-Related Person**") shall be liable for any damages arising from the use by others of information or other materials obtained through electronic, telecommunications or other information transmission systems (other than for direct or actual damages to the extent they are found by a final, non-appealable judgment of a court of competent jurisdiction to arise from the bad faith, gross negligence or willful misconduct of such Lender-Related Person), it being understood that the use of electronic telecommunications or other information transmission systems will not itself constitute bad faith, gross negligence or willful misconduct. No Lender-Related Person shall be liable for any special, indirect, consequential or punitive damages in connection with the Loan Documents.

(d) Each Lender severally agrees to pay any amount required to be paid by the Principal Borrower under paragraphs (a) or (b) of this Section 11.03 to the Administrative Agent, each Issuing Lender and the Sustainability Structuring Agent, and each Related Party of any of the foregoing Persons (each, an "**Agent-Related Person**") (to the extent not reimbursed by the Principal Borrower and without limiting the obligation of the Principal Borrower to do so), ratably according to their respective Applicable Percentage in effect on the date on which such payment is sought under this Section (or, if such payment is sought after the date upon which the Commitments shall have terminated and the Loans shall have been paid in full, ratably in accordance with such Applicable Percentage immediately prior to such date), and agrees to indemnify and hold each Agent-Related Person harmless from and against any and all Liabilities and related expenses, including the fees, charges and disbursements of any kind whatsoever that may at any time (whether before or after the payment of the Loans) be imposed on, incurred by or asserted against such Agent-Related Person in any way relating to or arising out of the Commitments, this Agreement, any of the other Loan Documents or any documents contemplated by or referred to herein or therein or the transactions contemplated hereby or thereby or any action taken or omitted by such Agent-Related Person under or in connection with any of the foregoing; provided that the unreimbursed expense or Liability or related expense, as the case may be, was incurred by or asserted against such Agent-Related Person in its capacity as such; provided further that no Lender shall be liable for the payment of any portion of such Liabilities, costs, expenses or disbursements that are found by a final and nonappealable decision of a court of competent jurisdiction to have resulted primarily from such Agent-Related Person's gross negligence or willful misconduct. The agreements in this Section shall survive the termination of this Agreement and the payment of the Loans and all other amounts payable hereunder.

Section 11.04 *Sharing of Set-offs.* Each Lender agrees that if it shall, by exercising any right of set-off or counterclaim or otherwise, receive payment of a proportion of the aggregate amount of principal and interest due with respect to the Loans and Letter of Credit Liabilities held by it which is greater than the proportion received by any other Lender in respect of the aggregate amount of principal and interest due with respect to the Loans and Letter of Credit Liabilities held by such other Lender, the Lender receiving such proportionately greater payment shall purchase such participations in the Loans and Letter of Credit Liabilities held by the other Lenders, and such other adjustments shall be made, as may be required so that all such payments of principal and interest with respect to the Loans and Letter of Credit Liabilities held by the Lenders shall be shared by the Lenders pro rata; provided that nothing in this Section 11.04 shall impair the right of any Lender or its affiliates to exercise any right of set-off or counterclaim it may have and to apply the amount subject to such exercise to the payment of indebtedness of a Borrower other than its indebtedness hereunder. Each Borrower agrees, to the fullest extent it may effectively do so under applicable law, that any holder of a participation in the Loans and Letter of Credit Liabilities, whether or not acquired pursuant to the foregoing arrangements, may exercise rights of set-off or counterclaim and other rights with respect to such participation as fully as if such holder of a participation were a direct creditor of such Borrower in the amount of such participation.

Section 11.05 *Amendments and Waivers.* Any provision of this Agreement or the Notes may be amended or waived if, but only if, such amendment or waiver is in writing and is signed by the Principal Borrower and the Required Lenders (and, if the rights or duties of the Administrative Agent or any Issuing Lender are affected thereby, by it); provided that no such amendment or waiver shall:

(a) (i) increase or extend the Commitment of any Lender without the written consent of such Lender (provided that an amendment, modification, waiver or consent with respect to any condition precedent, covenant, mandatory prepayment pursuant to Section 2.16(c), Event of Default or Default shall not constitute an increase in the Commitment of any Lender), (ii) reduce the principal of or rate of interest on any Loan or the amount to be reimbursed in respect of any Letter of Credit or any interest thereon (other than with respect to the default rate of interest included in the determination of the applicable interest rate under Section 2.06(a), 2.06(c), 2.06(d) or 2.19(f)) or any fees hereunder, without the written consent of each Lender directly and adversely affected thereby, (iii) postpone the date fixed for any payment of principal of or interest on any Loan or for reimbursement in respect of any Letter of Credit or interest thereon or any fees hereunder or for termination of any Commitment, without the written consent of each Lender directly and adversely affected thereby (other than any reduction of the amount of, or any extension of the payment date for, the mandatory prepayments required under Section 2.16(c), in each case which shall only require the approval of the Required Lenders, and it being understood that an amendment, modification, waiver or consent with respect to any condition precedent, covenant, mandatory prepayment pursuant to Section 2.16(c), Event of Default or Default shall not constitute a postponement of the scheduled date of expiration of the Commitment of any Lender), (iv) release the Parent from any obligation under Article 10, without the written consent of each Lender, (v) change Section 2.08(a) or Section 11.04 in a manner that would alter the ratable reduction of Commitments or pro rata sharing of payments required thereby, or change any provision requiring that funding of amounts by the Lenders be on a ratable basis, without the written consent of each Lender directly and adversely affected thereby, (vi) change the definition of "Required Lenders" or any other provision of any Loan Document specifying the number or percentage of Lenders required to waive, amend or modify any rights thereunder or make any determination or grant any consent thereunder without the written consent of each Lender (it being understood that, solely with the consent of the parties prescribed by Section 2.20 to be parties to an Incremental Term Loan Amendment, Incremental Term Loans may be included in the determination of Required Lenders on substantially the same basis as the Commitments and the Loans are included on the Closing Date), (vii) change any of the provisions of Section 2.21 without the consent of the Administrative Agent and the Issuing Lenders or (viii) change the payment waterfall provisions of Section 2.21(b) without the written consent of each Lender; provided that no consent of any

Defaulting Lender shall be required pursuant to clause (v) or (vi) above as to any modification that does not adversely affect such Defaulting Lender in a non-ratable manner;

(b) unless signed by all the Lenders, change the provisions of this Section 11.05; or

(c) unless signed by an Eligible Subsidiary, (i) subject such Eligible Subsidiary to any additional obligation, (ii) increase the principal of or rate of interest on any outstanding Loan of such Eligible Subsidiary or (iii) accelerate the stated maturity of any outstanding Loan of such Eligible Subsidiary.

It is understood that the operation of Sections 2.01(c), 2.20 and 8.01(b) and (c) and the Pricing Schedule in accordance with their terms is not an amendment subject to this Section 11.05.

Notwithstanding any provision herein to the contrary, as to any amendment, amendment and restatement or other modifications otherwise approved in accordance with this Section, it shall not be necessary to obtain the consent or approval of any Lender that, upon giving effect to such amendment, amendment and restatement or other modification, would have no Commitment or outstanding Loans so long as such Lender receives payment in full of the principal of and interest accrued on each Loan made by, and all other amounts owing to, such Lender or accrued for the account of such Lender under this Agreement and the other Loan Documents at the time such amendment, amendment and restatement or other modification becomes effective.

Notwithstanding any provision herein to the contrary, technical and conforming modifications to the Loan Documents may be made with the consent of the Principal Borrower and the Administrative Agent (but without the consent of any Lender or Issuing Lender) to the extent necessary (x) to integrate any increased Commitments in a manner consistent with Section 2.20 and (y) to cure any ambiguity, omission, error, defect or inconsistency.

Section 11.06 *Successors and Assigns*.

(a) The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns, except that no Borrower may assign or otherwise transfer any of its rights under this Agreement without the prior written consent of all Lenders.

(b) Any Lender may at any time grant to one or more Persons (other than an Ineligible Institution) (each a "**Participant**") participating interests in its Commitment and/or any or all of its Loans and Letter of Credit Liabilities. In the event of any such grant by a Lender of a participating interest to a Participant, whether or not upon notice to any Borrower and the Administrative Agent, such Lender shall remain responsible for the performance of its obligations hereunder, and the Borrowers, the Issuing Lenders and the Administrative Agent shall continue to deal solely and directly with such Lender in connection with such Lender's rights and/or obligations hereunder. Any agreement pursuant to which any Lender may grant such a participating interest shall provide that such Lender shall retain the sole right and responsibility to enforce the obligations of the Borrowers hereunder including, without limitation, the right to approve any amendment, modification or waiver of any provision hereof; provided that such participation agreement may provide that such Lender will not agree to any modification, amendment or waiver of this Agreement described in clause (a) of Section 11.05 without the consent of the Participant. The Borrowers agree that each Participant shall, to the extent provided in its participation agreement and subject to Section 11.06(e) below, be entitled to the benefits of Section 2.14 and Article 8 with respect to its participating interest. An assignment or other transfer which is not permitted by subsection 11.06(c), 11.06(d) or 11.06(f) below shall be given effect for purposes of this Agreement only to the extent of a participating interest granted in accordance with this subsection 11.06(b). Each Lender that sells a participation shall, acting solely for this

purpose as a non-fiduciary agent of the Borrowers, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans or other obligations under the Loan Documents (the "**Participant Register**"); provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register to any Person (including the identity of any Participant or any information relating to a Participant's interest in any commitments, loans, letters of credit or its other obligations under any Loan Document) except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) or Proposed Section 1.163-5(b) of the United States Treasury Regulations (or, in each case, any amended or successor version) or, if different, under Sections 871(h) or 881(c) of the Internal Revenue Code. The entries in the Participant Register shall be conclusive absent clearly demonstrable error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. Each Lender that sells a participation pursuant to this Section shall obtain a Qualifying Lender Confirmation completed and signed by or on behalf of the Participant and shall obtain such information required under Section 891A TCA; provided that, notwithstanding anything to the contrary, such confirmation or information shall be shared with Borrowers only to the extent required by law for reduced withholding or exemption from withholding.

(c) Any Lender may at any time assign to one or more Persons (other than an Ineligible Institution) (each an "**Assignee**") all, or a proportionate part (equivalent to an initial Commitment of not less than $10,000,000) of all, of its rights and obligations under this Agreement and the Notes, and such Assignee shall assume such rights and obligations, pursuant to an Assignment and Assumption Agreement in substantially the form of Exhibit G hereto executed by such Assignee and such transferor Lender, with (and subject to) the consent of the Administrative Agent, each Issuing Lender (provided that no consent of any Issuing Lender shall be required if (x) an Event of Default occurs with respect to the Parent under Section 6.01(h) or 6.01(i) and (y) such Issuing Lender has no outstanding Letters of Credit at that time) and the Principal Borrower, such consents not to be unreasonably withheld or delayed; provided that (i) no consent of the Principal Borrower shall be required for (1) an assignment to a Lender or a Lender Affiliate (it being understood that the Principal Borrower shall nevertheless receive prompt notice, either prior to or promptly after such assignment, of any such assignment to a Lender or a Lender Affiliate) (provided further, notwithstanding the preceding clause (1), so long as no Event of Default under Section 6.01(a), (h) or (i) has occurred and is continuing, the consent of the Principal Borrower shall be required if, after giving effect to such assignment, the assignee, collectively with its affiliated Lenders and affiliated Lender Affiliates, would, as a result of such assignment, hold more than fifteen percent (15%) of the aggregate amounts of Loans and unused Commitments), or (2) an assignment to any assignee if an Event of Default under Section 6.01(a), (h) or (i) has occurred and is continuing and (ii) the Principal Borrower shall be deemed to have consented to any such assignment unless it shall object thereto by written notice to the Administrative Agent within 15 Business Days after having received notice thereof. Upon execution and delivery of such instrument and payment by such Assignee to such transferor Lender of an amount equal to the purchase price agreed between such transferor Lender and such Assignee, such Assignee shall be a Lender party to this Agreement and shall have all the rights and obligations of a Lender with a Commitment as set forth in such instrument of assumption, and the transferor Lender shall be released from its obligations hereunder to a corresponding extent, and no further consent or action by any party shall be required. Upon the consummation of any assignment pursuant to this subsection, the transferor Lender, the Administrative Agent and the Borrowers shall make appropriate arrangements so that, if required, new Notes are issued to the Assignee. In connection with any such assignment, the transferor Lender shall pay to the Administrative Agent an administrative fee for processing such assignment in the amount of $3,500. The Administrative Agent, acting solely for this purpose as an agent of the Borrowers, shall maintain at one of its offices in New York a copy of each Assignment and Assumption Agreement delivered to it and a register for the recordation of the names and addresses of the Lenders, and the Commitments of, and principal amounts (and stated interest) of

the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "**Register**"). The entries in the Register shall be conclusive absent clearly demonstrative error, and the Borrowers, the Administrative Agent and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by the Borrowers and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

(d) Any Lender may at any time assign all or any portion of its rights under this Agreement and its Notes to a Federal Reserve Bank (or other central bank having jurisdiction over such Lender). No such assignment shall release the transferor Lender from its obligations hereunder.

(e) No Assignee, Participant or other transferee of any Lender's rights shall be entitled to receive any greater payment under Section 8.03 or 8.04 than such Lender would have been entitled to receive with respect to the rights transferred, unless such transfer is made with the Principal Borrower's prior written consent or by reason of the provisions of Section 8.02, 8.03 or 8.04 requiring such Lender to designate a different Applicable Lending Office under certain circumstances or at a time when the circumstances giving rise to such greater payment did not exist.

(f) Notwithstanding anything to the contrary contained in this Section 11.06, but subject to the terms and conditions set forth in this subsection (f), any Lender may from time to time, elect to designate a Conduit to provide all or any part of any Loan required to be made by such Lender pursuant to this Agreement or to acquire a participation interest in any Loans extended by such Lender hereunder (a "**Conduit Designation**"), provided the designation of a Conduit by any Lender for purposes of this Section 11.06(f) shall be subject to the approval of the Principal Borrower, which shall not be unreasonably withheld. No additional Note shall be required with regard to a Conduit Designation; provided, however, to the extent any Conduit shall advance funds under a Conduit Designation, the designating Lender shall be deemed to hold the Note in its possession as an administrative agent for such Conduit to the extent of the Loan funded by such Conduit. Notwithstanding any such Conduit Designation, (x) the designating Lender shall remain solely responsible to the other parties hereto for its obligations under this Agreement and (y) the Borrowers and the Administrative Agent may continue to deal solely and directly with the designating Lender as Administrative Agent for such designating Lender's Conduit, in connection with all of such Conduit's rights and obligations under this Agreement, unless and until the Principal Borrower and the Administrative Agent are notified that the designating Lender has been replaced as Administrative Agent for its Conduit; any payments for the benefit of any designating Lender and its Conduit shall be paid to such designating Lender for itself as Administrative Agent for its Conduit, as applicable; provided neither the Administrative Agent nor any Borrower shall be responsible for any designating Lender's application of any such payments. In addition, any Conduit may (i) with notice to, but without the consent of the Principal Borrower and the Administrative Agent, and without paying any processing fee therefor, assign all or portions of its interest in any Loans to the Lender that designated such Conduit or to any financial institutions consented to by the Principal Borrower and the Administrative Agent providing liquidity and/or credit facilities to or for the account of such Conduit to support the funding or maintenance of Loans and (ii) disclose on a confidential basis any non-public information relating to its Loans to any rating agency, commercial paper dealer or provider of any guarantee, surety, credit or liquidity enhancement to such Conduit.

(g) Each party to this Agreement hereby agrees that, at any time a Conduit Designation is in effect, it shall not institute against, or join any other person in instituting against, any Conduit any bankruptcy, reorganization, arrangement, insolvency or liquidation proceeding or other proceedings under any federal or state bankruptcy or similar law, for one year and a day after the latest maturing commercial

paper note issued by such Conduit is paid. This Section 11.06(g) shall survive the termination of this Agreement.

(h) Disqualified Institutions.

(i) No assignment or participation shall be made to any Person that was a Disqualified Institution as of the date (the "**Trade Date**") on which the assigning Lender entered into a binding agreement to sell and assign or grant a participation in all or a portion of its rights and obligations under this Agreement to such Person (unless the Principal Borrower has consented to such assignment or participation in writing in its sole and absolute discretion, in which case such Person will not be considered a Disqualified Institution for the purpose of such assignment or participation). For the avoidance of doubt, with respect to any assignee or Participant that becomes a Disqualified Institution after the applicable Trade Date (including as a result of the delivery of a notice pursuant to, and/or the expiration of the notice period referred to in, the definition of "Disqualified Institution"), (x) such assignee or Participant shall not retroactively be disqualified from being a Lender or Participant and (y) the execution by the Principal Borrower of an Assignment and Assumption with respect to such assignee will not by itself result in such assignee no longer being considered a Disqualified Institution. Any assignment or participation in violation of this clause (h)(i) shall not be void, but the other provisions of this clause (h) shall apply.

(ii) If any assignment or participation is made to any Disqualified Institution without the Principal Borrower's prior written consent in violation of clause (i) above, or if any Person becomes a Disqualified Institution after the applicable Trade Date, the Principal Borrower may, at its sole expense and effort, upon notice to the applicable Disqualified Institution and the Administrative Agent, require such Disqualified Institution to assign, without recourse (in accordance with and subject to the restrictions contained in this Section 11.06), all of its interest, rights and obligations under this Agreement to one or more Persons (other than an Ineligible Institution) at the lesser of (x) the principal amount thereof and (y) the amount that such Disqualified Institution paid to acquire such interests, rights and obligations in each case plus accrued interest, accrued fees and all other amounts (other than principal amounts) payable to it hereunder.

(iii) Notwithstanding anything to the contrary contained in this Agreement, Disqualified Institutions to whom an assignment or participation is made in violation of clause (i) above (A) will not have the right to (x) receive information, reports or other materials provided to Lenders by the Principal Borrower, the Administrative Agent or any other Lender, (y) attend or participate in meetings attended by the Lenders (or any of them) and the Administrative Agent, or (z) access any electronic site established for the Lenders or confidential communications from counsel to or financial advisors of the Administrative Agent or the Lenders and (B) (x) for purposes of any consent to any amendment, waiver or modification of, or any action under, and for the purpose of any direction to the Administrative Agent or any Lender to undertake any action (or refrain from taking any action) under this Agreement or any other Loan Document, each Disqualified Institution will be deemed to have consented in the same proportion as the Lenders that are not Disqualified Institutions consented to such matter, and (y) for purposes of voting on any plan of reorganization, each Disqualified Institution party hereto hereby agrees (1) not to vote on such plan of reorganization, (2) if such Disqualified Institution does vote on such plan of reorganization notwithstanding the restriction in the foregoing clause (1), such vote will be deemed not to be in good faith and shall be "designated" pursuant to Section 1126(e) of the Bankruptcy Code (or any similar provision in any other applicable laws), and such vote shall not be counted in determining whether the applicable class has accepted or rejected such plan of reorganization in accordance with Section 1126(c) of the Bankruptcy Code (or any similar provision in any other applicable laws) and (3) not to contest any request by any party for a determination by the Bankruptcy Court (or other applicable court of competent jurisdiction) effectuating the foregoing clause (2).

(iv) The Administrative Agent shall have the right, and the Principal Borrower hereby expressly authorizes the Administrative Agent, to (A) post the list of Disqualified Institutions provided by the Principal Borrower and any updates thereto from time to time (collectively, the "**DQ List**") on an Approved Electronic Platform, including that portion of such Approved Electronic Platform that is designated for "public side" Lenders and/or (B) provide the DQ List to each Lender or potential Lender requesting the same.

(v) The Administrative Agent shall not be responsible or have any liability for, or have any duty to ascertain, inquire into, monitor or enforce, compliance with the provisions hereof relating to Disqualified Institutions. Without limiting the generality of the foregoing, the Administrative Agent shall not (x) be obligated to ascertain, monitor or inquire as to whether any Lender or Participant or prospective Lender or Participant is a Disqualified Institution or (y) have any liability with respect to or arising out of any assignment or participation of Loans, or disclosure of confidential information, by any other Person to any Disqualified Institution.

Section 11.07 *Collateral.* Each of the Lenders represents to the Administrative Agent and each of the other Lenders that it in good faith is not relying upon any "margin stock" (as defined in Regulation U) as collateral in the extension or maintenance of the credit provided for in this Agreement.

Section 11.08 *Governing Law; Submission to Jurisdiction.* This Agreement and each other Loan Document and any claims, controversy, dispute or cause of action (whether in tort, contract or otherwise and whether at law or in equity) based upon, arising out of or relating to this Agreement or any other Loan Document shall be governed by and construed in accordance with the laws of the State of New York. Each of the Lenders and the Administrative Agent hereby irrevocably and unconditionally agrees that, notwithstanding the governing law provisions of any applicable Loan Document, any claims brought against the Administrative Agent by any Lender relating to this Agreement, any other Loan Document or the consummation or administration of the transactions contemplated hereby or thereby (whether in tort, contract or otherwise and whether at law or in equity) shall be construed in accordance with and governed by the law of the State of New York. Each Loan Party and each Lender hereby submits, to the fullest extent permitted by applicable law, to the nonexclusive jurisdiction of the United States District Court for the Southern District of New York sitting in the Borough of Manhattan (or if such court lacks subject matter jurisdiction, the Supreme Court of the State of New York sitting in the Borough of Manhattan), and any appellate court from any thereof, in any action or proceeding arising out of or relating to this Agreement or any other Loan Document or the transactions relating hereto or thereto, or for recognition or enforcement of any judgment arising out of or relating to any Loan Document or the transactions relating hereto or thereto, and whether in contract, tort or otherwise and whether at law or in equity, and each of the parties hereto hereby irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in such Federal (to the extent permitted by law) or New York State court. Each Loan Party and each Lender irrevocably waives, to the fullest extent permitted by law, any objection which it may now or hereafter have to the laying of the venue of any such proceeding brought in such a court and any claim that any such proceeding brought in such a court has been brought in an inconvenient forum.

Section 11.09 *Counterparts; Integration; Severability.* This Agreement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Agreement, the other Loan Documents and the Fee Letters constitute the entire contract among the parties relating to the subject matter hereof and thereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof and thereof. Except as provided in Section 3.01, this Agreement shall become effective when it shall have been executed by the Administrative Agent and when the Administrative Agent shall have received counterparts hereof which, when taken together, bear the

signatures of each of the other parties hereto, and thereafter shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. Delivery of an executed counterpart of a signature page of (x) this Agreement, (y) any other Loan Document and/or (z) any document, amendment, approval, consent, information, notice (including, for the avoidance of doubt, any notice delivered pursuant to Section 11.01), certificate, request, statement, disclosure or authorization related to this Agreement, any other Loan Document and/or the transactions contemplated hereby and/or thereby (each an "**Ancillary Document**") that is an Electronic Signature transmitted by telecopy, e-mailed .pdf or any other electronic means that reproduces an image of an actual executed signature page shall be effective as delivery of a manually executed counterpart of this Agreement, such other Loan Document or such Ancillary Document, as applicable. The words "execution," "signed," "signature," "delivery," and words of like import in or relating to this Agreement, any other Loan Document and/or any Ancillary Document shall be deemed to include Electronic Signatures, deliveries or the keeping of records in any electronic form (including deliveries by telecopy, emailed pdf, or any other electronic means that reproduces an image of an actual executed signature page), each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act; provided that nothing herein shall require the Administrative Agent to accept Electronic Signatures in any form or format without its prior written consent and pursuant to procedures approved by it (it being understood and agreed that the Administrative Agent accepts, consents to and approves of transmission through electronic means of any Electronic Signature that is a reproduction of an image of an actual executed signature page); provided, further, without limiting the foregoing, (i) (a) to the extent the Administrative Agent has agreed to accept any Electronic Signature, the Administrative Agent and each of the Lenders shall be entitled to rely on such Electronic Signature purportedly given by or on behalf of the Principal Borrower or any other Loan Party without further verification thereof (other than any Electronic Signature actually known by the Administrative Agent or such Lender, as applicable, to be unauthorized or otherwise invalid) and without any obligation to review the appearance or form of any such Electronic Signature and (b) each Loan Party shall be entitled to rely on the Electronic Signatures of the Administrative Agent and each Lender purportedly given by or on behalf of the Administrative Agent or such Lender, as applicable, without further verification thereof (other than any Electronic Signature actually known by such Loan Party to be unauthorized or otherwise invalid) and without any obligation to review the appearance or form of any such Electronic Signatures and (ii) upon the request of the Administrative Agent or any Lender, any Electronic Signature shall be followed, as soon as reasonably practicable, by a manually executed counterpart. Without limiting the generality of the foregoing, the Borrowers hereby (i) agree that, for all purposes, including without limitation, in connection with any workout, restructuring, enforcement of remedies, bankruptcy proceedings or litigation among the Administrative Agent, the Lenders and the Borrowers, Electronic Signatures transmitted by telecopy, emailed pdf, or any other electronic means that reproduces an image of an actual executed signature page and/or any electronic images of this Agreement, any other Loan Document and/or any Ancillary Document shall have the same legal effect, validity and enforceability as any paper original, (ii) agree that the Administrative Agent and each of the Lenders may, at its option, create one or more copies of this Agreement, any other Loan Document and/or any Ancillary Document in the form of an imaged electronic record in any format, which shall be deemed created in the ordinary course of such Person's business, and destroy the original paper document (and all such electronic records shall be considered an original for all purposes and shall have the same legal effect, validity and enforceability as a paper record), (iii) waive any argument, defense or right to contest the legal effect, validity or enforceability of this Agreement, any other Loan Document and/or any Ancillary Document based solely on the lack of paper original copies of this Agreement, such other Loan Document and/or such Ancillary Document, respectively, including with respect to any signature pages thereto and (iv) waive any claim against any Lender-Related Person for any losses, claims, damages or liabilities (collectively, "**Liabilities**") arising

solely from the Administrative Agent's and/or any Lender's reliance on or use of Electronic Signatures and/or transmissions by telecopy, emailed pdf, or any other electronic means that reproduces an image of an actual executed signature page, including any Liabilities arising as a result of the failure of the Principal Borrower and/or any other Loan Party to use any available security measures in connection with the execution, delivery or transmission of any Electronic Signature, other than any Liabilities (x) found by a final, non-appealable judgment of a court of competent jurisdiction to arise from the bad faith, willful misconduct or gross negligence of any Lender-Related Person or (y) to the extent resulting from a material breach by any Lender-Related Person thereof (as determined by a final non-appealable judgment of a court of competent jurisdiction) of its obligations under this Section 11.09 as found by a final, non-appealable judgment of a court of competent jurisdiction.

Section 11.10 *Waiver of Jury Trial.* EACH OF THE LOAN PARTIES, THE ADMINISTRATIVE AGENT AND THE LENDERS HEREBY IRREVOCABLY WAIVES ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS (WHETHER IN TORT, CONTRACT OR OTHERWISE AND WHETHER AT LAW OR IN EQUITY).

Section 11.11 *Confidentiality*.

(a) Each of the Administrative Agent, the Issuing Lenders and the Lenders agrees to maintain the confidentiality of the Information (as defined below), except that Information may be disclosed (i) to its and its Affiliates' directors, officers, employees and agents, including accountants, legal counsel and other advisors on a need-to-know basis (it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such Information and will agree to keep such Information confidential to the same extent as if they were parties hereto and the disclosing Administrative Agent, Issuing Lender or Lender shall be responsible for any breaches of the provisions of this Section 11.11(a)), (ii) to the extent requested by any central bank or the Federal Reserve or by any regulatory authority having jurisdiction over it or in connection with any pledge or assignment permitted under Section 11.06(d), (iii) to the extent required by applicable laws or regulations or by any subpoena or similar legal process, (iv) to any other party to this Agreement, (v) in connection with the exercise of any remedies hereunder or any suit, action or proceeding relating to any Loan Document or the enforcement of rights hereunder, (vi) subject to an agreement containing provisions substantially the same as those of this Section, to (A) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights or obligations under this Agreement (it being understood that the DQ List may be disclosed to any assignee or Participant, or prospective assignee or Participant, in reliance on and subject to the terms of this clause (vi)(A)) or (B) any actual or prospective counterparty (or its advisors) to any swap or derivative transaction relating to a Borrower and its obligations under this Agreement, (vii) with the prior written consent of the Principal Borrower, (viii) to the extent requested by ratings agencies or (ix) to the extent such Information (A) becomes publicly available other than as a result of a breach of this Section or (B) becomes available to the Administrative Agent, any Issuing Lender or any Lender on a nonconfidential basis from a source other than the Principal Borrower, its Affiliates, legal counsel or other advisors. For the purposes of this Section, "**Information**" means all information received from or on behalf of the Principal Borrower or any of its Affiliates relating to the Principal Borrower or its business or any of its Affiliates or their respective businesses (including, without limitation, Sustainability-Related Information), other than any such information that is available to the Administrative Agent, any Issuing Lender or any Lender on a nonconfidential basis prior to disclosure by or on behalf of the Principal Borrower and other than information pertaining to this Agreement routinely provided by arrangers to data service providers, including league table providers, that serve the lending industry, after the Principal Borrower has publicly disclosed this Agreement in a filing with the Securities and Exchange Commission (it being understood and agreed that the Principal Borrower shall so disclose this Agreement in such a filing as and when required by

applicable law). Any Person required to maintain the confidentiality of Information as provided in this Section shall be considered to have complied with its obligation to do so if such Person has exercised the same degree of care to maintain the confidentiality of such Information as such Person would accord to its own confidential information.

(b) The parties hereby agree that, from the commencement of discussions with respect to the Transactions, each party (and each employee, representative or other agent of such party) may disclose to any and all persons, without limitation of any kind, the tax treatment and tax structure (as such terms are used in Sections 6011, 6111 and 6112 of the Internal Revenue Code and the Treasury Regulations promulgated thereunder) of the Transactions and all materials of any kind (including opinions or other tax analyses) that are provided to such party relating to such tax treatment and tax structure, other than any information for which nondisclosure is reasonably necessary in order to comply with applicable securities laws.

Section 11.12 *USA Patriot Act*. Each Lender hereby notifies the Loan Parties that pursuant to the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the "Act") and the requirements of the Beneficial Ownership Regulation, it is required to obtain, verify and record information that identifies each Loan Party, which information includes the name and address of each Loan Party and other information that will allow such Lender, to identify each Loan Party in accordance with the Act and the Beneficial Ownership Regulation. Each Loan Party shall, promptly following a request by the Administrative Agent (including any such request on behalf of any Lender), provide all documentation and other information that the Administrative Agent (or such Lender) reasonably requests in order to comply with its ongoing obligations under applicable "know your customer" and anti-money laundering rules and regulations, including the Act and the Beneficial Ownership Regulation.

Section 11.13 *Termination of Existing Agreement*. Lenders which are parties to the Existing Agreement (and which constitute "Required Lenders" under and as defined in the Existing Agreement) hereby waive any advance notice requirement for terminating the commitments under the Existing Agreement, and the Principal Borrower and the applicable Lenders agree that the Existing Agreement and the "Commitments" thereunder shall be terminated on the Closing Date (except for any provisions thereof which by their terms survive termination thereof).

Section 11.14 *Acknowledgment and Consent to Bail-In of Affected Financial Institutions*. Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Affected Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the Write-Down and Conversion Powers of the applicable Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

(a) the application of any Write-Down and Conversion Powers by the applicable Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an Affected Financial Institution; and

(b) the effects of any Bail-In Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent entity, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by

it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the Write-Down and Conversion Powers of the applicable Resolution Authority.

To the extent not prohibited by applicable law, rule or regulation, each Lender shall notify the Principal Borrower and the Administrative Agent if it has become the subject of a Bail-In Action (or any case or other proceeding in which a Bail-In Action may occur), it being understood and agreed that a public statement made by such Lender (or the relevant banking regulator of such Lender) about any such Bail-In Action (or any such case or other proceeding) shall constitute notice for this purpose.

As used herein, the following terms have the following meanings:

"**Affected Financial Institution**" means (a) any EEA Financial Institution or (b) any UK Financial Institution.

"**Bail-In Action**" means the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of an Affected Financial Institution.

"**Bail-In Legislation**" means, (a) with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law, regulation, rule or requirement for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule and (b) with respect to the United Kingdom, Part I of the United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).

"**EEA Financial Institution**" means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent;

"**EEA Member Country**" means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

"**EEA Resolution Authority**" means any public administrative authority or any Person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

"**EU Bail-In Legislation Schedule**" means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor Person), as in effect from time to time.

"**Resolution Authority**" means an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.

"**UK Financial Institution**" means any BRRD Undertaking (as such term is defined under the PRA Rulebook (as amended from time to time) promulgated by the United Kingdom Prudential Regulation Authority) or any person falling within IFPRU 11.6 of the FCA Handbook (as amended from time to time)

promulgated by the United Kingdom Financial Conduct Authority, which includes certain credit institutions and investment firms, and certain affiliates of such credit institutions or investment firms.

"**UK Resolution Authority**" means the Bank of England or any other public administrative authority having responsibility for the resolution of any UK Financial Institution.

"**Write-Down and Conversion Powers**" means, (a) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule, and (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that person or any other person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

Section 11.15 *No Advisory or Fiduciary Responsibility.*

(a) Each Loan Party acknowledges and agrees, and acknowledges its Subsidiaries' understanding, that no Credit Party will have any obligations except those obligations expressly set forth herein and in the other Loan Documents and each Credit Party is acting solely in the capacity of an arm's length contractual counterparty to such Loan Party with respect to the Loan Documents and the transactions contemplated herein and therein and not as a financial advisor or a fiduciary to, or an agent of, such Loan Party or any other person. Each Loan Party agrees that it will not assert any claim against any Credit Party based on an alleged breach of fiduciary duty by such Credit Party in connection with this Agreement and the transactions contemplated hereby. Additionally, each Loan Party acknowledges and agrees that no Credit Party is advising such Loan Party as to any legal, tax, investment, accounting, regulatory or any other matters in any jurisdiction (including without limitation the potential application of the "contingent payment debt instrument" tax rules) in connection with this Agreement, the other Loan Documents and the credit facilities evidenced hereby. Each Loan Party shall consult with its own advisors concerning such matters and shall be responsible for making its own independent investigation and appraisal of the transactions contemplated herein or in the other Loan Documents, and the Credit Parties shall have no responsibility or liability to any Loan Party with respect thereto.

(b) Each Loan Party further acknowledges and agrees, and acknowledges its Subsidiaries' understanding, that each Credit Party, together with its Affiliates, in addition to providing or participating in commercial lending facilities such as that provided hereunder, is a full service securities or banking firm engaged in securities trading and brokerage activities as well as providing investment banking and other financial services. In the ordinary course of business, any Credit Party may provide investment banking and other financial services to, and/or acquire, hold or sell, for its own accounts and the accounts of customers, equity, debt and other securities and financial instruments (including bank loans and other obligations) of, such Loan Party, its Subsidiaries and other companies with which such Loan Party or any of its Subsidiaries may have commercial or other relationships. With respect to any securities and/or financial instruments so held by any Credit Party or any of its customers, all rights in respect of such securities and financial instruments, including any voting rights, will be exercised by the holder of the rights, in its sole discretion.

(c) In addition, each Loan Party acknowledges and agrees, and acknowledges its Subsidiaries' understanding, that each Credit Party and its affiliates may be providing debt financing, equity capital or other services (including financial advisory services) to other companies in respect of which such Loan Party or any of its Subsidiaries may have conflicting interests regarding the transactions described herein and

otherwise. No Credit Party will use Information obtained from the Loan Party by virtue of the transactions contemplated by the Loan Documents or its other relationships with the Loan Party in connection with the performance by such Credit Party of services for other companies, and no Credit Party will furnish any such Information to other companies. Each Loan Party also acknowledges that no Credit Party has any obligation to use in connection with the transactions contemplated by the Loan Documents, or to furnish to such Loan Party or any of its Subsidiaries, confidential information obtained from other companies.

(d) For purposes of this Section 11.15, the term "Credit Party" shall be deemed to include, and shall include, the Sustainability Structuring Agent.

Section 11.16 *Acknowledgement Regarding Any Supported QFCs*. To the extent that the Loan Documents provide support, through a guarantee or otherwise, for Swap Agreements or any other agreement or instrument that is a QFC (such support "**QFC Credit Support**" and each such QFC a "**Supported QFC**"), the parties acknowledge and agree as follows with respect to the resolution power of the Federal Deposit Insurance Corporation under the Federal Deposit Insurance Act and Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (together with the regulations promulgated thereunder, the "**U.S. Special Resolution Regimes**") in respect of such Supported QFC and QFC Credit Support (with the provisions below applicable notwithstanding that the Loan Documents and any Supported QFC may in fact be stated to be governed by the laws of the State of New York and/or of the United States or any other state of the United States):

In the event a Covered Entity that is party to a Supported QFC (each, a "**Covered Party**") becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer of such Supported QFC and the benefit of such QFC Credit Support (and any interest and obligation in or under such Supported QFC and such QFC Credit Support, and any rights in property securing such Supported QFC or such QFC Credit Support) from such Covered Party will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if the Supported QFC and such QFC Credit Support (and any such interest, obligation and rights in property) were governed by the laws of the United States or a state of the United States. In the event a Covered Party or a BHC Act Affiliate of a Covered Party becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under the Loan Documents that might otherwise apply to such Supported QFC or any QFC Credit Support that may be exercised against such Covered Party are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if the Supported QFC and the Loan Documents were governed by the laws of the United States or a state of the United States. Without limitation of the foregoing, it is understood and agreed that rights and remedies of the parties with respect to a Defaulting Lender shall in no event affect the rights of any Covered Party with respect to a Supported QFC or any QFC Credit Support.

Section 11.17 *Right of Set-off*. If an Event of Default shall have occurred and be continuing and the maturity of the Loans has been accelerated under Article 6, each Lender and each of its Affiliates is hereby authorized at any time and from time to time, to the fullest extent permitted by law, to set-off and apply any and all deposits (general or special, time or demand, provisional or final, but excluding deposits held in a trustee, fiduciary, agency or similar capacity or otherwise for the benefit of a third party) at any time held and other obligations at any time owing by such Lender or Affiliate to or for the credit or the account of any Loan Party against any of and all the obligations of such Loan Party now or hereafter existing under this Agreement held by such Lender, irrespective of whether or not such Lender shall have made any demand under this Agreement and although such obligations may be unmatured. The rights of each Lender under this Section are in addition to other rights and remedies (including other rights of set-off) which such Lender may have. Each Lender and each Issuing Lender agrees to notify the Principal Borrower and the Administrative Agent promptly after any such setoff and application; provided that the failure to give such notice shall not affect the validity of such setoff and application.

Section 11.18 *Termination of the Commitments under the Existing Agreement*. Each of the signatories hereto that is also a party to the Existing Agreement hereby agrees that, on and as of the Closing Date, all of the "Commitments" (as defined in the Existing Agreement) will be terminated and cancelled automatically and any and all required notice periods in connection with such termination are hereby waived and of no further force and effect.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered by their respective authorized officers as of the day and year first above written.

JOHNSON CONTROLS INTERNATIONAL PLC,
as the Parent and as the Principal Borrower

By: /s/ Olivier Leonetti
Name: Olivier Leonetti
Title: Executive Vice President and Chief Financial Officer

By: /s/ Pieter Lens
Name: Pieter Lens
Title: Vice President and Treasurer

JPMORGAN CHASE BANK, N.A.,
as Administrative Agent, as a Lender and as an Issuing Lender

By: /s/ Will Price
Name: Will Price
Title: Vice President

London Office:

J.P. Morgan Europe Limited
Loans Agency 6th floor
25 Bank Street, Canary Wharf
London E 145JP
United Kingdom
Attention: Loans Agency
Facsimile: +44 20 7777 2360
Email: Graeme.Syme@chase.com
& loan_and_agency_London@jpmorgan.com

New York Office:

JPMorgan Chase Bank, N.A.
500 Stanton Christiana Road
OPS5 1st Floor
Newark, DE 19713
Attention: Kevin Campbell
Fax: 12012443577@tls.ldsprod.com
Email: kevin.c.campbell@chase.com

BANK OF AMERICA, N.A.,
as a Lender and as an Issuing Lender

By: /s/ Michael Contreras
Name: Michael Contreras
Title: Director

BARCLAYS BANK PLC,
as a Lender and as an Issuing Lender

By: /s/ Charlene Saldanha
Name: Charlene Saldanha
Title: Vice President

CITIBANK, N.A.,
as a Lender and as an Issuing Lender

By: /s/ Susan M. Olsen
Name: Susan M. Olsen
Title: Vice President

MORGAN STANLEY BANK, N.A.,
as a Lender and as an Issuing Lender

By: /s/ Michael King
Name: Michael King
Title: Authorized Signatory

MUFG BANK, LTD.,
as a Lender and as an Issuing Lender

By: /s/ Wolfgang Arbaczewski
Name: Wolfgang Arbaczewski
Title: Director

BANCO BILBAO VIZCAYA ARGENTARIA, S.A. NEW YORK BRANCH,
as a Lender

By: /s/ Cara Younger
Name: Cara Younger
Title: Managing Director

By: /s/ Armen Semizian
Name: Armen Semizian
Title: Managing Director

CREDIT AGRICOLE CORPORATE AND INVESTMENT BANK,
as a Lender

By: /s/ Jill Wong
Name: Jill Wong
Title: Director

By: /s/ Gordon Yip
Name: Gordon Yip
Title: Director

DEUTSCHE BANK AG NEW YORK BRANCH,
as a Lender

By: /s/ Ming K. Chu
Name: Ming K. Chu
Title: Director

By: /s/ Alison Lugo
Name: Alison Lugo
Title: Vice President

ING BANK N.V., DUBLIN BRANCH,
as a Lender

By: /s/ Cormac Langford
Name: Cormac Langford
Title: Director

By: /s/ Sean Hassett
Name: Sean Hassett
Title: Director

STANDARD CHARTERED BANK,
as a Lender

By: /s/ Kristopher Tracy
Name: Kristopher Tracy
Title: Director, Financing Solutions

THE TORONTO DOMINION BANK, NEW YORK BRANCH,
as a Lender

By: /s/ David Perlman
Name: David Perlman
Title: Authorized Signatory

UNICREDIT BANK AG, NEW YORK BRANCH,
as a Lender

By: /s/ Douglas Riahi
Name: Douglas Riahi
Title: Managing Director

By: /s/ Peter Daugavietis
Name: Peter Daugavietis
Title: Director

U.S. BANK NATIONAL ASSOCIATION,
as a Lender

By: /s/ Mark Irey
Name: Mark Irey
Title: Senior Vice President

AUSTRALIA AND NEW ZEALAND BANKNG GROUP LIMITED,
as a Lender

By: /s/ Wendy Tso
Name: Wendy Tso
Title: Director

CHINA MERCHANTS BANK CO., LTD., NEW YORK BRANCH,
as a Lender

By: /s/ Jie Hu
Name: Jie Hu
Title: Managing Director

By: /s/ Xin He
Name: Xin He
Title: Deputy General Manager

DANSKE BANK A/S,
as a Lender

By: /s/ Sean Lenihan
Name: Sean Lenihan
Title: Manager

By: /s/ Niall Garvey
Name: Niall Garvey
Title: Director

INDUSTRIAL AND COMMERCIAL BANK OF CHINA LIMITED, NEW YORK BRANCH,
as a Lender

By: /s/ Brian Monahan
Name: Brian Monahan
Title: Director

By: /s/ Pinyen Shih
Name: Pinyen Shih
Title: Executive Director

THE BANK OF NEW YORK MELLON,
as a Lender

By: /s/ Tak Cheng
Name: Tak Cheng
Title: Vice President

COMMITMENT SCHEDULE

Lender	Commitment
Total Commitments	**$ 2,500,000,000**
JPMorgan Chase Bank, N.A.	$225,000,000
Bank of America, N.A.	$225,000,000
Barclays Bank PLC	$225,000,000
Citibank, N.A.	$225,000,000
Morgan Stanley Bank, N.A.	$112,500,000
MUFG Bank, Ltd.	$112,500,000
Banco Bilbao Vizcaya Argentaria, S.A. New York Branch	$125,000,000
Credit Agricole Corporate and Investment Bank	$125,000,000
Deutsche Bank AG New York Branch	$125,000,000
ING Bank N.V., Dublin Branch	$125,000,000
Standard Chartered Bank	$125,000,000
The Toronto Dominion Bank, New York Branch	$125,000,000
UniCredit Bank AG, New York Branch	$125,000,000
U.S. Bank National Association	$125,000,000
Australia and New Zealand Banking Group Limited	$75,000,000
China Merchants Bank Co., Ltd., New York Branch	$75,000,000
Danske Bank A/S	$75,000,000
Industrial and Commercial Bank of China Limited, New York Branch	$75,000,000
The Bank of New York Mellon	$75,000,000

PRICING SCHEDULE

Each of "**Facility Fee Rate**", "**Term Benchmark Margin**", "**RFR Margin**" and "**Base Rate Margin**" means, for any day, the rate set forth below, in basis points per annum, in the row opposite such term and in the column corresponding to the Pricing Level that applies for such day:

	LEVEL I	LEVEL II	LEVEL III	LEVEL IV	LEVEL V
Facility Fee Rate	7.0	9.0	10.0	12.5	17.5
Term Benchmark Margin	80.5	91.0	102.5	112.5	120.0
RFR Margin	80.5	91.0	102.5	112.5	120.0
Base Rate Margin	0.0	0.0	2.5	12.5	20.0

For purposes of this Schedule, the following terms have the following meanings, subject to the concluding paragraph of this Schedule:

"**Fitch**" means Fitch, Inc.

"**Level I**" status exists at any date if, at such date, the Credit Rating is A or higher by S&P or A2 or higher by Moody's or A or higher by Fitch.

"**Level II**" status exists at any date if, at such date, (i) Level I status does not exist and (ii) the Credit Rating is A- or higher by S&P or A3 or higher by Moody's or A- or higher by Fitch.

"**Level III**" status exists at any date if, at such date, (i) neither Level I status nor Level II status exists and (ii) the Credit Rating is BBB+ or higher by S&P or Baa1 or higher by Moody's or BBB+ or higher by Fitch.

"**Level IV**" status exists at any date if, at such date, (i) none of Level I status, Level II status or Level III status exists and (ii) the Credit Rating is BBB or higher by S&P or Baa2 or higher by Moody's or BBB or higher by Fitch.

"**Level V**" status exists at any date if, at such date, no other Pricing Level status exists.

"**Moody's**" means Moody's Investors Service, Inc.

"**Pricing Level**" refers to the determination of which of Level I, Level II, Level III, Level IV or Level V status exists at any date.

"**S&P**" means Standard & Poor's Ratings Services, a division of McGraw-Hill Financial, Inc.

"**Credit Rating**" means the rating assigned to the Principal Borrower's senior unsecured long-term debt.

If any Credit Rating established or deemed to have been established by Fitch, Moody's or S&P shall be changed (other than as a result of a change in the rating system of Fitch, Moody's or S&P), such change shall be effective as of the date which is three (3) Business Days after the date on which it is first announced by the applicable rating agency, irrespective of when notice of such change shall have been furnished by the Principal Borrower to the Administrative Agent and the Lenders. If the Principal Borrower is split-rated and the ratings differential between the highest rating and the next highest rating is one notch, the highest of the ratings will apply. If the Principal Borrower is split-rated and the ratings differential between the highest rating and the next highest rating is more than one notch, a rating that is one notch lower than the highest of the ratings shall be used. In the event that the Principal Borrower does not have a Credit Rating by any two of S&P, Moody's or Fitch, then Level V shall apply.

It is hereby understood and agreed that (i) the Facility Fee Rate shall be adjusted from time to time based upon the Sustainability Fee Adjustment and (ii) each of the Term Benchmark Margin, the RFR Margin and the Base Rate Margin (collectively the "**Applicable Margins**") shall be adjusted from time to time based upon the Sustainability Margin Adjustment, in each case as calculated and applied as set forth in this Agreement (including this Pricing Schedule); provided that in no event shall any of the Facility Fee Rate or any Applicable Margin be less than zero (0.0) basis points per annum.

Notwithstanding anything to the contrary herein, until the delivery of (or failure to deliver) the Pricing Certificate delivered in respect of the Reference Year ending September 30, 2024 pursuant to Section 5.01(g), (i) the Sustainability Fee Adjustment shall be 0.0 bps and there shall be no Sustainability Fee Adjustment to the Facility Fee Rate and (ii) the Sustainability Margin Adjustment shall be 0.0 bps and there shall be no Sustainability Margin Adjustment to the Applicable Margins.

Effective as of the fifth Business Day following receipt by the Administrative Agent of a Pricing Certificate delivered pursuant to 5.01(g) (such day, the **"Sustainability Pricing Adjustment Date"**) in respect of the most recently ended Reference Year, commencing with the Reference Year ending September 30, 2024 and ending with the Reference Year ending September 30, 2027, (i) the Applicable Margins shall be increased or decreased (or neither increased nor decreased), as applicable, pursuant to the Sustainability Margin Adjustment as set forth in such Pricing Certificate, and (ii) the Facility Fee Rate shall be increased or decreased (or neither increased nor decreased), as applicable, pursuant to the Sustainability Fee Adjustment as set forth in such Pricing Certificate. Each change in the Applicable Margins and the Facility Fee Rate resulting from a Pricing Certificate shall be effective during the period commencing on and including the applicable Sustainability Pricing Adjustment Date and ending on the date immediately preceding the next such Sustainability Pricing Adjustment Date. It is hereby understood and agreed that, notwithstanding anything to the contrary set forth in this Agreement, the Sustainability Pricing Adjustment Date occurring in 2028 as a result of the delivery of the Pricing Certificate pursuant to Section 5.01(g) (or the non-delivery of such Pricing Certificate or such Pricing Certificate being incomplete as set forth in the second succeeding paragraph) in respect of the Reference Year ending September 30, 2027 shall be the last Sustainability Pricing Adjustment Date under this Agreement, and the Sustainability Margin Adjustment and the Sustainability Fee Adjustment (in each case, whether a negative adjustment, a zero bps adjustment or a positive adjustment, including, for the avoidance of doubt due to the application of the provisions of the second succeeding paragraph) that take effect on such Sustainability Pricing Adjustment Date shall remain in effect until the one year anniversary of such Sustainability Pricing Adjustment Date and shall cease to apply after such anniversary date, and no further Sustainability Pricing Adjustment Date shall occur, and no further Sustainability Margin Adjustment or Sustainability Fee Adjustment shall apply or be in effect, after such anniversary date.

For the avoidance of doubt, only one Pricing Certificate may be delivered in respect of any Reference Year and any adjustment to the Applicable Margins or the Facility Fee Rate by reference to any of the KPI Metrics in any year shall not be cumulative year-over-year. Each applicable adjustment shall only apply until the date on which the next adjustment is to occur. It is further understood and agreed that the Applicable Margin will never be reduced or increased by more than 4.25 bps and that the Facility Fee Rate will never be reduced or increased by more than 0.75 bps, pursuant to the Sustainability Margin Adjustment and the Sustainability Fee Adjustment, respectively, during any Reference Year; provided that, and notwithstanding anything to the contrary in this Agreement (including any provision of Section 11.05 requiring the consent of "each Lender directly and adversely affected thereby" for reductions in interest rates), the definitions of the KPI Metrics and the definitions that are used to calculate the Sustainability Margin Adjustment and the Sustainability Fee Adjustment and the Sustainability Table may be amended or otherwise modified with the consent of the Parent, the Administrative Agent, the Sustainability Structuring Agent and the Required Lenders; provided, however, for the avoidance of doubt, any changes to the Applicable Margin pursuant to any Sustainability Margin Adjustment and the Facility Fee Rate pursuant to the Sustainability Fee Adjustment in excess of the amounts set forth above shall be subject to the consent of "each Lender directly and adversely affected thereby" in accordance with Section 11.05.

In the event the Parent does not deliver a Pricing Certificate within the period set forth in 5.01(g) or any Pricing Certificate shall be incomplete and fail to satisfy the requirements set forth in the definition of "Pricing Certificate" (including the failure to set forth the Sustainability Margin Adjustment and the Sustainability Fee Adjustment and calculations in reasonable detail of the KPI Metrics, in each case, for the applicable Reference Year), the Sustainability Margin Adjustment will be positive 4.25 bps and the Sustainability Fee Adjustment will be positive 0.75 bps commencing on the fifth Business Day following the last day such Pricing Certificate should have been delivered pursuant to the terms of Section 5.01(g) and continuing until the fifth Business Day following receipt by the Administrative Agent of a complete Pricing Certificate for such Reference Year.

If (i)(A) the Administrative Agent becomes aware of any material inaccuracy in the Sustainability Margin Adjustment, the Sustainability Fee Adjustment or the KPI Metrics as reported in any Pricing Certificate (any such material inaccuracy, a **"Pricing Certificate Inaccuracy"**) and the Administrative Agent notifies the Parent thereof, or (B) any Lender becomes aware of any Pricing Certificate Inaccuracy and such Lender delivers a written notice to the Administrative Agent describing such Pricing Certificate Inaccuracy in reasonable detail (which description the Administrative Agent shall promptly share with the Parent), or (C) the Parent becomes aware of a Pricing Certificate Inaccuracy and delivers notice thereof to the Administrative Agent, and (ii) a proper calculation of the Sustainability Margin Adjustment, the Sustainability Fee Adjustment or the KPI Metrics would have resulted in no adjustment or an increase in the Applicable Margins or Facility Fee Rate for any applicable period, (x) commencing on the fifth Business Day following delivery of a corrected Pricing Certificate to the Administrative Agent, the Applicable Margins and Facility Fee Rate shall be adjusted to reflect such corrected calculations of the Sustainability Margin Adjustment and the Sustainability Fee Adjustment and (y) the Parent shall be obligated to pay to the Administrative Agent for the account of the applicable Lenders or the applicable Issuing Lenders, as the case may be, promptly on demand by the Administrative Agent (or, after the occurrence of an actual or deemed entry of an order for relief with respect to any Borrower under any Debtor Relief Laws, automatically and without further action by the Administrative Agent, any Lender or any Issuing Lender), but in any event within ten (10) Business Days after the Parent has received written notice of, or has determined that there was, a Pricing Certificate Inaccuracy, an amount equal to the excess of (1) the amount of interest and fees that should have been paid for such period over (2) the amount of interest and fees actually paid for such period. It is understood and agreed that any Pricing Certificate Inaccuracy shall not constitute a Default or Event of Default or otherwise result in the failure of any condition precedent to any Borrowing or the issuance, extension or increase of any Letter of Credit; provided, that, the Parent complies

with the terms of this paragraph with respect to such Pricing Certificate Inaccuracy. Notwithstanding anything to the contrary herein, unless such amounts shall be due upon the occurrence of an actual or deemed entry of an order for relief with respect to any Borrower under any Debtor Relief Laws, (x) any additional amounts required to be paid pursuant to this paragraph shall not be due and payable until the earlier to occur of (I) a written demand is made for such payment by the Administrative Agent in accordance with this paragraph or (II) ten (10) Business Days after the Parent has received written notice of, or has determined that there was, a Pricing Certificate Inaccuracy (such earlier date, the **"Certificate Inaccuracy Payment Date"**), (y) any nonpayment of such additional amounts prior to the Certificate Inaccuracy Payment Date shall not constitute a Default or Event of Default or otherwise result in the failure of any condition precedent to any Borrowing or the issuance, extension or increase of any Letter of Credit (whether retroactively or otherwise) and (z) none of such additional amounts shall be deemed overdue prior to the Certificate Inaccuracy Payment Date or shall accrue interest at the default rate pursuant to Section 2.06(d) prior to the Certificate Inaccuracy Payment Date.

If, after the date hereof, there occurs any Sustainability Recalculation Event, and either (i) the Parent notifies the Administrative Agent in writing that the Parent requests an amendment to any provision on this Agreement to eliminate, accommodate or otherwise take into account the effect of such Sustainability Recalculation Event, or (ii) the Administrative Agent notifies the Parent that the Required Lenders request an amendment to any provision or provisions of this Agreement for such purpose (it being understood and agreed that any such notice may be given before or after such Sustainability Recalculation Event has occurred), then (A) the Parent, the Administrative Agent and the Sustainability Structuring Agent shall negotiate in good faith to amend the provisions hereof to eliminate, accommodate or otherwise take into account the effect of such Sustainability Recalculation Event for the period from and after the occurrence of such Sustainability Recalculation Event, and (B) the provisions of this Agreement shall be interpreted on the basis of the provisions in effect and applied immediately prior to such Sustainability Recalculation Event for a period of not more than 60 days (unless the provisions hereof shall have been amended in accordance herewith or such notice shall have been withdrawn). If, after 60 days following any such notice, the consent of the Parent, the Administrative Agent, the Sustainability Structuring Agent and the requisite Lenders under Section 11.05 has not been obtained, there will cease to be any Sustainability Margin Adjustment and any Sustainability Fee Adjustment until such time as the parties hereto can agree upon any such adjustments in accordance with the terms hereof, and (ii) for the period thereafter, (A) any pricing adjustment pursuant to clause (i) shall cease and (B) no party to this Agreement shall, without the prior written consent of the Administrative Agent, the Sustainability Structuring Agent and the Parent, make any public or private representations or description of the credit facility described in this Agreement as a sustainability-linked loan. For purposes of this paragraph, **"Sustainability Recalculation Event"** means (i) any acquisition, disposition, merger or similar transaction or series of related transactions consummated by the Parent and its Subsidiaries whereby, as a result of the consummation of such transaction or series of related transactions, any of the baselines of the KPI Metrics would reasonably be expected to be (as determined in good faith by the Parent), or shall be, increased or decreased by 5% or more (on a consolidated basis) as compared to the KPI Metrics in effect immediately prior to the consummation of such transaction or (ii) any Change in Law applicable to any party hereto the result of which shall (A) prohibit or materially modify any sustainability calculation hereunder or cause any other violation of any sustainability provision hereunder, or impose or materially modify any reporting obligation in respect thereof, (B) cause the Parent to fail to attain or maintain any KPI Metric or target or threshold with respect thereto or (C) prohibit or otherwise directly limit such party's ability to make or maintain the Loans hereunder after applying the sustainability provisions hereunder.

SCHEDULE 1.01
SUSTAINABILITY TABLE

KPI Metrics		Baseline	Annual Sustainability Targets and Thresholds				
			RY2024	RY2025	RY2026	RY2027	
Scope 1 and 2 GHG Emissions		**623,439**	≤ 585,722	≤ 567,728	≤ 550,287	≤ 533,381	**Scope 1 and 2 GHG Emissions Target A**
			> 603,716	> 585,169	> 567,192	> 549,767	**Scope 1 and 2 GHG Emissions Threshold A**
Total Water Withdrawals in Water-Stressed Locations		**294,011**	≤ 275,766	≤ 267,073	≤ 258,654	≤ 250,500	**Total Water Withdrawals in Water-Stressed Locations Target B**
			> 284,460	> 275,492	> 266,808	> 258,397	**Total Water Withdrawals in Water-Stressed Locations Threshold B**
Diverse Supplier Spend	*Nominal increase in Diverse Supplier Spend*	**420**	≥ 554	≥ 636	≥ 731	≥ 840	**Diverse Supplier Spend Target C**
			< 537	< 617	< 709	< 815	**Diverse Supplier Spend Threshold C**
	Increase in the Diverse Supplier Spend versus total revenue growth	**N/A**	Yes	Yes	Yes	Yes	**N/A**
			No	No	No	No	**N/A**

SCHEDULE 2.19
LETTER OF CREDIT FRONTING SUBLIMIT

Issuing Lender	**Letter of Credit Fronting Sublimit**
Total Letter of Credit Fronting Sublimit	**$ 300,000,000**
JPMorgan Chase Bank, N.A.	$60,000,000
Bank of America, N.A.	$60,000,000
Barclays Bank PLC	$60,000,000
Citibank, N.A.	$60,000,000
MUFG Bank, Ltd.	$30,000,000
Morgan Stanley Bank, N.A.	$30,000,000

SCHEDULE 5.08

EXISTING LIENS

None.

EXHIBIT A
Form of Note

NOTE

New York, New York
_____ __, ____

For value received, <NAME OF RELEVANT BORROWER>, a <RELEVANT BORROWER'S JURISDICTION OF FORMATION> <TYPE OF ENTITY> (the "**Borrower**"), promises to pay to _____ (the "**Lender**"), for the account of its Applicable Lending Office, the unpaid principal amount of each Loan made by the Lender to the Borrower pursuant to the Credit Agreement referred to below on the date provided for in the Credit Agreement. The Borrower promises to pay interest on the unpaid principal amount of each such Loan on the dates and at the rate or rates provided for in the Credit Agreement. All such payments of principal and interest shall be made (i) if in Dollars, in lawful money of the United States in Federal or other immediately available funds at the office of JPMorgan Chase Bank, at 383 Madison Avenue, New York, New York or (ii) if in an Alternative Currency, in such funds as may then be customary for the settlement of international transactions in such Alternative Currency at the place specified for payment thereof pursuant to the Credit Agreement.

All Loans made by the Lender, the respective types and maturities thereof and all repayments of the principal thereof shall be recorded by the Lender and, if the Lender so elects in connection with any transfer or enforcement hereof, appropriate notations to evidence the foregoing information with respect to each such Loan then outstanding may be endorsed by the Lender on the schedule attached hereto, or on a continuation of such schedule attached to and made a part hereof; provided that the failure of the Lender to make any such recordation or endorsement shall not affect the obligations of the Borrower hereunder or under the Credit Agreement.

This note is one of the Notes referred to in the Credit Agreement dated as of December 11, 2023 among the Principal Borrower, the Eligible Subsidiaries referred to therein, the Lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent (as amended, amended and restated, supplemented, waived or otherwise modified from time to time, the "**Credit Agreement**"). Terms defined in the Credit Agreement are used herein with the same meanings. Reference is made to the Credit Agreement for provisions for the prepayment hereof and the acceleration of the maturity hereof.

The payment in full of the principal and interest on this note has, pursuant to the provisions of the Credit Agreement, been unconditionally guaranteed by the Parent.

This Note shall be governed by and construed in accordance with the laws of the State of New York. For the avoidance of doubt, the provisions of articles 470-1 to 470-19 of the Luxembourg act dated 10 August 1915 on commercial companies, as amended, shall not be applicable to this note.

<NAME OF RELEVANT BORROWER>

By: ____
Name:
Title:

LOANS AND PAYMENTS OF PRINCIPAL

Date	Amount of Loan	Type of Loan	Amount of Principal Repaid	Notation	Made By

EXHIBIT B
Form of Increasing Lender Supplement

INCREASING LENDER SUPPLEMENT, dated _____, 20___ (this "Supplement"), by and among each of the signatories hereto, to the Credit Agreement dated as of December 11, 2023 among the Principal Borrower, the Eligible Subsidiaries referred to therein, the Lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent (as amended, amended and restated, supplemented, waived or otherwise modified from time to time, the "**Credit Agreement**").

W I T N E S S E T H

WHEREAS, pursuant to Section 2.20 of the Credit Agreement, the Principal Borrower has the right, subject to the terms and conditions thereof, to effectuate from time to time an increase in the Commitments and/or enter into one or more tranches of Incremental Term Loans under the Credit Agreement by requesting one or more Lenders to increase the amount of its Commitment and/or to participate in such a tranche;

WHEREAS, the Principal Borrower has given notice to the Administrative Agent of its intention to [increase the Commitments] [and] [enter into a tranche of Incremental Term Loans] pursuant to such Section 2.20; and

WHEREAS, pursuant to Section 2.20 of the Credit Agreement, the undersigned Increasing Lender now desires to [increase the amount of its Commitment] [and] [participate in a tranche of Incremental Term Loans] under the Credit Agreement by executing and delivering to the Principal Borrower and the Administrative Agent this Supplement;

NOW, THEREFORE, each of the parties hereto hereby agrees as follows:

1. The undersigned Increasing Lender agrees, subject to the terms and conditions of the Credit Agreement, that on the date of this Supplement it shall [have its Commitment increased by $[_____], thereby making the aggregate amount of its total Commitments equal to $[_____]] [and] [participate in a tranche of Incremental Term Loans with a commitment amount equal to $[_____] with respect thereto].

2. Capitalized definitional terms used but not defined herein shall have the meanings given to them in the Credit Agreement.

3. This Supplement shall be governed by, and construed in accordance with, the laws of the State of New York.

4. This Supplement may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same document.

IN WITNESS WHEREOF, each of the undersigned has caused this Supplement to be executed and delivered by a duly authorized officer on the date first above written.

[remainder of this page intentionally left blank]

[INSERT NAME OF INCREASING LENDER]

By:_____
Name:
Title:

Accepted and agreed to as of the date first written above:

JOHNSON CONTROLS INTERNATIONAL PLC

By:_____
Name:
Title:

Acknowledged and agreed as of the date first written above:

JPMORGAN CHASE BANK, N.A.
as Administrative Agent

By:_____
Name:
Title:

EXHIBIT C
Form of New Lender Supplement

NEW LENDER SUPPLEMENT, dated _____, 20___ (this "Supplement"), by and among each of the signatories hereto, to the Credit Agreement dated as of December 11, 2023 among the Principal Borrower, the Eligible Subsidiaries referred to therein, the Lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent (as amended, amended and restated, supplemented, waived or otherwise modified from time to time, the "**Credit Agreement**").

W I T N E S S E T H

WHEREAS, the Credit Agreement provides in Section 2.20 thereof that any bank, financial institution or other entity may [extend Commitments] [and] [participate in tranches of Incremental Term Loans] under the Credit Agreement subject to the approval of the Principal Borrower, the Administrative Agent and, in the case of an increase in the Commitments, each Issuing Lender, by executing and delivering to the Principal Borrower and the Administrative Agent a supplement to the Credit Agreement in substantially the form of this Supplement; and

WHEREAS, the undersigned New Lender was not an original party to the Credit Agreement but now desires to become a party thereto;

NOW, THEREFORE, each of the parties hereto hereby agrees as follows:

1. The undersigned New Lender agrees to be bound by the provisions of the Credit Agreement and agrees that it shall, on the date of this Supplement, become a Lender for all purposes of the Credit Agreement to the same extent as if originally a party thereto, with a [Commitment with respect to Loans of $[_____]] [and] [a commitment with respect to Incremental Term Loans of $[_____]].

2. The undersigned New Lender (a) represents and warrants that it is legally authorized to enter into this Supplement; (b) confirms that it has received a copy of the Credit Agreement, together with copies of the most recent financial statements delivered or made available pursuant to Section 5.01 thereof, as applicable, and has reviewed such other documents and information as it has deemed appropriate to make its own credit analysis and decision to enter into this Supplement; (c) agrees that it will, independently and without reliance upon the Administrative Agent or any other Lender and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Credit Agreement, any other Loan Document or any other instrument or document furnished pursuant hereto or thereto; (d) appoints and authorizes the Administrative Agent to take such action as agent on its behalf and to exercise such powers and discretion under the Credit Agreement, any other Loan Document or any other instrument or document furnished pursuant hereto or thereto as are delegated to the Administrative Agent by the terms thereof, together with such powers as are incidental thereto; and (e) agrees that it will be bound by the provisions of the Credit Agreement and any other Loan Document to which it is a party and will perform in accordance with its terms all the obligations which by the terms of the Credit Agreement or any other Loan Document are required to be performed by it as a Lender.

3. The undersigned's address for notices for the purposes of the Credit Agreement is as follows:

[_____]

4. Capitalized definitional terms used but not defined herein shall have the meanings given to them in the Credit Agreement.

5. This Supplement shall be governed by, and construed in accordance with, the laws of the State of New York.

6. This Supplement may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same document.

[remainder of this page intentionally left blank]

IN WITNESS WHEREOF, each of the undersigned has caused this Supplement to be executed and delivered by a duly authorized officer on the date first above written.

[INSERT NAME OF NEW LENDER]

By:_____
Name:
Title:

Accepted and agreed to as of the date first written above:

JOHNSON CONTROLS INTERNATIONAL PLC

By:_____
Name:
Title:

Acknowledged and agreed as of the date first written above:

JPMORGAN CHASE BANK, N.A.
as Administrative Agent

By:_____
Name:
Title:

[ISSUING LENDERS]

By:_____
Name:
Title:

EXHIBIT D
Form of Election to Participate

_____, 20___

JPMORGAN CHASE BANK, N.A.
as Administrative Agent for the
Lenders named in the Credit
Agreement dated as of December 11, 2023
among the Principal Borrower,
the Eligible Subsidiaries referred to
therein, the Lenders party thereto and
the Administrative Agent
(as amended, amended and restated, supplemented, waived or otherwise
modified from time to time, the "**Credit Agreement**")

Dear Sirs:

Reference is made to the Credit Agreement described above. Terms not defined herein which are defined in the Credit Agreement shall have for the purposes hereof the meaning provided therein.

The undersigned, <NAME OF ELIGIBLE SUBSIDIARY>, a <JURISDICTION OF FORMATION> <TYPE OF ENTITY>, hereby elects to be an Eligible Subsidiary for purposes of the Credit Agreement, effective from the date hereof until an Election to Terminate shall have been delivered on behalf of the undersigned in accordance with the Credit Agreement. The undersigned confirms that the representations and warranties set forth in Article 9 of the Credit Agreement are true and correct as to the undersigned as of the date hereof, and the undersigned hereby agrees to perform all the obligations of an Eligible Subsidiary under, and to be bound in all respects by the terms of, the Credit Agreement, including without limitation Section 11.08 thereof, as if the undersigned were a signatory party thereto.

[Tax disclosure pursuant to Section 9.04]

The address to which all notices to the undersigned under the Credit Agreement should be directed is:

This instrument shall be governed by and construed in accordance with and the laws of the State of New York.

Very truly yours,

<NAME OF ELIGIBLE SUBSIDIARY>

By: ____
Name:
Title:

The undersigned hereby confirms that <NAME OF ELIGIBLE SUBSIDIARY> is an Eligible Subsidiary for purposes of the Credit Agreement described above.

JOHNSON CONTROLS INTERNATIONAL PLC

By: ____
Name:
Title:

Receipt of the above Election to Participate is hereby acknowledged on and as of the date set forth above.

JPMORGAN CHASE BANK, N.A.,
as Administrative Agent

By: ____
Name:
Title:

EXHIBIT E
Form of Election to Terminate

_____, 20___

JPMORGAN CHASE BANK, N.A.
as Administrative Agent for the
Lenders named in the Credit
Agreement dated as of December 11, 2023
among the Principal Borrower,
the Eligible Subsidiaries referred to
therein, the Lenders party thereto and
the Administrative Agent
(as amended, amended and restated, supplemented, waived or otherwise
modified from time to time, the "**Credit Agreement**")

Dear Sirs:

Reference is made to the Credit Agreement described above. Terms not defined herein which are defined in the Credit Agreement shall have for the purposes hereof the meaning provided therein.

The undersigned, <NAME OF ELIGIBLE SUBSIDIARY>, a <JURISDICTION OF FORMATION> <TYPE OF ENTITY>, hereby elects to terminate its status as an Eligible Subsidiary for purposes of the Credit Agreement, effective as of the date hereof. The undersigned Subsidiary hereby represents and warrants that all principal and interest on all Notes of the undersigned Subsidiary and all other amounts payable by the undersigned Subsidiary pursuant to the Credit Agreement have been paid in full on or prior to the date hereof. Notwithstanding the foregoing, this Election to Terminate shall not affect any obligation of the undersigned Subsidiary under the Credit Agreement or under any Note heretofore incurred.

This instrument shall be governed by and construed in accordance with the laws of the State of New York.

Very truly yours,

<NAME OF ELIGIBLE SUBSIDIARY>

By: ____
Name:
Title:

The undersigned hereby confirms that the status of <NAME OF ELIGIBLE SUBSIDIARY> as an Eligible Subsidiary for purposes of the Credit Agreement described above is terminated as of the date hereof.

JOHNSON CONTROLS INTERNATIONAL PLC

By: ____
Name:
Title:

Receipt of the above Election to Terminate is hereby acknowledged on and as of the date set forth above.

JPMORGAN CHASE BANK, N.A.,
as Administrative Agent

By: ____
Name:
Title:

EXHIBIT F
Form of Qualifying Lender Confirmation

JPMorgan Chase Bank, N.A.,
500 Stanton Christiana Road
NCC5 / 1st Floor
Newark, DE 19713
Attention: Loan & Agency Services Group

Re: Johnson Controls International plc

Ladies and Gentlemen:

The undersigned refers to the Credit Agreement dated as of December 11, 2023 among the Principal Borrower, the Eligible Subsidiaries referred to therein, the Lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent (as amended, amended and restated, supplemented, waived or otherwise modified from time to time, the "**Credit Agreement**") and hereby confirms, as at the date of this Confirmation, that it is:

☐ not a Qualifying Lender.

☐ a Qualifying Lender within paragraph [__] of the definition of Qualifying Lender in the Credit Agreement.

Signed on behalf of
[NAME OF LENDER OR PARTICIPANT]

By: _____
Name:
Title:

EXHIBIT G
Form of Assignment and Assumption Agreement

AGREEMENT dated as of _____, 20___ between <NAME OF ASSIGNOR> (the "**Assignor**") and <NAME OF ASSIGNEE> (the "**Assignee**").

WHEREAS, this Assignment and Assumption Agreement (the "**Agreement**") relates to the Credit Agreement dated as of December 11, 2023 among the Principal Borrower, the Eligible Subsidiaries referred to therein, the Assignor and the other Lenders thereto, as Lenders, and JPMorgan Chase Bank, N.A., as Administrative Agent (the "**Administrative Agent**") (as amended, amended and restated, supplemented, waived or otherwise modified from time to time, the "**Credit Agreement**");

WHEREAS, as provided under the Credit Agreement, the Assignor has a Commitment to make Loans and participate in Letters of Credit in an aggregate Dollar Amount at any time outstanding not to exceed $___,000,000;

WHEREAS, Loans made to the Borrowers by the Assignor under the Credit Agreement in the aggregate Dollar Amount of $_____ are outstanding at the date hereof;

WHEREAS, Letters of Credit with a total Dollar Amount available for drawing thereunder of $_____ are outstanding at the date hereof; and

WHEREAS, the Assignor proposes to assign to the Assignee all of the rights of the Assignor under the Credit Agreement in respect of a portion of its Commitment thereunder in an amount equal to $_____ (the "**Assigned Loan Amount**"), together with a corresponding portion of its outstanding Loans and Letter of Credit Liabilities, and the Assignee proposes to accept assignment of such rights and assume the corresponding obligations from the Assignor on such terms;

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements contained herein, the parties hereto agree as follows:

SECTION 1. *Definitions*. All capitalized terms not otherwise defined herein shall have the respective meanings set forth in the Credit Agreement.

SECTION 2. *Assignment*. The Assignor hereby assigns and sells to the Assignee all of the rights of the Assignor under the Credit Agreement to the extent of the Assigned Loan Amount, and the Assignee hereby accepts such assignment from the Assignor and assumes all of the obligations of the Assignor under the Credit Agreement to the extent of the Assigned Loan Amount, including the purchase from the Assignor of the corresponding portion of the principal amount of the Loans made by, and Letter of Credit Liabilities of, the Assignor outstanding at the date hereof. Upon the execution and delivery hereof by the Assignor, the Assignee and the Principal Borrower and the payment of the amounts specified in Section 3 required to be paid on the date hereof (i) the Assignee shall, as of the date hereof, succeed to the rights and be obligated to perform the obligations of a Lender under the Credit Agreement with a Commitment in an amount equal to the Assigned Loan Amount, and (ii) the Commitment of the Assignor shall, as of the date hereof, be reduced by a like amount and the Assignor released from its obligations under the Credit Agreement to the extent such obligations have been assumed by the Assignee. The assignment provided for herein shall be without recourse to the Assignor and without any representations or warranties of any kind, except that the Assignor is the legal and beneficial owner of the interest being

assigned by it hereunder and that such interest is free and clear of any adverse claim created by the Assignor.

SECTION 3. *Payments*. As consideration for the assignment and sale contemplated in Section 2 hereof, the Assignee shall pay to the Assignor on the date hereof in Federal funds the amount heretofore agreed between them.[1] It is understood that facility fees and Letter of Credit fees accrued to the date hereof in respect of the Assigned Loan Amount are for the account of the Assignor and such fees accruing from and including the date hereof are for the account of the Assignee. Each of the Assignor and the Assignee hereby agrees that if it receives any amount under the Credit Agreement which is for the account of the other party hereto, it shall receive the same for the account of such other party to the extent of such other party's interest therein and shall promptly pay the same to such other party.

SECTION 4. *Consent of the Principal Borrower*. This Agreement is conditioned upon the consent of [the Principal Borrower,] the Administrative Agent and each Issuing Lender pursuant to Section 11.06(c) of the Credit Agreement. The execution of this Agreement by them is evidence of this consent. In accordance with Section 2.04 and Section 11.06(c), the Principal Borrower, if requested by the Assignee, shall execute and deliver a Note, and shall cause each Eligible Subsidiary to execute and deliver a Note, payable to the Assignee to evidence the assignment and assumption provided for herein.

SECTION 5. *Non-reliance on Assignor*. The Assignor makes no representation or warranty in connection with, and shall have no responsibility with respect to, the solvency, financial condition, or statements of any Borrower, or the validity and enforceability of the obligations of any Borrower in respect of the Credit Agreement or any Note. The Assignee acknowledges that it has, independently and without reliance on the Assignor, and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement and will continue to be responsible for making its own independent appraisal of the business, affairs and financial condition of the Borrowers.

SECTION 6. *Representations and Warranties*.

6.1 Assignor. The Assignor (a) represents and warrants that (i) it is the legal and beneficial owner of the Assigned Interest, (ii) the Assigned Interest is free and clear of any lien, encumbrance or other adverse claim and (iii) it has full power and authority, and has taken all action necessary, to execute and deliver this Agreement and to consummate the transactions contemplated hereby; and (b) assumes no responsibility with respect to (i) any statements, warranties or representations made in or in connection with the Credit Agreement or any other Loan Document, (ii) the execution, legality, validity, enforceability, genuineness, sufficiency or value of the Loan Documents thereunder, (iii) the financial condition of the Borrowers, any of their Subsidiaries or Affiliates or any other Person obligated in respect of any Loan Document, (iv) any requirements under applicable law for the Assignee to become a Lender under the Credit Agreement or to charge interest at the rate set forth therein from time to time or (v) the performance or observance by the Borrowers, any of their Subsidiaries or Affiliates or any other Person of any of their respective obligations under any Loan Document.

6.2 Assignee. The Assignee (a) represents and warrants that (i) it has full power and authority, and has taken all action necessary, to execute and deliver this Agreement and to consummate the transactions contemplated hereby and to become a Lender under the Credit Agreement,

[1] Amount should combine principal together with accrued interest and breakage compensation, if any, to be paid by the Assignee, net of any portion of any upfront fee to be paid by the Assignor to the Assignee. It may be preferable in an appropriate case to specify these amounts generically or by formula rather than as a fixed sum.

(ii) it satisfies the requirements, if any, specified in the Credit Agreement that are required to be satisfied by it in order to acquire the Assigned Interest and become a Lender, (iii) from and after the Closing Date, it shall be bound by the provisions of the Credit Agreement as a Lender thereunder and, to the extent of the Assigned Interest, shall have the obligations of a Lender thereunder, (iv) it is sophisticated with respect to decisions to acquire assets of the type represented by the Assigned Interest and either it, or the Person exercising discretion in making its decision to acquire the Assigned Interest, is experienced in acquiring assets of such type, (v) it has received a copy of the Credit Agreement, together with copies of the most recent financial statements delivered pursuant to Section 5.01 thereof, as applicable, and such other documents and information as it has deemed appropriate to make its own credit analysis and decision to enter into this Agreement and to purchase the Assigned Interest on the basis of which it has made such analysis and decision independently and without reliance on the Administrative Agent, any arrangers or any other Lender and their respective Related Parties, and (vi) attached to the Agreement is any documentation required to be delivered by it pursuant to the terms of the Credit Agreement (including Section 8.04 thereof), duly completed and executed by the Assignee; and (b) agrees that (i) it will, independently and without reliance on the Administrative Agent, any arranger, the Assignor or any other Lender and their respective Related Parties, and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Loan Documents, and (ii) it will perform in accordance with their terms all of the obligations which by the terms of the Loan Documents are required to be performed by it as a Lender. Without limiting the foregoing, the Assignee represents and warrants, and agrees to, each of the matters set forth in Section 7.07 of the Credit Agreement, including that the Loan Documents set out the terms of a commercial lending facility.

SECTION 7. *Governing Law*. This Agreement shall be governed by and construed in accordance with the laws of the State of New York.

SECTION 8. *General Provisions*. This Agreement shall be binding upon, and inure to the benefit of, the parties hereto and their respective successors and permitted assigns. This Agreement may be executed in any number of counterparts, which together shall constitute one instrument. Acceptance and adoption of the terms of this Agreement by the Assignee and the Assignor by Electronic Signature or delivery of an executed counterpart of a signature page of this Agreement by any Approved Electronic Platform shall be effective as delivery of a manually executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed and delivered by their duly authorized officers as of the date first above written.

<NAME OF ASSIGNOR>

By: ____
Name:
Title:

<NAME OF ASSIGNEE>

By: ____
Name:
Title:

JOHNSON CONTROLS INTERNATIONAL PLC

By: ____
Name:
Title:

JPMORGAN CHASE BANK, N.A.,
as Administrative Agent and as Issuing Lender

By: ____
Name:
Title:

BANK OF AMERICA, N.A.,
as Issuing Lender

By: ____
Name:
Title:

BARCLAYS BANK PLC,
as Issuing Lender

By: ____
Name:
Title:

CITIBANK, N.A.,
as Issuing Lender

By: ____
Name:
Title:

MUFG BANK, LTD.,
as Issuing Lender

By: ____
Name:
Title:

MORGAN STANLEY BANK, N.A.,
as Issuing Lender

By: ____
Name:
Title:

EXHIBIT H
Form of Extension Agreement

EXTENSION AGREEMENT

JPMorgan Chase Bank, N.A., as Administrative Agent
under the Credit Agreement referred to below
383 Madison Avenue
New York, New York 10017

Ladies and Gentlemen:

Effective as of [date], the undersigned hereby agrees to extend its Commitment and the Termination Date under the Credit Agreement dated as of December 11, 2023 (as amended, amended and restated, supplemented, waived or otherwise modified from time to time, the "**Credit Agreement**") among the Principal Borrower, the Eligible Subsidiaries referred to therein, the Lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent, to <DATE TO WHICH THE TERMINATION DATE IS TO BE EXTENDED> pursuant to Section 2.01(c) of the Credit Agreement. Terms defined in the Credit Agreement are used herein as therein defined.

This Extension Agreement shall be governed by and construed in accordance with the laws of the State of New York. This Extension Agreement may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

[NAME OF LENDER]

By: ____
Name:
Title:

Agreed and Accepted:

JOHNSON CONTROLS INTERNATIONAL PLC,
as Principal Borrower

By: ____
Name:
Title:

JPMORGAN CHASE BANK, N.A.,
as Administrative Agent

By: ____
Name:
Title:

EXHIBIT I
Form of Pricing Certificate

PRICING CERTIFICATE

JPMorgan Chase Bank, N.A., as Administrative Agent
under the Credit Agreement referred to below
383 Madison Avenue
New York, New York 10017

This Pricing Certificate (this "**Certificate**") is furnished pursuant to that certain Credit Agreement dated as of December 11, 2023 among Johnson Controls International plc (the "**Parent**"), the Principal Borrower, the Eligible Subsidiaries referred to therein, the Lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent (as amended, amended and restated, supplemented, waived or otherwise modified from time to time, the "**Credit Agreement**"). Unless otherwise defined herein, capitalized terms used in this Certificate have the meanings ascribed thereto in the Credit Agreement.

THE UNDERSIGNED HEREBY CERTIFIES SOLELY IN [HIS/HER] CAPACITY AS [INSERT TITLE OF FINANCIAL OFFICER DELIVERING THIS CERTIFICATE] OF THE PARENT AND NOT IN AN INDIVIDUAL CAPACITY (AND WITHOUT PERSONAL LIABILITY) THAT:

1. I am the duly elected [insert title of Financial Officer delivering this Certificate] of the Parent, and I am authorized to deliver this Certificate on behalf of the Parent;

2. Attached as Annex A hereto is a true and correct copy of the Sustainability Report for the 20[__] Reference year;

3. The Sustainability Fee Adjustment in respect of the 20[__] Reference Year is [+][-][___] basis points per annum, and the Sustainability Margin Adjustment in respect of the 20[__] Reference Year is [+][-][___] basis points per annum, in each case as computed as set forth on Annex B hereto;

4. Attached as Annex C hereto is a true and correct copy of a review report of the Sustainability Metric Auditor (a) measuring, verifying, calculating and certifying each KPI Metric set forth herein or in the Sustainability Report, as applicable, for the Reference Year most recently ended and (b) confirming that the Sustainability Metric Auditor is not aware of any modifications that should be made to the computations on Annex B hereto in order for them to be presented in all material respects in conformity with the ESG Standards; and

5. **[**The Parent has not made any change in its sustainability strategy or initiatives or its internal policies related to sustainability, in each case to the extent material to the sustainability-related provisions of the Credit Agreement.**][**Attached as Annex D hereto is a complete and accurate description of changes in the Parent's sustainability strategy or initiatives or its internal policies related to sustainability, in each case to the extent material to the sustainability-related provisions of the Credit Agreement.**]**

The foregoing certifications are made and delivered this _____ day of _____, 20[__].

JOHNSON CONTROLS INTERNATIONAL PLC,
as the Parent

By:_____
Name:
Title:

Exhibit 10.7

DEED OF INDEMNIFICATION

THIS DEED OF INDEMNIFICATION (this "Agreement"), dated as of [___], 2023, is made by and between Johnson Controls International plc (company number 543654, hereinafter referred to as "Johnson Controls"), an Irish public limited company, and [_____] ("Indemnitee").

WHEREAS, it is essential to Johnson Controls to retain and attract as directors, secretary and officers the most capable persons available;

WHEREAS, Indemnitee is a director, secretary or officer of Johnson Controls;

WHEREAS, each of Johnson Controls and Indemnitee recognize the increased risk of litigation and other claims currently being asserted against directors and officers of companies;

WHEREAS, in recognition of Indemnitee's need for (i) substantial protection against personal liability, and (ii) specific contractual assurance that such protection will be available to Indemnitee (regardless of, among other things, any amendment to or revocation of Johnson Controls' Articles of Association or any change in the composition of Johnson Controls' Board of Directors or any acquisition transaction relating to Johnson Controls), Johnson Controls wishes to provide in this Agreement for the indemnification by Johnson Controls of Indemnitee as set forth in this Agreement;

NOW, THEREFORE, in consideration of the above premises and of Indemnitee continuing to serve Johnson Controls directly or, at its request, with another Enterprise, and intending to be legally bound hereby, the parties agree as follows:

1. Certain Definitions.

(a) Affiliate: any corporation or other person or entity that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the person specified.

(b) Board: the Board of Directors of Johnson Controls.

(c) Change in Control: shall be deemed to have occurred if:

(i) any "person," as such term is used in Sections 3(a)(9) and 13(d) of the Exchange Act, becomes a "beneficial owner," as such term is used in Rule 13d-3 promulgated under the Exchange Act, of 50% or more of the Voting Shares (as defined below) of Johnson Controls;

(ii) the majority of the Board consists of individuals other than Incumbent Directors, which term means the members of the Board as of the date hereof, provided that any person becoming a director subsequent to such time whose election or nomination for election was supported by three-quarters of the directors who immediately prior to such election or nomination for election comprised the Incumbent Directors shall be considered to be an Incumbent Director;

(iii) Johnson Controls adopts any plan of liquidation providing for the distribution of all or substantially all of its assets;

(iv) all or substantially all of the assets or business of Johnson Controls is disposed of pursuant to a merger, consolidation or other transaction (unless the shareholders of Johnson Controls immediately prior to such a merger, consolidation or other transaction beneficially own, directly or indirectly, in substantially the same proportion as they owned the Voting Shares of Johnson Controls, all of the Voting Shares or other ownership interests of the entity or entities, if any, that succeed to the business of Johnson Controls); or

(v) Johnson Controls combines with another company and is the surviving entity but, immediately after the combination, the shareholders of Johnson Controls immediately prior to the combination hold, directly or indirectly, 50% or less of the Voting Shares of the combined company (there being excluded from the number of shares held by such shareholders, but not from the Voting Shares of the combined company, any shares received by Affiliates of such other company in exchange for shares of such other company), provided, however, that any occurrence that would, in the absence of this proviso, otherwise constitute a Change in Control pursuant to any of clause (i), (iii), (iv) or (v) above, shall not constitute a Change in Control if such occurrence is approved by a majority of the directors on the Board who were directors immediately prior to such occurrence.

(d) Enterprise: Johnson Controls and any other corporation, body corporate, company, partnership, joint venture, trust, employee benefit plan or other enterprise of which Indemnitee is or was serving at the request of Johnson Controls or an Affiliate of Johnson Controls as a director, officer, secretary, trustee, general partner, managing member, fiduciary, board of directors' committee member, employee or agent.

(e) Exchange Act: the U.S. Securities Exchange Act of 1934, as amended.

(f) Expenses: any expense, liability, or loss, including attorneys' fees, judgments, fines, excise taxes and penalties, amounts paid or to be paid in settlement, any interest, assessments, or other charges imposed thereon, any federal, state, local, or foreign taxes imposed as a result of the actual or deemed receipt of any payments under this Agreement, and all other costs and obligations, paid or incurred in connection with investigating, defending, prosecuting (subject to Section 2(b)), being a witness in, participating in (including on appeal), or preparing for any of the foregoing in, any Proceeding relating to any Indemnifiable Event. Expenses also shall include Expenses incurred in connection with any appeal resulting from any Proceeding, including without limitation the premium, security for, and other costs relating to any cost bond, supersedeas bond, or other appeal bond or its equivalent. In no event, however, shall Expenses include any compensation recovered from the Indemnitee pursuant to the Johnson Controls International plc Executive Compensation Recoupment Policy, as in effect from time to time, or any successor policy thereto, regardless of the method of recoupment of such compensation.

(g) Indemnifiable Event: any event or occurrence that takes place either prior to or after the execution of this Agreement, related to the fact that Indemnitee is or was a director, officer, secretary or employee of Johnson Controls, or while a director, secretary or officer of Johnson Controls is or was serving at the request of Johnson Controls or an Affiliate of Johnson Controls as a director, officer, secretary, employee, trustee, agent, or fiduciary of another foreign or domestic corporation, partnership, body corporate, company, joint venture, employee benefit plan, trust, or other Enterprise, or related to anything done or not done by Indemnitee in any such capacity, whether or not the basis of the Proceeding is alleged action in an official capacity as a director, officer, secretary, employee, trustee, agent, or fiduciary or in any other capacity while serving as a director, officer, secretary, employee, trustee, agent, or fiduciary.

(h) Independent Counsel: the meaning specified in Section 3.

(i) Proceeding: any threatened, pending, or completed action, suit, or proceeding or any alternative dispute resolution mechanism (including an action by or in the right of Johnson Controls), or any inquiry, hearing, tribunal or investigation, whether conducted by Johnson Controls or any other party, that Indemnitee in good faith believes might lead to the institution of any such action, suit, or proceeding, whether civil, criminal, administrative, investigative, or other, or otherwise might give rise to adverse consequences or findings in respect of the Indemnitee.

(j) Reviewing Party: the meaning specified in Section 3.

(k) Voting Shares: shares of any class or classes having general voting power under ordinary circumstances, in the absence of contingencies, to elect the directors (or similar function) of an Enterprise.

2. Agreement to Indemnify.

(a) General Agreement. In the event Indemnitee was, is, or becomes a party to or witness or other participant in, or is threatened to be made a party to or witness or other participant in, a Proceeding by reason of (or arising in part out of) an Indemnifiable Event, Johnson Controls shall indemnify Indemnitee from and against any and all Expenses to the fullest extent permitted by law, as the same exists or may hereafter be amended or interpreted (but in the case of any such amendment or interpretation, only to the extent that such amendment or interpretation permits Johnson Controls to provide broader indemnification rights than were permitted prior thereto). For the purposes of this Agreement, the meaning of the phrase "to the fullest extent permitted by law" shall include, but not be limited to: (i) to the fullest extent permitted by the provisions of Irish law and/or the Articles of Association or constitution of Johnson Controls that authorize, permit or contemplate indemnification by agreement, court action or corresponding provisions of any amendment to or replacement of such provisions; and (ii) to the fullest extent authorized or permitted by any amendments to or replacements of Irish law and/or the Articles of Association or constitution of Johnson Controls adopted after the date of this Agreement that increase the extent to which a company may indemnify its directors or secretary.

(b) Initiation of Proceeding. Notwithstanding anything in this Agreement to the contrary, Indemnitee shall not be entitled to indemnification pursuant to this Agreement in connection with any Proceeding initiated by Indemnitee against Johnson Controls or any of its Affiliates or any director, officer or employee of Johnson Controls or any of its Affiliates unless (i) Johnson Controls has joined in or the Board has consented to the initiation of such Proceeding; (ii) the Proceeding is one to enforce indemnification rights under Section 4; or (iii) the Proceeding is instituted after a Change in Control and Independent Counsel has approved its initiation.

(c) Mandatory Indemnification. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee has been successful on the merits or otherwise in defense of any Proceeding relating in whole or in part to an Indemnifiable Event or in defense of any issue or matter therein, Indemnitee shall be indemnified by Johnson Controls hereunder against all Expenses incurred in connection therewith.

(d) Partial Indemnification. If Indemnitee is entitled under any provision of this Agreement to indemnification by Johnson Controls for some or a portion of Expenses, but not, however, for the total amount thereof, Johnson Controls shall nevertheless indemnify Indemnitee for the portion thereof to which Indemnitee is entitled.

(e) Prohibited Indemnification. No indemnification pursuant to this Agreement shall be paid by Johnson Controls:

(i) on account of any Proceeding in which a final and non-appealable judgment is rendered against Indemnitee for an accounting of profits made from the purchase or sale by Indemnitee of securities of Johnson Controls pursuant to the provisions of Section 16(b) of the Exchange Act or similar provisions of any federal, state, or local laws;

(ii) if a court of competent jurisdiction by a final and non-appealable judgment, shall determine that such indemnification is not permitted under applicable law;

(iii) on account of any Proceeding relating to an Indemnifiable Event as to which the Indemnitee has been convicted of a crime constituting a felony under the laws of the jurisdiction where the criminal action had been brought (or, where a jurisdiction does not classify any crime as a felony, a crime for which Indemnitee is sentenced to death or imprisonment for a term exceeding one year); or

(iv) on account of any Proceeding brought by Johnson Controls or any of its subsidiaries against Indemnitee.

3. Reviewing Party; Exhaustion of Remedies.

(a) Prior to any Change in Control, the reviewing party (the "Reviewing Party") shall be any appropriate person or body consisting of a member or members of the Board or any other person or body appointed by the Board who is not a party to the particular Proceeding with respect to which Indemnitee is seeking indemnification; after a Change in Control, the Independent Counsel referred to below shall become the Reviewing Party. With respect to all matters arising after a Change in Control concerning the rights of Indemnitee to indemnity payments and Expense advances under this Agreement, the Indemnification Agreement, dated as of the date hereof, between Tyco Fire & Security (US) Management, LLC., ("Tyco Management"), and Indemnitee (the "Tyco Management Indemnification Agreement") or any other agreement to which Johnson Controls or any of its Affiliates is a party or under applicable law, Johnson Controls' Articles of Association, constitution or articles of organization or operating agreement of Tyco Management (the "Tyco Management Organizational Documents") now or hereafter in effect relating to indemnification for Indemnifiable Events, Johnson Controls and Tyco Management shall seek legal advice only from independent counsel ("Independent Counsel") selected by Indemnitee and approved by Johnson Controls (which approval shall not be unreasonably withheld), and who has not otherwise performed services for Johnson Controls, Tyco Management or the Indemnitee (other than in connection with indemnification matters) within the last five years. The Independent Counsel shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing Johnson Controls, Tyco Management or Indemnitee in an action to determine Indemnitee's rights under this Agreement. Such counsel, among other things, shall render its written opinion to Johnson Controls, Tyco Management and Indemnitee as to whether and to what extent the Indemnitee should be permitted to be indemnified under applicable law. In doing so, the Independent Counsel may consult with (and rely upon) counsel in any appropriate jurisdiction who would qualify as Independent Counsel ("Local Counsel"). To the fullest extent permitted by law, Johnson Controls agrees to pay the reasonable fees of the Independent Counsel and the Local Counsel and to indemnify fully such counsel against any and all expenses (including attorneys' fees), claims, liabilities, loss, and damages arising out of or relating to this Agreement or the engagement of Independent Counsel or the Local Counsel pursuant hereto.

(b) The Tyco Management Indemnification Agreement provides that, prior to making written demand on Tyco Management for indemnification pursuant to Section 4(a) of the Tyco Management Indemnification Agreement or making a request for Expense Advance (as defined in the Tyco Management Indemnification Agreement) pursuant to Section 2(c) of the Tyco

Management Indemnification Agreement, Indemnitee shall (i) seek such indemnification or Expense Advance, as applicable, under any applicable insurance policy and (ii) request that Johnson Controls consider in its discretion whether to make such indemnification or Expense Advance, as applicable. Upon any such request by Indemnitee of Johnson Controls, Johnson Controls shall consider whether to make such indemnification or Expense Advance, as applicable, based on the facts and circumstances related to the request. Johnson Controls may require, as a condition to making any indemnification or Expense Advance, as applicable, that Indemnitee enter into an agreement providing for such indemnification or Expense Advance, as applicable, to be made subject to substantially the same terms and conditions applicable to an indemnification or Expense Advance, as applicable, by Tyco Management under the Tyco Management Indemnification Agreement (including, without limitation, conditioning any Expense Advance upon delivery to Johnson Controls of an undertaking of the type described in clause (i) of the proviso to Section 2(c) of the Tyco Management Indemnification Agreement).

4. Indemnification Process and Appeal.

(a) Indemnification Payment. Indemnitee shall be entitled to indemnification of Expenses, and shall receive payment thereof, from Johnson Controls in accordance with this Agreement as soon as practicable after Indemnitee has made written demand on Johnson Controls for indemnification, unless the Reviewing Party has given a written opinion to Johnson Controls that Indemnitee is not entitled to indemnification under applicable law.

(b) Adjudication or Arbitration. (i) Regardless of any action by the Reviewing Party, if Indemnitee has not received full indemnification within thirty days after making a demand or request in accordance with Section 4(a) (a "Nonpayment"), Indemnitee shall have the right to enforce its indemnification rights under this Agreement by commencing litigation in any court located in the country of Ireland (an "Irish Court") having subject matter jurisdiction thereof seeking an initial determination by the court or by challenging any determination by the Reviewing Party or any aspect thereof. Any determination by the Reviewing Party not challenged by Indemnitee in any such litigation shall be binding on Johnson Controls, Tyco Management and Indemnitee. The remedy provided for in this Section 4 shall be in addition to any other remedies available to Indemnitee at law or in equity. Johnson Controls, Tyco Management and Indemnitee hereby irrevocably and unconditionally (A) consent to submit to the non-exclusive jurisdiction of the Irish Court for purposes of any action or proceeding arising out of or in connection with this Agreement, (B) waive any objection to the laying of venue of any such action or proceeding in the Irish Court, and (C) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Irish Court has been brought in an improper or inconvenient forum. For the avoidance of doubt, nothing in this Agreement shall limit any right Indemnitee may have under applicable law to bring any action or proceeding in any other court.

(ii) Alternatively, in the case of a Nonpayment, Indemnitee, at his or her option, may seek an award in arbitration to be conducted by a single arbitrator pursuant to the Commercial Arbitration Rules of the American Arbitration Association.

(iii) In the event that a determination shall have been made pursuant to Section 4(a) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding or arbitration commenced pursuant to this Section 4(b) shall be conducted in all respects as a *de novo* trial, or arbitration, on the merits, and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding or arbitration commenced pursuant to this Section 4(b) Johnson Controls shall have the burden of proving Indemnitee is not entitled to indemnification.

(iv) In the event that Indemnitee, pursuant to this Section 4(b), seeks a judicial adjudication of or an award in arbitration to enforce his or her rights under, or to recover damages for breach of, this Agreement, and it is determined in said judicial adjudication or arbitration that Indemnitee is entitled to receive all of the indemnification sought, Indemnitee shall be entitled to recover from Johnson Controls, and shall be indemnified by Johnson Controls against, any and all Expenses actually and reasonably incurred by him in such judicial adjudication or arbitration. If it shall be determined in said judicial adjudication or arbitration that Indemnitee is entitled to receive part but not all of the indemnification sought, the Indemnitee shall be entitled to recover from Johnson Controls, and shall be indemnified by Johnson Controls against, any and all Expenses reasonably incurred by Indemnitee in connection with such judicial adjudication or arbitration.

(c) Defense to Indemnification, Burden of Proof, and Presumptions. (i) It shall be a defense to any action brought by Indemnitee against Johnson Controls to enforce this Agreement that it is not permissible under applicable law for Johnson Controls to indemnify Indemnitee for the amount claimed.

(ii) In connection with any action or any determination by the Reviewing Party or otherwise as to whether Indemnitee is entitled to be indemnified hereunder, the burden of proving such a defense or determination shall be on Johnson Controls.

(iii) Neither the failure of the Reviewing Party to have made a determination prior to the commencement of such action by Indemnitee that indemnification of the Indemnitee is proper under the circumstances because Indemnitee has met the standard of conduct set forth in applicable law, nor an actual determination by the Reviewing Party that the Indemnitee had not met such applicable standard of conduct, shall, of itself, be a defense to the action or create a presumption that the Indemnitee has not met the applicable standard of conduct.

(iv) For purposes of this Agreement, to the fullest extent permitted by law, the termination of any claim, action, suit, or proceeding, by judgment, order, settlement (whether with or without court approval), conviction, or upon a plea of nolo contendere, or its equivalent, shall not, of itself, create a presumption that Indemnitee did not meet any particular standard of conduct or have any particular belief or that a court has determined that indemnification is not permitted by applicable law.

(v) For purposes of any determination of good faith, to the fullest extent permitted by law, Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of any Enterprise, including financial statements, or on information supplied to Indemnitee by the management of such Enterprise in the course of their duties, or on the advice of legal counsel for such Enterprise or on information or records given or reports made to such Enterprise by an independent certified public accountant or by an appraiser or other expert selected by such Enterprise. The provisions of this Section 4(c)(v) shall not be deemed to be exclusive or to limit in any way the other circumstances in which Indemnitee may be deemed or found to have met the applicable standard of conduct set forth in applicable law.

(vi) The knowledge and/or actions, or failure to act, of any other director, trustee, partner, managing member, fiduciary, officer, agent or employee of any Enterprise shall, to the fullest extent permitted by law, not be imputed to Indemnitee for purposes of determining any right to indemnification under this Agreement.

(vii) To the fullest extent permitted by law, Johnson Controls shall be precluded from asserting in any judicial proceeding or arbitration commenced pursuant to this Agreement that the procedures or presumptions of this Agreement are not valid, binding and enforceable and

shall stipulate in any court or before any arbitrator that Johnson Controls is bound by all the provisions of this Agreement.

5. Indemnification for Expenses Incurred in Enforcing Rights. In addition to Indemnitee's rights under Section 4(b)(iv), Johnson Controls shall indemnify Indemnitee to the fullest extent permitted by law against any and all Expenses that are incurred by Indemnitee in connection with any action brought by Indemnitee:

(a) for indemnification or advance payment of Expenses under any agreement to which Johnson Controls or any of its Affiliates is a party (other than this Agreement) or under applicable law, Johnson Controls' Articles of Association, constitution or the Tyco Management Organizational Documents now or hereafter in effect relating to indemnification or advance payment of Expenses for Indemnifiable Events (it being specified, for the avoidance of doubt, that this clause (a) shall not be deemed to provide Indemnitee with a right to the indemnification or advance payment of Expenses being sought in such action), and/or

(b) for recovery under directors' and officers' liability insurance policies maintained by Johnson Controls,

but, in either case, only in the event that Indemnitee ultimately is determined to be entitled to such indemnification or expense advance or insurance recovery, as the case may be.

6. Notification and Defense of Proceeding.

(a) Notice. Promptly after receipt by Indemnitee of notice of the commencement of any Proceeding, Indemnitee shall, if a claim in respect thereof is to be made against Johnson Controls under this Agreement, notify Johnson Controls and Tyco Management of the commencement thereof; but the omission so to notify Johnson Controls and Tyco Management will not relieve Johnson Controls from any liability that it may have to Indemnitee, except as provided in Section 6(c).

(b) Defense. With respect to any Proceeding as to which Indemnitee notifies Johnson Controls and Tyco Management of the commencement thereof, Johnson Controls will be entitled to participate in the Proceeding at its own expense and except as otherwise provided below, to the extent Johnson Controls so wishes, it may assume the defense thereof with counsel reasonably satisfactory to Indemnitee. After notice from Johnson Controls to Indemnitee of its election to assume the defense of any Proceeding, Johnson Controls shall not be liable to Indemnitee under this Agreement or otherwise for any Expenses subsequently incurred by Indemnitee in connection with the defense of such Proceeding other than reasonable costs of investigation or as otherwise provided below. Indemnitee shall have the right to employ legal counsel in such Proceeding, but all Expenses related thereto incurred after notice from Johnson Controls of its assumption of the defense shall be at Indemnitee's expense unless: (i) the employment of legal counsel by Indemnitee has been authorized by Johnson Controls, (ii) Indemnitee has reasonably determined that there may be a conflict of interest between Indemnitee and Johnson Controls in the defense of the Proceeding, (iii) after a Change in Control, the employment of counsel by Indemnitee has been approved by the Independent Counsel, or (iv) Johnson Controls shall not in fact have employed counsel to assume the defense of such Proceeding, in each of which cases all Expenses of the Proceeding shall be borne by Johnson Controls to the fullest extent permitted by law. Johnson Controls shall not be entitled to assume the defense of any Proceeding (x) brought by or on behalf of Tyco Management or Johnson Controls, (y) as to which Indemnitee shall have made the determination provided for in (ii) above or (z) after a Change in Control (it being specified, for the avoidance of doubt, that Johnson Controls may assume defense of any such

proceeding described in this sentence with Indemnitee's consent, provided that any such consent shall not affect the rights of Indemnitee under the foregoing provisions of this Section 6(b)).

(c) Settlement of Claims. Johnson Controls shall not be liable to indemnify Indemnitee under this Agreement or otherwise for any amounts paid in settlement of any Proceeding effected without Johnson Controls' written consent, such consent not to be unreasonably withheld; provided, however, that if a Change in Control has occurred, Johnson Controls shall be liable for indemnification of Indemnitee for amounts paid in settlement if the Independent Counsel has approved the settlement. Johnson Controls shall not settle any Proceeding in any manner that would impose any penalty or limitation on Indemnitee without Indemnitee's written consent. Johnson Controls shall not be liable to indemnify the Indemnitee under this Agreement with regard to any judicial award if Johnson Controls was not given a reasonable and timely opportunity, at its expense, to participate in the defense of such action; Johnson Controls' liability hereunder shall not be excused if assumption of the defense of the Proceeding by Johnson Controls was barred by this Agreement.

7. Establishment of Trust. In the event of a Change in Control Johnson Controls shall, upon written request by Indemnitee, create a trust for the benefit of the Indemnitee (the "Trust") and from time to time upon written request of Indemnitee shall fund the Trust in an amount sufficient to satisfy any and all Expenses reasonably anticipated at the time of each such request (a) to be incurred in connection with investigating, preparing for, participating in, and/or defending any Proceeding relating to an Indemnifiable Event and (b) to be indemnifiable pursuant to this Agreement. The amount or amounts to be deposited in the Trust pursuant to the foregoing funding obligation shall be determined by the Independent Counsel. The terms of the Trust shall provide that (i) the Trust shall not be revoked or the principal thereof invaded without the written consent of the Indemnitee, (ii) the Trust shall continue to be funded by Johnson Controls in accordance with the funding obligation set forth above, (iii) the Trustee shall promptly pay to the Indemnitee all amounts for which the Indemnitee shall be entitled to indemnification pursuant to this Agreement, and (iv) all unexpended funds in the Trust shall revert to Johnson Controls upon a final determination by the Independent Counsel or a court of competent jurisdiction, as the case may be, that the Indemnitee has been fully indemnified under the terms of this Agreement. The trustee of the Trust (the "Trustee") shall be chosen by the Indemnitee. Nothing in this Section 7 shall relieve Johnson Controls of any of its obligations under this Agreement. All income earned on the assets held in the Trust shall be reported as income by Johnson Controls for federal, state, local, and foreign tax purposes. Johnson Controls shall pay all costs of establishing and maintaining the Trust and shall indemnify the Trustee against any and all expenses (including attorney's fees), claims, liabilities, loss, and damages arising out of or relating to this Agreement or the establishment and maintenance of the Trust.

8. Non-Exclusivity. The rights of Indemnitee hereunder shall be in addition to any other rights Indemnitee may have under Johnson Controls' Articles of Association, constitution, the Tyco Management Organizational Documents, the Tyco Management Indemnification Agreement, applicable law, or otherwise. To the extent that a change in applicable law (whether by statute or judicial decision) permits greater indemnification than would be afforded currently under Johnson Controls' Articles of Association, constitution, the Tyco Management Organizational Documents, the Tyco Management Indemnification Agreement, applicable law or this Agreement, it is the intent of the parties that Indemnitee enjoy by this Agreement the greater benefits so afforded by such change.

9. Exclusions. In addition to and notwithstanding any other provision of this Agreement to the contrary, Johnson Controls shall not be obligated under this Agreement to make any payment pursuant to this Agreement for which payment is expressly prohibited by law (including, with respect to any director or secretary of Johnson Controls, in respect of any liability expressly

prohibited from being indemnified pursuant to section 235 of the Irish Companies Act 2014 (as amended from time to time and including any successor provisions), but (i) in no way limiting any rights under section 233 or section 234 of the Irish Companies Act 2014 (each as amended from time to time and including any successor provisions), and (ii) to the extent any such limitations or prescriptions are amended or determined by a court of a competent jurisdiction to be void or inapplicable, or relief to the contrary is granted, then the Indemnitee shall receive the greatest rights then available under law.

10. Continuation of Contractual Indemnity or Period of Limitations. All agreements and obligations of Johnson Controls contained herein shall continue for so long as Indemnitee shall be subject to, or involved in, any proceeding for which indemnification is provided pursuant to this Agreement. Notwithstanding the foregoing, no legal action shall be brought and no cause of action shall be asserted by or on behalf of Johnson Controls or any Affiliate of Johnson Controls against Indemnitee, Indemnitee's spouse, heirs, executors, or personal or legal representatives after the expiration of two years from the date of accrual of such cause of action, or such longer period as may be required by the laws of Ireland under the circumstances. Any claim or cause of action of Johnson Controls or its Affiliate shall be extinguished and deemed released unless asserted by the timely filing and notice of a legal action within such period; provided, however, that if any shorter period of limitations is otherwise applicable to any such cause of action, the shorter period shall govern. For purposes hereof, a cause of action relating to compensation that is subject to recoupment under the Johnson Controls International plc Executive Compensation Recoupment Policy, as in effect from time to time, is deemed to accrue on the date that Johnson Controls or any Affiliate of Johnson Controls provides notice to the Indemnitee of the amount of compensation to be recouped.

11. Amendment of this Agreement. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing by each of the parties hereto. No waiver of any of the provisions of this Agreement shall be binding unless in the form of a writing signed by the party against whom enforcement of the waiver is sought, and no such waiver shall operate as a continuing waiver. Except as specifically provided herein, no failure to exercise or any delay in exercising any right or remedy hereunder shall constitute a waiver thereof.

12. Subrogation. In the event of payment under this Agreement, Johnson Controls shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and shall do everything that may be necessary to secure such rights, including the execution of such documents necessary to enable Johnson Controls effectively to bring suit to enforce such rights.

13. No Duplication of Payments. Johnson Controls shall not be liable under this Agreement to make any payment in connection with any claim made by Indemnitee to the extent Indemnitee has otherwise received payment (under any insurance policy, Johnson Controls' Articles of Association, constitution, the Tyco Management Organizational Documents, the Tyco Management Indemnification Agreement or otherwise) of the amounts otherwise indemnifiable hereunder.

14. Obligations of Johnson Controls. In the event a Proceeding results in a judgment in Indemnitee's favor or otherwise is disposed of in a manner that allows Johnson Controls to indemnify Indemnitee in connection with such Proceeding under the Articles of Association of Johnson Controls as then in effect, Johnson Controls will provide such indemnification to Indemnitee and will reimburse Tyco Management for any indemnification or Expense Advance previously made by Tyco Management in connection with such Proceeding.

15. Binding Effect. This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective successors (including any direct or indirect successor by purchase, merger, consolidation, or otherwise to all or substantially all of the business and/or assets of Johnson Controls), assigns, spouses, heirs, and personal and legal representatives; provided, however, that Tyco Management shall be a beneficiary of, and have the right to enforce, Section 14 hereof. Johnson Controls shall require and cause any successor thereof (whether direct or indirect by purchase, merger, consolidation, or otherwise) to all, substantially all, or a substantial part, of the business and/or assets of Johnson Controls, by written agreement in form and substance satisfactory to Indemnitee, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that Johnson Controls would be required to perform if no such succession had taken place. The indemnification provided under this Agreement shall continue as to Indemnitee for any action taken or not taken while serving in an indemnified capacity pertaining to an Indemnifiable Event even though he may have ceased to serve in such capacity at the time of any Proceeding or is deceased and shall inure to the benefit of the heirs, executors, administrators, legatees and assigns of such a person.

16. Severability. If any provision (or portion thereof) of this Agreement shall be held by a court of competent jurisdiction to be invalid, void, or otherwise unenforceable, the remaining provisions shall remain enforceable to the fullest extent permitted by law. Furthermore, to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of this Agreement containing any provision held to be invalid, void, or otherwise unenforceable, that is not itself invalid, void or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, void or unenforceable.

17. Governing Law. This Agreement shall be governed by and construed and enforced in accordance with the laws of Ireland applicable to contracts made and to be performed in such State without giving effects to its principles of conflicts of laws.

18. Notices. All notices, demands, and other communications required or permitted hereunder shall be made in writing and shall be deemed to have been duly given if delivered by hand, against receipt, or mailed, postage prepaid, certified or registered mail, return receipt requested, and addressed to Johnson Controls at:

Johnson Controls International plc
One Albert Quay
Cork
Ireland
Attn: The General Counsel

and

Tyco Fire & Security (US) Management, LLC
5757 North Green Bay Avenue
Glendale, WI 53209
United States
Attn: The General Counsel

And to Indemnitee at:

[_____]

Notice of change of address shall be effective only when given in accordance with this Section. All notices complying with this Section shall be deemed to have been received on the date of hand delivery or on the third business day after mailing.

19. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF the parties have executed this Deed of Indemnification as a deed with the intention that it be delivered on the date first written above.

GIVEN under the common seal of
JOHNSON CONTROLS INTERNATIONAL PUBLIC LIMITED COMPANY
and **DELIVERED** as a **DEED**

_____
Duly Authorised Signatory

SIGNED AND DELIVERED as a deed by
[_____]
in the presence of:

_____
Witness
Name of Witness:

Address of Witness:

Occupation of Witness:

_____
Indemnitee

Exhibit 10.8

INDEMNIFICATION AGREEMENT

THIS INDEMNIFICATION AGREEMENT (this "Agreement"), dated as of [____], 2022, is made by and between Tyco Fire & Security (US) Management, LLC, a Nevada limited liability company ("Tyco Management"), and [____] ("Indemnitee").

WHEREAS, Tyco Management is a wholly owned subsidiary of Johnson Controls International plc (company number 543654, hereinafter referred to as "Johnson Controls");

WHEREAS, it is essential to Tyco Management and Johnson Controls that Johnson Controls retain and attract as directors, secretary and officers the most capable persons available;

WHEREAS, Tyco Management has requested that the Indemnitee serve as a director, officer, secretary or employee of Johnson Controls, and, if requested to do so by Tyco Management, as a director, officer, secretary, employee, trustee, agent, or fiduciary of another foreign or domestic corporation, partnership, limited liability company, joint venture, employee benefit plan, trust, or other Enterprise; and

WHEREAS, each of Johnson Controls, Tyco Management and Indemnitee recognize the increased risk of litigation and other claims currently being asserted against directors and officers of companies;

WHEREAS, due to restrictions imposed by Irish law, the Articles of Association of Johnson Controls do not confer indemnification and advancement rights on its directors and secretary as broad as the indemnification and advancement rights that are customarily provided to the directors and secretary of a company organized under the laws of a U.S. state;

WHEREAS, in recognition of Indemnitee's need for (i) substantial protection against personal liability, and (ii) specific contractual assurance that such protection will be available to Indemnitee (regardless of, among other things, any amendment to or revocation of Johnson Controls' Articles of Association, the articles of organization or the operating agreement of Tyco Management (the "Tyco Management Organizational Documents") or any change in the composition of Johnson Controls' Board of Directors or any acquisition transaction relating to Johnson Controls), Tyco Management wishes to provide in this Agreement for the indemnification by Tyco Management of, and the advancing by Tyco Management of expenses to, Indemnitee as set forth in this Agreement;

NOW, THEREFORE, in consideration of the above premises and of Indemnitee continuing to serve Johnson Controls directly or, at Tyco Management's request, with another Enterprise, and intending to be legally bound hereby, the parties agree as follows:

1. Certain Definitions.

(a) Affiliate: any corporation or other person or entity that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the person specified.

(b) Board: the Board of Directors of Johnson Controls.

(c) Change in Control: shall be deemed to have occurred if:

(i) any "person," as such term is used in Sections 3(a)(9) and 13(d) of the Exchange Act, becomes a "beneficial owner," as such term is used in Rule 13d-3 promulgated under the Exchange Act, of 50% or more of the Voting Shares (as defined below) of Johnson Controls;

(ii) the majority of the Board consists of individuals other than Incumbent Directors, which term means the members of the Board as of the date hereof, provided that any person becoming a director subsequent to such time whose election or nomination for election was supported by three-quarters of the directors who immediately prior to such election or nomination for election comprised the Incumbent Directors shall be considered to be an Incumbent Director;

(iii) Johnson Controls adopts any plan of liquidation providing for the distribution of all or substantially all of its assets;

(iv) all or substantially all of the assets or business of Johnson Controls is disposed of pursuant to a merger, consolidation or other transaction (unless the shareholders of Johnson Controls immediately prior to such a merger, consolidation or other transaction beneficially own, directly or indirectly, in substantially the same proportion as they owned the Voting Shares of Johnson Controls, all of the Voting Shares or other ownership interests of the entity or entities, if any, that succeed to the business of Johnson Controls); or

(v) Johnson Controls combines with another company and is the surviving entity but, immediately after the combination, the shareholders of Johnson Controls immediately prior to the combination hold, directly or indirectly, 50% or less of the Voting Shares of the combined company (there being excluded from the number of shares held by such shareholders, but not from the Voting Shares of the combined company, any shares received by Affiliates of such other company in exchange for shares of such other company), provided, however, that any occurrence that would, in the absence of this proviso, otherwise constitute a Change in Control pursuant to any of clause (i), (iii), (iv) or (v) above, shall not constitute a Change in Control if such occurrence is approved by a majority of the directors on the Board who were directors immediately prior to such occurrence.

(d) Enterprise: Johnson Controls and any other corporation, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise of which Indemnitee is or was serving at the request of Tyco Management as a director, officer, secretary, trustee, general partner, managing member, fiduciary, board of directors' committee member, employee or agent.

(e) Exchange Act: the U.S. Securities Exchange Act of 1934, as amended.

(f) Expenses: any expense, liability, or loss, including attorneys' fees, judgments, fines, excise taxes and penalties, amounts paid or to be paid in settlement, any interest, assessments, or other charges imposed thereon, any federal, state, local, or foreign taxes imposed as a result of the actual or deemed receipt of any payments under this Agreement, and all other costs and obligations, paid or incurred in connection with investigating, defending, prosecuting (subject to Section 2(b)), being a witness in, participating in (including on appeal), or preparing for any of the foregoing in, any Proceeding relating to any Indemnifiable Event. Expenses also shall include Expenses incurred in connection with any appeal resulting from any Proceeding, including without limitation the premium, security for, and other costs relating to any cost bond, supersedeas bond, or other appeal bond or its equivalent. In no event, however, shall Expenses include any compensation recovered from the Indemnitee pursuant to the Johnson Controls

International plc Executive Compensation Recoupment Policy, as in effect from time to time, or any successor policy thereto, regardless of the method of recoupment of such compensation.

(g) Indemnifiable Event: any event or occurrence that takes place either prior to or after the execution of this Agreement, related to the fact that Indemnitee is or was a director, officer, secretary or employee of Johnson Controls, or while a director or secretary of Johnson Controls is or was serving at the request of Tyco Management as a director, officer, secretary, employee, trustee, agent, or fiduciary of another foreign or domestic corporation, partnership, limited liability company, joint venture, employee benefit plan, trust, or other Enterprise, or related to anything done or not done by Indemnitee in any such capacity, whether or not the basis of the Proceeding is alleged action in an official capacity as a director, officer, secretary, employee, trustee, agent, or fiduciary or in any other capacity while serving as a director, officer, secretary, employee, trustee, agent, or fiduciary.

(h) Independent Counsel: the meaning specified in Section 3.

(i) Proceeding: any threatened, pending, or completed action, suit, or proceeding or any alternative dispute resolution mechanism (including an action by or in the right of Johnson Controls), or any inquiry, hearing, tribunal or investigation, whether conducted by Johnson Controls or any other party, that Indemnitee in good faith believes might lead to the institution of any such action, suit, or proceeding, whether civil, criminal, administrative, investigative, or other, or otherwise might give rise to adverse consequences or findings in respect of the Indemnitee.

(j) Reviewing Party: the meaning specified in Section 3.

(k) Voting Shares: shares of any class or classes having general voting power under ordinary circumstances, in the absence of contingencies, to elect the directors (or similar function) of an Enterprise.

2. Agreement to Indemnify.

(a) General Agreement. In the event Indemnitee was, is, or becomes a party to or witness or other participant in, or is threatened to be made a party to or witness or other participant in, a Proceeding by reason of (or arising in part out of) an Indemnifiable Event, Tyco Management shall indemnify Indemnitee from and against any and all Expenses to the fullest extent permitted by law, as the same exists or may hereafter be amended or interpreted (but in the case of any such amendment or interpretation, only to the extent that such amendment or interpretation permits Tyco Management to provide broader indemnification rights than were permitted prior thereto). The parties hereto intend that this Agreement shall provide for indemnification in excess of that expressly permitted by statute or provided by Johnson Controls' Articles of Association, the separate deed of indemnification which Indemnitee has with Johnson Controls, the Tyco Management Organizational Documents or applicable law.

(b) Initiation of Proceeding. Notwithstanding anything in this Agreement to the contrary, Indemnitee shall not be entitled to indemnification pursuant to this Agreement in connection with any Proceeding initiated by Indemnitee against Johnson Controls or any of its Affiliates or any director, officer or employee of Johnson Controls or any of its Affiliates unless (i) Johnson Controls has joined in or the Board has consented to the initiation of such Proceeding; (ii) the Proceeding is one to enforce indemnification rights under Section 4; or (iii) the Proceeding is instituted after a Change in Control and Independent Counsel has approved its initiation.

(c) Expense Advances. If so requested by Indemnitee, Tyco Management shall advance (within five business days of such request) any and all Expenses to Indemnitee (an "Expense Advance"); provided that, (i) such Expense Advance shall be made only upon delivery to Tyco Management of an undertaking by or on behalf of the Indemnitee to repay the amount thereof if it is ultimately determined that Indemnitee is not entitled to be indemnified by Tyco Management, (ii) Tyco Management shall not (unless a court of competent jurisdiction shall determine otherwise) be required to make an Expense Advance if and to the extent that the Reviewing Party has determined that Indemnitee is not permitted to be indemnified under applicable law, and (iii) if and to the extent that the Reviewing Party determines after payment of one or more Expense Advances that Indemnitee would not be permitted to be so indemnified under applicable law, Tyco Management shall be entitled to be reimbursed by Indemnitee (who hereby agrees to reimburse Tyco Management) for all such amounts theretofore paid. If Indemnitee has commenced or commences legal proceedings in a court of competent jurisdiction or commences arbitration to secure a determination that Indemnitee is entitled to indemnification or Expense Advance, as provided in Section 4, any determination made by the Reviewing Party that Indemnitee would not be permitted to be indemnified under applicable law shall not be binding, and Indemnitee shall not be required to reimburse Tyco Management for any Expense Advance until a final determination is made with respect thereto (as to which all rights of appeal therefrom have been exhausted or have lapsed). Indemnitee's obligation to reimburse Tyco Management for Expense Advances shall be unsecured and no interest shall be charged thereon.

(d) Mandatory Indemnification. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee has been successful on the merits or otherwise in defense of any Proceeding relating in whole or in part to an Indemnifiable Event or in defense of any issue or matter therein, Indemnitee shall be indemnified by Tyco Management hereunder against all Expenses incurred in connection therewith.

(e) Partial Indemnification. If Indemnitee is entitled under any provision of this Agreement to indemnification by Tyco Management for some or a portion of Expenses, but not, however, for the total amount thereof, Tyco Management shall nevertheless indemnify Indemnitee for the portion thereof to which Indemnitee is entitled.

(f) Prohibited Indemnification. No indemnification pursuant to this Agreement shall be paid by Tyco Management:

(i) on account of any Proceeding in which a final and non-appealable judgment is rendered against Indemnitee for an accounting of profits made from the purchase or sale by Indemnitee of securities of Johnson Controls pursuant to the provisions of Section 16(b) of the Exchange Act or similar provisions of any federal, state, or local laws;

(ii) if a court of competent jurisdiction by a final and non-appealable judgment, shall determine that such indemnification is not permitted under applicable law;

(iii) on account of any Proceeding relating to an Indemnifiable Event as to which the Indemnitee has been convicted of a crime constituting a felony under the laws of the jurisdiction where the criminal action had been brought (or, where a jurisdiction does not classify any crime as a felony, a crime for which Indemnitee is sentenced to death or imprisonment for a term exceeding one year); or

(iv) on account of any Proceeding brought by Johnson Controls or any of its subsidiaries against Indemnitee.

3. Reviewing Party; Exhaustion of Remedies.

(a) Prior to any Change in Control, the reviewing party (the "Reviewing Party") shall be any appropriate person or body consisting of a member or members of the Board or any other person or body appointed by the Board who is not a party to the particular Proceeding with respect to which Indemnitee is seeking indemnification; after a Change in Control, the Independent Counsel referred to below shall become the Reviewing Party. With respect to all matters arising after a Change in Control concerning the rights of Indemnitee to indemnity payments and Expense Advances under this Agreement, the separate deed of indemnification which Indemnitee has with Johnson Controls or any other agreement to which Johnson Controls or any of its Affiliates is a party or under applicable law, Johnson Controls' Articles of Association or the Tyco Management Organizational Documents now or hereafter in effect relating to indemnification for Indemnifiable Events, Johnson Controls and Tyco Management shall seek legal advice only from independent counsel ("Independent Counsel") selected by Indemnitee and approved by Johnson Controls (which approval shall not be unreasonably withheld), and who has not otherwise performed services for Johnson Controls, Tyco Management or the Indemnitee (other than in connection with indemnification matters) within the last five years. The Independent Counsel shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing Johnson Controls, Tyco Management or Indemnitee in an action to determine Indemnitee's rights under this Agreement. Such counsel, among other things, shall render its written opinion to Johnson Controls, Tyco Management and Indemnitee as to whether and to what extent the Indemnitee should be permitted to be indemnified under applicable law. In doing so, the Independent Counsel may consult with (and rely upon) counsel in any appropriate jurisdiction who would qualify as Independent Counsel ("Local Counsel"). Tyco Management agrees to pay the reasonable fees of the Independent Counsel and the Local Counsel and to indemnify fully such counsel against any and all expenses (including attorneys' fees), claims, liabilities, loss, and damages arising out of or relating to this Agreement or the engagement of Independent Counsel or the Local Counsel pursuant hereto.

(b) Prior to making written demand on Tyco Management for indemnification pursuant to Section 4(a) or making a request for Expense Advance pursuant to Section 2(c), Indemnitee shall (i) seek such indemnification or Expense Advance, as applicable, under any applicable insurance policy and (ii) request that Johnson Controls consider in its discretion whether to make such indemnification or Expense Advance, as applicable. Upon any such request by Indemnitee of Johnson Controls, Johnson Controls shall consider whether to make such indemnification or Expense Advance, as applicable, based on the facts and circumstances related to the request. Johnson Controls may require, as a condition to making any indemnification or Expense Advance, as applicable, that Indemnitee enter into an agreement providing for such indemnification or Expense Advance, as applicable, to be made subject to substantially the same terms and conditions applicable to an indemnification or Expense Advance, as applicable, by Tyco Management hereunder (including, without limitation, conditioning any Expense Advance upon delivery to Johnson Controls of an undertaking of the type described in clause (i) of the proviso to Section 2(c)). In the event indemnification or Expense Advance, as applicable, is not received pursuant to an insurance policy, or from Johnson Controls, within 5 business days of the later of Indemnitee's request of the insurer and Indemnitee's request of Johnson Controls as provided in the first sentence of this Section 3(b), Indemnitee may make written demand on Tyco Management for indemnification pursuant to Section 4(a) or make a request for Expense Advance pursuant to Section 2(c), as applicable.

4. Indemnification Process and Appeal.

(a) Indemnification Payment. Indemnitee shall be entitled to indemnification of Expenses, and shall receive payment thereof, from Tyco Management in accordance with this Agreement as soon as practicable after Indemnitee has made written demand on Tyco Management for indemnification, unless the Reviewing Party has given a written opinion to Tyco Management that Indemnitee is not entitled to indemnification under applicable law.

(b) Adjudication or Arbitration. (i) Regardless of any action by the Reviewing Party, if Indemnitee has not received full indemnification or Expense Advance within thirty days after making a demand or request in accordance with Section 4(a) or Section 2(c), as applicable (a "Nonpayment"), Indemnitee shall have the right to enforce its indemnification rights under this Agreement by commencing litigation in any federal or state court located in the State of Delaware (a "Delaware Court") having subject matter jurisdiction thereof seeking an initial determination by the court or by challenging any determination by the Reviewing Party or any aspect thereof. Any determination by the Reviewing Party not challenged by Indemnitee in any such litigation shall be binding on Johnson Controls, Tyco Management and Indemnitee. The remedy provided for in this Section 4 shall be in addition to any other remedies available to Indemnitee at law or in equity. Johnson Controls, Tyco Management and Indemnitee hereby irrevocably and unconditionally (A) consent to submit to the non-exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement, (B) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court, and (C) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum. For the avoidance of doubt, nothing in this Agreement shall limit any right Indemnitee may have under applicable law to bring any action or proceeding in any other court.

(ii) Alternatively, in the case of a Nonpayment, Indemnitee, at his or her option, may seek an award in arbitration to be conducted by a single arbitrator pursuant to the Commercial Arbitration Rules of the American Arbitration Association.

(iii) In the event that a determination shall have been made pursuant to Section 4(a) or 2(c) of this Agreement that Indemnitee is not entitled to indemnification or Expense Advance, any judicial proceeding or arbitration commenced pursuant to this Section 4(b) shall be conducted in all respects as a *de novo* trial, or arbitration, on the merits, and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding or arbitration commenced pursuant to this Section 4(b) Tyco Management shall have the burden of proving Indemnitee is not entitled to indemnification or advancement of Expenses, as the case may be. If Indemnitee commences a judicial proceeding or arbitration pursuant to this Section 4(b), Indemnitee shall not be required to reimburse Tyco Management for any advances pursuant to Section 2(c) until a final determination is made with respect to Indemnitee's entitlement to indemnification (as to which all rights of appeal have been exhausted or lapsed).

(iv) In the event that Indemnitee, pursuant to this Section 4(b), seeks a judicial adjudication of or an award in arbitration to enforce his or her rights under, or to recover damages for breach of, this Agreement, and it is determined in said judicial adjudication or arbitration that Indemnitee is entitled to receive all of the indemnification or advancement of Expenses sought, Indemnitee shall be entitled to recover from Tyco Management, and shall be indemnified by Tyco Management against, any and all Expenses actually and reasonably incurred by him in such judicial adjudication or arbitration. If it shall be determined in said judicial adjudication or arbitration that Indemnitee is entitled to receive part but not all of the indemnification or advancement of Expenses sought, the Indemnitee shall be entitled to recover from Tyco

Management, and shall be indemnified by Tyco Management against, any and all Expenses reasonably incurred by Indemnitee in connection with such judicial adjudication or arbitration.

(c) Defense to Indemnification, Burden of Proof, and Presumptions. (i) It shall be a defense to any action brought by Indemnitee against Tyco Management to enforce this Agreement that it is not permissible under applicable law for Tyco Management to indemnify Indemnitee for the amount claimed.

(ii) In connection with any action or any determination by the Reviewing Party or otherwise as to whether Indemnitee is entitled to be indemnified hereunder, the burden of proving such a defense or determination shall be on Tyco Management.

(iii) Neither the failure of the Reviewing Party to have made a determination prior to the commencement of such action by Indemnitee that indemnification of the Indemnitee is proper under the circumstances because Indemnitee has met the standard of conduct set forth in applicable law, nor an actual determination by the Reviewing Party that the Indemnitee had not met such applicable standard of conduct, shall, of itself, be a defense to the action or create a presumption that the Indemnitee has not met the applicable standard of conduct.

(iv) For purposes of this Agreement, to the fullest extent permitted by law, the termination of any claim, action, suit, or proceeding, by judgment, order, settlement (whether with or without court approval), conviction, or upon a plea of nolo contendere, or its equivalent, shall not, of itself, create a presumption that Indemnitee did not meet any particular standard of conduct or have any particular belief or that a court has determined that indemnification is not permitted by applicable law.

(v) For purposes of any determination of good faith, Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of any Enterprise, including financial statements, or on information supplied to Indemnitee by the management of such Enterprise in the course of their duties, or on the advice of legal counsel for such Enterprise or on information or records given or reports made to such Enterprise by an independent certified public accountant or by an appraiser or other expert selected by such Enterprise. The provisions of this Section 4(c)(v) shall not be deemed to be exclusive or to limit in any way the other circumstances in which Indemnitee may be deemed or found to have met the applicable standard of conduct set forth in applicable law.

(vi) The knowledge and/or actions, or failure to act, of any other director, trustee, partner, managing member, fiduciary, officer, agent or employee of any Enterprise shall not be imputed to Indemnitee for purposes of determining any right to indemnification under this Agreement.

(vii) Tyco Management shall be precluded from asserting in any judicial proceeding or arbitration commenced pursuant to this Agreement that the procedures or presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any court or before any arbitrator that Tyco Management is bound by all the provisions of this Agreement.

5. Indemnification for Expenses Incurred in Enforcing Rights. In addition to Indemnitee's rights under Section 4(b)(iv), Tyco Management shall indemnify Indemnitee against any and all Expenses that are incurred by Indemnitee in connection with any action brought by Indemnitee:

(a) for indemnification or advance payment of Expenses under any agreement to which Tyco Management or any of its Affiliates is a party (other than this Agreement) or under applicable law, Johnson Controls' Articles of Association, constitution or the Tyco Management

Organizational Documents now or hereafter in effect relating to indemnification or advance payment of Expenses for Indemnifiable Events (it being specified, for the avoidance of doubt, that this clause (a) shall not be deemed to provide Indemnitee with a right to the indemnification or advance payment of Expenses being sought in such action), and/or

(b) for recovery under directors' and officers' liability insurance policies maintained by Johnson Controls,

but, in either case, only in the event that Indemnitee ultimately is determined to be entitled to such indemnification or expense advance or insurance recovery, as the case may be. In addition, Tyco Management shall, if so requested by Indemnitee, advance the foregoing Expenses and any Expenses incurred in any action brought pursuant to Section 4 to Indemnitee, subject to and in accordance with Section 2(c).

6. Notification and Defense of Proceeding.

(a) Notice. Promptly after receipt by Indemnitee of notice of the commencement of any Proceeding, Indemnitee shall, if a claim in respect thereof is to be made against Tyco Management under this Agreement, notify Johnson Controls and Tyco Management of the commencement thereof; but the omission so to notify Johnson Controls and Tyco Management will not relieve Tyco Management from any liability that it may have to Indemnitee, except as provided in Section 6(c).

(b) Defense. With respect to any Proceeding as to which Indemnitee notifies Johnson Controls and Tyco Management of the commencement thereof, Tyco Management will be entitled to participate in the Proceeding at its own expense and except as otherwise provided below, to the extent Tyco Management so wishes, it may assume the defense thereof with counsel reasonably satisfactory to Indemnitee. After notice from Tyco Management to Indemnitee of its election to assume the defense of any Proceeding, Tyco Management shall not be liable to Indemnitee under this Agreement or otherwise for any Expenses subsequently incurred by Indemnitee in connection with the defense of such Proceeding other than reasonable costs of investigation or as otherwise provided below. Indemnitee shall have the right to employ legal counsel in such Proceeding, but all Expenses related thereto incurred after notice from Tyco Management of its assumption of the defense shall be at Indemnitee's expense unless: (i) the employment of legal counsel by Indemnitee has been authorized by Tyco Management, (ii) Indemnitee has reasonably determined that there may be a conflict of interest between Indemnitee and Tyco Management in the defense of the Proceeding, (iii) after a Change in Control, the employment of counsel by Indemnitee has been approved by the Independent Counsel, or (iv) Tyco Management shall not in fact have employed counsel to assume the defense of such Proceeding, in each of which cases all Expenses of the Proceeding shall be borne by Tyco Management. Tyco Management shall not be entitled to assume the defense of any Proceeding (x) brought by or on behalf of Johnson Controls or Tyco Management, (y) as to which Indemnitee shall have made the determination provided for in (ii) above or (z) after a Change in Control (it being specified, for the avoidance of doubt, that Tyco Management may assume defense of any such proceeding described in this sentence with Indemnitee's consent, provided that any such consent shall not affect the rights of Indemnitee under the foregoing provisions of this Section 6(b)).

(c) Settlement of Claims. Tyco Management shall not be liable to indemnify Indemnitee under this Agreement or otherwise for any amounts paid in settlement of any Proceeding effected without Tyco Management's written consent, such consent not to be unreasonably withheld; provided, however, that if a Change in Control has occurred, Tyco Management shall be liable for indemnification of Indemnitee for amounts paid in settlement if the Independent Counsel has

approved the settlement. Tyco Management shall not settle any Proceeding in any manner that would impose any penalty or limitation on Indemnitee without Indemnitee's written consent. Tyco Management shall not be liable to indemnify the Indemnitee under this Agreement with regard to any judicial award if Tyco Management was not given a reasonable and timely opportunity, at its expense, to participate in the defense of such action; Tyco Management's liability hereunder shall not be excused if assumption of the defense of the Proceeding by Tyco Management was barred by this Agreement.

7. Establishment of Trust. In the event of a Change in Control Tyco Management shall, upon written request by Indemnitee, create a trust for the benefit of the Indemnitee (the "Trust") and from time to time upon written request of Indemnitee shall fund the Trust in an amount sufficient to satisfy any and all Expenses reasonably anticipated at the time of each such request (a) to be incurred in connection with investigating, preparing for, participating in, and/or defending any Proceeding relating to an Indemnifiable Event and (b) to be indemnifiable pursuant to this Agreement. The amount or amounts to be deposited in the Trust pursuant to the foregoing funding obligation shall be determined by the Independent Counsel. The terms of the Trust shall provide that (i) the Trust shall not be revoked or the principal thereof invaded without the written consent of the Indemnitee, (ii) the Trustee (as defined below) shall advance, within five business days of a request by the Indemnitee, any and all Expenses to the Indemnitee on the same terms and conditions as provided in Section 2(c) (and the Indemnitee hereby agrees to reimburse the Trust under the same circumstances for which the Indemnitee would be required to reimburse Tyco Management under Section 2(c) of this Agreement), (iii) the Trust shall continue to be funded by Tyco Management in accordance with the funding obligation set forth above, (iv) the Trustee shall promptly pay to the Indemnitee all amounts for which the Indemnitee shall be entitled to indemnification pursuant to this Agreement, and (v) all unexpended funds in the Trust shall revert to Tyco Management upon a final determination by the Independent Counsel or a court of competent jurisdiction, as the case may be, that the Indemnitee has been fully indemnified under the terms of this Agreement. The trustee of the Trust (the "Trustee") shall be chosen by the Indemnitee. Nothing in this Section 7 shall relieve Tyco Management of any of its obligations under this Agreement. All income earned on the assets held in the Trust shall be reported as income by Tyco Management for federal, state, local, and foreign tax purposes. Tyco Management shall pay all costs of establishing and maintaining the Trust and shall indemnify the Trustee against any and all expenses (including attorney's fees), claims, liabilities, loss, and damages arising out of or relating to this Agreement or the establishment and maintenance of the Trust.

8. Non-Exclusivity. The rights of Indemnitee hereunder shall be in addition to any other rights Indemnitee may have under Johnson Controls' Articles of Association, constitution, the separate deed of indemnification which Indemnitee has with Johnson Controls, the Tyco Management Organizational Documents, applicable law or otherwise. To the extent that a change in applicable law (whether by statute or judicial decision) permits greater indemnification than would be afforded currently under Johnson Controls' Articles of Association, the separate deed of indemnification which Indemnitee has with Johnson Controls, the Tyco Management Organizational Documents, applicable law or this Agreement, it is the intent of the parties that Indemnitee enjoy by this Agreement the greater benefits so afforded by such change.

9. Continuation of Contractual Indemnity or Period of Limitations. All agreements and obligations of Tyco Management contained herein shall continue for so long as Indemnitee shall be subject to, or involved in, any proceeding for which indemnification is provided pursuant to this Agreement. Notwithstanding the foregoing, no legal action shall be brought and no cause of action shall be asserted by or on behalf of Tyco Management or any Affiliate of Tyco Management against Indemnitee, Indemnitee's spouse, heirs, executors, or personal or legal

representatives after the expiration of two years from the date of accrual of such cause of action, or such longer period as may be required by the laws of Delaware under the circumstances. Any claim or cause of action of Tyco Management or its Affiliate shall be extinguished and deemed released unless asserted by the timely filing and notice of a legal action within such period; provided, however, that if any shorter period of limitations is otherwise applicable to any such cause of action, the shorter period shall govern. For purposes hereof, a cause of action relating to compensation that is subject to recoupment under the Johnson Controls International plc Executive Compensation Recoupment Policy, as in effect from time to time, is deemed to accrue on the date that Tyco Management or any Affiliate of Tyco Management provides notice to the Indemnitee of the amount of compensation to be recouped.

10. Contribution. To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever (other than pursuant to the terms hereof), Tyco Management, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any claim relating to an Indemnifiable Event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by Johnson Controls and Tyco Management, on one hand, and Indemnitee, on the other hand, as a result of the event(s) and/or transaction(s) giving cause to such Proceeding; and/or (ii) the relative fault of Johnson Controls and Tyco Management (and their respective directors, officers, employees and agents), on one hand, and Indemnitee, on the other hand, in connection with such event(s) and/or transaction(s).

11. Amendment of this Agreement. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing by each of the parties hereto. No waiver of any of the provisions of this Agreement shall be binding unless in the form of a writing signed by the party against whom enforcement of the waiver is sought, and no such waiver shall operate as a continuing waiver. Except as specifically provided herein, no failure to exercise or any delay in exercising any right or remedy hereunder shall constitute a waiver thereof.

12. Subrogation. In the event of payment under this Agreement, Tyco Management shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and shall do everything that may be necessary to secure such rights, including the execution of such documents necessary to enable Tyco Management effectively to bring suit to enforce such rights.

13. No Duplication of Payments. Tyco Management shall not be liable under this Agreement to make any payment in connection with any claim made by Indemnitee to the extent Indemnitee has otherwise received payment (under any insurance policy, Johnson Controls' Articles of Association, the separate deed of indemnification which Indemnitee has with Johnson Controls, the Tyco Management Organizational Documents or otherwise) of the amounts otherwise indemnifiable hereunder.

14. Binding Effect. This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective successors (including any direct or indirect successor by purchase, merger, consolidation, or otherwise to all or substantially all of the business and/or assets of the Tyco Management), assigns, spouses, heirs, and personal and legal representatives. Tyco Management shall require and cause any successor thereof (whether direct or indirect by purchase, merger, consolidation, or otherwise) to all, substantially all, or a substantial part, of the business and/or assets of the Tyco Management, by written agreement in form and substance satisfactory to Indemnitee, expressly to assume and agree to perform this

Agreement in the same manner and to the same extent that Tyco Management would be required to perform if no such succession had taken place. The indemnification provided under this Agreement shall continue as to Indemnitee for any action taken or not taken while serving in an indemnified capacity pertaining to an Indemnifiable Event even though he may have ceased to serve in such capacity at the time of any Proceeding or is deceased and shall inure to the benefit of the heirs, executors, administrators, legatees and assigns of such a person.

15. Severability. If any provision (or portion thereof) of this Agreement shall be held by a court of competent jurisdiction to be invalid, void, or otherwise unenforceable, the remaining provisions shall remain enforceable to the fullest extent permitted by law. Furthermore, to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of this Agreement containing any provision held to be invalid, void, or otherwise unenforceable, that is not itself invalid, void or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, void or unenforceable.

16. Governing Law. This Agreement shall be governed by and construed and enforced in accordance with the laws of Delaware applicable to contracts made and to be performed in such State without giving effects to its principles of conflicts of laws.

17. Notices. All notices, demands, and other communications required or permitted hereunder shall be made in writing and shall be deemed to have been duly given if delivered by hand, against receipt, or mailed, postage prepaid, certified or registered mail, return receipt requested, and addressed to Tyco Management at:

Tyco Fire & Security (US) Management, LLC
5757 North Green Bay Avenue
Glendale, WI 53209
United States
Attn: The General Counsel

If to Johnson Controls, to:

Johnson Controls International plc
One Albert Quay
Cork
Ireland
Attn: The General Counsel

And to Indemnitee at:

[_____]

Notice of change of address shall be effective only when given in accordance with this Section. All notices complying with this Section shall be deemed to have been received on the date of hand delivery or on the third business day after mailing.

18. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have duly executed and delivered this Agreement as the day specified above.

TYCO FIRE & SECURITY (US) MANAGEMENT LLC

_____

By:
Its:

INDEMNITEE

_____
[____]

EXHIBIT 21.1

JOHNSON CONTROLS INTERNATIONAL PLC

The following is a list of significant subsidiaries of Johnson Controls International plc, as defined by Section 1.02(w) of Regulation S-X, as of September 30, 2023.

Name of Company	**Jurisdiction Where Subsidiary is Incorporated**
Johnson Controls, Inc.	Wisconsin, United States

Exhibit 22.1

Co-Issuer of Debt Securities

Tyco Fire & Security Finance S.C.A., a subsidiary of Johnson Controls International plc (the "Company"), co-issued with the Company the debt securities listed below:

1.750% Senior Notes due 2030

0.375% Senior Notes due 2027

1.000% Senior Notes due 2032

2.000% Sustainability-Linked Senior Notes due 2031

3.000% Senior Notes due 2028

4.900% Senior Notes due 2032

4.250% Senior Notes due 2035

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-269534) and Form S-8 (Nos. 333-254239, 333-226258, 333-213508, 333-200320 and 333-185004) and Post-Effective Amendment to Registration Statement Form S-4 on Form S-8 (No. 333-210588) of Johnson Controls International plc of our report dated December 14, 2023 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Milwaukee, Wisconsin
December 14, 2023

EXHIBIT 31.1

CERTIFICATIONS

I, George R. Oliver, of Johnson Controls International plc, certify that:

1. I have reviewed this annual report on Form 10-K of Johnson Controls International plc;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 14, 2023

/s/ George R. Oliver

George R. Oliver
Chairman and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATIONS

I, Olivier Leonetti, of Johnson Controls International plc, certify that:

1. I have reviewed this annual report on Form 10-K of Johnson Controls International plc;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 14, 2023

/s/ Olivier Leonetti

Olivier Leonetti
Executive Vice President and
Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION OF PERIODIC FINANCIAL REPORTS

We, George R. Oliver and Olivier Leonetti, of Johnson Controls International plc, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. the Annual Report on Form 10-K for the year ended September 30, 2023 (Periodic Report) to which this statement is an exhibit fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) and

2. information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of Johnson Controls International plc.

Date: December 14, 2023

/s/ George R. Oliver

George R. Oliver
Chairman and Chief Executive Officer

/s/ Olivier Leonetti

Olivier Leonetti
Executive Vice President and Chief Financial Officer

Johnson Controls International plc
Executive Compensation Recoupment Policy

Effective as of October 2, 2023

1. Purpose. The purpose of the Johnson Controls International plc (the "Company") Executive Compensation Recoupment Policy (this "Policy") is to describe the circumstances under which the Company is required to or shall have the right to recover certain compensation paid to certain employees and independent contractors. Any references in compensation plans, agreements, equity awards or other policies to the Company's "recoupment", "clawback" or similarly-named policy shall be deemed to refer to this Policy with respect to Incentive-Based Compensation Received on or after the Effective Date. With respect to Incentive-Based Compensation Received prior to the Effective Date, such references to the Company's "recoupment", "clawback" or similarly-named policy in compensation plans, agreements, equity awards or other policies shall be deemed to refer to the Company's "recoupment," "clawback" or similarly-named policy, if any, in effect prior to the Effective Date.

2. Mandatory Recovery of Compensation. In the event that the Company is required to prepare an Accounting Restatement, the Company shall recover reasonably promptly the amount of Erroneously Awarded Compensation.

3. Discretionary Recovery of Compensation.

   (a) *Recoupment from Culpable Individuals*. In the event that the Criminal Division of the United States Department of Justice (the "DOJ") determines that it is warranted to enter into criminal resolutions with the Company, the Company has the right, but not the obligation, to recover from a Culpable Individual the Recoupment Amount.

   (b) *Recoupment for Misconduct*. In the event the Committee determines that a Covered Officer has engaged in Misconduct that resulted in, or has the potential to result in, material reputational or financial harm to the Company, then the Committee may instruct the Company, and the Company shall be entitled, to (i) cause the full or partial forfeiture or reduction of any unvested or unearned cash or equity based performance incentives or unexercised or unvested equity-based awards then held by any Covered Officer, and (ii) obtain full or partial reimbursement from the Covered Officer of any cash or equity based performance incentives or equity-based awards previously paid to, or earned by, such Covered Officer during the Misconduct Clawback Period, in each case to the extent permitted by applicable law. The Committee may, or may delegate to the Company the authority to: determine the amount to be forfeited, reduced or reimbursed under this Section 3(b) in its sole discretion; adjust the amount of any reimbursement by earnings or losses; and consider, in determining such amounts, the magnitude and extent of the Covered Officer's relative degree of fault or

involvement, the nature of the infraction involved and the potential reputational or financial harm that may result, among other factors.

4. Definitions. For purposes of this Policy, the following terms, when capitalized, shall have the meanings set forth below:

(a) "*Accounting Restatement*" shall mean any accounting restatement required due to material noncompliance of the Company with any financial reporting requirement under the United States federal securities laws, including to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period.

(b) "*Board*" shall mean the Company's Board of Directors.

(c) "*Committee*" shall mean the Compensation and Talent Development Committee of the Board.

(d) "*Covered Officer*" shall mean the Company's president; principal financial officer; principal accounting officer (or if there is no such accounting officer, the controller); any vice-president of the Company in charge of a principal business unit, division, or function (such as sales, administration, or finance); any other officer who performs a significant policy-making function; or any other person who performs similar significant policy-making functions for the Company. For purposes of this Policy, an individual's status as a Covered Officer shall be evidenced by their designation by the Board as an officer subject to the requirements of Section 16 of the Securities Exchange Act of 1934, as amended.

(e) "*Culpable Individual*" shall mean any (i) employee of the Company, its parent(s) or subsidiaries who is identified by the DOJ as having engaged in wrongdoing in connection with conduct under investigation by the DOJ, or (ii) any other person who both (A) had supervisory authority over the employee(s) or business area engaged in the misconduct and (B) knew of, or were willfully blind to, the misconduct, as determined by the DOJ.

(f) "*Effective Date*" shall mean October 2, 2023.

(g) "*Erroneously Awarded Compensation*" shall mean the excess of (i) the amount of Incentive-Based Compensation Received by a person (A) after beginning service as a Covered Officer, (B) who served as a Covered Officer at any time during the performance period for that Incentive-Based Compensation, (C) while the Company has a class of securities listed on a national securities exchange or a national securities association and (D) during the Recovery Period; over (ii) the Recalculated Compensation. For the avoidance of doubt, a person who served as a Covered Officer during the periods set forth in clauses (A) and (B) of the preceding sentence shall continue to be subject to this Policy even after such person's service as a Covered Officer has ended.

(h) "*Incentive-Based Compensation*" shall mean any compensation that is granted, earned, or vested based wholly or in part upon the attainment of a financial reporting measure. A financial reporting measure is a measure that is determined

and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measures that are derived wholly or in part from such measures, regardless of whether such measure is presented within the financial statements or included in a filing with the Securities and Exchange Commission. Solely for the purposes of this definition and this Policy, each of stock price and total shareholder return is considered a financial reporting measure. For the avoidance of doubt, Incentive-Based Compensation subject to this Policy does not include stock options, restricted stock, restricted stock units or similar equity-based awards for which the grant is not contingent upon achieving any financial reporting measure performance goal and vesting is contingent solely upon completion of a specified employment period and/or attaining one or more non-financial reporting measures.

(i) "*Misconduct*" shall mean a Covered Officer's: (i) commission of acts or omissions constituting "Cause" under the Company's Severance and Change in Control Policy for Officers (or acts that would constitute "Cause" if such definition were applicable to the Covered Officer); (ii) failure to identify, escalate, monitor or manage, in a timely manner and as reasonably expected, risks material to the Company; or (iii) failure to exercise reasonable care in the oversight, management and direction of a subordinate. For the avoidance of doubt, Misconduct shall include: (x) a Covered Officer's commission of acts or omissions that meet the definition of "Cause" under the Company's Severance and Change in Control Policy for Officers even if the Covered Officer's employment is not actually terminated for "Cause;" and (y) a determination by the Committee, after a Covered Officer's employment ends, that the Covered Officer's employment could have been terminated for "Cause" had all relevant facts been known at the time the Covered Officer's employment ended.

(j) "*Misconduct Clawback Period*" means the period of time, as determined by the Committee in its discretion, to which a forfeiture, reduction or reimbursement for Misconduct under this policy will apply; provided that such period will generally be no shorter than the period commencing on the date the Misconduct first occurred (as determined by the Committee) and ending on the date on which the Committee makes its determination that Misconduct has occurred.

(k) "*Recalculated Compensation*" shall mean the amount of Incentive-Based Compensation that otherwise would have been Received had it been determined based on the restated amounts in the Accounting Restatement, computed without regard to any taxes paid. For Incentive-Based Compensation based on stock price or total shareholder return, where the amount of the Erroneously Awarded Compensation is not subject to mathematical recalculation directly from the information in an Accounting Restatement, the amount of the Recalculated Compensation must be based on a reasonable estimate of the effect of the Accounting Restatement on the stock price or total shareholder return, as the case may be, during the applicable performance period on the compensation Received. The Company will maintain documentation of the determination of that reasonable estimate and provide such documentation to the national securities exchange or association on which its securities are listed in accordance with the applicable rules and policies of such national securities exchange or association.

(l) Incentive-Based Compensation is deemed "*Received*" in the Company's fiscal period during which the financial reporting measure specified in the award of such Incentive-Based Compensation is attained, even if the calculation, payment or grant of the Incentive-Based Compensation occurs after the end of that period.

(m) "*Recoupment Amount*" shall mean the gross amount of all compensation, in any form (including but not limited to shares of common stock of the Company or deferred compensation, whether or not such deferral was made at the election of such individual), excluding base salary or base fees paid to a Culpable Individual during the period of misconduct that is the subject of investigation by the DOJ, as determined in the sole discretion of the Committee taking into consideration such factors as the Committee determines are relevant, not to exceed the amount of the applicable fine imposed on the Company by the DOJ with respect to such misconduct.

(n) "*Recovery Period*" shall mean the three completed fiscal years of the Company immediately preceding the date the Company is required to prepare an Accounting Restatement; provided that the Recovery Period shall not begin before the Effective Date. For purposes of determining the Recovery Period, the Company is considered to be "required to prepare an Accounting Restatement" on the earlier to occur of: (i) the date the Board, a committee thereof, or the Company's authorized officers conclude, or reasonably should have concluded, that the Company is required to prepare an Accounting Restatement, or (ii) the date a court, regulator, or other legally authorized body directs the Company to prepare an Accounting Restatement. If the Company changes its fiscal year, then the transition period within or immediately following such three completed fiscal years also shall be included in the Recovery Period, provided that if the transition period between the last day of the Company's prior fiscal year end and the first day of its new fiscal year comprises a period of nine to 12 months, then such transition period shall instead be deemed one of the three completed fiscal years and shall not extend the length of the Recovery Period.

5. Exceptions. Notwithstanding anything to the contrary in this Policy, recovery of Erroneously Awarded Compensation will not be required to the extent the Company's committee of independent directors responsible for executive compensation decisions (or a majority of the independent directors on the Board in the absence of such a committee) has made a determination that such recovery would be impracticable and one of the following conditions have been satisfied:

(a) The direct expense paid to a third party to assist in enforcing this Policy would exceed the amount to be recovered; provided that, before concluding that it would be impracticable to recover any amount of Erroneously Awarded Compensation that was Incentive-Based Compensation based on the expense of enforcement, the Company must make a reasonable attempt to recover such Erroneously Awarded Compensation, document such reasonable attempt(s) to recover, and provide that documentation to the national securities exchange or association on which its securities are listed in accordance with the applicable rules and policies of such national securities exchange or association.

(b) Recovery would violate home country law where, with respect to Incentive-Based Compensation, that law was adopted prior to November 28, 2022; provided that,

before concluding that it would be impracticable to recover any amount of Erroneously Awarded Compensation that was Incentive-Based Compensation based on violation of home country law, the Company must obtain an opinion of home country counsel, acceptable to the national securities exchange or association on which its securities are listed, that recovery would result in such a violation, and must provide such opinion to the exchange or association in accordance with the applicable rules and policies of such national securities exchange or association.

(c) Recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees of the Company, to fail to meet the requirements of 26 U.S.C. 401(a)(13) or 26 U.S.C. 411(a) and regulations thereunder.

6. Manner of Recovery. In addition to any other actions permitted by law or contract, the Company may take any or all of the following actions to recover any Erroneously Awarded Compensation any Recoupment Amount or any other amount subject to recovery under this Policy: (a) require the Covered Officer or Culpable Individual to repay such amount; (b) offset such amount from any other compensation owed by the Company or any of its affiliates to the Covered Officer or Culpable Individual, regardless of whether the contract or other documentation governing such other compensation specifically permits or specifically prohibits such offsets; (c) subject to Section 5(c), to the extent the Erroneously Awarded Compensation the Recoupment Amount or other amount subject to recovery under this Policy was deferred into a plan of deferred compensation, whether or not qualified, forfeit such amount (as well as the earnings on such amounts) from the Covered Officer's or Culpable Individual's balance in such plan, regardless of whether the plan specifically permits or specifically prohibits such forfeiture; and (d) reduce or eliminate future salary increases, cash incentive awards or equity awards. If the Erroneously Awarded Compensation, Recoupment Amount or other amount subject to recovery under this Policy consists of shares of the Company's common stock, and the Covered Officer or Culpable Individual still owns such shares, then the Company may satisfy its recovery obligations by requiring the Covered Officer or Culpable Individual to transfer such shares back to the Company.

7. Other.

(a) This Policy shall be administered and interpreted, and may be amended from time to time, by the Board or any committee to which the Board may delegate its authority in its sole discretion in compliance with the applicable listing standards of the national securities exchange or association on which the Company's securities are listed, and the determinations of the Board or such committee shall be binding on all: (i) Covered Officers; (ii) Culpable Individuals; and (iii) their respective heirs, executors, administrators and legal representatives.

(b) The Company shall not indemnify any Covered Officer or Culpable Individual against the loss of Erroneously Awarded Compensation or any Recoupment Amount.

(c) The Company shall file all disclosures with respect to this Policy in accordance with the requirements of the Federal securities laws, including disclosure required by the Securities and Exchange Commission.

(d) Any right to recovery under this Policy shall be in addition to, and not in lieu of, any other rights of recovery that may be available to the Company.