

# Brilliant transformation.

TRONOX HOLDINGS PLC | 2021 ANNUAL REPORT

TRONOX 



## FAST FACTS

**\$3.572 billion**  
revenue

**9** TiO<sub>2</sub> pigment  
facilities

**≈1,200** customers  
in **120** countries

**\$468 million** free  
cash flow generated

**6** mines

**\$2.6+ million** invested  
in our communities

**26.5%** EBITDA margin

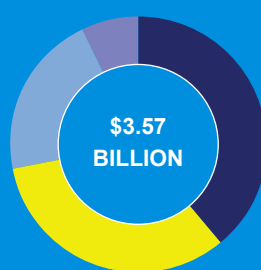
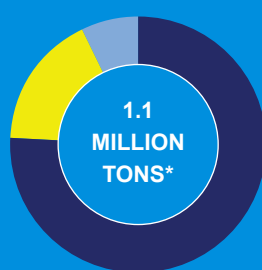
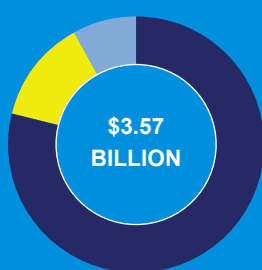
**5** upgrading facilities

**≈6,500** employees  
worldwide

## FINANCIAL HIGHLIGHTS

(Millions of U.S. dollars, except share and per share amounts) <sup>(1)</sup>	2021	2020	2019
Sales	\$3,572	\$2,758	\$2,642
Net income (loss) from continuing operations	\$ 303	\$ 995	\$ (102)
Diluted income (loss) per share from continuing operations	\$ 1.81	\$ 6.69	\$ (0.81)
Dividend paid per share	\$ 0.36	\$ 0.28	\$ 0.18
Total assets	\$5,987	\$6,568	\$5,268
Shares outstanding (at December 31)	153,934,677	143,557,479	141,900,459

(1) The following information is from our Form 10-K for the year ended December 31, 2021, filed with the Securities and Exchange Commission on February 22, 2022.



### REVENUE FROM PRODUCT SALES

- 79% TiO<sub>2</sub>
- 13% Zircon
- 8% Feedstock and Other Products

### SALES VOLUME DISTRIBUTION BY END USE

- 76% Paints and Coatings
- 17% Plastics
- 7% Paper and Specialty

(\*) Nameplate capacity

### SALES REVENUE DISTRIBUTION BY GEOGRAPHY

- 39% Europe, Middle East and Africa
- 33% Asia-Pacific
- 21% North America
- 7% South and Central America

### FULL-TIME EMPLOYEES BY REGION

- 32% South Africa
- 18% Australia
- 14% Europe
- 11% Asia-Pacific
- 11% North America
- 8% KSA
- 6% South America

# Tronox is investing in the future — from our multi-year digital technology program to our ambitious safety and sustainability initiatives — we’re developing our people and harnessing their diversity for a **brilliant transformation.**

## Dear Fellow Shareholders,

A year of records across many aspects of our business — sustainability, production, revenue, EBITDA, cash flow, debt reduction and profitability — is how we can best summarize 2021. In the midst of ongoing challenges, our Tronox team demonstrated resilience, dedication and unrelenting spirit as we continued to protect our people and business through prudent protocols and attention to health and wellbeing. Our integrated business planning model and vertically integrated portfolio enabled us to optimize our business quickly and efficiently, allowing us to successfully navigate through various raw material, shipping and other supply and inflationary challenges while achieving record production levels and addressing the needs of our customers. We are proud of how Tronox and its employees performed in 2021 and honored to provide you with the key highlights.

performance programs in our company that will enable us to continue to improve our safety performance for years to come. By elevating our approach to how we guide, enable and execute our work, we are living our core value of operating safe, reliable and responsible facilities. The objective of our journey is to create a safety culture where no employee, contractor or visitor in our workplace is injured. Safety performance directly impacts Tronox’s ability to deliver safe, quality, low-cost, sustainable tons to our customers. Because of this, 15% of the annual incentive plan is tied directly to safety goals. We have demonstrated our consistent ability to achieve great safety performance and, as such, we are setting next-level targets for 2022, because complacency is not an option at Tronox.

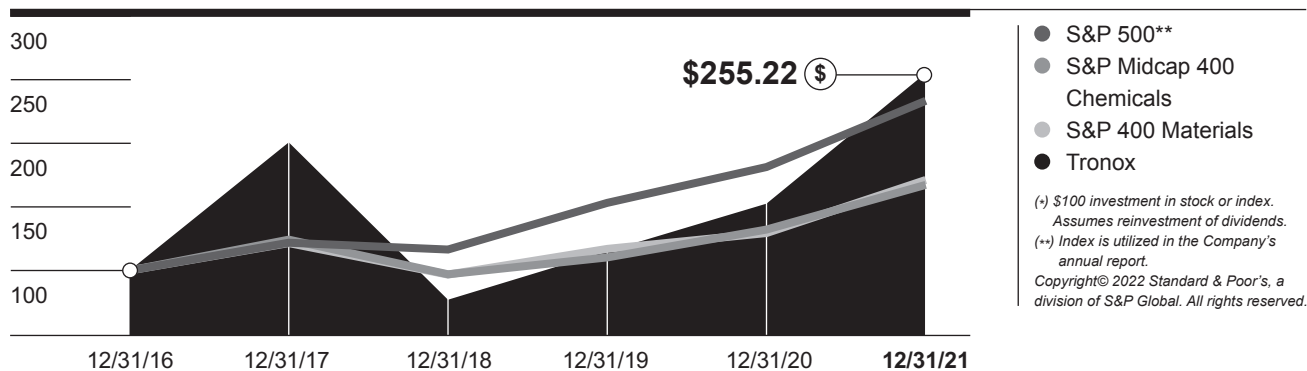
## Continued Prioritization of Safety

Safety is at the core of everything we do, and in 2021, we achieved another consecutive year of excellent safety performance. We are on a journey to inspire world-class safety for employees and contractors across all of our operations. We are embedding human and organizational

## Sustainability Commitment

Tronox has always been focused on environmental, social and governance (ESG) initiatives, and in order to provide better oversight of ESG activities, our Board of Directors reorganized its committee structure. As a result, the Corporate Governance and Nominating Committee has become the Governance and Sustainability Committee with a restated

### TOTAL SHAREHOLDER RETURN\*



committee charter that requires management to regularly report on its progress on key ESG initiatives. This change comes on top of other significant ESG-related improvements made by Tronox, including the announcement of a detailed and substantive roadmap to align with a global warming scenario below 2°C and achieve net zero GHG emissions by 2050; inclusion of carbon emission reduction targets in our executive compensation programs; and a commitment to be fully compliant with applicable TCFD and SASB disclosure standards in 2022.

Additionally, Tronox joined the United Nations Global Compact — a worldwide platform for organizations to network and engage in the areas of human rights, labor, environment, and anti-corruption. Incorporating its standards into our strategies and procedures will help us protect our privilege to operate and set the stage for long-term success.

We are proud to share that Tronox has been awarded a Platinum rating from EcoVadis, an independent sustainability assessment organization. It also puts us in the top 1% of the 85,000 evaluated companies and in the top 2% in the Basic Chemicals Manufacturing sector for sustainability management.

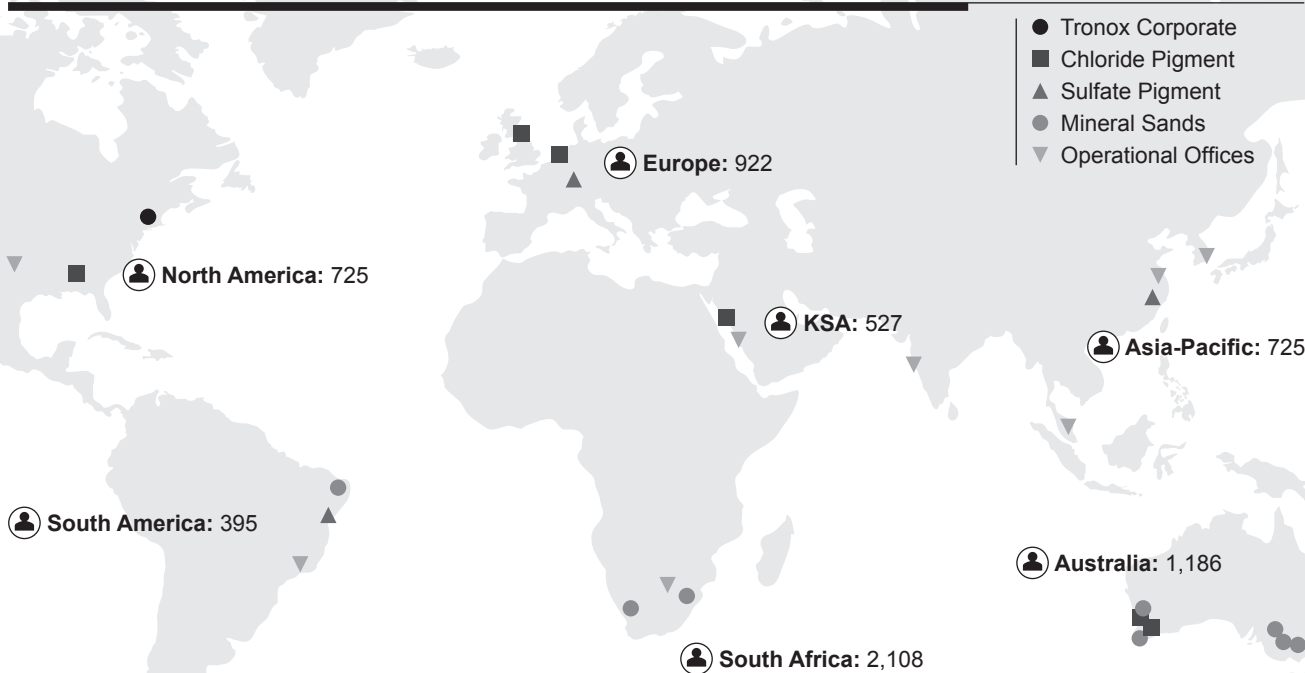
We look forward to making more significant progress in 2022 as we take intentional, well-planned steps to achieve our sustainability targets, including having 5% of our annual incentive plan tied to carbon emission reduction.

## Debt Reduction, Capital Allocation and Ownership

At the start of 2021, we communicated our capital allocation strategy focused on key capital projects, including newTRON and Atlas Campaspe, and debt paydown. During 2021, we made significant progress on this commitment, repaying \$745 million in debt. We expect to achieve our previously announced \$2.5 billion gross debt objective well ahead of our 2023 objective as part of our announced refinancing of our 6.5% 2025 Senior Secured Notes in April. Given this and the strength of our vertically integrated business model, we have increased our annual dividend to \$0.50 per share and announced a \$300 million share repurchase program through February of 2024. We also expect to continue to invest in the business through cost reduction, as well as growth- and vertical integration-related capital expenditures to strengthen our business model.

In another significant event, Exxaro Resources Limited sold its remaining share ownership in Tronox in an underwritten secondary public offering in February 2021. As part of this transaction, Exxaro “flipped-in” its 26% shareholding in our South African operating subsidiaries, which hold our material mining licenses, for approximately 7.2 million ordinary shares of Tronox, which were also sold as part of the upsized offering. As a result, we now own 100% of our South African operating subsidiaries and have increased our public float.

### GLOBAL OPERATIONS & FULL-TIME EMPLOYEES BY REGION



“ We have an exciting year ahead, in which we expect to exceed our long-term target of \$1 billion in EBITDA, continue to generate strong cash flow and return capital to shareholders. We are confident we have the best team in place to deliver on our commitments and propel Tronox on our journey of transformation. ”

## Key Strategic Projects

Reduction of debt, increased dividends and share repurchases are not coming at the expense of capital investments. Maintaining sufficient mineral reserves and resources to be the world's leading vertically integrated producer of TiO<sub>2</sub> is one of our major investment focuses. Three key mining projects are underway: Atlas Campaspe, a project expected to come online in 2022 to replace feedstock supply from our Snapper and Ginkgo mines in Eastern Australia as they reach end of life; Fairbreeze mine expansion; and Namakwa East OFS, which will replace a portion of our Namakwa Sands operations beginning in 2024. The Fairbreeze and Namakwa East OFS projects will extend our mine life in South Africa beyond 2035.

Our other focus is newTRON, a multi-year business transformation program. Project newTRON will enable us to maintain our position among the lowest cost producers of TiO<sub>2</sub> and enhance our service to customers through standardization of business processes and deploying new technologies that will optimize our global supply chain, reduce maintenance spend and improve throughput. The capital investment of approximately \$150 million over 2021 and 2022 is expected to yield \$150 to \$200 per ton in run rate cost reductions by the end of 2023. Through newTRON, we are equipping our business and empowering our people to be more competitive.

## Investing in Our People

We believe that, by building our organization with talented people and investing in their success, we unleash the full potential of our business and our people. We have benchmarked our current practices against high-performing learning organizations and used these insights to help our

leaders improve their ability to lead and develop their teams, to build a sustainable talent base and to create a powerful learning culture for all employees.

In 2021, we also solidified our Diversity & Inclusion (D&I) strategy and shared our vision for how to promote and embed the principles within our culture, including signing a pledge developed by CEO Action for Diversity & Inclusion.™

Our D&I vision is to be an organization where our leaders foster and encourage a diverse workforce and where all people feel valued and respected. We expect our leaders and employees to listen to others with diverse perspectives; support new and different approaches; promote fairness and equality in the workplace; encourage others to be open-minded and to appreciate alternative cultural perspectives; and not tolerate discrimination. Our strategy is focused on building a workforce that is reflective of the community, fostering an inclusive culture and developing diverse talent. Our Tronox Diversity and Inclusion Network (TDIN) chapters throughout the organization are working to educate our workforce on D&I topics, as well as develop initiatives to listen, learn and enhance our culture.

As we complete our first full year as your co-CEOs, we would like to thank our shareholders, Board of Directors, employees and customers for the confidence you have placed in us to lead Tronox. We firmly believe in the values that Tronox stands for and know that we are stronger when we work together. We have an exciting year ahead in which we expect to exceed our long-term target of \$1 billion in EBITDA, continue to generate strong cash flow and return capital to shareholders. We are confident we have the best team in place to deliver on our commitments and propel Tronox on our journey of transformation.

Sincerely,



**John D. Romano**  
co-Chief Executive Officer



**Jean-François Turgeon**  
co-Chief Executive Officer

At Tronox, we believe that leadership is about working together to achieve results and maximizing the efforts of our talented team around the world. Meet our leaders...

## BOARD OF DIRECTORS

### Ilan Kaufthal<sup>(3\*)</sup>

Chairman of the Board,  
Tronox Holdings plc,  
Eastwind Advisors

### Peter B. Johnston<sup>(1,2)</sup>

Former Interim Chief  
Executive Officer, Tronox  
Limited; Former Global  
Head of Nickel Assets,  
Glencore

### Ginger M. Jones<sup>(1,2)</sup>

Former Senior Vice  
President and Chief  
Financial Officer, Cooper  
Tire & Rubber Company

### Sipho Nkosi<sup>(2,3)</sup>

Former Chief Executive  
Officer, Exxaro Resources

### Vanessa Guthrie<sup>(1,3)</sup>

Non-executive Director  
of Santos Limited and  
Adbri Limited

### Stephen Jones<sup>(1,2\*)</sup>

Former President and Chief  
Executive Officer, Covanta  
Holding Corporation

### Mutlaq Al-Morished

Chief Executive Officer,  
TASNEE

### Moazzam Khan

Managing Director,  
Cristal International  
Holdings B.V.

### Dr. Talal Al-Shair

Director Emeritus

### John D. Romano

co-Chief Executive  
Officer, Tronox

### Jean-François Turgeon

co-Chief Executive  
Officer, Tronox

Our Board of Directors includes six independent directors who participate on three committees:

(1) Audit

(2) Human Resources and Compensation

(3) Corporate Governance and Sustainability

(\*) Committee Chair

## EXECUTIVE MANAGEMENT TEAM

### John D. Romano

co-Chief Executive Officer

### Jean-François Turgeon

co-Chief Executive Officer

### Timothy C. Carlson

Senior Vice President,  
Chief Financial Officer

### Russell Austin

Senior Vice President,  
Operations

### Jeff Engle

Senior Vice President,  
Commercial and Strategy

### Elizabeth Marengo

Senior Vice President,  
Global Human Resources

### Jeffrey Neuman

Senior Vice President,  
General Counsel and  
Corporate Secretary

### John Srivisal

Senior Vice President,  
Business Development  
and Finance

### Melissa H. Zona

Senior Vice President,  
External Affairs and Chief  
Sustainability Officer

### Emad AlJunaidi

Chief Procurement Officer

### Jonathan Flood

Vice President, Controller  
and Principal Accounting  
Officer

### Jennifer Guenther

Vice President, Investor  
Relations

### Rose Mei

Vice President, Integrated  
Business Planning

### Michael Miller

Chief Information Officer

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549  
Form 10-K**

(Mark One)

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

For the Year ended December 31, 2021

OR

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

1-35573

(Commission file number)

**TRONOX HOLDINGS PLC**

(Exact name of registrant as specified in its charter)

England and Wales  
(State or other jurisdiction of incorporation or organization)

98-1467236  
(I.R.S. Employer Identification No.)

263 Tresser Boulevard, Suite 1100  
Stamford, Connecticut 06901

Laporte Road, Stallingborough  
Grimsby, North East Lincolnshire, DN40 2PR  
United Kingdom

**Registrant's telephone number, including area code: (203) 705-3800**

**Securities registered pursuant to Section 12(b) of the Act:**

Title of each class	Name of each exchange on which registered
Ordinary Shares, par value \$0.01 per share	New York Stock Exchange

Trading Symbol: TROX

**Securities registered pursuant to Section 12(g) of the Act: None**

Indicate by check mark if 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 15(d) of the 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 Securities Exchange Act of 1934 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 (§232.405 of this chapter) 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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

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

The aggregate market value of the ordinary shares held by non-affiliates of the registrant as of June 30, 2021 was approximately \$2,598,591,296.

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes  No

As of January 31, 2022, the registrant had 153,937,928 ordinary shares outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's proxy statement for its 2022 annual general meeting of shareholders are incorporated by reference in this Form 10-K in response to Part III Items 10, 11, 12, 13 and 14.

**TRONOX HOLDINGS PLC**  
**ANNUAL REPORT ON FORM 10-K**  
**FOR THE FISCAL YEAR ENDED DECEMBER 31, 2021**  
**INDEX**

<b>Form 10-K Item Number</b>	<u>Page</u>
<b>PART I</b>	
Item 1. Business .....	1
Item 1A. Risk Factors .....	13
Item 1B. Unresolved Staff Comments .....	28
Item 2. Properties .....	28
Item 3. Legal Proceedings .....	39
Item 4. Mine Safety Disclosures .....	39
<b>PART II</b>	
Item 5. Market for Registrant’s Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities .....	40
Item 6. Selected Financial Data .....	41
Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations ...	41
Item 7A. Quantitative and Qualitative Disclosures About Market Risk .....	54
Item 8. Financial Statements and Supplementary Data .....	56
Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure ...	107
Item 9A. Controls and Procedures .....	107
Item 9B. Other Information .....	108
Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections .....	108
<b>PART III</b>	
Item 10. Directors, Executive Officers and Corporate Governance .....	109
Item 11. Executive Compensation .....	109
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters .....	109
Item 13. Certain Relationships and Related Transactions, and Director Independence .....	110
Item 14. Principal Accounting Fees and Services .....	110
<b>PART IV</b>	
Item 15. Exhibits, Financial Statement Schedules .....	111
Item 16. Form 10-K Summary .....	113
<b>SIGNATURES</b> .....	114



## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

We have made statements under the captions “Business,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations”, and in other sections of this Form 10-K that are forward-looking statements. Forward-looking statements also can be identified by words such as “future,” “anticipates,” “believes,” “estimates,” “expects,” “intends,” “plans,” “predicts,” “will,” “would,” “could,” “can,” “may,” and similar terms. These forward-looking statements, which are subject to known and unknown risks, uncertainties and assumptions about us, may include projections of our future financial performance based on our growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements. In particular, you should consider the numerous risks and uncertainties outlined in “Risk Factors.”

These risks and uncertainties are not exhaustive. Other sections of this Form 10-K may include additional factors, which could adversely impact our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible for our management to predict all risks and uncertainties, nor can management assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Although we believe the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy or completeness of any of these forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. Unless otherwise required by applicable law, we are under no duty to update any of these forward-looking statements after the date of this Form 10-K to conform our prior statements to actual results or revised expectations and we do not intend to do so.

When considering forward-looking statements, you should keep in mind the risks, uncertainties and other cautionary statements made in this Form 10-K and the documents incorporated by reference, including, in particular, the factors discussed below. These factors may be revised or supplemented in subsequent reports on Forms 10-Q and 8-K.

Factors that may affect future results include, but are not limited to:

- the risk that our customers might reduce demand for our products;
- market conditions and price volatility for titanium dioxide (“TiO<sub>2</sub>”), zircon and other feedstock products, as well as global and regional economic downturns, that adversely affect the demand for our end-use products;
- the potential negative impacts of COVID-19 on our business as well as the global economy and financial markets;
- the possibility that Chinese production of chloride technology and improvements in product quality may occur more quickly than anticipated;
- changes in prices or supply of energy or other raw materials;
- liability, production delays and additional expenses from environmental and industrial accidents;
- production curtailments, shutdowns or additional expenditures resulting from equipment upgrades, equipment failures and deterioration of assets;
- the possibility that cybersecurity incidents or other security breaches may seriously impact our results of operations and financial condition;
- risks of operating a global business;
- political and social instability, and unrest, in the regions in which we operate, including South Africa and the Middle East region;
- economic conditions and regulatory changes following the U.K.’s exit from the E.U. could adversely impact our operations, operating results and financial condition;

- fluctuations in currency exchange rates;
- the risk that the agreements governing our debt may restrict our ability to operate our business in certain ways, as well as impact our liquidity;
- our inability to obtain additional capital on favorable terms;
- the risk that we may not realize expected investment returns on our capital expenditure projects;
- an unpredictable regulatory environment in South Africa where we have significant mining and beneficiation operations, including amendments by the South African Department of Mineral Resources and Energy to the Mining Charter (as defined elsewhere herein);
- the risk that our TiO<sub>2</sub> products are subject to increased regulatory scrutiny, that may impede or inhibit widespread usage of TiO<sub>2</sub> and/or diminish the Company's ability to sustain or grow its business or may add significant costs of doing business;
- ESG issues, including those related to climate change and sustainability, may subject us to additional costs and restrictions;
- the risk that our ability to use our tax attributes to offset future income may be limited;
- concentrated share ownership in the hands of Cristal may result in conflicts of interest and/or prevent minority shareholders from influencing the Company;
- the risk that we are dependent on, and compete with other mining and chemical businesses for, key human resources in the countries in which we operate; and
- impact of English law and our articles of association on our ability to manage our capital structure flexibly and the anti-takeover protections incorporated into our articles of association.

We are committed to providing timely and accurate information to the investing public, consistent with our legal and regulatory obligations. To that end, we use our website to convey information about our businesses, including the anticipated release of quarterly financial results, quarterly financial and statistical and business-related information. Investors can access announcements about the Company through our website available at <http://www.tronox.com>. Our website is included as an inactive textual reference only and the information contained therein or connected thereto shall not be deemed to be incorporated into this Form 10-K.



## PART I

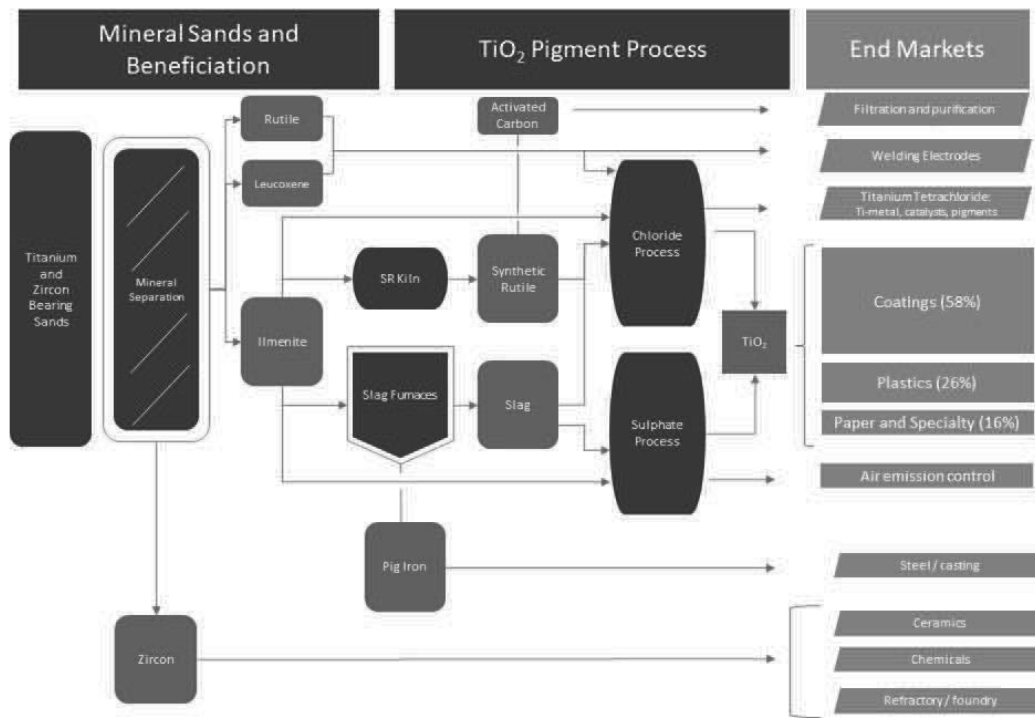
For the purposes of this discussion, references to “we,” “us,” and, “our” refer to Tronox Holdings plc, together with its consolidated subsidiaries (collectively referred to as “Tronox” or the “Company”). We are a public limited company formed under the laws of England and Wales. We are considered a domestic company in the United Kingdom and, as such, are required to comply with filing requirements in the United Kingdom. Additionally, we are not considered a “foreign private issuer” in the U.S.; therefore, we are required to comply with the reporting and other requirements imposed by the U.S. securities law on U.S. domestic issuers, which, among other things, requires reporting under accounting principles generally accepted in the United States of America (“U.S. GAAP”).

### Item 1. Business

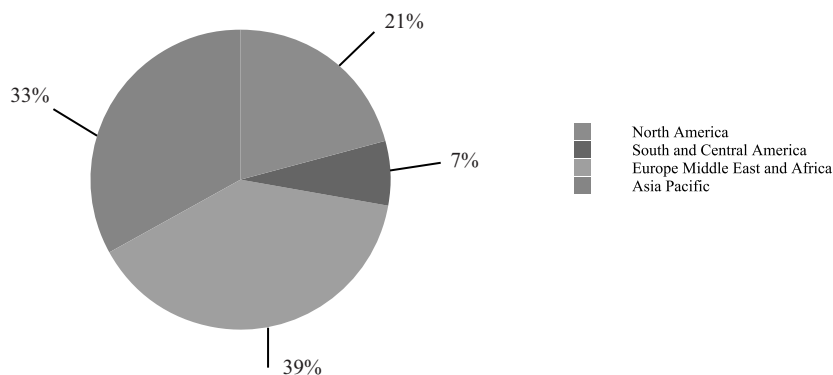
#### Overview

Tronox is the world’s leading vertically integrated manufacturer of TiO<sub>2</sub> pigment. We operate titanium-bearing mineral sand mines and beneficiation and smelting operations in Australia, South Africa and Brazil to produce feedstock materials that can be processed into TiO<sub>2</sub> for pigment, high purity titanium chemicals, including titanium tetrachloride, and ultrafine TiO<sub>2</sub> used in certain specialty applications. It is our long-term strategic goal to be vertically integrated and consume all our feedstock materials in our 9 TiO<sub>2</sub> pigment facilities located in the United States, Australia, Brazil, UK, France, the Netherlands, China and the Kingdom of Saudi Arabia (“KSA”). We believe that vertical integration is the best way to achieve our ultimate goal of delivering low cost, high-quality pigment to our approximately 1,200 TiO<sub>2</sub> customers throughout the world. The mining, beneficiation and smelting of titanium bearing mineral sands also creates meaningful quantities of zircon and pig iron, which we also supply to customers around the world.

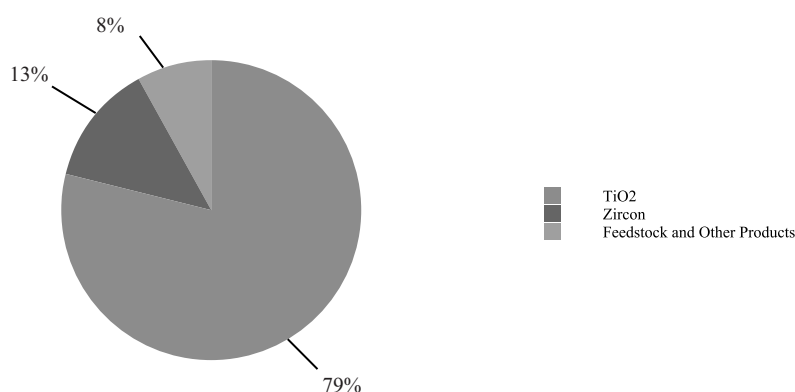
The following chart highlights the TiO<sub>2</sub> value chain we participate in (percentages set forth in the chart below refer to the global TiO<sub>2</sub> market as of December 31, 2021):



The following sets forth the percentage of our revenue derived from sales of our products by geographic region for the year ended December 31, 2021.



The below sets forth the percentage of our revenue derived from sales of our products for the year ended December 31, 2021.



For further financial information regarding our products and geographic regions, see the section entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations”, as well as Notes 5 and 25 of notes to our consolidated financial statements, each included elsewhere in this Form 10-K.

### 2021 Key Strategic Initiatives

The following sets forth the key strategic initiatives undertaken during 2021:

#### ***Become the Low Cost TiO<sub>2</sub> Producer by Investing in our Business Processes and Strengthening Vertical Integration***

Our ability to compete effectively in the TiO<sub>2</sub> industry is determined by many factors, including innovation, reliability, product quality, customer service and price. The business processes that allows us to maximize the benefit of our vertical integration and global footprint — the so-called “hidden factory” — needs to be optimized if we are to successfully meet the pricing and other competitive pressures that characterize our industry. One of the largest investment projects that we continued to pursue in 2021 to improve our global business processes is what we call “Project newTRON,” a multi-year IT-enabled transformation program that includes both operational and business transformation. We believe that Project newTRON will not only enable us to maintain our position as among the lowest cost producers of TiO<sub>2</sub> but also substantially improve the reliability, customer service, cybersecurity and the IT resiliency of our operations.

In terms of strengthening vertical integration, we have two significant mining projects currently underway. Most significant is the development of a mine in Eastern Australia called Atlas Campaspe. Atlas Campaspe is intended to replace feedstock supply from our existing Snapper/Ginkgo mines in Eastern Australia which are expected to be mined until at least 2023. Our pre-mining feasibility work indicates that this mine is abundant in natural rutile and high-value zircon, and will be a significant source of high grade ilmenite suitable for direct use, synthetic rutile production, or slag processing. In addition, we are investing in expanding our Fairbreeze and



Namakwa mines in South Africa. Like Atlas Campaspe, we believe these expansions are extremely attractive mine development projects, rich in ilmenite, rutile and zircon that are expected to replace existing mines which would otherwise deplete in 2024 and 2025. We have numerous other mine development projects in earlier stages of development in Western Australia and on the Eastern and Western Capes of South Africa, all of which are intended to maintain or expand our level of feedstock vertical integration.

Our vertical integration strategy may also benefit from the 2022 start-up of a titanium slag smelter facility (the “Slagger”) located in The Jazan City for Primary and Downstream Industries in KSA. On May 9, 2018, we entered into an Option Agreement with Advanced Metals Industries Cluster Company Limited (“AMIC”) which is owned equally by Tasnee and Cristal. Under the terms of the Option Agreement, AMIC granted us an option (the “Option”) to acquire 90% of a special purpose vehicle (the “SPV”) which will hold AMIC’s ownership in the Slagger. The Option may be exercised if the Slagger achieves certain production criteria related to sustained quality and tonnage of slag produced (the “Option Criteria”). Likewise, AMIC may require us to acquire the Slagger on the same terms if the Option Criteria are satisfied (the “Put”). If the Option Criteria are met and Cristal exercises the Put or we exercise the Option, AMIC will also contribute \$322 million of AMIC indebtedness (the “AMIC Debt”) to the SPV before we acquire a 90% ownership in it. In addition, pursuant to the Option Agreement, we agreed to lend AMIC up to \$125 million for capital expenditures and operational expenses intended to facilitate the start-up of the Slagger (the “Tronox Loans”). As of December 31, 2021, we have loaned AMIC \$125 million to facilitate the startup of the Slagger. If the Option Criteria are met and Cristal exercises the Put or we exercise the Option, AMIC will also contribute the Tronox Loans to the SPV before we acquire a 90% ownership in it.

On May 13, 2020, we amended the Option Agreement (the “First Amendment”) with AMIC to address circumstances in which the Option Criteria fail to be satisfied. Pursuant to the First Amendment, if the Option Criteria are not satisfied, Tronox has the right to acquire 90% of the SPV in exchange for the forgiveness of the Tronox Loans in which case the AMIC Debt will be retained by AMIC and not contributed to the SPV.

Additionally, on May 13, 2020, we amended a Technical Services Agreement (the “Amended TSA”) that we had entered with AMIC on March 15, 2018 to supplement certain technical services that we had originally agreed to provide. Under the Amended TSA, we agreed to provide technical advice and project management services including supervision and management of third-party consultants intended to increase the likelihood that the Option Criteria are satisfied. AMIC and its consultants remain responsible for engineering and construction of the Slagger. As compensation for these services, Tronox receives a monthly management fee of approximately \$1 million, subject to certain success incentives if and when the Slagger achieves the Option Criteria. The term of the Amended TSA was extended in December 2021 until December 31, 2022.

### ***Capital Allocation and Global Debt Refinancing***

During 2021, we repaid approximately \$745 million in debt and are on course to achieve our previously announced \$2.5 billion gross debt objective well ahead of our 2023 target. Our anticipated strong free cashflow not only enabled us to accelerate our debt reduction program, but also enabled us to announce in November 2021, the authorization by our Board of Directors of up to \$300 million of repurchases of our ordinary shares. At the same time, we also announced the Board’s intention to increase the annual dividend to \$0.50 per share.

Further, in March 2021, we consummated a debt refinancing transaction which lowered our annualized cash interest by approximately \$30 million and extended our debt portfolio’s weighted average years to maturity by approximately 3 years. The refinancing consisted of: (a) \$1.3 billion first lien loan agreement due in 2028; (b) \$350 million cash flow revolving credit facility; and (c) \$1.075 billion 4.625% senior unsecured notes due 2029, the proceeds of which were used to redeem approximately \$1.065 billion of our then outstanding senior notes.

### ***Exxaro Exit Transaction***

In the first quarter of 2021, Exxaro Resources Limited (“Exxaro”) sold its entire share ownership in Tronox, totaling 21,975,315 ordinary shares, in an underwritten secondary offering. As part of its exit transaction and as contemplated under the 2012 merger agreements between Exxaro and Tronox, Exxaro exchanged its 26% shareholding in our South African operating subsidiaries for 7,246,035 ordinary shares which were also sold by Exxaro as part of the underwritten offering. As a result, we now own 100% of our South African operating subsidiaries.

## **Our Principal Products**

### **TiO<sub>2</sub>**

#### ***TiO<sub>2</sub> Pigment***

TiO<sub>2</sub> pigment is used in a wide range of products due to its ability to impart whiteness, brightness, and opacity. TiO<sub>2</sub> pigment is used extensively in the manufacture of paint and other coatings, plastics and paper, and in a wide range of other applications. Moreover, it is a critical component of everyday consumer applications due to its superior ability to cover or mask other materials effectively and efficiently relative to alternative white pigments and extenders. TiO<sub>2</sub> pigment is considered to be a quality of life product. At present, it is our belief that there is no effective substitute for TiO<sub>2</sub> pigment because no other white pigment has the physical properties for achieving comparable opacity and brightness or can be incorporated as cost effectively.

#### ***Ultrafine Specialty TiO<sub>2</sub>***

We use the sulfate process at our manufacturing facility in Thann, France to produce ultrafine TiO<sub>2</sub> products. We market ultrafine TiO<sub>2</sub> products under the CristalActiv® trademark. Ultrafine TiO<sub>2</sub> has highly catalytic properties due to the relatively high surface area of each TiO<sub>2</sub> molecule. The principal use of ultrafine TiO<sub>2</sub> products is in NOx emission control products utilized in stationary, mobile and marine applications.

In 2021, we generated \$2.8 billion in revenue from sales of TiO<sub>2</sub>.

### **Zircon**

Zircon (ZrSiO<sub>4</sub>) is a co-product of mining mineral sands deposits for titanium feedstock. Zircon is primarily used as an additive in ceramic glazes, which makes the ceramic glaze more water, chemical and abrasion resistant. It is also used for the production of zirconium metal and zirconium chemicals, in refractories, as molding sand in foundries, and for TV screen glass, where it adds its structural stability at high temperatures and resistance to abrasive and corrosive conditions. Zircon typically represents a relatively low proportion of the in-situ heavy mineral sands deposits we mine, but has a relatively high value compared to other heavy mineral products. Refractories containing zircon are expensive and are only used in demanding, high-wear and corrosive applications in the glass, steel and cement industries. Foundry applications use zircon when casting articles of high quality and value where accurate sizing is crucial, such as aerospace, automotive, medical, and other high-end applications.

In 2021, we generated \$478 million in revenue from sales of zircon.

### **Feedstock and Other Products**

#### ***High Purity Pig Iron***

During the process of smelting ilmenite at our smelters to increase the concentration of titanium and produce titanium slag, high purity pig iron is produced as a co-product. High purity pig iron is used as a raw material in foundries for the production of high-quality ductile iron castings. Ductile iron is used extensively throughout the world for the production of safety critical automotive parts, such as engine blocks, brake calipers and steering knuckles in cars and trucks.

#### ***Feedstock***

Most TiO<sub>2</sub> products are derived from three naturally occurring minerals which are commonly referred to as heavy minerals or mineral sands: ilmenite, leucoxene and rutile. Ilmenite, rutile, leucoxene, as well as titanium slag and synthetic rutile which are processed from ilmenite, are the primary feedstock materials that we use for the production of TiO<sub>2</sub> pigment. Titanium slag is produced by smelting ilmenite in an electric arc furnace to separate titanium-oxide from the iron and other impurities. Synthetic rutile is produced by reducing ilmenite in a rotary kiln, followed by leaching under various conditions to remove the metallic iron from the reduced ilmenite grains. The purpose of both processes is to increase the titanium concentration of the ilmenite. There is substantial overlap amongst each of the aforementioned with the primary differentiating factor being the level of titanium content. For instance, rutile has the highest titanium dioxide content of approximately 94% to 96%, while ilmenite has the lowest of approximately 45% to 65%. As a result of expiration of external feedstock agreements entered into in connection with the regulatory approval of our Cristal transaction and our continued pursuit of our vertical integration strategy, we do not expect to actively sell feedstock going forward.



## *Titanium Tetrachloride*

We sell titanium tetrachloride (“TiCl<sub>4</sub>”) from our facilities in Thann, France and Yanbu, KSA. At our Thann facility in France, we produce TiCl<sub>4</sub> dedicated for sale to customers for use mainly in the production of various types of pigments and catalyst products. At our Yanbu facility, we produce excess TiCl<sub>4</sub> which we sell directly to a joint venture between Advanced Metal Industries Cluster and Toho Titanium Metal Co. Ltd. (“ATTM”) for use at a titanium sponge plant facility that is adjacent to our Yanbu facility.

In 2021, we generated \$301 million in revenue from the sale of high purity pig iron, feedstock, titanium tetrachloride and other products. This amount also includes revenue generated from the 8120 paper laminate grade to Venator Materials plc (“Venator”). In 2019, as part of the Cristal transaction and in order to obtain approval by regulators in the European Union, we sold the 8120 paper laminate grade to Venator and entered into a three-year transitional supply agreement which will terminate in April 2022. Revenue from 8120 paper laminate grade sales to Venator are included within Feedstock and Other products until the expiration date of the supply agreement with Venator.

The demand for certain of our products during a given year is subject to seasonal fluctuations. See “Risk Factors — Risks Relating to our Business — The markets for many of our products have seasonally affected sales patterns”.

## **Mining and Beneficiation of Mineral Sands Deposits**

Our current operational mining and beneficiation of mineral sands deposits are comprised of the following:

- KwaZulu-Natal (“KZN”) Sands operations located on the eastern coast of South Africa consisting of the Fairbreeze mine, a concentration plant, a mineral separation plant and two smelting furnaces that produce titanium slag;
- Our Namakwa Sands operations located on the western coast of South Africa consisting of the Namakwa mine, two concentration plants, a mineral separation plant, as well as two smelting furnaces that produce titanium slag;
- Our Northern Operations complex in Western Australia consisting of the Cooljarloo dredge mine and floating heavy mineral concentration plant and the Chandala metallurgical site which includes a mineral separation plant and a synthetic rutile plant that produces synthetic rutile;
- Our Eastern Australia operations consisting of the Ginkgo and Snapper mines, a floating heavy mineral concentration plant at the Ginkgo site, and a mineral separation plant;
- Our Perth Basin operations in Western Australia consisting of the Wonnerup mine and a mineral separation plant; and
- Our Paraiba, Brazil mining operations ceased during 2020 in line with our life of mine plan; however, we believe there is enough feedstock to supply the Brazil pigment plant through 2023.

Zircon is often, but not always, found in mineral sands deposits containing ilmenite. It is extracted, alongside ilmenite and rutile, as part of the initial mineral sands beneficiation process.

The mining of mineral sands deposits is conducted either “wet,” by dredging or hydraulic water jets, or “dry,” by using earth-moving equipment to excavate and transport the sands. The type of mining operation we deploy is dependent upon the characteristics of the ore body. Dredge mining is generally the favored method of mining mineral sands, provided that the ground conditions are suitable, water is readily available and the deposit is low in slime content. Dry mining techniques are generally preferred in situations involving hard ground, discontinuous ore bodies, small tonnage, high slimes contents and/or very high grades.

Regardless of the type of mining technique, the first step in the beneficiation process after the mineral sands have been mined is to utilize wet concentrator plants to produce a high grade of heavy mineral concentrate (typically approximately 90% to 98% heavy mineral content). Screened ore is first de-slimes, a process by which slimes are separated from larger particles of minerals, and then processed through a series of spiral separators that use gravity to separate the heavy mineral sands from lighter materials, such as quartz. Residue from the concentration process is pumped back into either the open pits or slimes dams for rehabilitation and water recovery.

After producing heavy mineral concentrate in our wet concentrator plants, we separate the non-magnetic (zircon and rutile) and magnetic (ilmenite) fractions utilizing a variety of techniques. Through the separation process, we produce zircon which is sold directly to customers and rutile and leucoxene which can immediately be used as feedstock material to make TiO<sub>2</sub> pigment or sold to the titanium metal, welding and other industries.

Ilmenite is generally further refined for use in our TiO<sub>2</sub> pigment manufacturing processes. Depending on the characteristics of the ilmenite we use two fundamental processes to refine ilmenite. Both processes involve the removal of iron and other non-titanium material.

- Titanium slag is made by smelting ilmenite in an electric arc furnace to separate titanium-oxide from the iron and other impurities. The result is two products: “slag” which contains 86% to 89% titanium dioxide and is considered a TiO<sub>2</sub> feedstock material, and high purity pig iron which is ready for sale to end-use customers.
- Synthetic rutile is made by reducing ilmenite in a rotary kiln, followed by leaching under various conditions to remove the iron from the reduced ilmenite grains. Activated carbon is a byproduct of this process. Our synthetic rutile has a titanium dioxide content of approximately 89% to 92% and is also considered a TiO<sub>2</sub> feedstock material.

Our current mining and beneficiation operations have an annual production capacity of approximately 832,000 metric tons (“MT”) of titanium feedstock, which is comprised of 182,000 MT of rutile and leucoxene, 240,000 MT of synthetic rutile and 410,000 MT of titanium slag. We currently have the capability to produce approximately 297,000 MT of zircon and 250,000 MT of pig iron.

### **Competitive Conditions of Mining and Feedstock Production**

Globally, there are a large number of mining companies that mine mineral sand deposits containing ilmenite, as well as zircon. However, there is a smaller number of mining companies that are also involved in upgrading the underlying ilmenite to produce feedstock typically utilized by TiO<sub>2</sub> producers.

Pigment producers procure a range of types of feedstocks from multiple feedstock producers to create varying blends of feedstock materials that maximize the efficiency and economic returns of their unique production technique under conditions applicable at the time of production. Pigment producers frequently switch the relative amount of each feedstock they procure based on a number of factors including: the relative cost of feedstocks, feedstock logistics costs, the cost of, and availability of, chemicals used to process feedstocks, as well as waste management costs. Hence, there is a high degree of substitutability between and among titanium feedstocks.

### **Production of TiO<sub>2</sub> Pigment**

TiO<sub>2</sub> pigment is produced using a combination of processes involving the manufacture of base pigment particles through either the chloride or sulfate process followed by surface treatment, drying and milling (collectively known as finishing). Currently, approximately 87% of our TiO<sub>2</sub> pigment production capacity is produced using the chloride process and approximately 13% of our TiO<sub>2</sub> production capacity is produced using the sulfate process.

In the chloride process, feedstock (slag, synthetic rutile, natural rutile or ilmenite ores) are reacted with chlorine (the chlorination step) and carbon to form TiCl<sub>4</sub> in a continuous fluid bed reactor. Purification of TiCl<sub>4</sub> to remove impurities is accomplished using selective condensation and distillation processes. The purified TiCl<sub>4</sub> is then oxidized in a vapor phase form to produce raw pigment particles and chlorine gas. The latter is recycled back to the chlorination step for reuse. Raw pigment is then typically slurried with water and dispersants prior to entering the finishing step. Due to the nature of the production process, the final pigment product is not sensitive to the feedstocks used to create it, as substantially all substances other than TiO<sub>2</sub> are removed during the process. The chloride process currently accounts for substantially all of the industry-wide TiO<sub>2</sub> production capacity in North America, and approximately 43% of industry-wide capacity globally.

In the sulfate process, ilmenite and/or slag are dissolved in concentrated sulfuric acid. After removing impurities, dissolved titanium is hydrolyzed and separated from the remaining sulfuric acid. The titanium hydrolysate is subsequently calcined in a rotary kiln to produce a raw TiO<sub>2</sub>. The product is then further finished in a similar way to TiO<sub>2</sub> produced through the chloride process.

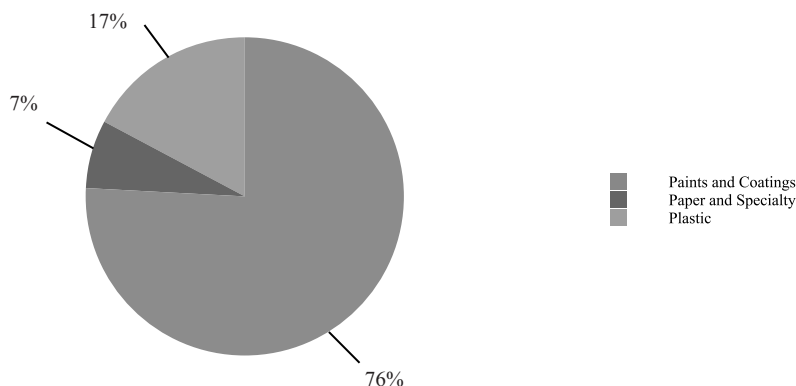
Commercial production of TiO<sub>2</sub> pigment results in one of two different crystal forms: rutile, which is manufactured using either the chloride process or the sulfate process, or anatase, which is only produced using the sulfate process. Rutile TiO<sub>2</sub> is preferred over anatase TiO<sub>2</sub> for many of the largest end-use applications, such as coatings and plastics, because its higher refractive index imparts better hiding power at lower quantities than the anatase crystal form and it is more suitable for outdoor use because it is more durable. Rutile TiO<sub>2</sub> can be produced using either the chloride process or the sulfate process.

The primary raw materials used in the production of chloride TiO<sub>2</sub> pigment include titanium feedstock, chlorine and coke. As discussed above, we believe we are unique in the degree to which we produce our own high-grade titanium feedstock. Other chemicals used in the production of TiO<sub>2</sub> are purchased from various companies under short and long-term supply contracts. In the past, we have been, and we expect that we will continue to be, successful in obtaining extensions to these and other existing supply contracts prior to their expiration. We expect the raw materials purchased under these contracts, and contracts that we enter into the near term, to meet our requirements over the next several years.

### Marketing of TiO<sub>2</sub>

We supply and market TiO<sub>2</sub> under the brand name TIONA® and CristalActiv® to approximately 1,200 customers in approximately 120 countries, including market leaders in each of the key end-use markets for TiO<sub>2</sub>, and we have supplied each of our top ten customers with TiO<sub>2</sub> for more than 10 years. In 2018, we launched a margin stabilization program which provides relative certainty over availability of product and price stability to customers who choose to participate. In early 2021, we initiated a long-term partnership strategy that we believe will strengthen the commitments from our customers across all regions and products. The long-term partnership strategy and margin stabilization programs are key parts of our TiO<sub>2</sub> marketing and sales strategy, enabling us to focus on predictability and reliability of TiO<sub>2</sub> delivery across the supply and demand cycle.

The following sets forth the percentage of our TiO<sub>2</sub> sales volume by end-use market for the year ended December 31, 2021:



In addition to price and product quality, we compete on the basis of technical support and customer service. We sell our products through both a direct sales force and third-party agents and distributors. Our direct sales, marketing and technical service organizations execute our sales and marketing strategy on a global basis. Due to the technical requirements of TiO<sub>2</sub> applications, our technical service organization and direct sales offices are supported by a regional customer service staff located in each of our major geographic markets.

Our sales and marketing strategy focuses on aligning ourselves with customers growing faster than the market and effective customer management through the development and maintenance of strong relationships. We develop customer relationships and manage customer contact across multiple contact points within the organization including our sales, technical service and marketing, research and development, and customer service teams. These primary points of contact are supplemented by direct contact with plant operations personnel, supply chain specialists, and senior management. We believe that multiple points of customer contact facilitate efficient problem solving, supply chain support, formula optimization and co-development of products.

### Competitive Conditions of TiO<sub>2</sub> Pigment

The global market in which our TiO<sub>2</sub> pigment business operates is highly competitive. Competition is based on a number of factors such as price, product quality and service. We face competition from both chloride



process pigment producers and sulfate process pigment producers. Moreover, because transportation costs are minor relative to the cost of our product, there is also competition between products produced in one region versus products produced in another region.

We face competition from global competitors with headquarters in Europe, the United States and China, including Chemours, LB Group, Venator, Kronos Worldwide Inc., and INEOS. In addition, we compete with numerous regional producers particularly in Eastern Europe and China.

## **Research and Development**

We have research and development facilities that aim to develop new products, service our products, and focus on applied research and development of both new and existing processes. We utilize a third party for research and development support with respect to our mineral sands business located in South Africa and Australia. The majority of scientists supporting our TiO<sub>2</sub> pigment product development and testing are located in Oklahoma City, Oklahoma, USA and Stallingborough, UK, while the majority of scientists supporting our TiO<sub>2</sub> ultrafine specialty business are located in Thann, France.

New process developments are focused on increased throughput, efficiency gains and general processing-related improvements for our customers. Ongoing development of process technology contributes to cost reduction, enhanced production flexibility, increased capacity, and improved consistency of product quality. In 2021, our product development and commercialization efforts successfully produced a new coatings product at our Bahia TiO<sub>2</sub> pigment plant as well as expanded the number of product grades produced at our Yanbu site. We also advanced product development for the plastics industry which is expected to result in increased growth in that segment commencing in 2022. In addition, our specialty chemicals and materials development efforts have been focused on producing products that we believe will benefit the environment.

## **Patents, Trademarks, Trade Secrets and Other Intellectual Property Rights**

Protection of our proprietary intellectual property is important to our business. At December 31, 2021, we held 108 patents and 5 patent applications in the U.S., and approximately 656 in foreign counterparts, including both issued patents and pending patent applications. Our U.S. patents have expiration dates ranging through 2037. Additionally, we have 9 trademark registrations in the U.S. and 2 trademark applications in the U.S., as well as 272 trademark counterpart registrations and applications in foreign jurisdictions.

We also rely upon our unpatented proprietary technology, know-how and other trade secrets. The substantial majority of our patents and trade secrets relate to our chloride products, surface treatments, chlorination expertise, and oxidation process technology, and this proprietary chloride production technology is an important part of our overall technology position. However, much of the fundamental intellectual property associated with both chloride and sulfate pigment production is no longer subject to patent protection. At Namakwa Sands, we rely on intellectual property for our smelting technology, which was granted to us in perpetuity by Anglo American South Africa Limited for use on a worldwide basis, pursuant to a non-exclusive license.

While certain of our patents relating to our products and production processes are important to our long-term success, more important is the operational knowledge we possess. We also use and rely upon unpatented proprietary knowledge, continuing technological innovation and other trade secrets to develop and maintain our competitive position. We conduct research activities and protect the confidentiality of our trade secrets through reasonable measures, including confidentiality agreements and security procedures. We protect the trademarks that we use in connection with the products we manufacture and sell, and have developed value in connection with our long-term use of our trademarks. See “Risk Factors — If our intellectual property were compromised or copied by competitors, or if competitors were to develop similar intellectual property, our results of operations could be negatively affected. Further, third parties may claim that we infringe on their intellectual property rights which could result in costly litigation.”

## **Human Capital**

Tronox employs approximately 6,500 people across six continents, and we believe it is our rich diversity and exceptional operational and technical expertise that, combined with our vertical integration model, position Tronox as the world’s leading vertically integrated manufacturer of titanium dioxide pigment. Recognizing the importance of our human capital, we have made People, Culture and Capabilities one of our five strategic pillars,

and placed a priority around developing leaders who will help us effectively (i) acquire, develop and nurture our talent, and (ii) foster a culture that embodies the values that are important to us, starting with safety and operating our business responsibly.

### *People*

Because we operate both titanium ore mines and titanium dioxide pigment plants, and because our operations span the world, we require specialty skills in mining and TiO<sub>2</sub> pigment manufacturing. We also need people who are willing to learn skills across both mining and chemicals operations and who can help us extract value from our integrated model. The below map sets forth the approximate number of employees as of December 31, 2021, in each of the global regions in which we operate.



Accordingly, we place a high priority on knowledge transfer (including by relocating skilled leaders across countries and between mining and TiO<sub>2</sub> pigment operations, by staffing high-potential employees in regions on global projects, and by enabling collaboration in global centers of excellence), and we place a high priority on fostering diversity, equity and inclusion. We are committed to creating an organization where leaders encourage a diverse workforce, where people feel valued and respected, have access to opportunities, and in which a variety of different voices are encouraged and heard. For instance, during 2021, we implemented a Diversity and Inclusion steering committee and developed a Diversity and Inclusion strategy consisting of three mission drivers: Workforce Reflective of our Communities, Foster an Inclusive Culture, and Develop our Diverse Talent. Moreover, in 2021, we launched a Women in Leadership Program consisting of female leaders across our company.

We also place an uncompromising focus on operating safe, reliable, and responsible facilities, and we measure our progress with both safety metrics and leading indicators. We believe every employee and contractor has a responsibility for safety, and we proactively identify and manage risk, conduct ourselves responsibly, exercise good judgement, and take accountability for our actions. In 2021, our employees worked more than 12 million hours with 22 recordable injuries and no fatalities from our operations, and our contractors worked more than 8 million hours with 20 recordable injuries and no fatalities from our operations. For the tenth year in a row our aggregate employee plus contractor total recordable injury rate was lower than the prior year.

As we continue to navigate the dynamic COVID-19 environment, we continue to take swift actions in response to the pandemic to protect our employees, Tronox carefully monitored the impacts to our operations. We were able to operate globally without material disruption. We put prudent and proportionate measures in place, such as restricted employee travel, remote working, staggered shifts, wellness checkpoints at our entrances, visitor restrictions and more robust sanitation, and disinfecting procedures.

### *Culture*

We aim to create an organizational culture where employees unleash their full value through living our values, and fostering a high-performance culture. We apply an “outward mindset” by which we mean that each employee should be highly aware of the organization’s goals and how his or her individual actions affect the entire organization.

Nearly all of our employees have been through training and development courses which instill the principles of working with an outward mindset. The consistent training and reinforcement of the importance of acting with

an outward mindset has enabled us to transform our culture. We believe this cultural transformation is reflected in our results, starting with safety: our people truly care for one another, and not only other employees, but also our contractors, visitors and communities. Shaped by an outward mindset, our people have embraced our global diversity and are naturally inclusive.

Today, we are a collaborative group of people who naturally want to be helpful to others, and we adjust our own efforts to make our colleagues' work easier, however we can.

Building on the foundation of applying an outward mindset, we have adopted a set of core values that describes our expectations of one another, starting with safety. Every performance review starts with a self-assessment and manager's assessment of our consistency in living our values. Employees are encouraged — and provided a toolkit — to develop in the values where they are weak, and to help coach others in the values where they are strong.

#### *Tronox Core Values*

- We have an uncompromising focus on operating safe, reliable and responsible facilities.
- We honor our responsibility to create value for stakeholders.
- We treat others with respect, and act with personal and organizational integrity.
- We build our organization with diverse, talented people who make a positive difference and we invest in their success.
- We are adaptable, decisive and effective.
- We are trustworthy and reliable, and we build mutually rewarding relationships.
- We share accountability, and have high expectations for ourselves and one another.
- We do the right work the right way in every aspect of our business.
- We celebrate the joy of working together to accomplish great things.

#### *Capabilities*

Developing the operating and technical skills of our people, and the leadership competencies of our leaders, is an essential component of our business strategy.

At the beginning of 2020 we assessed the competencies of our senior leaders on ten dimensions, and then identified a competency on which they would focus their development during the year. Leaders were encouraged to access targeted executive education courses that aligned with their development from a new online program we offered. During 2021, in addition to our senior leaders, our managers were also assessed on their leadership competencies and a competency was identified for development in 2022.

In addition to our focus on leadership development, we continued to leverage and enhance our employees learning through the following initiatives:

- Offered online education to all employees via a broad based global learning platform, providing leadership development, business skills and information technology; and
- Created development plans for prioritized technical areas based on gaps identified from a comprehensive skills assessment.

In addition, our employees are further guided by our code of conduct and business ethics and we conduct annual global training to help them fully understand and comply with our code of conduct.

We also have a rigorous succession planning process with respect to key positions throughout the organization. We believe such process allows us to proactively develop the talent of the future and allows us to move with speed and agility when leadership changes are required, as was demonstrated in the recent appointment of our co-CEOs and the election of our Chairman of the Board of Directors. As part of the succession planning process, high potential leaders are identified and development plans are completed for each candidate.



## *Sustainability*

Our business requires an unwavering focus on sustainable operating practices, and our commitment to sustainability supports our overall vision and strategy to be the world's leading vertically integrated TiO<sub>2</sub> producer. As such, we integrate sustainability into every aspect of our business—from our culture and our strategy to our operating practices. We believe sustainable operations enable us to better control costs and manage our environmental footprint. In addition, we enhanced oversight of ESG by reorganizing the Board committee structure to make the Corporate Governance and Nominating Committee the Corporate Governance and Sustainability Committee with a restated committee charter that requires management to regularly report on key ESG initiatives. Sustainability also encompasses providing our employees with a safe, diverse workplace and offering them opportunities to grow and develop. Ultimately, safe, environmentally sustainable operations demonstrates our respect for our communities and supports our continued privilege to operate.

During 2021, we received a Platinum Rating by EcoVadis in recognition of our sustainability efforts. This Platinum Rating places us in the Top 1% of the 85,000 companies evaluated around the world by EcoVadis on their sustainability performance, and the Top 2% in the Basic Chemicals Manufacturing sector. The EcoVadis assessment focuses on four themes: the environment, labor and human rights, ethics, and sustainable procurement. In 2021, we achieved a 10-point increase in all categories, and a 20-point increase in the environmental category compared to our score in 2020.

EcoVadis is a leading third-party independent assessment organization that evaluates companies' sustainability performance. Their methodology is based on international sustainability standards including the Global Reporting Initiative (GRI), United Nations Global Compact (UNGC) and ISO 26000.

## **Environmental, Health and Safety Authorizations**

### ***Mining***

Our facilities and operations are subject to extensive general and industry-specific environmental, health and safety regulations in jurisdictions where we operate, but particularly South Africa and Australia. These regulations include those relating to mine rehabilitation, liability provision, water management, the handling and disposal of hazardous and non-hazardous materials, and occupational health and safety. The various legislation and regulations are subject to a number of internal and external audits. We believe our mineral sands operations are in compliance, in all material respects, with existing health, safety and environmental legislation and regulations.

### *Regulation of the Mining Industry in South Africa*

The South African mining regulatory regime is comprehensive and requires regular reporting to applicable government departments. A failure to, among other things, comply with any such reporting requirements or the conditions of any mining license could result in extended mandatory shutdown periods, license and/or mining right suspensions or revocations all of which could impact our business.

In South Africa, the primary legislative enactments with which our mines are required to comply are the Mineral and Petroleum Resources Development Act (“MPRDA”) which governs the acquisition and retention of prospecting and mining rights. In addition, the Mine Health and Safety Act governs the manner in which mining must be conducted from a health and safety perspective, while the National Environmental Management Act (and its subsidiary legislation) provides the underlying framework with respect to environmental rules and regulation for which our operations must comply. For additional details regarding other South African legislative enactments that govern our mining licenses please see the section entitled “Risk Factors” set forth elsewhere in this Form 10-K.

### *Regulation of the Mining Industry in Australia*

Each Australian state and territory has its own legislation regulating the exploration for and mining of minerals. Our key exploration and mining operations are regulated by the Mining Act 1978 (WA), the Mining Act 1992 (NSW) and their related regulations.

In Western Australia, State Agreements are contracts between the State and the proponents of major resources projects within Western Australia, and are intended to foster resource development and related infrastructure investments. These agreements are approved and ratified by the Parliament of Western Australia. The State Agreement relevant to the development of certain of our Western Australian operations is the

agreement authorized by the Mineral Sands (Cooljarloo) Mining and Processing Agreement Act 1988 (WA). This agreement concluded in March 2020 and Tronox's rights and obligations are now covered by the Western Australian Mining Act.

### **Regulation of Finished Product Manufacturing**

Our business is subject to extensive regulation by federal, state, local and foreign governments. Governmental authorities regulate the generation and treatment of waste and air emissions at our operations and facilities. At many of our operations, we also comply with worldwide, voluntary standards developed by the International Organization for Standardization ("ISO"), a nongovernmental organization that promotes the development of standards and serves as a bridging organization for quality and environmental standards, such as ISO 9002 for quality management and ISO 14001 for environmental management.

#### *Chemical Registration*

As a chemical manufacturer with global operations, we are subject to a wide array of regulations regarding the import, export, labelling, use, storage and disposal of our products. We are obliged to comply with the regulation of chemical substances and inventories under the Toxic Substances Control Act in the United States and the Registration, Evaluation and Authorization of Chemicals ("REACH") regulation in Europe, as well as a growing list of analogous regimes in other parts of the world, including China, South Korea and Taiwan. Manufacturers and importers of chemical substances must register information regarding the properties of their existing chemical substances with the European Chemicals Agency ("ECHA"). REACH regulations require chemical substances which are newly imported or manufactured in the EU to be registered before being placed on the market, assessed for human health or environmental risk and for registrations to be updated periodically such as when new information emerges relevant to human health or environmental risks associated with the production or use of the substance. In 2020, the European Commission adopted a regulation classifying certain forms of TiO<sub>2</sub> with a particular aerodynamic diameter as a Category 2 carcinogen by inhalation. This regulation came into effect in October 2021. For additional information on this topic, see section entitled "Risk Factors — Risks Relating to our Legal and Regulatory Environment — Our TiO<sub>2</sub> products are subject to increased regulatory scrutiny that may impede or inhibit widespread usage of TiO<sub>2</sub> and/or diminish the Company's ability to sustain or grow its business or may add significant costs of doing business."

#### *Greenhouse Gas Regulation*

Globally, our operations are subject to regulations that seek to reduce emissions of "greenhouse gases" ("GHGs"). We currently report and manage GHG emissions as required by law for sites located in jurisdictions requiring such managing and reporting of GHGs, primarily the European Union and Australia. For additional information on this topic, see section entitled "Risk Factors — Risks Relating to our Legal and Regulatory Environment - ESG issues, including those related to climate change and sustainability, may subject us to additional costs and restrictions, including increased energy and raw material costs, which could have an adverse effect on our business, financial condition and results of operations, as well as damage our reputation."

### **Available Information**

Our public internet site is <http://www.tronox.com>. The content of our internet site is available for information purposes only and is included as an inactive textual reference. It should not be relied upon for investment purposes, nor is it incorporated by reference into this annual report on Form 10-K unless expressly noted. We make available, free of charge, on or through the investor relations section of our internet site, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and Forms 3, 4 and 5 filed on behalf of directors and executive officers, as well as any amendments to those reports filed or furnished pursuant to the U.S. Securities and Exchange Act of 1934, as amended (the "Exchange Act") as soon as reasonably practicable after we electronically file such material with, or furnish it to, the U.S. Securities and Exchange Commission (the "SEC").

We file current, annual and quarterly reports, proxy statements and other information required by the Exchange Act with the SEC. Our SEC filings are also available to the public from the SEC's internet site at <http://www.sec.gov>. The content of the SEC's internet site is available for informational purposes only and is included as an inactive textual reference. It should not be relied upon for investment purposes, nor is it incorporated by reference into this annual report on Form 10-K unless expressly noted.

## Item 1A. Risk Factors

### Item 1A. Risk Factors

*You should carefully consider the risk factors set forth below, as well as the other information contained in this Form 10-K, including our consolidated financial statements and related notes. This Form 10-K contains forward-looking statements that involve risks and uncertainties. Any of the following risks could materially and adversely affect our business, financial condition or results of operations. Additional risks and uncertainties not currently known to us or those we currently view to be immaterial may also materially and adversely affect our business, financial condition or results of operations. The following risk factors are not necessarily presented in order of relative importance and should not be considered to represent a complete set of all potential risks that could affect our business, financial condition or results of operations.*

### **RISKS RELATING TO OUR BUSINESS**

***Market conditions, as well as global and regional economic downturns that adversely affect the demand for our end-use products, could adversely affect the results of our operations and the prices at which we can sell our products, thus, negatively impacting our financial results.***

Our revenue and results of operations are significantly dependent on sales of TiO<sub>2</sub> products and zircon. Demand for these products historically have been linked to global, regional and local GDP and discretionary spending, which can be negatively impacted by regional and world events or economic and market conditions. Such events can cause a decrease in demand for our products and market prices to fall, which may have an adverse effect on our results of operations and financial condition. A substantial portion of our products and raw materials are commodities that reprice as market supply and demand fundamentals change. Accordingly, product margins and the results of operations tend to vary with changes in the business cycle.

A significant portion of the demand for our TiO<sub>2</sub> products comes from manufacturers of paint and plastics. A significant portion of the demand for zircon comes from the construction and other industrial end markets. Our customers may experience significant fluctuations in demand for their own end products because of economic conditions, changes in consumer demand, or increases in raw material and energy costs. In addition, with respect to the zircon market, we believe that China currently accounts for approximately 50% of the world's demand for zircon. As such, any prolonged downturn in China could have a material adverse effect on our business and financial results.

***The price of our products, in particular, TiO<sub>2</sub>, zircon, and pig iron, have been, and in the future may be, volatile. Price declines for our products will negatively affect our financial position and results of operations.***

Historically, the global market for TiO<sub>2</sub>, zircon and pig iron have been volatile, and those markets are likely to remain volatile in the future. Prices for TiO<sub>2</sub>, zircon and pig iron may fluctuate in response to relatively minor changes in the supply of, and demand for, these products, market uncertainty and other factors beyond our control. Factors that affect the price of our products include, among other things:

- overall economic conditions;
- the level of customer demand particularly in the paint, plastics and construction industries;
- the level of production and exports of our products globally, including the impact of competitors increasing their capacity and exports;
- the level of production and cost of materials, such as chlorine, sulfuric acid and anthracite, used to produce our products, including rising prices of raw materials due to inflation;
- the cost of energy consumed in the production of TiO<sub>2</sub> and zircon, including the price of natural gas, electricity and pet coke;
- domestic and foreign governmental relations, tariffs or other trade disputes, regulations and taxes; and
- political conditions or hostilities and unrest in regions where we export our TiO<sub>2</sub>, zircon and feedstock/other products.



Pricing pressure with respect to our TiO<sub>2</sub> products, zircon and pig iron can make it difficult to predict the cash we may have on hand at any given time, and a prolonged period of price declines may materially and adversely affect our financial position, liquidity, ability to finance planned capital expenditures and results of operations.

***The ongoing global COVID-19 pandemic has adversely affected, and may continue to adversely affect, our business, financial condition and results of operations.***

The ongoing global COVID-19 pandemic, including new strains of the virus, has adversely affected, and may continue to adversely affect, our business, financial condition and results of operations. We have significant sales and manufacturing operations in the U.S., Europe, South Africa, Brazil, the Kingdom of Saudi Arabia and Australia, and each of these countries has been significantly affected by the outbreak and taken measures to try to contain it. These restrictive measures have adversely impacted, and may further adversely impact, our workforce and operations, the operations of our customers, and those of our respective vendors and suppliers. Demand for our products could decrease as a result of the pandemic. Any such future developments are dependent upon factors including, but are not limited to, the duration and spread of the outbreak, the severity of new strains of the virus, the actions to contain the virus or treat its impact, the effectiveness of treatments and vaccines, the size and effectiveness of the compensating measures taken by governments, including the failure to implement additional stimuli and how quickly and to what extent normal economic and operating conditions can resume.

In addition, the COVID-19 pandemic has significantly increased economic and demand uncertainty. It is possible that the continued spread of COVID-19, including new strains of the virus, will cause an additional economic slowdown, and it is possible that this could cause a global recession. Such adverse impact on the global economy is likely to adversely affect our performance, financial condition and results of operations, as well as our ability to successfully execute our business strategies and initiatives, such as the funding of capital expenditures, including by negatively impacting the demand for our products and services, negatively affecting the parties with whom we do business and disrupting our ability to conduct product development and other important business activities.

To the extent the COVID-19 pandemic continues to adversely affect the global economy, and/or adversely affects our business, operations or financial performance, it may also have the effect of increasing the likelihood and/or magnitude of other risks described in this section entitled “Risk Factors”. We are closely monitoring the potential adverse effects and impact on our operations, businesses and financial performance, including liquidity and capital usage, though the extent is difficult to fully predict at this time due to the rapid evolution of this uncertain situation.

***Our industry and the end-use markets in which we compete are highly competitive. This competition may adversely affect our results of operations and operating cash flows.***

Each of our markets is highly competitive. Competition in the TiO<sub>2</sub> industry is based on a number of factors such as price, product quality, and service. We face significant competition from major international and smaller regional competitors, including producers in China. Moreover, Chinese producers have significantly expanded their production capacity in recent years and have also commenced the commercial production of TiO<sub>2</sub> via chloride technology. The risk of substitution of these Chinese producers by our customers could increase as these Chinese producers expand their use of chloride technology, improve the quality of their chloride technology, and continue to improve the quality of their sulfate products. Moreover, we compete with a large number of mining companies with respect to zircon. Zircon producers generally compete on the basis of price, quality, logistics, delivery, and payment terms and consistency of supply.

Within the end-use markets in which we compete, competition between products is intense. We face substantial risk that our customers could switch to our competitors’ products in response to any number of developments including lower price offerings by our competitors for substantially the same products, new product development by competitors, increased commercial production of TiO<sub>2</sub> via chloride technology by Chinese producers, greater acceptance of TiO<sub>2</sub> produced via sulfate technology in end-market applications previously characterized by TiO<sub>2</sub> produced via chloride technology, or with respect to zircon customers, switching to lower priced substitute products. Our inability to develop, produce or market our products to compete effectively against our competitors could have a material adverse effect on our business, financial condition, results of operations and cash flow.

***An increase in the price of energy or other raw materials, or an interruption in our energy or other raw material supply, could have a material adverse effect on our business, financial condition or results of operations.***

Our mining, beneficiation, smelting and production processes consume significant amounts of energy and raw materials, the costs of which can be subject to worldwide, as well as, local supply and demand, as well as other factors beyond our control. Fuel and energy linked to commodities, such as diesel, natural gas, heavy fuel oil and pet coke, and other consumables, such as chlorine, sulfuric acid, illuminating paraffin, electrodes, sulfur and anthracite, consumed in our TiO<sub>2</sub> manufacturing and mining operations form an important part of our TiO<sub>2</sub> operating costs. We have no control over the costs of these consumables, many of which are linked to some degree to the price of oil, and the costs of many of these raw materials may fluctuate widely for a variety of reasons, including changes in availability, major capacity additions or reductions, or significant facility operating problems. Availability of such consumables could also be impacted by transportation capacity constraints or other interruptions. These fluctuations could negatively affect our operating margins, our results of operations or planned capital expenditures. As these costs rise, our operating expenses will increase and could adversely affect our business, especially if we are unable to pass price increases in raw materials through to our customers.

***The markets for many of our products have seasonally affected sales patterns.***

Historically, the demand for our products is subject to seasonal fluctuations. TiO<sub>2</sub> is widely used in paint and other coatings where demand increases prior to the painting season in the Northern Hemisphere (spring and summer). Additionally, although zircon is generally a non-seasonal product, it is negatively impacted by the winter and Chinese New Year celebrations due to reduced zircon demand from China. We may be adversely affected by existing or future cyclical changes, and such conditions may be sustained or further aggravated by anticipated or unanticipated changes in regional weather conditions. For example, poor weather conditions in a region can lead to an abbreviated painting season, which can depress consumer sales of paint products that use TiO<sub>2</sub>.

***We are dependent on, and compete with other mining and chemical businesses for, key human resources in the countries in which we operate, and our business will suffer if we are unable to hire or deploy highly skilled employees.***

We compete with other chemical and mining companies, and other companies generally, in the countries in which we operate to attract and retain key human resources at all levels with the appropriate technical skills and operating and managerial experience necessary to continue operating and expanding our businesses. These operations use modern techniques and equipment and accordingly require various types of skilled workers. The success of our business will be materially dependent upon the skills, experience and efforts of our key officers and skilled employees. Competition for skilled employees may cost us in terms of higher labor costs or reduced productivity. In addition, due to the ongoing COVID-19 pandemic, certain countries in which we operate have imposed stringent travel and immigration restrictions which may further hinder our ability to deploy necessary human resources. As a result, we may not be able to attract, retain and deploy skilled and experienced employees.

Should we lose any of our key personnel or fail to attract, retain and deploy key qualified personnel or other skilled employees, our business may be harmed and our operational results and financial condition could be affected.

***If we are unable to innovate and successfully introduce new products, or new technologies or processes reduce the demand for our products or the price at which we can sell products, our results of operations could be adversely affected.***

Our industries and the end-use markets into which we sell our products experience periodic technological change and product improvement. Our financial condition and results of operations could be adversely affected if we are unable to gauge the direction of commercial and technological progress in key end-use markets or if we fail to fund and successfully develop, manufacture and market products in such changing end-use markets.

In addition, new technologies or processes have the potential to replace or provide lower-cost alternatives to our products, such as new processes that reduce the amount of TiO<sub>2</sub> or zircon content in consumer products which in turn could depress the demand and pricing for TiO<sub>2</sub> or zircon, respectively. We cannot predict whether

technological innovations will, in the future, result in a lower demand for our products or affect the competitiveness of our business. We may be required to invest significant resources to adapt to changing technologies, markets and competitive environments.

***Given the nature of our chemical, mining and smelting operations, we face a material risk of liability, production delays and additional expenditures from environmental and industrial accidents.***

Our business is exposed to, among other things, environmental hazards and industrial accidents the occurrence of which could delay production, suspend operations, increase repair, maintenance or medical costs and, due to the vertical integration of our operations, could have an adverse effect on the productivity and results of operations of a particular manufacturing facility or on our business as a whole. Furthermore, during operational breakdowns resulting from any such environmental hazard or industrial accident, the relevant facility may not be restored to full operations within the anticipated timeframe, which could result in further business losses. Over our operating history, we have incurred incidents of this nature. If any of the equipment on which we depend were severely damaged or were destroyed by fire, flooding, or otherwise, we may be unable to replace or repair it in a timely manner or at a reasonable cost, which would impact our ability to produce and ship our products, which would have a material adverse effect on our business, financial condition or results of operations.

***Equipment failures and deterioration of assets may lead to production curtailments, shutdowns or additional expenditures.***

Our operations depend upon critical equipment that must periodically maintained and upgraded in order to avoid suffering unanticipated breakdowns or failures. As a result, our mining operations and processing plants may be interrupted or curtailed by equipment failures, which could have a material adverse effect on our results of operations. In addition, assets critical to our mining and chemical processing operations may deteriorate due to wear and tear or otherwise sooner than we currently estimate. Such deterioration may result in additional maintenance spending and additional capital expenditures. If these assets do not generate the amount of future cash flows that we expect, and we are not able to refurbish them or procure replacement assets in an economically feasible manner, our future results of operations may be materially and adversely affected.

***Our results of operations and financial condition could be seriously impacted by security breaches, including cybersecurity incidents.***

We rely on information technology systems across our operations to manage our accounting, finance, and supply chain functions. Our information technology is provided by a combination of internal and external services and service providers. Further, our business involves the use, processing, storage and transmission of information about customers, suppliers and employees using such information technology systems. Our ability to effectively operate our business depends on the security, reliability and capacity of these systems.

Like most major corporations, we may become the target of cyberattacks, including industrial espionage, phishing or ransomware attacks, from time to time. For instance, the Cristal business we acquired in April 2019 was subject to a significant cybersecurity attack in 2017. Failure to effectively prevent, detect and recover from security breaches, including attacks on information technology and infrastructure by hackers; viruses; breaches due to employee error or actions; or other disruptions could seriously harm our operations as well as the operations of our customers and suppliers. Such serious harm can involve, among other things, misuse of our assets, business disruptions, loss of data, unauthorized access to trade secrets and confidential business information, unauthorized access to personal information, legal claims or proceedings, reporting errors, processing inefficiencies, negative media attention, reputational harm, loss of sales, remediation and increased insurance costs, and interference with regulatory compliance. We have experienced, and expect to continue to experience, these types of cybersecurity threats and incidents, which may be material.

We have put in place training and security measures designed to protect against cyberattacks, phishing, security breaches and misappropriation or corruption of our systems, intentional or unintentional disclosure of confidential information, or disruption of our operations. As these threats continue to evolve, particularly around cybersecurity, we may be required to expend significant resources to enhance our control environment, processes, practices and other protective measures. Despite these efforts, we may not be able to prevent cyberattacks and other security breaches and such events could materially adversely affect our business, financial condition or results of operations.

***Our ore resources and reserve estimates are based on a number of assumptions, including mining and recovery factors, future cash costs of production and ore demand and pricing. As a result, ore resources and reserve quantities actually produced may differ from current estimates.***

The mineral resource and reserve estimates are estimates of the quantity and ore grades in our mines based on the interpretation of geological data obtained from drill holes and other sampling techniques, as well as from feasibility studies. The accuracy of these estimates is dependent on the assumptions and judgments made in interpreting the geological data in accordance with established guidelines and standards. Our mineral reserves represent the amount of ore that we believe can be economically mined and processed, and are estimated based on a number of factors.

There is significant uncertainty in any mineral reserve or mineral resource estimate. Factors that are beyond our control, such as the ability to secure mineral rights, the sufficiency of mineralization to support mining and beneficiation practices and the suitability of the market may significantly impact mineral resource and reserve estimates. The actual deposits encountered and the economic viability of mining a deposit may differ materially from our estimates. Since these mineral resources and reserves are estimates based on assumptions, we may revise these estimates in the future as we become aware of new developments. To maintain TiO<sub>2</sub> feedstock and zircon production beyond the expected lives of our existing mines or to increase production materially above projected levels, we will need to access additional reserves through exploration or discovery.

## ***RISKS RELATING TO THE GLOBAL NATURE OF OUR BUSINESS***

***We are exposed to the risks of operating a global business.***

We have operations in jurisdictions around the globe which subjects us to a number of risks, including:

- adapting to unfamiliar regional and geopolitical conditions and demands, including political instability, civil unrest, expropriation, nationalization of properties by a government, imposition of sanctions, changes to import or export regulations and fees, renegotiation or nullification of existing agreements, mining leases and permits;
- increased difficulties with regard to political and social attitudes, laws, rules, regulations and policies within countries that favor domestic companies over non-domestic companies, including customer-or government-supported efforts to promote the development and growth of local competitors;
- economic and commercial instability risks, including those caused by sovereign and private debt default, corruption, and new and unfamiliar laws and regulations at national, regional and local levels, including taxation regimes, tariffs and trade barriers, exchange controls, repatriation of earnings, and labor and environmental and health and safety laws and regulations;
- implementation of additional technological and cybersecurity measures and cost reduction efforts, including restructuring activities, which may adversely affect our ability to capitalize on opportunities;
- major public health issues, including the current COVID-19 pandemic, which could cause, and have caused, disruptions in our operations or workforce;
- war or terrorist activities;
- difficulties enforcing intellectual property and contractual rights in certain jurisdictions; and
- unexpected events, including fires or explosions at facilities, and natural disasters.

***Political and social instability, and unrest, and actual, or potential, armed conflicts in the Middle East region may affect the Company's results of operations and financial position.***

Our operations in KSA have been affected in the past, and may be affected in the future, by the political, social and economic conditions from time to time prevailing in, or affecting, KSA or the wider Middle East region, including by rocket attacks from armed rebel groups. For example, since 2011, a number of countries in the Middle East region have witnessed significant social unrest, including widespread public demonstrations, and, in certain cases, armed conflict, terrorist attacks, diplomatic disputes, foreign military intervention and a change of government. In addition, KSA faces a number of challenges arising mainly from the relatively high levels of unemployment among the Saudi youth population, requests for political and social changes, and the security



threat posed by certain groups. Should KSA experience similar political and social unrest as found in other countries in the Middle East, the Saudi Arabian economy could be adversely affected, our TiO<sub>2</sub> plant located in Yanbu could be temporarily disrupted or materially adversely affected and our business and operating results could be materially adversely affected.

In addition, the Slagger, that is subject to the Option or Put (as defined elsewhere herein), is located in Jazan, KSA which has been subject to rocket attacks from armed rebel groups fighting the KSA military in Yemen. Further attacks could materially adversely affect our business and operating results.

***South Africa, where we have large mining assets and derive a significant portion of our revenue and profit, poses distinct operational risks which could affect our business, financial condition and results of operations.***

In South Africa, we currently operate two significant mining assets, as well as accompanying separation plants and smelting operations, and derive a significant portion of our profit from the sale of zircon. Our mining and smelting operations depend on electrical power generated by Eskom, the sole, state-owned energy supplier. Eskom has not been able to reliably provide electrical power and as a result “load-shedding” (planned and unplanned rolling power outages) is expected for the foreseeable future. In addition, in 2021, Eskom received a governmental order to reduce by one-third its operating capacity to limit its greenhouse gas emissions. Although Eskom is currently appealing the government order, there is no assurance that Eskom will be successful in its appeal. We have also experienced increased electricity prices and future price increases are expected to occur. Capacity reductions, load shedding, and/or electricity price increases could have a material adverse effect on our business, financial conditions or results of operations.

In addition, our KZN Sands operations currently use approximately 320,000 gigajoules of Sasol gas, which is available only from Sasol Limited. As such, an interruption in the supply of Sasol gas could have a material adverse effect on our business, financial conditions or results of operations.

Moreover, certain regions of South Africa have experienced in the past, and are prone to, drought conditions resulting in water restrictions being imposed in such areas. We use significant amounts of water in our South African operations. A prolonged drought in a region of South Africa where our operations are located may lead to water use restrictions which could have a material adverse effect on our business, financial condition or results of operations. In addition, under South African law, our South African mining operations are subject to water-use licenses that govern each operation. These licenses require, among other conditions, that mining operations achieve and maintain certain water quality limits for all water discharges, where applicable. Changes to water-use licenses could increase our costs of operations thereby affecting our operational results and financial condition.

Our operations in South Africa are also reliant on services provided by the State-owned, sole provider of rail transport, Transnet Freight Rail and ocean transport, Transnet National Port Authority (collectively “Transnet”). Furthermore, Transnet provides extensive dockside services at both the ports of Richards Bay and Saldanha Bay. In 2021, the Transnet owned and operated Port of Richards Bay was impacted by two separate events, including a significant fire, which damaged part of the Port’s infrastructure, causing increased shipment delays. Delays or interruptions at either the rail service or the ports in which we receive and/or export material could have a negative impact on our business, financial condition and results of operations.

The aforementioned operational risks, as well as any other foreseen or unforeseen operational risks primarily related to doing business in South Africa, could have a material adverse effect on our business, financial condition or results of operations.

***As an emerging market, South Africa poses a challenging array of long-term political, social and economic risks.***

South Africa continues to undergo political, social and economic challenges. For example, in 2021, unprecedented and politically motivated civil unrest in South Africa resulted in significant damage to the national supply chains and logistics. The primary area of unrest was near to our KZN operations. Changes to, or instability in, the economic, social or political environment in South Africa which cause civil unrest, shortages of production materials, interruptions to transportation networks, or labor unrest could result in production delays and production shortfalls, and materially impact our production and results of operations.

The South African government has recently embarked on a process of identifying and securing land for persons who were previously dispossessed of such land as a result of Apartheid policies. In December 2019, the

South African government released a draft land expropriation bill for public comment. The land expropriation bill contemplates that, where it is in the “public interest”, land may be expropriated by the South African government, without compensation being payable to the current owners. While the South African government has indicated that such measures will be applied initially to state-owned land, it is possible that such measures may extend to agricultural and mining areas. In the event that the land on which the Namakwa Sands and KZN Sands operations are situated areas become the subject of a land claim under any such proposed or future land expropriation bill, it may have a material adverse effect on our business, financial condition or results of operations.

The African Government’s exchange control regulations require resident companies to obtain the prior approval of the South African Reserve Bank to raise capital in any currency other than the Rand, and restrict the export of capital from South Africa. While the South African government has relaxed exchange controls in recent years, it is difficult to predict whether or how it will further change or abolish exchange control measures in the future. These exchange control restrictions could hinder our financial and strategic flexibility, particularly our ability to use South African capital to fund acquisitions, capital expenditures, and new projects outside of South Africa.

Our South African operations have been affected by inflation in South Africa in recent years. Employment costs and wages in South Africa have increased in recent years, resulting in significant cost pressures for the mining industry. Prolonged or heightened inflation and associated cost pressures could have a material adverse effect on our business, financial condition or results of operations.

Our South African operations have entered into various collective agreements with organized labor regulating wages and working conditions at our mines and smelter operations. There have been periods when various stakeholders have been unable to agree on dispute resolution processes, leading to threats of disruptive industrial action disputes. Due to the high level of employee union membership, our South African operations are at risk of production stoppages for indefinite periods due to strikes and other labor disputes. Although we believe that we have good labor relations with our South African employees, we may experience labor disputes in the future.

Although we believe that our relationships with our various local communities are good, the areas in which our South African operations are situated are the traditional homelands of various tribal groupings that are historically politically volatile. This volatility persists today and frequently results in violent, destructive behaviors. Increased volatility and any consequential civil unrest may result in production stoppages and/or the destruction of assets which comprise our South African operations, any of which could have a material adverse effect on our business, financial condition or results of operations.

***Economic conditions and regulatory changes following the U.K.’s exit from the E.U. could adversely impact our operations, operating results and financial condition.***

The U.K. has withdrawn from the E.U. (often referred to as Brexit). Since December 31, 2020, the U.K. has left the E.U. customs union and single market and is no longer required to follow E.U. laws. It is expected that Brexit will impact economic conditions in the U.K. and the E.U. but given the lack of comparable precedent, it is unclear what financial, trade and legal implications the withdrawal of the U.K. from the E.U. will have and how such withdrawal will affect us.

The consequences of Brexit could adversely impact the markets in which we and our customers operate. Brexit could also create uncertainty with respect to the legal and regulatory requirements to which we are subject and lead to divergent national laws and regulations as the U.K. government determines which E.U. laws to replace or replicate. Due to Brexit, adverse consequences such as deterioration in economic conditions, volatility in currency exchange rates or adverse changes in regulation could have a negative impact on our future operations, operating results and financial condition.

***Our results of operations may be adversely affected by fluctuations in currency exchange rates.***

The financial condition and results of operations of our operating entities outside the U.S. are reported in various foreign currencies, primarily the South African Rand, Australian Dollars, Euros, Pound Sterling and Brazilian Real and then converted into U.S. dollars at the applicable exchange rate for inclusion in the financial statements. A significant portion of our costs are denominated in currencies other than the U.S. dollar. As a

result, any volatility of the U.S. dollar against these foreign currencies creates uncertainty for, and may have a negative impact on, reported sales and operating margin. In addition, our operating entities often need to convert currencies they receive for their products into currencies in which they purchase raw materials or pay for services, which could result in a gain or loss depending on fluctuations in exchange rates. In order to manage this risk, we have, from time to time, entered into forward contracts to buy and sell foreign currencies.

### ***RISKS RELATING TO OUR DEBT AND CAPITAL STRUCTURE***

***We are a holding company that is dependent on cash flows from our operating subsidiaries to fund our debt obligations, capital expenditures and ongoing operations.***

All of our operations are conducted, and all of our assets are owned, by our operating companies, which are our subsidiaries. We intend to continue to conduct our operations at the operating company level. Consequently, our cash flow and our ability to meet our obligations or make cash distributions depends upon the cash flow of our operating companies, and the payment of funds by our operating companies in the form of dividends or otherwise. The ability of our operating companies to make any payments to us depends on their earnings, the terms of their indebtedness, including the terms of any credit facilities, or indentures, and legal restrictions regarding the transfer of funds.

Our ability to service our debt and fund our planned capital expenditures and ongoing operations will depend on our ability to generate and increase cash flow, and our access to additional liquidity sources. Our ability to generate and increase cash flow is dependent on many factors, including many of other risks described in this section entitled “Risk Factors”.

***The agreements and instruments governing our debt contain restrictions and limitations that could affect our ability to operate our business, as well as impact our liquidity.***

As of December 31, 2021, our total principal amount of debt was approximately \$2.6 billion. Our credit facilities contain covenants that could adversely affect our ability to operate our business, our liquidity, and our results of operations. These covenants may restrict, among other things, our and our subsidiaries’ ability to:

- incur or guarantee additional indebtedness;
- complete asset sales, acquisitions or mergers;
- make investments and capital expenditures;
- prepay other indebtedness;
- enter into transactions with affiliates; and
- fund additional dividends or repurchase shares.

Certain of our indebtedness facilities and senior notes include requirements relating to the ratio of adjusted EBITDA to indebtedness or certain fixed charges. The breach of any covenants or obligations in our credit facilities, not otherwise waived or amended, could result in a default under the applicable debt obligations (and cross-defaults to certain other debt obligations) and could trigger acceleration of those obligations, which in turn could trigger other cross defaults under other existing or future agreements governing our long-term indebtedness. In addition, the secured lenders under the credit facilities could foreclose on their collateral, which includes equity interests in our subsidiaries, and exercise other rights of secured creditors. Any default under those credit facilities could adversely affect our growth, our financial condition, our results of operations and our ability to make payments on our credit facilities, and could force us to seek the protection of bankruptcy laws.

***We may need additional capital in the future and may not be able to obtain it on favorable terms, and such capital expenditure projects may not realize expected investment returns.***

Our business is capital intensive, and our success depends to a significant degree on our ability to maintain our manufacturing operations and invest in those operations to expand capacity and remain competitive from a cost perspective. We may require additional capital in the future to finance capital investments, including any new mines that replace mines that are end of life, potential expansion or optimization of existing production facilities or mining operations, fund ongoing research and development activities and meet general working capital needs. For instance, in 2020 we began the implementation of a multi-year global digital transformation

strategy that is expected to include the establishment of increased automation of both operational and financial systems, including the global ERP, through new and upgraded systems, technology and processes. The risks relating to such digital transformation include any new information and operational technologies not being properly designed, integrated, managed, and/or implemented in a timely manner which could significantly increase the program's costs, and negatively impact our operations, including, our plant's system safety, functionality and effectiveness. Although we have taken, and will continue to take, significant steps to mitigate the potential negative impact of the implementation of such new digital systems, there can be no assurance that these procedures will be completely successful. Additionally, we entered into the Option Agreement with AMIC pursuant to which AMIC granted us an option to acquire 90% of a SPV, to which AMIC's ownership in the Slagger will be contributed together with \$322 million of indebtedness currently held by AMIC. Upon exercise of the Option or Put, there can be no assurance that we may assume this indebtedness and may need to obtain funding to repay it at maturity. In the event we require any additional financing, such financing may not be available when needed on terms favorable to us, or at all. If we are unable to obtain adequate funds on acceptable terms, we may be unable to maintain, expand or lower the operating costs of our facilities or take advantage of future opportunities or respond to competitive pressures, which could harm our results of operations, financial condition and business prospects. Additionally, if we undertake these projects, they may not be completed on schedule, at the budgeted cost, or at all. Moreover, our revenue may not increase immediately upon the expenditure of funds on a particular project. As a result, we may not be able to realize our expected investment return, which could adversely affect our results of operations and financial condition.

### ***RISKS RELATING TO OUR LEGAL AND REGULATORY ENVIRONMENT***

***Our South African mining rights are subject to onerous regulatory requirements imposed by legislation and the Department of Mineral Resources and Energy (the "DMRE"), the compliance with which could have a material adverse effect on our business, financial condition and results of operations.***

Black economic empowerment ("BEE") legislation was introduced into South Africa as a means to seek to redress the inequalities of the previous Apartheid system by requiring the inclusion of historically disadvantaged South Africans in the mainstream economy. Under BEE legislation, certain of our operations are required to be partially owned by historically disadvantaged South Africans — known as "empowerment" — and comply with other provisions of applicable BEE legislation that relate to matters such as mandatory procurement and employment opportunities for the communities in which we operate. On March 1, 2019, a new set of BEE rules and regulations relevant to our operation came into effect known as "Mining Charter III". Under the "empowerment" rules of Mining Charter III, certain of our operations require a 30% BEE shareholding that must be structured through a special purpose vehicle comprised of black entrepreneurs, the local community surrounding the relevant mining area and eligible employees. In addition, Mining Charter III sets forth more stringent requirements applicable to all of our South African operations, including: the procurement of goods and services from BEE compliant entities; race, age and gender based employment quotas; and, workers' housing and living conditions. Uncertainty over the status of Mining Charter III arose when in September 2021, the South African High Court ruled that certain provisions of Mining Charter III were unconstitutional and that Mining Charter III cannot be considered binding legislation. The DMRE is currently considering its options with respect to the court ruling. As a result, there is no assurance that all the provisions of Mining Charter III will take effect or that the DMRE as result of such ruling will not attempt to enforce the same or more onerous provisions through legislative amendments.

Prior to Mining Charter III, BEE in the South African mining sector was governed by Mining Charter II. Under Mining Charter II, our South African operations were "empowered" by a 26% ownership interest in two of our South African subsidiaries by Exxaro which prior to 2017 was greater than 50% owned by historically disadvantaged South Africans. We believe that under Mining Charter III the two South African subsidiaries in which Exxaro previously held 26% became permanently "empowered" — so-called, "once empowered always empowered".

"Once empowered always empowered" means that a South African company that has had the requisite shareholding base consisting of historically disadvantaged South Africans as at December 31, 2014 will always qualify as an "empowered" entity for purposes of the retention of an existing mining right for the duration of that right. The question of whether the "once empowered always empowered" principle applies in the mining industry in South Africa has been subject to litigation between the Minerals Council of South Africa (the "Minerals Council") (formerly the Chamber of Mines, an industry body that represents approximately 90% of



the South African Mining Industry) and the DMRE. The South African High Court decided in the affirmative for the Minerals Council and such decision was subsequently confirmed on appeal. Thus, based on the High Court's ruling, the "once empowered always empowered" principle applies to our existing mining rights. In addition, the South African High Court in connection with its September 2021 decision with respect to the unconstitutionality of Mining Charter III also confirmed that "once empowered always empowered" applies to the renewal and transfer of mining rights. However, there is no assurance that DMRE may not enact new legislation that would undermine the court's ruling regarding the applicability of "once empowered always empowered" to the renewal and transfer of mining rights. In the event that "once empowered always empowered" does not ultimately apply to the renewal or transfer of mining rights it could have a material adverse effect on our business, financial condition or results of operations.

***Our failure to comply with the anti-corruption laws of the U.S. and various international jurisdictions could negatively impact our reputation and results of operations.***

Doing business on a global basis requires us to comply with the laws and regulations of the U.S. government and those of various international jurisdictions, and our failure to successfully comply with these rules and regulations may expose us to liabilities. In particular, our operations are subject to U.S. and foreign anti-corruption laws and regulations, such as the U.S. Foreign Corrupt Practices Act ("FCPA"), the U.K. Bribery Act 2010 ("U.K. Bribery Act"), as well as anti-corruption laws of the various jurisdictions in which we operate. Our global operations may expose us to the risk of violating, or being accused of violating, the foregoing or other anti-corruption laws. Such violations could be punishable by criminal fines, imprisonment, civil penalties, disgorgement of profits, injunctions, and exclusion from government contracts, as well as other remedial measures. Investigations of alleged violations can be very expensive, disruptive, and damaging to our reputation. Although we have implemented anti-corruption policies and procedures, there can be no guarantee that these policies, procedures, and training will effectively prevent violations by our employees or representatives in the future. Additionally, we face a risk that our distributors and other business partners may violate the FCPA, the U.K. Bribery Act, or similar laws or regulations. Such violations could expose us to FCPA and U.K. Bribery Act liability and/or our reputation may potentially be harmed by their violations and resulting sanctions and fines.

***We may be subject to litigation, the disposition of which could have a material adverse effect on our results of operations.***

The nature of our operations exposes us to possible litigation claims, including disputes with competitors, customers, equipment vendors, environmental groups and other non-governmental organizations, and providers of shipping services. Some of the lawsuits may seek fines or penalties and damages in large amounts, or seek to restrict our business activities. Because of the uncertain nature of any litigation and coverage decisions, we cannot predict the outcome of these matters or whether insurance claims may mitigate any damages to us. Litigation is very costly, and the costs associated with prosecuting and defending litigation matters could have a material adverse effect on our results of operations and financial condition. See Note 20 of notes to our consolidated financial statements, included elsewhere in this Form 10-K for further information regarding our commitments and contingencies.

***Our flexibility in managing our labor force may be adversely affected by labor and employment laws in the jurisdictions in which we operate, many of which are more onerous than those of the U.S.; and some of our labor force has substantial workers' council or trade union participation, which creates a risk of disruption from labor disputes and new laws affecting employment policies.***

The vast majority of our employees are located outside the U.S. In most of those countries, labor and employment laws are more onerous than in the U.S. and, in many cases, grant significant job protection to employees, including rights on termination of employment. Moreover, many of our workforce outside the U.S. belong to unions and/or are represented by a collective bargaining agreement. As such, in such jurisdictions we are required to consult with, and seek the consent or advice of, various employee groups or works' councils that represent our employees for any changes to our activities or employee benefits. This requirement could have a significant impact on our flexibility in managing costs and responding to market changes.

***We are subject to many environmental, health and safety regulations.***

Our operations and production facilities are subject to extensive environmental and health and safety laws and regulations at national, international and local levels in numerous jurisdictions relating to use of natural resources, pollution, protection of the environment, mine site remediation, transporting and storing raw materials

and finished products, and storing and disposing of hazardous wastes among other materials. Moreover, certain environmental laws impose joint and several and/or strict liability for costs to clean up and restore sites where pollutants have been disposed or otherwise spilled or released. We cannot be certain that we will not incur significant costs and liabilities for remediation or damage to property, natural resources or persons as a result of spills or releases from our operations or those of a third party.

The costs of compliance with the extensive environmental, health and safety laws and regulations or the inability to obtain, update or renew permits required for operation or expansion of our business could negatively impact our results of operations or otherwise adversely affect our business. If we fail to comply with the conditions of our permits governing the production and management of regulated materials, mineral sands mining licenses or leases or the provisions of the relevant jurisdictional laws in which we operate, these permits, mining licenses or leases and mining rights could be canceled or suspended, and we could be prevented from obtaining new mining and prospecting rights, which could materially and adversely affect our business, operating results and financial condition. Additionally, we could incur substantial costs, including fines, damages, criminal or civil sanctions and remediation costs, or experience interruptions in our operations, for violations arising under these laws and regulations, including operating without the required permits, mining licenses or leases and/or mining rights. In the event of a catastrophic incident involving any of the raw materials we use, or chemicals or mineral products we produce, we could incur material costs as a result of addressing the consequences of such event.

Changes to existing laws governing operations, especially changes in laws relating to transportation of mineral resources, the treatment of land and infrastructure, contaminated land, the remediation of mines, tax royalties, waste handling and management, exchange control restrictions, environmental remediation, mineral rights, ownership of mining assets, or the rights to prospect and mine may have a material adverse effect on our future business operations and financial performance. There is risk that onerous conditions may be attached to authorizations in the form of mining rights, water-use licenses, miscellaneous licenses and environmental approvals, or that the grant of these approvals may be delayed or not granted.

***Our TiO<sub>2</sub> products are subject to increased regulatory scrutiny, that may impede or inhibit widespread usage of TiO<sub>2</sub> and / or diminish the Company's ability to sustain or grow its business or may add significant costs of doing business.***

Current regulatory and societal demands for increased protection against products which may cause cancer, genetic mutations or other long-term health problems are resulting in increased pressure for more stringent regulation of our TiO<sub>2</sub> products. We expect these trends to continue and the ultimate cost of compliance could be material. In particular, changes to product safety regulations could limit the use of, and demand for, our TiO<sub>2</sub> products, require investment in new product development or the way we manufacture our existing products, and increase regulatory compliance expenditures for us and our suppliers.

For instance, the European Commission has recently adopted a regulation classifying certain forms of TiO<sub>2</sub> with a particular aerodynamic diameter as a Category 2 carcinogen by inhalation, with the applicable labelling regulation coming into effect in October 2021. The classification of TiO<sub>2</sub> as a Category 2 Carcinogen could impact our business by inhibiting the marketing of products containing TiO<sub>2</sub> to consumers, and subject our manufacturing operations to new regulations that could increase costs. The Category 2 classification and labelling requirements could have additional effects under other EU laws (e.g., those affecting medical and pharmaceutical applications, cosmetics, food packaging and food additives) and/or trigger heightened regulatory scrutiny in countries and local jurisdictions outside the EU based on health and safety grounds. For instance, the Health and Safety Executive in the U.K. has published the U.K.'s mandatory classification and labelling list, which includes the classification of TiO<sub>2</sub> as a suspected carcinogen (in a powder form containing 1% or more of particles with aerodynamic diameter ≤ 10 µm). The classification became mandatory in the U.K. in October 2021.

In May 2021, the European Food Safety Authority (EFSA) announced new guidelines which concluded that a certain digestible form of TiO<sub>2</sub> known as E171 is no longer considered safe as a food additive due to uncertainty for genotoxicity. Though we do not manufacture E171, the EFSA guidelines indicate additional regulatory review of our TiO<sub>2</sub> products is likely which could result in more stringent qualifications and use-restriction being applied or to the introduction of further classifications. It is also possible that heightened regulatory scrutiny could lead to claims by consumers or those involved in the production of such products alleging adverse health impacts. In addition, there is no assurance that other materials which we add to our TiO<sub>2</sub> products could also be subject to increased regulation which could impact the cost of labelling or the sales of our products.

***ESG issues, including those related to climate change and sustainability, may subject us to additional costs and restrictions, including increased energy and raw material costs, which could have an adverse effect on our business, financial condition and results of operations, as well as damage our reputation.***

The majority of our greenhouse gas emissions are generated from our TiO<sub>2</sub> slag furnaces in South Africa, synthetic rutile kiln in Australia, and TiO<sub>2</sub> pigment plants in the United States, United Kingdom, France, Brazil, China, Netherlands, Australia, and Saudi Arabia. Concerns about the relationship between greenhouse gases and global climate change, and an increased focus on carbon neutrality, may result in new or increased legal and regulatory requirements on both national and supranational levels, to monitor, regulate, control and tax emissions of carbon dioxide and other greenhouse gases. A number of governmental bodies have already introduced, or are contemplating, regulatory changes in response to climate change, including regulating greenhouse gas emissions. Any laws or regulations that are adopted to reduce emissions of greenhouse gases could, among other things, (i) cause an increase to our raw material costs, (ii) increase our costs to operate and maintain our facilities, and (iii) increase costs to administer and manage emissions programs.

In addition, companies across all industries are facing increasing scrutiny relating to their ESG policies. Increased focus and activism related to ESG may hinder the Company's access to capital, as investors may reconsider their capital investment as a result of their assessment of the Company's ESG practices. In particular, customers, investors and other stakeholders are increasingly focusing on environmental issues, including climate change, water use, and other sustainability concerns. Moreover, increased regulatory requirements, including in relation to various aspects of ESG including disclosure requirements, may result in increased compliance or input costs of energy, raw materials or compliance with emissions standards, which may cause disruptions in the manufacture of our products or an increase in operating costs. Any failure to achieve our ESG goals or a perception of our failure to act responsibly with respect to the environment or to effectively respond to new, or changes in, legal or regulatory requirements concerning environmental or other ESG matters, or increased operating or manufacturing costs due to increased regulation, could adversely affect our business, financial condition and results of operations, as well as our reputation.

***If our intellectual property were compromised or copied by competitors, or if competitors were to develop similar intellectual property independently, our results of operations could be negatively affected. Further, third parties may claim that we infringe on their intellectual property rights which could result in costly litigation.***

Our success depends to a significant degree upon our ability to protect and preserve our patents and unpatented proprietary technology, operational knowledge and other trade secrets (collectively "intellectual property rights"). The undetected or unremedied unauthorized use of our intellectual property rights or the legitimate development or acquisition of intellectual property related to our industry by third parties could reduce or eliminate any competitive advantage we have as a result of our intellectual property rights. If we must take legal action to protect, defend or enforce our intellectual property rights, any suits or proceedings could result in significant costs and diversion of our resources and our management's attention, and we may not prevail in any such suits or proceedings. A failure to protect, defend or enforce our intellectual property rights could have an adverse effect on our financial condition and results of operations.

Although there are currently no pending or threatened proceedings or claims known to us that are material relating to alleged infringement, misappropriation or violation of the intellectual property rights of others, we may be subject to legal proceedings and claims in the future in which third parties allege that their patents or other intellectual property rights are infringed, misappropriated or otherwise violated by us or our products or processes. In the event that any such infringement, misappropriation or violation of the intellectual property rights of others is found, we may need to obtain licenses from those parties or substantially re-engineer our products or processes to avoid such infringement, misappropriation or violation. We might not be able to obtain the necessary licenses on acceptable terms or be able to re-engineer our products or processes successfully. Moreover, if we are found by a court of law to infringe, misappropriate or otherwise violate the intellectual property rights of others, we could be required to pay substantial damages or be enjoined from making, using or selling the infringing products or technology. We also could be enjoined from making, using or selling the allegedly infringing products or technology pending the final outcome of the suit. Any of the foregoing could adversely affect our financial condition and results of operations.

## ***RISKS RELATING TO ACCOUNTING AND TAXATION***

***If our intangible assets or other long-lived assets become impaired, we may be required to record a significant noncash charge to earnings.***

We have a significant amount of intangible assets and other long-lived assets on our consolidated balance sheets. Under U.S. GAAP, we review our intangible assets and other long-lived assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Factors that may be considered a change in circumstances, indicating that the carrying value of our intangible assets and other long-lived assets may not be recoverable, include, but are not limited to, a significant decline in share price and market capitalization, changes in the industries in which we operate, particularly the impact of a downturn in the global economy, as well as competition or other factors leading to reduction in expected long-term sales or results of operations. We may be required to record a significant noncash charge in our financial statements during the period in which any impairment of our intangible assets and other long-lived assets is determined, negatively impacting our results of operations.

***Our ability to use our tax attributes to offset future income may be limited.***

Our ability to use net operating losses (“NOLs”) and Section 163(j) interest expense carryforwards generated by us could be substantially limited if we were to experience an “ownership change” as defined under Section 382 of the U.S. Internal Revenue Code of 1986, as amended (“the Code”). In general, an ownership change would occur if our “5-percent shareholders,” as defined under Section 382 of the Code and including certain groups of persons treated as “5-percent shareholders,” collectively increased their ownership in us by more than 50 percentage points over a rolling three-year period. Although we believe we have sufficient protection of our approximately \$4.3 billion of NOLs and/or approximately \$856 million of Section 163(j) interest expense carryforwards, there can be no assurance that an ownership change for U.S. federal and applicable state income tax purposes will not occur in the future. A corporation that experiences an ownership change will generally be subject to an annual limitation on the use of certain pre-ownership change losses and/or credits. Such a limitation could, for any given year, have the effect of increasing the amount of our U.S. federal and/or state income tax liability, which would negatively impact our financial condition and the amount of after-tax cash available for distribution to holders of our ordinary shares if declared by our board of directors.

***We could be subject to changes in tax rates, adoption of new tax laws or additional tax liabilities.***

We are subject to taxation in the United States, United Kingdom, South Africa, Australia, Brazil and various other foreign jurisdictions. Our future effective tax rate could be affected by changes in statutory rates and other legislative changes, or changes in determinations regarding the jurisdictions in which we are subject to tax. From time to time, the U.S. federal, state and local and foreign governments make substantive changes to tax rules and their application, which could result in higher corporate taxes than would be incurred under existing tax law and could have an adverse effect on our results of operations or financial condition. From time to time, we are also subject to tax audits by various taxing authorities. Although we believe our tax positions are appropriate, the final determination of any future tax audits could be materially different from our income tax provisions, accruals and reserves and any such unfavorable outcome from a future tax audit could have a material adverse effect on our results of operations or financial condition.

***Failure to meet some or all of our key financial and non-financial targets could negatively impact the value of our business and adversely affect our stock price.***

From time to time, we may announce certain key financial and non-financial targets that are expected to serve as benchmarks for our performance for a given time period, such as, projections for our future revenue growth, Adjusted EBITDA, Adjusted diluted earnings per share and free cash flow. Our failure to meet one or more of these key financial targets may negatively impact our results of operations, stock price, and stockholder returns. The factors influencing our ability to meet these key financial targets include, but are not limited to, changes in the global economic environment relating to our TiO<sub>2</sub> products and zircon, changes in our competitive landscape, including our relationships with new or existing customers, our ability to introduce new products, applications, or technologies, our undertaking an acquisition, joint venture, or other strategic arrangement, and other factors described within this Item 1A – Risk Factors, many of which are beyond our control.



## ***RISKS RELATING TO INVESTING IN OUR ORDINARY SHARES***

***Concentrated ownership of our ordinary shares by Cristal may prevent minority shareholders from influencing significant corporate decisions and may result in conflicts of interest.***

As of December 31, 2021, Cristal Inorganic, an affiliate of Cristal owned approximately 24% of our outstanding ordinary shares. As such, Cristal Inorganic may be able to influence fundamental corporate matters and transactions. This concentration of ownership, may delay, deter or prevent acts that would be favored by our other shareholders. The interests of Cristal Inorganic may not always coincide with our interests or the interests of our other shareholders. Also, Cristal Inorganic may seek to cause us to take courses of action that, in their judgment, could enhance their investment in us, but which might involve risks to our other shareholders or adversely affect us or our other shareholders.

In addition, under the shareholders agreement (the “Cristal Shareholders Agreement”) we entered into at the closing of the Cristal Transaction with Cristal, as long as Cristal Inorganic and the three shareholders of Cristal (collectively, the “Cristal Shareholders”) collectively beneficially own at least 24,900,000 or more of our ordinary shares, they have the right to designate for nomination two directors of our board of directors (the “Board”). As long as the Cristal Shareholders collectively beneficially own at least 12,450,000 ordinary shares but less than 24,900,000 ordinary shares, they have the right to designate for nomination one director of the Board. The Cristal Shareholders Agreement also provides that as long as the Cristal Shareholders collectively beneficially own at least 12,450,000 ordinary shares they have certain preemptive rights. Also, pursuant to the Cristal Shareholders Agreement, we have filed a universal shelf registration statement which is currently effective and which currently would cover 6,532,738 shares owned by Cristal. Other than with respect to those shares, the Cristal Shareholders Agreement includes certain restrictions on Cristal Inorganic’s ability to transfer any of its ordinary shares prior to December 31, 2022 if such transfer would cause an “ownership change” as defined under Section 382 of the Internal Revenue Code.

As a result of these or other factors, including as a result of any offering of shares by Cristal, or the perception that such sales may occur, the market price of our ordinary shares could decline. In addition, this concentration of share ownership may adversely affect the trading price of our ordinary shares because investors may perceive disadvantages in owning shares in a company with significant shareholders or with significant outstanding shares with registration rights.

***English law and provisions in our articles of association may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our shareholders, and may prevent attempts by our shareholders to replace or remove our current management.***

Certain provisions of the U.K. Companies Act 2006 (the “Companies Act”) and our articles of association may have the effect of delaying or preventing a change in control of us or changes in our management. For example, our articles of association include provisions that:

- maintain an advance notice procedure for proposed nominations of persons for election to our board of directors;
- provide certain mandatory offer provisions, including, among other provisions, that a shareholder, together with persons acting in concert, that acquires 30 percent or more of our issued shares without making an offer to all of our other shareholders that is in cash or accompanied by a cash alternative would be at risk of certain sanctions from our board of directors unless they acted with the prior consent of our board of directors or the prior approval of the shareholders; and
- provide that vacancies on our board of directors may be filled by a vote of the directors or by an ordinary resolution of the shareholders.

In addition, public limited companies are prohibited under the Companies Act from taking shareholder action by written resolution. These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management.

***Although we do not anticipate being subject to the U.K. City Code on Takeovers and Mergers, such Takeover Code may still have anti-takeover effects in the event the Takeover Panel determines that such Code is applicable to us.***

The U.K. City Code on Takeovers and Mergers (the “Takeover Code”) applies, among other things, to an offer for a public company whose registered office is in the U.K. (or the Channel Islands or the Isle of Man) and whose securities are not admitted to trading on a regulated market in the U.K. (or on any stock exchange in the Channel Islands or the Isle of Man) if the company is considered by the Panel on Takeovers and Mergers (the “Takeover Panel”) to have its place of central management and control in the U.K. (or the Channel Islands or the Isle of Man). This is known as the “residency test.” The test for central management and control under the Takeover Code is different from that used by the U.K. tax authorities. Under the Takeover Code, the Takeover Panel will determine whether we have our place of central management and control in the U.K. by looking at various factors, including the structure of our board of directors, the functions of the directors and where they are resident.

Given that currently all of the members of our Board of Directors reside outside the United Kingdom, we do not anticipate that we will be subject to the Takeover Code. However, if at the time of a takeover offer, the Takeover Panel determines that we have our place of central management and control in the U.K., we would be subject to a number of rules and restrictions, including but not limited to the following: (1) our ability to enter into deal protection arrangements with a bidder would be extremely limited; (2) we might not, without the approval of our shareholders, be able to perform certain actions that could have the effect of frustrating an offer, such as issuing shares or carrying out acquisitions or disposals; and (3) we would be obliged to provide equality of information to all bona fide competing bidders.

***As a public limited company incorporated in England and Wales, certain capital structure decisions requires approval of our shareholders, which may limit our flexibility to manage our capital structure.***

The Companies Act generally provides that a board of directors of a public limited company may only allot shares (or grant rights to subscribe for or convertible into shares) with the prior authorization of shareholders, such authorization stating the maximum amount of shares that may be allotted under such authorization and specifying the date on which such authorization will expire, being not more than five years, each as specified in the articles of association or relevant shareholder resolution. We obtained previous shareholder authority to allot additional shares for a period of five years from February 25, 2019, which authorization will need to be renewed at least upon expiration (five years from February 25, 2019) but may be sought more frequently for additional five-year terms (or any shorter period).

The Companies Act generally provides that existing shareholders of a company have statutory pre-emption rights when new shares in such company are allotted and issued for cash. However, it is possible for such statutory pre-emption right to be disapplied by either shareholders passing a special resolution at a general meeting, being a resolution passed by at least 75% of the votes cast, or by inclusion of relevant provisions in the articles of association of the company. Such a disapplication of statutory pre-emption rights may not be for more than five years. We obtained previous shareholder authority to disapply statutory pre-emption rights for a period of five years from February 25, 2019, which disapplication will need to be renewed upon expiration (i.e., at least every five years) to remain effective, but may be sought more frequently for additional five-year terms (or any shorter period).

The Companies Act generally prohibits a public limited company from repurchasing its own shares without the prior approval of its shareholders by ordinary resolution, being a resolution passed by a simple majority of votes cast, and subject to compliance with other statutory formalities. Such authorization may not be for more than five years from the date on which such ordinary resolution is passed. We obtained previous shareholder authority to repurchase shares for a period of five years from February 25, 2019, which authorization will need to be renewed at least upon expiration (i.e., five years from February 25, 2019) but may be sought more frequently for additional five-year terms (or any shorter period).

***Transfers of our ordinary shares outside The Depository Trust may be subject to stamp duty or stamp duty reserve tax in the U.K., which would increase the cost of dealing in our shares.***

Except for ordinary shares received by a holder deemed to be an affiliate of us for purposes of U.S. securities laws, our ordinary shares have been issued to a nominee for The Depository Trust Company (“DTC”)

and corresponding book-entry interests credited in the facilities of DTC. On the basis of current law and HM Revenue and Customs (“HMRC”) practice, no charges to U.K. stamp duty or stamp duty reserve tax (“SDRT”) are expected to arise on the issue of the ordinary shares into DTC’s facilities or on transfers of book-entry interests in ordinary shares within DTC’s facilities.

Shareholders are strongly encouraged to hold their ordinary shares in book entry form through DTC. Transfers of shares held in book entry form through DTC currently do not attract a charge to stamp duty or SDRT in the U.K. A transfer of title in the shares from within the DTC system out of DTC, including to certificate shares, and any subsequent transfers that occur entirely outside the DTC system will attract a charge to stamp duty at a rate of 0.5% of any consideration, which is payable by the transferee of the shares. Any such duty must be paid (and the relevant transfer document, if any, stamped by HMRC) before the transfer can be registered in our books. However, if those shares are redeposited into DTC, the redeposit will attract stamp duty or SDRT at the rate of 1.5% to be paid by the transferor.

We have put arrangements in place such that directly held ordinary shares cannot be transferred into the DTC system until the transferor of the ordinary shares has first delivered the ordinary shares to a depository specified by us so that SDRT may be collected in connection with the initial delivery to the depository. Any such ordinary shares will be evidenced by a receipt issued by the depository. Before the transfer can be registered in our books, the transferor will also be required to put the depository in funds to settle the resultant liability to SDRT, which will be charged at a rate of 1.5% of the value of the shares.

***Our articles of association provide that the courts of England and Wales have exclusive jurisdiction to determine any dispute brought by a shareholder in that shareholder’s capacity as such and certain other matters.***

Our articles of association provide that the courts of England and Wales have exclusive jurisdiction to determine any dispute brought by a shareholder in that shareholder’s capacity as such, or related to or connected with any derivative claim in respect of a cause of action vested in us or seeking relief on our behalf, against us and/or the board and/or any of the directors, former directors, officers, employees or shareholders individually, arising out of or in connection with our articles of association or (to the maximum extent permitted by applicable law) otherwise. This choice of forum provision may limit a shareholder’s ability to bring a claim in a judicial forum that the shareholder believes is favorable for disputes with us or our directors, former directors, officers, employees or shareholders which may discourage lawsuits against us and our directors, former directors, officers, employees or shareholders.

***There may be difficulty in effecting service of legal process and enforcing judgments against us and our directors and management.***

We are incorporated under the laws of England and Wales and a substantial portion of our assets are located outside of the U.S. The U.S. and the U.K. do not currently have a treaty providing for the recognition and enforcement of judgments, other than arbitration awards, in civil and commercial matters. The enforceability of any judgment of a U.S. federal or state court in the U.K. will depend on the laws and any treaties in effect at the time, including conflicts of laws principles (such as those bearing on the question of whether a U.K. court would recognize the basis on which a U.S. court had purported to exercise jurisdiction over a defendant). In this context, there is doubt as to the enforceability in the U.K. of civil liabilities based solely on the federal securities laws of the U.S. In addition, awards for punitive damages in actions brought in the U.S. or elsewhere may be unenforceable in the U.K.. An award for monetary damages under U.S. securities laws would likely be considered punitive if it did not seek to compensate the claimant for loss or damage suffered and was intended to punish the defendant.

## **Item 1B. Unresolved Staff Comments**

Not applicable.

## **Item 2. Properties**

Below are our primary offices and facilities at December 31, 2021. We believe our properties are in good operating condition, and are well maintained. Pursuant to separate financing agreements, substantially all of our material U.S., European and Australian properties are pledged or encumbered to support or otherwise provide security for our indebtedness.

Our primary office locations consisted of the following:

Location	Owned/Leased	Offices
Stamford, Connecticut	Leased	263 Tresser Boulevard, Suite 1100
Stallingborough, United Kingdom	Owned	Laporte Road
Oklahoma City, Oklahoma	Owned	3301 NW 150 Street

### ***Overview of Our Vertical Integration***

Tronox is the world’s leading vertically integrated manufacturer of TiO<sub>2</sub> pigment. We produce the majority of our internal TiO<sub>2</sub> pigment feedstock requirements internally at our mine and mineral processing facilities. Our supply chain consists of mining operations in South Africa and Australia, separation and upgrading facilities located near our mines where we separate and process raw ore and then “upgrade” the titanium content of the raw ore to produce specialized chloride TiO<sub>2</sub> feedstock materials (titanium slag and synthetic rutile) and nine TiO<sub>2</sub> pigment production facilities located on six continents. The internal TiO<sub>2</sub> feedstocks we produce include titanium slag, synthetic rutile, natural rutile, leucoxene, chloride ilmenite and sulfate ilmenite.

As part of our TiO<sub>2</sub> value chain, we explore, acquire, mine and process heavy mineral sands to produce Heavy Mineral Concentrate (“HMC”) from which the Valuable Heavy Mineral (VHM) titanium and zircon products are made. HMC is produced from heavy mineral sands primarily through spiral gravity concentration at our mines. Mined material is transported to our nearby integrated mineral separation plants (MSP) to separate and concentrate VHMs by gravity, magnetic and electrostatic techniques. Multiple grades of titanium minerals and zircon may be produced from each MSP. The three titanium feedstocks which result from the MSP process (natural rutile, leucoxene and ilmenite) are each handled differently. Natural rutile and leucoxene are ordinarily shipped from the MSP to one of our TiO<sub>2</sub> pigment production facilities. Depending on the TiO<sub>2</sub> content of mined ilmenite, we either use it directly to produce TiO<sub>2</sub> pigment or we upgrade it to produce titanium slag at our two South African smelter operations and synthetic rutile (SR) at our Chandala metallurgical complex in Western Australia. Our internally sourced titanium mineral products provide a secure, long-term low-cost supply of high-grade feedstock for our TiO<sub>2</sub> pigment manufacturing facilities.

There is a high degree of substitutability among natural rutile, synthetic rutile, titanium slag, leucoxene and chloride ilmenite as titanium feedstocks for chloride pigment production. The commercial value of titanium feedstock is a function not only of TiO<sub>2</sub> content and supply and demand balances, but also particle size, trace element geochemistry, logistics and other factors. The global TiO<sub>2</sub> industry is a value-added supply chain, with final product prices for TiO<sub>2</sub> pigment, typically significantly higher than that of chloride or sulfate ilmenite, the backbone of the global titanium mineral supply. The revenue assumptions for titanium feedstocks we applied to determine our reserve estimates, as described below, are based on market intelligence gathered from internal and external experts, sales contracts and historic pricing. The economic assessment is done on a minerals only basis and no value of downstream upgrading is attributed to the minerals units.

In 2021, we produced concentrates of ilmenite, rutile, leucoxene, and zircon from five operations:

- Namakwa Sands, Western Cape, South Africa;
- KwaZulu-Natal (“KZN”) Sands, KwaZulu-Natal, South Africa;
- Northern Operations, Western Australia;
- Southern Operations, Western Australia; and
- Eastern Operations, Murray Basin, New South Wales, Australia.

Ilmenite from our Namakwa and KZN Sands mines in South Africa is converted to titanium slag at our smelters at Saldanha Bay, Western Cape and Empangeni, KwaZulu-Natal, respectively. Ilmenite from our Cooljarloo mine in Western Australia is converted to SR at our Chandala metallurgical complex which is most commonly used as feedstock to our TiO<sub>2</sub> pigment plants at Kwinana and Kemerton, both of which are south of Perth in Western Australia.



## Mining Operations

Tronox owns and operates five mining and mineral processing operations, each including one or more heavy mineral sand (“HMS”) mines producing HMC which is separated into valuable co-products, primarily zircon, and TiO<sub>2</sub> feedstocks — ilmenite, natural rutile or leucoxene — in a dedicated mineral separation plant.

In South Africa, the Namakwa Sands operations include two open-pit mines at Brand-se-Baai, each with a dedicated primary gravity concentration plant and a secondary concentration plant (SCP) that processes the HMC from both primary plants. Products from the SCP are further processed to finished mineral products at a nearby mineral separation plant (MSP) in Koekenaap. Ilmenite product is further processed into titanium slag and pig iron at a two-furnace smelter at Saldanha, Western Cape, South Africa which is two hundred kilometers south of Koekenaap. The KZN operations have an open pit hydraulic mine at Fairbreeze with a primary gravity concentration plant, a mineral separation plant at nearby Empangeni alongside a two-furnace smelter complex, and export facilities at the port of Richards Bay.

In Australia, the Northern Operations consist of the Cooljarloo dredge mine and floating primary gravity concentration plant, and the Chandala metallurgical complex, consisting of a mineral separation plant and SR plant. The Southern Operations consist of a dry open pit mine and primary concentration at Wonnerup and a mineral separation plant at Bunbury.

The Eastern Operations in the Murray Basin of Australia include two operating dredge mines at Ginkgo and Snapper and a mineral separation plant at Broken Hill, NSW. As the Ginkgo and Snapper mines are expected to be mined until at least 2023, we are developing and will be commissioning another mine in the Eastern Operations, Atlas Campaspe, intended to seamlessly replace the Ginkgo and Snapper mines. Our pre-mining feasibility work indicates that this mine is abundant in natural rutile and high-value zircon, and will be a significant source of high grade ilmenite suitable for direct use or upgraded feedstock production.

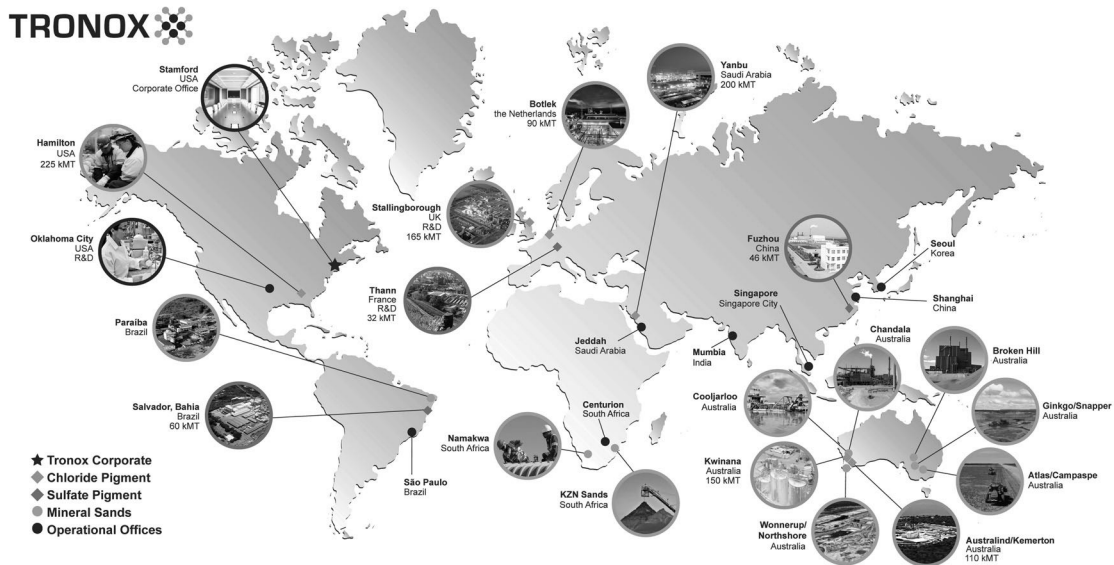


Figure 1 Showing global site and offices including locations with resources and reserves.

## ***Pigment Operations***

Our pigment production facilities utilize the titanium mineral feedstock from our mining and processing operations to produce TiO<sub>2</sub> pigment products. The following table lists our TiO<sub>2</sub> pigment production facilities and capacity (in metric tonnes per year), by location:

<b>Facility</b>	<b>Production</b>	<b>TiO<sub>2</sub> Capacity</b>	<b>Process</b>
Hamilton, Mississippi, USA	TiO <sub>2</sub>	225,000	Chloride
Yanbu, Saudi Arabia	TiO <sub>2</sub>	200,000	Chloride
Stallingborough, England, United Kingdom	TiO <sub>2</sub>	165,000	Chloride
Kwinana, Western Australia	TiO <sub>2</sub>	150,000	Chloride
Kemerton, Western Australia	TiO <sub>2</sub>	110,000	Chloride
Botlek, the Netherlands	TiO <sub>2</sub>	90,000	Chloride
Salvador, Bahia, Brazil	TiO <sub>2</sub>	60,000	Sulphate
Fuzhou, Jiangxi Province, China	TiO <sub>2</sub>	46,000	Sulphate
Thann, Alsace, France	TiO <sub>2</sub>	32,000	Sulphate

## ***Mineral Properties***

### **Reporting of Reserves and Resources**

U.S. registrants are required to report resources and reserves in accordance with the amendments finalized in February 2019 to Item 102 of Regulation S-K (Subpart 1300). These amendments were intended to modernize the disclosure requirements for properties owned or operated by mining companies to provide investors with a more comprehensive understanding of a registrant's mining properties.

Our mineral resource and reserve estimates are based on extensive geological resource models modified by various mining and processing factors and assessed in a techno-economic model for commercial viability. This constitutes a Life-of-Mine-Plan (LOMP) for each operation. Our LOMP and reserve estimates are optimized with respect to anticipated revenues and costs. Assumptions are developed from our extensive experience and include mining parameters, processing recoveries, operating costs, foreign exchange, and rehabilitation. Each of our operations reconcile predicted mining and processing metrics with actual production and recovery data on a monthly basis. Our models are updated as necessary and used to determine ore boundaries based on economic assumptions. To satisfy the disclosure rules the nominal cut-off grades used to define resources are, generally: 0.3% zircon at Namakwa Sands; 1.5% ilmenite at KZN Sands; 1.0% Total Heavy Minerals ("THM") at our Northern Operations, Western Australia, 3% THM at our Southern Operations, Western Australia, and 1% THM at our Eastern Operations, Murray Basin, Australia. Actual cut-off grades applied in estimates can vary according to numerous factors, such as mining method, overburden: ore ratios, and heavy mineral ("HM") assemblage quality. For reserves where there is substantial asset investment post the minerals production stage, parameters that best utilize the whole value chain may take precedence over maximizing value from the minerals business unit, therefore impacting the optimal mining shell and effective cut-off grade.

Not all HMS deposits are alike. Our reserves, as set forth in the table below, have a higher confidence level because we have undertaken sufficient drilling density and validation. Resources present unconfirmed continuity and variability in grade, HM assemblage, or other characteristics, as well as the indeterminate impact of modifying factors, and hence are not classified as reserves.

Within the broad category of resources, inferred resources have a lower level of geological confidence than do indicated resources with measured resources being the highest confidence level from a geological perspective. Only indicated resources and measured resources can be converted to reserves with proven reserves having a higher level of economically exploitable confidence than probable reserves. The summary table of our reserves below have been determined to be economically-exploitable by individuals competent and qualified to act under the new disclosure requirements as "Qualified Persons".

### **Mining and Mineral Tenure**

S-K Subpart 1300 requires us to describe our rights to access and mine the minerals we report as reserves and to disclose any change in mineral tenure of material significance. Our heavy mineral exploration and mining activities in South Africa and Australia are regulated by the South African Department of Mineral Resources, the

Western Australia Department of Mines, Industry Regulation and Safety and the New South Wales Department of Planning, Industry and Environment. All exploration and mining activities are subject to multiple levels of environmental regulatory review, including approvals of environmental plans and public comment periods as pre-conditions to granting of mineral tenure.

### **Mineral Tenure - South Africa**

Our two South African mineral sand mining processing chains are operated by Namakwa Sands and KZN Sands, both indirect, wholly-owned subsidiaries of Tronox Holdings plc. The South African Department of Mineral Resources and Energy (“DMRE”) is the regulatory administrator of mineral rights in South Africa, subject to the provisions of the Mineral and Petroleum Resources Development Act (“MPRDA”), No. 28 of 2004, as amended in 2016. The MPRDA vests all mineral rights in South Africa in the national government and establishes conditions for the acquisition and maintenance of prospecting and mining rights. Prospecting rights and mining rights may only be granted by the DMRE. Prospecting rights are granted for a maximum period of five years and can be renewed once for an extension of up to three years. Prospecting rights may be revoked for non-compliance with the terms of the prospecting right.

Mining right applications require additional approvals by the Department of Environmental Affairs (“DEA”) of an Environmental Management Program (“EMP”) and an Integrated Water and Land Use License.

Mining rights are valid for up to 30 years and may be extended by 30-year renewals, subject to compliance with conditions established in the EMP and by the MPRDA. Environmental permitting and compliance are co-administered by the regional offices of DEA and Development Planning. All rights, licenses and permits for Namakwa Sands and KZN Sands are in good standing.

On the Western Cape of South Africa, Tronox holds mining rights over an area of 19,205 hectares (47,457 acres) and surface rights totaling 17,111 hectares (43,542 acres) at the active mining site near Brand-se-Baai, commonly referred to as our Namakwa Sands operation. On the Eastern coast of South Africa, Tronox controls mining and prospecting rights covering approximately 4,041 hectares (9,986 acres) at KZN, where surface access rights are either owned directly by KZN Sands or secured by agreements with Mondi Ltd. A further 4,790 hectares (11,836 acres) of prospecting rights are held by a direct, wholly-owned subsidiary of KZN Sands at the nearby Port Durnford and Waterloo project areas which we are currently in the process of converting into a mining right.

### **Mineral Tenure - Australia**

Our Australian mineral properties are divided into the Northern and Southern Operations on the Swan Coastal Plain of Western Australia and the Eastern Operations in the Murray Basin of New South Wales and Victoria. Mining tenements in Australia are managed at the State or Territorial level. In Western Australia, Mining Leases, Exploration Licenses and Retention Licenses are granted and administered by the Western Australian Department of Mines, Industry Regulation and Safety, and in New South Wales by the NSW Department of Planning, Industry and Environment, under the authority of the Western Australian Mining Act 1978 and the New South Wales Mining Act 1992, respectively. Principal environmental authorities are the Western Australian Department of Water and Environmental Regulation and the NSW Environment Protection Authority.

At the Northern Operations in Western Australia, Tronox controls mining leases, exploration and other licenses and rights covering a total 50,838 hectares (125,623 acres). Mining and Public Environmental Review plans are approved for the Cooljarloo mine and approval to extend the environmental plans for Dongara were recently approved. Environmental Protection Agency approval of Cooljarloo West has also been approved. The main Cooljarloo deposit covers 9,744 hectares (24,078 acres). We hold 14 mining leases at the Dongara project. Three older mining leases are held at our Jurien property, the site of a former heavy minerals open pit mine operated by another party in the 1970’s.

As part of our acquisition of Cristal which closed in 2019, Tronox acquired mining and exploration licenses totaling 559,682 hectares (1,383,004 acres) in the South Perth Basin and Murray Basin heavy mineral provinces of Australia.

The Southern Operations in the southwest of Western Australia comprises 30 mining leases, 5 exploration licenses, 3 retention licenses, 2 general purpose leases and 2 miscellaneous licenses totaling 16,178 hectares.

Tronox holds 4 mining leases, 15 exploration licenses and 2 retention licenses in our Eastern Operations in the Murray Basin of New South Wales, Victoria and South Australia. The tenements cover approximately 524,400 hectares (2,025 sq miles). Three mining leases west of Pooncarie, NSW cover approximately 6,720 hectares (16,605 acres) surrounding our active mines at Snapper, Ginkgo and Crayfish. One mining lease of 2,330 hectares is at the Atlas Campaspe mining project in NSW.

### ***Mineral Sands - South Africa and Australia***

HMS deposits are natural concentrations of granular minerals of high density (conventionally above about 2.85 gm/cm<sup>3</sup>). Titanium-rich HMS deposit source rocks are typically granitic and/or high-grade metamorphic crystalline rocks. The heavy mineral assemblage of a particular HMS deposit generally reflects the ilmenite, leucoxene, natural rutile and zircon contained in local and regional source rocks. Factors that influence the formation of HMS deposits include erosion of crystalline source rocks, fluvial transport to the coastline, longshore drift, coastal geomorphology, deposition of heavy minerals, and prolonged natural sorting of heavy minerals by water and wind, according to the density, size and shape of HM grains. Post-depositional geological processes that can affect the economic viability of a HMS deposit include in situ weathering, induration of the host sands, and natural preservation or destruction of the HMS deposit.

Not all heavy minerals have commercial value, and a distinction is made between the Total Heavy Minerals (“THM”) and Valuable Heavy Minerals (“VHM”). Typical VHM assemblages include the titanium-iron oxide mineral, ilmenite (FeTiO<sub>3</sub>); rutile, a premium TiO<sub>2</sub> feedstock mineral; leucoxene, a natural alteration product of weathered ilmenite; and zircon, a zirconium silicate (ZrSiO<sub>4</sub>) valuable for its use in a diverse range of industrial and construction applications. Other HM of commercial value, such as garnet, staurolite, kyanite and monazite, may be recovered as by-products.

Of interest recently is the potential use of monazite, both in contained ore bodies and in stockpiled sources located near the mineral separation processes at Namakwa Sands. Monazite has increasing commercial value due to a high concentration of rare earth metals which can be separated by well-established methods. Rare earths are expected to remain in high demand as demand grows for electric vehicles, wind turbines, and consumer goods that require rare earth-containing permanent magnets. We currently do not know the metallurgical recovery potential for the monazite as our processes have historically focused on traditional value minerals. Given the increasing importance of monazite, we are evaluating new processes to better understand the grade and recoverability of monazite in our mining tenements.

### **TRONOX MINERAL SAND - 2021 AGGREGATE MINERAL PRODUCTION FOR THE PAST THREE YEARS (metric tonnes per year)**

<b>Product</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
Rutile <sup>(1)</sup> . . . . .	141,594	168,258	159,311
Ilmenite <sup>(2)</sup> . . . . .	1,190,981	1,188,051	1,222,681
Zircon <sup>(3)</sup> . . . . .	219,825	245,471	266,321

- (1) includes natural rutile + leucoxene
- (2) includes multiple grades of TiO<sub>2</sub> grades of ilmenite
- (3) includes multiple grades of zircon

### ***Namakwa Sands, Western Cape, South Africa***

Our heavy mineral sand operations in South Africa include similar material flows from integrated mine-mineral separation-smelter value chains on the west and east coasts of South Africa. Both Namakwa, Western Cape and KZN Sands, KwaZulu-Natal produce smelter products of titanium slag and pig iron from ilmenite, plus commercial grades of zircon and high-grade rutile + leucoxene concentrates.

Ore is excavated from two open-pit dry mines and delivered by trucks and conveyors to two primary wet concentration plants. Heavy Mineral Concentrate is separated into magnetic and non-magnetic fractions at a secondary concentration plant at the mine. The two fractions are further processed at a mineral separation plant



52 km south at Koekenaap. Ilmenite, rutile and zircon are transported by rail from Koekenaap to Saldanha Bay, where ilmenite is smelted in a two-furnace complex into titanium slag and pig iron. Chloride-grade slag, slag fines, pig iron, rutile and zircon are exported from our dedicated facilities at the Saldanha Bay deep-water port, approximately 150 km north of Cape Town.

The Namakwa Sands HM deposit occupies an ellipsoidal area of 15 kilometers northeasterly by 4 km wide and is interpreted to be an ancient dune complex shaped by prevailing winds at the time of its formation. Repetitive cycles of erosion from crystalline source rock, fluvial transport and prolonged reworking by water and wind formed the deposit. The Namakwa Sands heavy mineral assemblage is heterogeneous, creating challenges to efficient recovery of valuable heavy minerals.

### ***KZN Sands, KwaZulu-Natal, South Africa***

KZN Sands operates the open-cut Fairbreeze mine, just south of the coastal town of Mtunzini, the Central Processing Complex, 30 km west of Richards Bay, and bulk export facilities at the port of Richards Bay.

The Fairbreeze deposit is hosted by deeply weathered “Berea-type” sands which are mined using a hydraulic mining technique supported by track dozing. The hydraulic mining technique was pioneered for HMS mining at our nearby Hillendale mine, where rehabilitation is now complete. High-pressure water jets disaggregate the fine-grained sand into a slurry that flows by gravity to a central collection caisson and is pumped to a primary wet plant to produce HMC. This HMC is hauled by truck 45 km to the Empangeni CPC for separation into commercial zircon and rutile concentrates, and ilmenite feed for the adjacent two-furnace smelter. Except for local consumption of some pig iron, all saleable products are exported from Richards Bay, including high-grade titanium feedstocks for our TiO<sub>2</sub> pigment plants.

The Fairbreeze deposit is hosted by a complex of strandline/paleo-dune couplets, approximately two kilometers inland from the modern coastline, forming an elongate ridge extending 12 km south-southwesterly from the town of Mtunzini with a maximum width of approximately two kilometers. No overburden is present. Modern erosion has dissected the deposit into five discrete ore bodies. As with all heavy mineral sand deposits, iron-titanium oxides, rutile, zircon and other minerals in the HM assemblage at Fairbreeze are inherited from their source rock provenance and modified by selective sorting during deposition. Probable source rocks for the HM are the Natal Metamorphic Province and younger rift-related basalts.

### ***Northern Operations, Western Australia***

Our mineral properties of the coastal plain of Western Australia are located within two historically important heavy mineral provinces. Our combined Cooljarloo dredge mine and planned Cooljarloo West dredge mine, 170 km north of Perth, contain proven and probable reserves shown in the tables below.

Two dredges in a single pond feed an ore slurry to a floating gravity concentrator to produce HMC, which is hauled by trucks 110 km south to our Chandala metallurgical complex near Muchea, 60 km north of Perth, for the recovery of ilmenite, rutile, leucoxene and zircon. Ilmenite is upgraded at Chandala to SR, a high-TiO<sub>2</sub> feedstock for our Kwinana and other TiO<sub>2</sub> pigment plants.

The mining of low-grade ore at Cooljarloo is supported by economies of scale, low-cost dredging, a high-quality VHM suite that constitutes nearly 80% of THM, and good processing characteristics of the ilmenite in its conversion to SR. Upon exhaustion of Cooljarloo ore, the dredge mine will relocate to nearby Cooljarloo West, where reserves from three-ore bodies contain an estimated 2.6 million tonnes of in-place heavy minerals.

At Dongara, multiple studies, drilling, and dry-mining optimization over the past 15 years identified reserves of 68 million tonnes of ore at an average grade of 5.1% THM in five deposits, for which mining and environmental approvals have been secured. Tronox has chosen not to upgrade the studies to a current feasibility level and consequently has reported only resources for the Dongara project.

Heavy mineral deposits of our Northern Operations generally occur as stacked, elongate, NNW-trending bodies parallel to the modern coastline, bounded to the east by the Gingin Scarp. A swarm of HM deposits in the Cooljarloo district span an area of 40 km NNW by a width of over 5 km. Heavy minerals derived from the crystalline “basement” of the Yilgarn craton east of the scarp and Mesozoic sediments of the North Perth Basin west of the scarp are associated with marine still-stands on a wave-cut platform, as HM sands accumulated in shoreline, dunal and other coastal environments of a westward-regressing seacoast.

### ***Southern Operations, Western Australia***

Our mineral properties in the South-West of Western Australia were acquired in the Cristal transaction in 2019.

We extract heavy minerals from the Wonnerup North open-cut HMS mine, 10 km east of Busselton, from which HMC is trucked to our MSP at Bunbury, adjacent to the Bunbury port. The Bunbury MSP also processes streams of non-magnetic zircon and rutile rich HM concentrates from our Broken Hill MSP in New South Wales.

Ilmenite-dominant heavy mineral deposits of the South Perth Basin occur as multiple, arcuate bands, parallel to the J-shaped Geopraphe Bay modern shoreline.

The Wonnerup North deposit is a shallow (~3m deep) windblown dunal deposit on the Capel paleo-shoreline, one of two strandlines, along with the Yoganup paleo shoreline, located 7 km and 15 km inland, respectively, from the modern Indian Ocean coast associated with most of the economic HMS deposits of the region.

### ***Eastern Operations, Murray Basin, New South Wales, Australia***

Our Eastern Operations are located in the Murray Basin, a 300,000-square-kilometer intra-cratonic sedimentary basin covering parts of Victoria, New South Wales, and South Australia. Our operating mines of Snapper, Ginkgo and Crayfish are approximately 40 km west of Pooncarie, New South Wales. Overburden at our Snapper and Ginkgo mines is removed by conventional mining methods, followed by dredge mining of ore. Dry-mining at Crayfish, a small deposit adjunct to Ginkgo, started in September 2019, from which ore is hauled to the Ginkgo dredge pond.

HMC from Ginkgo-Snapper is hauled by trucks approximately 240 km to our MSP in Broken Hill, NSW. The Broken Hill MSP utilizes magnetic separation techniques to produce commercial concentrates of ilmenite and leucoxene, and a non-magnetic HM concentrate. The products are railed approximately 430 km to the port of Adelaide, South Australia. The non-magnetic concentrates are then shipped to the Bunbury MSP for further processing into final products. At current production rates, mining is expected to continue at Snapper Ginkgo and Crayfish until at least 2023.

Construction at our two new open-cut dry mines at Atlas/Campaspe, 150km east of the current operations and 90 km north of Balranald, NSW and approximately 270 km southeast of Broken Hill is nearly complete. Starting with Atlas in 2022, the new production will be phased in to sustain VHM output from our Eastern Operations, as Snapper, Ginkgo and Crayfish reach depletion. HMC produced on-site at Atlas and Campaspe by wet gravity separation will be delivered to the Broken Hill MSP via a combination of road and rail transport. Active exploration programs are ongoing in the Murray Basin heavy minerals province, where our exploration licenses cover nearly 5,100 square kilometers.

Further description of each of our mining projects described above are included in our exhibit filings.

### ***Heavy Mineral Reserves***

All of our reserves are reported on the basis of our 100% ownership of in-place, economically extractable ore, determined from comprehensive geological, mining, processing and economic models. Reserve classifications of proven or probable are based on the level of confidence in the appropriate resource estimates. Our residual resources are those areas of mineralized ground which have either had insufficient drilling to confidently define the shape, grade and recoverability of the valuable minerals as well as not yet having been subjected to a detailed assessment of the impact of validated “modifying factors” on the revenue generating potential of a deposit.

For clarity, in the tables below, our reserves have been excised from the resources as they can be proven to be profitably mined and processed. The remaining deposit that exceeds cut-off grade, but have not yet been demonstrated to be profitable by virtue of either recoverable grade, operating cost or capital required to develop, are separately defined as resources.

The following tables summarize our reserves and resources as well as their contained in situ THM and HM assemblages as of December 31, 2021.

### TRONOX MINERAL SANDS - 2021 RESERVES

MINE/DEPOSIT	Reserve Category	Material (million tonnes)	HM%	Mineral Assemblage (% of THM)			Change (+/-) from 2020 (%) <sup>(1)</sup>
				Ilmenite	Rutile and Leucoxene	Zircon	
Namakwa Sands Dry Mine – Western Cape RSA . . . . .							
	Proven	148	7.8%	37.0	8.6	9.0	
	Probable	555	5.4%	53.7	11.1	11.4	
	<b>Total Reserves</b>	<b>703</b>	<b>5.9%</b>	<b>49.0</b>	<b>10.4</b>	<b>10.7</b>	<b>(3.3)</b>
KZN Sands Hydraulic Mine KwaZulu-Natal RSA . . . . .							
	Proven	206	5.6%	61.6	7.3	7.7	
	Probable	11	3.7%	51.9	5.0	7.0	
	<b>Total Reserves</b>	<b>217</b>	<b>5.5%</b>	<b>61.3</b>	<b>7.2</b>	<b>7.7</b>	<b>(3.7)</b>
Cooljarloo – Dredge Mine Western Australia . . . . .							
	Proven	231	1.7%	61.1	7.7	10.5	
	Probable	130	2.0%	60.5	8.3	12.3	
	<b>Total Reserves</b>	<b>361</b>	<b>1.8%</b>	<b>60.8</b>	<b>7.9</b>	<b>11.2</b>	<b>—</b>
Atlas-Campaspe Dry Mine in Development, New South Wales Australia . . . . .							
	Proven	51	7.3%	60.6	13.5	11.8	
	Probable	56	5.4%	60.3	10.0	13.1	
	<b>Total Reserves</b>	<b>107</b>	<b>6.3%</b>	<b>60.5</b>	<b>11.9</b>	<b>12.4</b>	<b>17.1</b>
Wonnerup Dry Mine Western Australia . . . . .							
	Proven	12	5.5%	70.7	18.4	9.7	
	Probable	4	5.7%	78.0	11.1	8.8	
	<b>Total Reserves</b>	<b>16</b>	<b>5.5%</b>	<b>72.8</b>	<b>16.3</b>	<b>9.4</b>	<b>(11.8)</b>
Ginkgo-Snapper Dredge/Dry Mines, New South Wales Australia . . . . .							
	Proven	36	2.0%	52.1	16.8	12.7	
	Probable	—	—	—	—	—	
	<b>Total Reserves</b>	<b>36</b>	<b>2.0%</b>	<b>52.1</b>	<b>16.8</b>	<b>12.7</b>	<b>(42.4)</b>
<b>Total Reserves</b> . . . . .							
	Proven	684	4.7%	52.5	9.0	9.1	
	Probable	756	4.8%	54.9	10.8	11.6	
	<b>Total Reserves</b>	<b>1,440</b>	<b>4.7%</b>	<b>53.8</b>	<b>9.9</b>	<b>10.4</b>	<b>(8.7)</b>

(1) Changes are predominantly due to depletion as a result of mining offset by an increase related to our Atlas Campaspe mine and other reclassifications.

**TRONOX MINERAL SANDS - 2021 RESOURCES**

MINE/DEPOSIT	Resource Category	Material (million tonnes)	HM%	Mineral Assemblage (% of THM)		
				Ilmenite	Rutile and Leucoxene	Zircon
Namakwa Sands Dry Mine – Western Cape RSA . . . . .						
	Measured	110	7.3	31.6	5.7	6.9
	Indicated	<u>86</u>	<u>6.5</u>	<u>28.3</u>	<u>5.6</u>	<u>6.9</u>
	Measured + Indicated	196	6.9	30.1	5.7	6.9
	Inferred	<u>110</u>	<u>5.5</u>	<u>35.1</u>	<u>8.1</u>	<u>6.5</u>
	<b>Total</b>	<b>306</b>	<b>6.4</b>	<b>31.9</b>	<b>6.5</b>	<b>6.8</b>
KZN Sands Hydraulic Mine KwaZulu-Natal RSA . . . . .						
	Measured	50	4.1	64.1	8.1	7.7
	Indicated	<u>1</u>	<u>2.0</u>	<u>53.5</u>	<u>7.0</u>	<u>7.5</u>
	Measured + Indicated	51	4.0	63.9	8.1	7.7
	Inferred	<u>56</u>	<u>3.4</u>	<u>54.7</u>	<u>6.9</u>	<u>7.1</u>
	<b>Total</b>	<b>107</b>	<b>3.7</b>	<b>59.1</b>	<b>7.5</b>	<b>7.4</b>
Cooljarloo – Dredge Mine Western Australia . . . . .						
	Measured	10	1.5	59.4	7.8	9.8
	Indicated	<u>282</u>	<u>1.5</u>	<u>61.4</u>	<u>6.7</u>	<u>10.5</u>
	Measured + Indicated	292	1.5	61.3	6.8	10.4
	Inferred	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	<b>Total</b>	<b>292</b>	<b>1.5</b>	<b>61.3</b>	<b>6.8</b>	<b>10.4</b>
Dongara Planned Dry Mine Western Australia . . . . .						
	Measured	109	4.1	50.2	9.0	10.8
	Indicated	<u>31</u>	<u>3.5</u>	<u>53.7</u>	<u>9.1</u>	<u>12.4</u>
	Measured + Indicated	140	3.9	52.0	9.1	11.6
	Inferred	<u>38</u>	<u>2.7</u>	<u>54.6</u>	<u>8.7</u>	<u>9.3</u>
	<b>Total</b>	<b>178</b>	<b>3.7</b>	<b>51.5</b>	<b>9.0</b>	<b>10.8</b>
Atlas-Campaspe Dry Mine in Development, New South Wales Australia . . . . .						
	Measured	31	2.6	58.7	10.8	11.9
	Indicated	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	Measured + Indicated	31	2.6	58.7	10.8	11.9
	Inferred	<u>83</u>	<u>3.1</u>	<u>60.1</u>	<u>5.8</u>	<u>13.1</u>
	<b>Total</b>	<b>114</b>	<b>3.0</b>	<b>59.8</b>	<b>7.0</b>	<b>12.8</b>
Port Durnford-KwaZulu-Natal RSA . . . . .						
	Measured	143	4.5	67.6	6.0	9.3
	Indicated	<u>340</u>	<u>4.1</u>	<u>67.4</u>	<u>6.1</u>	<u>9.3</u>
	Measured + Indicated	483	4.2	67.5	6.1	9.3
	Inferred	<u>466</u>	<u>3.5</u>	<u>71.8</u>	<u>6.3</u>	<u>10.0</u>
	<b>Total</b>	<b>949</b>	<b>3.9</b>	<b>69.4</b>	<b>6.2</b>	<b>9.6</b>



MINE/DEPOSIT	Resource Category	Material (million tonnes)	HM%	Mineral Assemblage (% of THM)		
				Ilmenite	Rutile and Leucoxene	Zircon
Wonnerup Dry Mine Western Australia . . . . .						
	Measured	13	4.7	77.5	12.0	8.8
	Indicated	<u>7</u>	<u>4.6</u>	<u>86.9</u>	<u>3.3</u>	<u>7.6</u>
	Measured + Indicated	20	4.7	80.7	9.1	8.4
	Inferred	<u>4</u>	<u>4.4</u>	<u>84.0</u>	<u>4.0</u>	<u>8.3</u>
	<b>Total</b>	<b><u>24</u></b>	<b><u>4.6</u></b>	<b><u>81.2</u></b>	<b><u>8.3</u></b>	<b><u>8.4</u></b>
Ginkgo-Snapper Dredge/Dry Mines, New South Wales Australia . . . . .						
	Measured	79	1.4	48.5	17.7	12.5
	Indicated	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	Measured + Indicated	79	1.4	48.5	17.7	12.5
	Inferred	<u>59</u>	<u>1.1</u>	<u>47.9</u>	<u>17.9</u>	<u>13.0</u>
	<b>Total</b>	<b><u>138</u></b>	<b><u>1.2</u></b>	<b><u>48.3</u></b>	<b><u>17.8</u></b>	<b><u>12.7</u></b>
Kara/Cylinder New South Wales Australia . . . . .						
	Measured	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	Indicated	<u>175</u>	<u>4.1</u>	<u>44.9</u>	<u>12.7</u>	<u>11.3</u>
	Measured + Indicated	175	4.1	44.9	12.7	11.3
	Inferred	<u>26</u>	<u>2.7</u>	<u>54.4</u>	<u>24.4</u>	<u>14.2</u>
	<b>Total</b>	<b><u>201</u></b>	<b><u>3.9</u></b>	<b><u>45.7</u></b>	<b><u>13.7</u></b>	<b><u>11.5</u></b>
Total Resources . . . . .						
	Measured	545	4.3	50.7	7.5	8.9
	Indicated	<u>922</u>	<u>3.5</u>	<u>54.6</u>	<u>7.6</u>	<u>9.6</u>
	Measured + Indicated	1,467	3.8	53.0	7.6	9.3
	Inferred	<u>842</u>	<u>3.5</u>	<u>60.7</u>	<u>7.4</u>	<u>9.5</u>
	<b>Total</b>	<b><u>2,309</u></b>	<b><u>3.7</u></b>	<b><u>55.6</u></b>	<b><u>7.5</u></b>	<b><u>9.3</u></b>

### Abbreviations, Definitions, and Notations

**One metric tonne** = 1.10231 short tons

**Reserves** — mineralized material inclusive of dilution, determined to be economically and legally exploitable as of December 31, 2021, classified as either Probable Reserves or Proven Reserves, based on level of confidence.

**Resources** — mineralized ground which has either had insufficient drilling to confidently define the shape, grade and recoverability of the valuable minerals as well as not yet having been subjected to a detailed assessment of the impact of validated modifying factors on the revenue generating potential of a deposit.

**LOMP** — Life-of-Mine-Plans (LOMPs) have been developed for each mine site by teams of Tronox professionals based on the mineral reserves and resources, realistic assumptions of geological, mining, metallurgical, economic, marketing, legal, environmental, social, governmental, engineering, operational and all other modifying factors in sufficient detail to demonstrate at the time of reporting that extraction is reasonably justified.

**THM** — total heavy minerals, densities >2.85 g/cm<sup>3</sup> regardless of commercial value

**VHM** — valuable heavy minerals, including Ilmenite, Rutile, Leucoxene & Zircon, reported as percentage of THM.

Minor computational discrepancies may be due to rounding.

Cooljarloo Dredge Mine reserves include Cooljarloo and Cooljarloo West

**Key Assumptions** — economic viability is determined by techno-economic modeling that integrates geological, analytical and geotechnical databases, mining parameters, metallurgical recoveries, known or forecast operating costs, cost of capital, and product sales prices at time of production. Historical sales prices by themselves are unreliable predictors of future prices, and our forecasts are based on our private contracts, internal and external market research.

Disclosures of mineral reserves traditionally include a cut-off grade, the grade in a mineral deposit below which material cannot be profitably mined and processed. However, economic exploitability is determined by many modifying factors other than grade, and most modern mining operations, including ours, use detailed computer models utilized by employees who possess the experience and technical expertise to identify what parts of a deposit are economically exploitable. As cut-off grades remain entrenched in the mining industry, the following nominal cut-off grades apply, with qualifications, to our five operations: 0.3% zircon at Namakwa Sands; 1.5% ilmenite at KZN Sands; 1.3% THM (approximately 1% VHM) at our Northern Operations, WA, 3% THM at our Southern Operations, WA, and 1% THM at our Eastern Operations, NSW.

Production forecasts of commercial-quality titanium mineral and zircon concentrates from reserves are taken from our Life-of-Mine Plans. Mining recoveries are typically close to 100%, but metallurgical recoveries in each concentration step can vary widely, as a function of ore and mineral characteristics. We apply recovery factors based on actual operating data.

Mineral reserve estimates, life-of mine projections, and revenue assumptions are inherently forward-looking and subject to market conditions, uncertainties and unanticipated events beyond our control.

### **Item 3. Legal Proceedings**

Information required by this item is incorporated herein by reference to the section captioned “Notes to Consolidated Financial Statements, Note 20 — Commitments and Contingencies” of this Form 10-K.

SEC Regulations require us to disclose certain information about administrative or judicial proceedings to which a governmental authority is party arising under federal, state or local environmental provisions if we reasonably believe that such proceedings may result in monetary sanctions above a stated threshold. Pursuant to the SEC regulations, the Company uses a threshold of \$1 million or more for purposes of determining whether disclosure of any such proceedings is required.

### **Item 4. Mine Safety Disclosures**

None.

## PART II

### Item 5. Market for Registrant’s Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

#### Market for our Ordinary Shares

Our ordinary shares trade on the New York Stock Exchange under the symbol “TROX.”

#### Holders of Record

As of January 31, 2021, there were approximately 55 holders of record of ordinary shares. This does not include the shareholders that held shares of our ordinary shares in a nominee or “street-name” accounts through banks or broker-dealers. See Item 12, Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters.

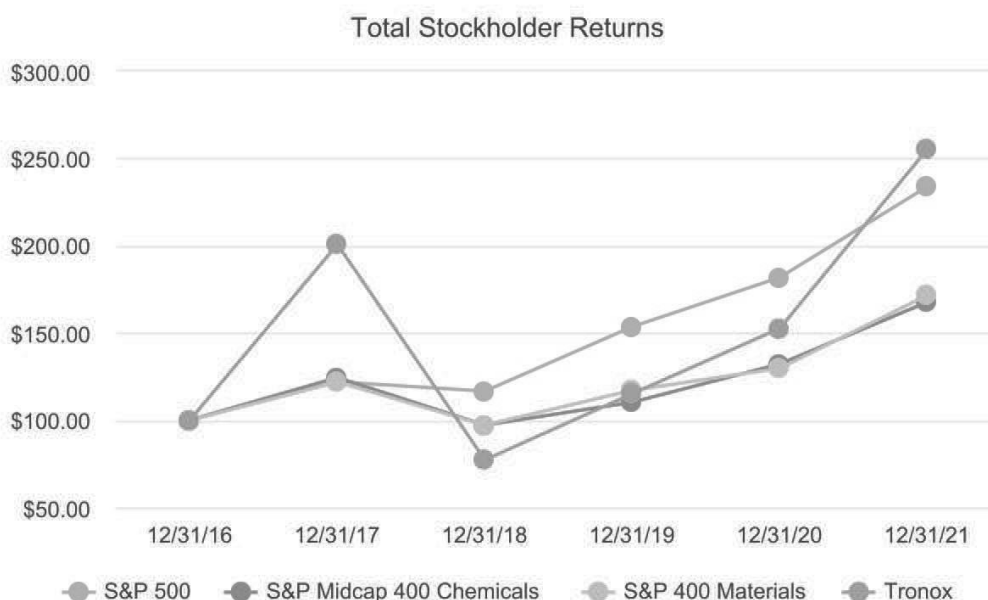
#### Issuer Purchases of Equity Securities

2021	Total Number of Shares Purchased	Weighted Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan <sup>(1)</sup>	Maximum Approximate Dollar Value that May Yet be Purchased Under the Plan <sup>(1)</sup>
October 1 - October 31 . . . . .	—	\$—	—	\$ —
November 1 - November 30 . . . . .	—	—	—	300,000,000
December 1 - December 31 . . . . .	—	—	—	300,000,000
Total . . . . .	—	\$—	—	\$300,000,000

(1) On November 9, 2021, the Company announced that the Company’s Board of Directors has authorized the repurchase of up to \$300 million of the Company’s ordinary shares, par value \$0.01 per share (the “ordinary shares”), through February 2024. During the year ended December 31, 2021, the Company did not repurchase any shares under the Company’s share repurchase plan.

#### Stock Performance Graph

The following graph presents the five-year cumulative total stockholder returns for our ordinary shares compared with the Standard & Poor’s (“S&P”) 500, the S&P MidCap 400 Chemicals and the S&P 400 Materials indices.



The graph assumes that the values of our ordinary shares, the S&P 500, the S&P MidCap 400 Chemicals index, and the S&P 400 Materials index were each \$100 on December 31, 2016, and that all dividends were reinvested.

## **Item 6. Selected Financial Data**

Not applicable.

## **Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations**

*The following discussion should be read in conjunction with Tronox Holdings plc’s consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K. This discussion and other sections in this Annual Report on Form 10-K contain forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, that involve risks and uncertainties, and actual results could differ materially from those discussed in the forward-looking statements as a result of numerous factors. Forward-looking statements provide current expectations of future events based on certain assumptions and include any statement that does not directly relate to any historical or current fact. Forward-looking statements also can be identified by words such as “future,” “anticipates,” “believes,” “estimates,” “expects,” “intends,” “plans,” “predicts,” “will,” “would,” “could,” “can,” “may,” and similar terms. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements. In particular, you should consider the numerous risks and uncertainties outlined in Item 1A. “Risk Factors.”*

*This Management’s Discussion and Analysis of Financial Condition and Results of Operations contains certain financial measures, in particular the presentation of earnings before interest, taxes, depreciation and amortization (“EBITDA”) and Adjusted EBITDA, which are not presented in accordance with accounting principles generally accepted in the United States (“U.S. GAAP”). We are presenting these non-U.S. GAAP financial measures because we believe they provide us and readers of this Form 10-K with additional insight into our operational performance relative to earlier periods and relative to our competitors. We do not intend for these non-U.S. GAAP financial measures to be a substitute for any U.S. GAAP financial information. Readers of these statements should use these non-U.S. GAAP financial measures only in conjunction with the comparable U.S. GAAP financial measures. A reconciliation of net income (loss) to EBITDA and Adjusted EBITDA is also provided herein.*

### **Executive Overview**

Tronox Holdings plc (referred to herein as “Tronox”, “we”, “us”, or “our”) operates titanium-bearing mineral sand mines and beneficiation operations in Australia, South Africa and Brazil to produce feedstock materials that can be processed into TiO<sub>2</sub> for pigment, high purity titanium chemicals, including titanium tetrachloride, and Ultrafine© titanium dioxide used in certain specialty applications. It is our long-term strategic goal to be vertically integrated and consume all of our feedstock materials in our own nine TiO<sub>2</sub> pigment facilities which we operate in the United States, Australia, Brazil, UK, France, the Netherlands, China and the Kingdom of Saudi Arabia (“KSA”). We believe that vertical integration is the best way to achieve our ultimate goal of delivering low cost, high-quality pigment to our coatings and other TiO<sub>2</sub> customers throughout the world. The mining, beneficiation and smelting of titanium bearing mineral sands creates meaningful quantities of zircon and pig iron, which we also supply to customers around the world.

We are a public limited company listed on the New York Stock Exchange and are registered under the laws of England and Wales.

### **Business Environment**

The following discussion includes trends and factors that may affect future operating results:

Throughout the current COVID-19 pandemic, our operations have been designated as essential to support the continued manufacturing of products such as food and medical packaging, medical equipment, pharmaceuticals, and personal protective gear.

The fourth quarter of 2021 results were driven by robust demand across our end markets, with the supply to demand balance remaining tight due to below seasonally normal levels of TiO<sub>2</sub>, production challenges caused by supplier force majeure and delivery times extended by shipping delays. Fourth quarter revenue increased



13% compared to the prior year, driven by higher TiO<sub>2</sub>, Zircon and pig iron prices. On a year over year basis, TiO<sub>2</sub> average selling prices increased 17% on a local currency basis and 15% on a US dollar basis and Zircon average selling prices increased 26%. Both TiO<sub>2</sub> and Zircon sales volumes remained relatively flat in line with prior year levels. Revenue from feedstock and other products decreased 11% on a year over year basis due to the internal consumption of all feedstocks in the quarter compared to the prior year, partially offset by increased pig iron revenue from higher average selling prices. Sequentially, revenue increased 2% in the fourth quarter of 2021 compared to the third quarter of 2021, as price increases of TiO<sub>2</sub>, Zircon and pig iron were partially offset by volume declines of TiO<sub>2</sub> and Zircon. TiO<sub>2</sub> average selling prices grew 3% sequentially on a US dollar basis and 4% on a local currency basis. TiO<sub>2</sub> volumes were constrained by global logistics challenges and supply chain and certain raw material availability that resulted in a 4% sequential decline. Revenue from Zircon sales increased 3% sequentially, as a 9% increase in average selling prices due to improved pricing, was partially offset by 6% lower sales volumes. Feedstock and other product revenues increased 26% sequentially mainly due to both higher pig iron volumes and selling prices.

Gross profit decreased sequentially from the third quarter to the fourth quarter of 2021 due to lower sales volumes of TiO<sub>2</sub> and Zircon, higher production costs due to transitory inflation and increased freight rates, partially offset by favorable impacts of average selling prices. Gross profit increased year over year due to the increase in average selling prices of TiO<sub>2</sub>, Zircon and pig iron and the favorable impact of sales volumes and product mix partially offset by unfavorable impacts of foreign currency as well as higher production costs and increased freight rates partially offset by favorable overhead absorption and cost savings.

As of December 31, 2021, our total available liquidity was \$677 million, including \$228 million in cash and cash equivalents and \$449 million available under revolving credit agreements.

During the year ended December 31, 2021, we made several discretionary prepayments on our debt facilities primarily on the New Term Loan Facility and Standard Bank Term Loan Facility. During the fourth quarter of 2021, we made an additional \$202 million of voluntary prepayments on our New Term Loan Facility. As of December 31, 2021, our total debt was \$2.6 billion and net debt to trailing-twelve month Adjusted EBITDA was 2.5x. The Company also has no financial covenants on its term loan or bonds and only one springing financial covenant on its Cash Flow revolver facility, which we do not expect to be triggered based on our current scenario planning.

## Consolidated Results of Operations from Continuing Operations

### Year Ended December 31, 2021 Compared to the Year Ended December 31, 2020

	Reported Amounts		
	Year Ended December 31,		
	2021	2020	Variance
	(Millions of U.S. Dollars)		
<b>Net sales</b> .....	\$3,572	\$2,758	\$ 814
Cost of goods sold .....	<u>2,677</u>	<u>2,137</u>	<u>540</u>
<b>Gross profit</b> .....	\$ 895	\$ 621	\$ 274
<b>Gross Margin</b> .....	25.1%	22.5%	2.6 pts
Selling, general and administrative expenses .....	318	347	(29)
Restructuring .....	<u>—</u>	<u>3</u>	<u>(3)</u>
<b>Income from operations</b> .....	577	271	306
Interest expense .....	(157)	(189)	32
Interest income .....	7	8	(1)
Loss on extinguishment of debt .....	(65)	(2)	(63)
Other income, net .....	<u>12</u>	<u>26</u>	<u>(14)</u>
<b>Income from continuing operations before income taxes</b> .....	374	114	260
Income tax (provision) benefit .....	<u>(71)</u>	<u>881</u>	<u>(952)</u>
<b>Net income from continuing operations</b> .....	<u>\$ 303</u>	<u>\$ 995</u>	<u>\$(692)</u>
<b>Effective tax rate</b> .....	<u>19%</u>	<u>(773)%</u>	<u>792 pts</u>

	Reported Amounts		
	Year Ended December 31,		
	2021	2020	Variance
	(Millions of U.S. Dollars)		
<b>EBITDA</b> <sup>(1)</sup> .....	<u>\$ 821</u>	<u>\$ 599</u>	<u>\$222</u>
<b>Adjusted EBITDA</b> <sup>(1)</sup> .....	<u>\$ 947</u>	<u>\$ 668</u>	<u>\$279</u>
<b>Adjusted EBITDA as % of Net Sales</b> .....	<u>26.5%</u>	<u>24.2%</u>	<u>2.3 pts</u>

(1) EBITDA and Adjusted EBITDA are Non-U.S. GAAP financials measures. Please refer to the “Non-U.S. GAAP Financial Measures” section of this Management’s Discussion and Analysis of Financial Condition and Results of Operations for a discussion of these measures and a reconciliation of these measures to Net income (loss) from continuing operations.

Net sales of \$3,572 million for the year ended December 31, 2021 increased by 30% compared to \$2,758 million for the same period in 2020. Revenue increased primarily due to both higher TiO<sub>2</sub> and Zircon sales volumes and average selling prices. Net sales by type of product for the years ended December 31, 2021 and 2020 were as follows:

The table below presents reported revenue by product:

(Millions of dollars, except percentages)	Year Ended December 31,			
	2021	2020	Variance	Percentage
TiO <sub>2</sub> .....	\$2,793	\$2,176	\$617	28%
Zircon .....	478	283	195	69%
Feedstock and other products .....	301	299	2	1%
Total net sales .....	<u>\$3,572</u>	<u>\$2,758</u>	<u>\$814</u>	<u>30%</u>

For the year ended December 31, 2021, TiO<sub>2</sub> revenue increased \$617 million, or 28%, compared to the prior year due to a \$369 million increase in sales volumes and an increase of \$217 million in average selling prices. Foreign currency positively impacted TiO<sub>2</sub> revenue by \$31 million due primarily to the strengthening of the Euro. Zircon revenues increased \$195 million primarily due to a 55% increase in sales volumes and a 9% increase in average selling prices. Feedstock and other products revenue increased \$2 million primarily due to an increase in average selling prices and sales volumes of pig iron partially offset by a decrease in sales volumes of CP slag and other feedstocks.

Gross profit of \$895 million for the year ended December 31, 2021 was 25.1% of net sales compared to 22.5% of net sales for the same period in 2020. The increase in gross margin is primarily due to:

- the favorable impact of approximately 8 points due to an increase in TiO<sub>2</sub>, Zircon and pig iron selling prices;
- the favorable impact of approximately 1 point for sales volume and product mix;
- the net unfavorable impact of approximately 4 points due to changes in foreign exchange rates, primarily due to the South African Rand and Australian dollar; and
- the net unfavorable impact of approximately 2 points due to higher production costs and increased freight rates offset by favorable overhead absorption and cost savings.

Selling, general and administrative (“SG&A”) expenses decreased \$29 million when comparing the year ended December 31, 2021 to the prior year. The SG&A expenses decrease was primarily driven by \$29 million of lower professional fees and lower integration costs of \$9 million, partially offset by \$16 million of increased employee costs primarily driven by higher incentive compensation. The remaining net decrease was driven by individually immaterial amounts.

Income from operations for the year ended December 31, 2021 of \$577 million, increased by \$306 million or 113% compared to the same period in 2020 which is primarily attributable to the higher gross margin and lower selling, general and administrative expenses.

Adjusted EBITDA as a percentage of net sales was 26.5% for the year ended December 31, 2021, an increase of 2.3 points from 24.2% in the prior year. On a reported basis, the higher gross profit and lower SG&A expenses as discussed above were the primary drivers of the year-over-year increase in Adjusted EBITDA percentage.

Interest expense for the year ended December 31, 2021 decreased \$32 million compared to the same period in 2020. The decrease is primarily due to the following: 1) lower average debt outstanding balances and lower average interest rates on the New Term Loan Facility as compared to the Prior Term Loan Facility, 2) lower average debt outstanding balance on the New Standard Bank Term Loan Facility as compared to the Prior Standard Bank Term Loan Facility, and 3) lower average interest rates on the Senior Notes due 2029 as compared to the Senior Notes due 2025 and the Senior Notes due 2026. These decreases in interest expense are partially offset by the four months of additional interest expense in the current year associated with the 6.5% Senior Secured Notes due 2025, which were issued on May 1, 2020.

Interest income for the year ended December 31, 2021 decreased by \$1 million compared to the prior year primarily due to lower cash balances from the use of cash to paydown the New Term Loan Facility, the Standard Bank Term Loan Facility and the Tikon Loan.

Loss on extinguishment of debt of \$65 million for the year ended December 31, 2021 is primarily comprised of the following: 1) call premiums paid of \$21 million and \$19 million in relation to the refinancing of our \$615 million Senior Notes due 2026 and our \$450 million Senior Notes due 2025, respectively, 2) the write-off of certain existing debt issuance costs and original issue discount as well as certain new lender and other third party fees associated with the refinancing of our new revolver and term loan and issuance of our new senior notes due 2029 and 3) approximately \$9 million write-off of existing debt issuance costs and original issue discount as a result of the \$398 million voluntary prepayments made on the New Term Loan Facility.

Other income, net for the year ended December 31, 2021 primarily consisted of \$16 million net realized and unrealized foreign currency gains, \$8 million associated with the monthly technical service fee relating to the Jazan slagger we receive from AMIC, and \$5 million of pension income primarily due to the expected return on plan assets offset by pension related interest costs and amortization of actuarial gain/losses partially offset by \$18 million related to the breakage fee associated with the termination of the TTI acquisition. The foreign currency gains were primarily related to the South African Rand and the Australian dollar due to the remeasurement of our U.S. dollar denominated working capital and other long-term obligations partially offset by the impact of our foreign currency derivatives.

We maintain full valuation allowances related to the total net deferred tax assets in Australia, Switzerland and the United Kingdom. The provisions for income taxes associated with these jurisdictions include no tax benefits with respect to losses incurred and tax expense only to the extent of current tax payments. Additionally, we have valuation allowances against other specific tax assets.

The effective tax rate was 19% and (773)% for the years ended December 31, 2021 and 2020, respectively. The large negative effective tax rate for the year ended December 31, 2020 is caused by the release of valuation allowances for deferred tax assets in the U.S. and Brazil, partially offset by the recording of valuation allowances in Saudi Arabia and the U.K. The net impact was \$905 million benefit to the income tax provision. Refer to Note 8 of notes to consolidated financial statements for further information. Additionally, the effective tax rates for the years ended December 31, 2021 and 2020 are influenced by a variety of factors, primarily income and losses in jurisdictions with valuation allowances, disallowable expenditures, prior year accruals, and our jurisdictional mix of income at tax rates different than the U.K. statutory rate.

#### ***Year Ended December 31, 2020 Compared to the Year Ended December 31, 2019***

A discussion of our results of operations for the year ended December 31, 2020 versus December 31, 2019 is included in Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Results of Operation”, included in our Annual Report on Form 10-K for the year ended December 31, 2020.

#### **Other Comprehensive Income (Loss)**

There was an other comprehensive loss of \$104 million for the year ended December 31, 2021 compared to other comprehensive loss of \$20 million for the year ended December 31, 2020. This increase in comprehensive loss was primarily driven by unfavorable movements of foreign currency translation adjustments of \$113 million

for the year ended December 31, 2021 as compared to unfavorable foreign currency translation adjustments of \$4 million in the prior year. In addition, we recognized net losses on derivative instruments of \$11 million in the year ended December 31, 2021 as compared to none in the prior year. These losses were partially offset by \$20 million of pension and postretirement gains for the year ended December 31, 2021 as compared to \$16 million of pension and postretirement losses for the prior year.

A discussion of our comprehensive (loss) income for the year ended December 31, 2020 versus December 31, 2019 is included in Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Other Comprehensive (Loss) Income”, included in our Annual Report on Form 10-K for the year ended December 31, 2020.

## Liquidity and Capital Resources

During 2021, our liquidity decreased by \$364 million to \$677 million.

The table below presents our liquidity, including amounts available under our credit facilities, as of the following dates:

	December 31, 2021	December 31, 2020
Cash and cash equivalents . . . . .	\$228	\$ 619
Available under the Wells Fargo Revolver . . . . .	—	285
Available under the new Cash Flow Revolver . . . . .	329	—
Available under the Standard Credit Facility . . . . .	63	68
Available under the Emirates Revolver . . . . .	38	50
Available under the SABB Facility . . . . .	19	19
Total . . . . .	<u>\$677</u>	<u>\$1,041</u>

Historically, we have funded our operations and met our commitments through cash generated by operations, issuance of unsecured notes, bank financings and borrowings under lines of credit. In the next twelve months, we expect that our operations will provide sufficient cash for our operating expenses, capital expenditures, interest payments and debt repayments, however, if necessary, we have the ability to borrow under our debt and revolving credit agreements (see Note 15 of notes to consolidated financial statements). This is predicated on our achieving our forecast which could be negatively impacted by items outside of our control, in particular, macroeconomic conditions including the economic impacts caused by continued impact of the COVID-19 pandemic. Consistent with our actions in 2020 in response to the COVID-19 pandemic, if negative events occur in the future, we may need to reduce our capital spend, cut back on operating costs, and other items within our control to maintain appropriate liquidity.

Working capital (calculated as current assets less current liabilities) was \$1.2 billion at December 31, 2021, compared to \$1.7 billion at December 31, 2020. The decrease year over year is primarily due to the decrease in cash as we made several voluntary prepayments on our debt obligations as is discussed below and in Note 15 of notes to consolidated financial statements and reductions in inventories as the supply / demand balance remains tight due to continued strong demand.

As of and for the year ended December 31, 2021, the non-guarantor subsidiaries of our 6.5% Senior Secured Notes and our Senior Notes due 2029 represented approximately 20% of our total consolidated liabilities, approximately 25% of our total consolidated assets, approximately 44% of our total consolidated net sales and approximately 49% of our Consolidated EBITDA (as such term is defined in 6.5% Senior Secured Notes Indenture and the 2029 Indenture). In addition, as of December 31, 2021, our non-guarantor subsidiaries had \$777 million of total consolidated liabilities (including trade payables but excluding intercompany liabilities), all of which would have been structurally senior to the 6.5% Senior Secured Notes and the 2029 Notes. See Note 15 of notes to consolidated financial statements for additional information.

At December 31, 2021, we had outstanding letters of credit and bank guarantees of \$53 million. See Note 15 of notes to consolidated financial statements.

Principal factors that could affect our ability to obtain cash from external sources include (i) debt covenants that limit our total borrowing capacity; (ii) increasing interest rates applicable to our floating rate debt; (iii) increasing



demands from third parties for financial assurance or credit enhancement; (iv) credit rating downgrades, which could limit our access to additional debt; (v) a decrease in the market price of our common stock and debt obligations; and (vi) volatility in public debt and equity markets.

As of December 31, 2021, our credit rating with Moody's was B1 stable outlook unchanged from December 31, 2020. Starting in the first quarter of 2021 and through December 31, 2021, our credit rating with Standard & Poor's changed positively to B stable and further changed positively to Ba3 during the first quarter of 2022. See Note 15 of notes to consolidated financial statements.

#### *Cash and Cash Equivalents*

We consider all investments with original maturities of three months or less to be cash equivalents. As of December 31, 2021, our cash and cash equivalents were invested in money market funds and we also receive earnings credits for some balances left in our bank operating accounts. We maintain cash and cash equivalents in bank deposit and money market accounts that may exceed federally insured limits. The financial institutions where our cash and cash equivalents are held are highly rated and geographically dispersed, and we have a policy to limit the amount of credit exposure with any one institution. We have not experienced any losses in such accounts and believe we are not exposed to significant credit risk.

The use of our cash includes payment of our operating expenses, capital expenditures, servicing our interest and debt repayment obligations, making pension contributions and making quarterly dividend payments. On November 9, 2021, we updated our capital allocation policy and announced that our Board of Directors had authorized the repurchase of up to \$300 million of the Company's ordinary shares through February 2024. Under the updated policy, the Board intends to increase the annual dividend to \$0.50 per share beginning with the first quarterly dividend in 2022. We also expect to continue to invest in our businesses through cost reduction, as well as growth and vertical integration-related capital expenditures including projects such as newTRON and various mine development projects as well as continued reductions in our debt.

#### *Repatriation of Cash*

At December 31, 2021, we held \$228 million in cash and cash equivalents in these respective jurisdictions: \$5 million in the United States, \$54 million in South Africa, \$59 million in Australia, \$30 million in Brazil, \$40 million in Saudi Arabia, \$19 million in China, and \$21 million in Europe. Our credit facilities limit transfers of funds from subsidiaries in the United States to certain foreign subsidiaries. In addition, at December 31, 2021, we held \$4 million of restricted cash of which \$3 million is in Australia related to performance bonds and \$1 million is in Saudi Arabia related to vendor supply agreement guarantees.

Tronox Holdings plc has foreign subsidiaries with undistributed earnings at December 31, 2021. We have made no provision for deferred taxes related to these undistributed earnings because they are considered indefinitely reinvested in the foreign jurisdictions.

#### *Debt Obligations*

In March 2021, the Company closed the refinancing of its existing first lien term loan credit agreement with a new seven-year first lien term loan credit facility (the "New Term Loan Facility") and existing revolving syndicated facility agreement with a new five-year cash flow revolving facility (the "New Revolving Facility"). Pursuant to the New Term Loan Facility, the Company's wholly owned subsidiary, Tronox Finance LLC borrowed \$1,300 million of first lien term loans. Pursuant to the New Revolving Facility, the lenders thereunder have agreed to provide revolving commitments of \$350 million. The Company also paid down approximately \$313 million, with cash on hand, of debt in conjunction with the refinancing transaction. Refer to Note 15 of notes to consolidated financial statements for further details.

On March 15, 2021, Tronox Incorporated, a wholly-owned indirect subsidiary of the Company, issued its 4.625% senior notes due 2029 for an aggregate principal amount of \$1,075 million. The net proceeds was used to fund the redemption in full on March 31, 2021 of the Company's outstanding \$615 million aggregate principal amount of 6.50% senior notes due 2026 and the redemption in full on April 1, 2021 of Company's outstanding \$450 million aggregate principal amount of 5.75% senior notes due 2025. Refer to Note 15 of notes to consolidated financial statements for further details.

On October 1, 2021, Tronox Minerals Sands Proprietary Limited, a wholly-owned indirect subsidiary of the Company, entered into an amendment and restatement of a new credit facility with Standard Bank. The new

credit facility provides the Company with (a) a new five-year term loan facility in an aggregate principal amount of R1.5 billion (approximately \$98 million) (the “New Standard Bank Term Loan Facility”) and (b) a new three-year revolving credit facility (the “New Standard Bank Revolving Credit Facility”) providing initial revolving commitments of R1.0 billion (approximately \$63 million at December 31, 2021 exchange rate). As a result of the amended facility, the Company repaid the remaining outstanding principal balance of R390 million (approximately \$26 million) of the Standard Bank Term Loan Facility on September 30, 2021 and we drewdown the R1.5 billion (approximately \$98 million) on the new term loan facility in November 2021.

During the year ended December 31, 2021, the Company made several voluntary prepayments totaling \$398 million on the New Term Loan Facility. As a result of these voluntary prepayments, the Company recorded \$9 million in “Loss on extinguishment of debt” within the Consolidated Statement of Operations for the year ended December 31, 2021.

During the year ended December 31, 2021, the Company made several voluntary prepayments totaling R1,040 million (approximately \$69 million) on the Prior Standard Bank Term Loan Facility. Additionally, on September 30, 2021, in conjunction with the Company’s refinancing of the Prior Standard Bank Term Loan Facility, the Company repaid the remaining outstanding principal balance of R390 million (approximately \$26 million). During the year ended December 31, 2021, the Company repaid the remaining outstanding principal balance of CNY 111 million (approximately \$17 million) on the Tikon loan. No prepayment penalties were required as a result of these principal prepayments.

On a consolidated basis, no incremental debt was incurred as a result of the aforementioned debt refinancing transactions.

At December 31, 2021 and 2020, our long-term debt, net of unamortized discount and debt issuance costs was \$2.6 billion and \$3.3 billion, respectively.

At December 31, 2021 and 2020, our net debt (the excess of our debt over cash and cash equivalents) was \$2.3 billion and \$2.7 billion, respectively. See Note 15 of notes to consolidated financial statements.

## Cash Flows

*Years Ended December 31, 2021 and 2020*

The following table presents cash flow for the periods indicated:

	<u>Year Ended December 31,</u>	
	<u>2021</u>	<u>2020</u>
	(Millions of U.S. dollars)	
Net cash provided by operating activities . . . . .	\$ 740	\$ 355
Net cash used in investing activities . . . . .	(269)	(229)
Net cash (used in) provided by financing activities . . . . .	(877)	214
Effect of exchange rate changes on cash . . . . .	<u>(10)</u>	<u>(3)</u>
Net (decrease) increase in cash and cash equivalents . . . . .	<u>\$ (416)</u>	<u>\$ 337</u>

*Cash Flows provided by Operating Activities* — Cash provided by our operating activities is driven by net income adjusted for non-cash items and changes in working capital items. The following table summarizes our net cash provided by operating activities for 2021 and 2020:

	<u>Year Ended December 31,</u>	
	<u>2021</u>	<u>2020</u>
	(Millions of U.S. dollars)	
Net income. . . . .	\$303	\$ 995
Net adjustments to reconcile net income (loss) to net cash provided by operating activities. . . . .	<u>455</u>	<u>(488)</u>
Income related cash generation. . . . .	758	507
Net change in assets and liabilities. . . . .	<u>(18)</u>	<u>(152)</u>
Net cash provided by our operating activities . . . . .	<u>\$740</u>	<u>\$ 355</u>

Net cash provided by operating activities was \$740 million in 2021 as compared to \$355 million in 2020. The increase of \$385 million period over period is primarily due to a \$251 million improvement in net income net of non-cash adjustments and a decrease of \$134 million use of cash for net assets and liabilities. The lower use of cash for working capital was primarily driven by decreases in inventories and prepaid and other current assets of \$74 million and \$82 million, respectively, and an increase in account payable and accrued liabilities of \$36 million partially offset by an increase in accounts receivable of \$59 million and an increased use of cash in long-term other assets and liabilities of \$10 million.

*Cash Flows used in Investing Activities* — Net cash used in investing activities for the year ended December 31, 2021 was \$269 million as compared to \$229 million for the year ended December 31, 2020. The \$40 million increase in use of cash year over year is primarily driven by higher capital expenditures of \$272 million. The prior year also included \$36 million for a loan to AMIC related to a titanium slag smelter facility (see Note 24 of notes to consolidated financial statements) of which there was no comparable amount in the current year.

*Cash Flows (used in) provided by Financing Activities* — Net cash used in financing activities during the year ended December 31, 2021 was \$877 million as compared to cash provided by financing activities of \$214 million for the year ended December 31, 2020. The current year is primarily comprised of repayments of long-term debt of \$3 billion partially offset by proceeds from long-term debt of \$2 billion due to the various debt refinancing transactions that occurred during the current year (refer to Note 15 of notes to consolidated financial statements) as well as the Company’s continued focus on making discretionary debt repayments in order to achieve its previously stated gross debt target. As a result of the debt refinancing transactions, there was a \$77 million use of cash for debt issuance costs and call premiums paid in 2021 as compared to \$10 million in 2020. Additionally, dividends paid were \$65 million during the year ended December 31, 2021 as compared to \$40 million in the same period of 2020.

#### *Years Ended December 31, 2020 and 2019*

A discussion of our cash flows for the year ended December 31, 2020 versus 2019 is included in Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Cash Flows”, included in our Annual Report on Form 10-K for the year ended December 31, 2020.

### **Contractual Obligations**

The following table sets forth information relating to our contractual obligations as of December 31, 2021:

	<b>Contractual Obligation Payments Due by Period<sup>(3)</sup></b>				
	<b>Total</b>	<b>Less than 1 year</b>	<b>1-3 years</b>	<b>3-5 years</b>	<b>More than 5 years</b>
	(Millions of U.S. dollars)				
Long-term debt and lease financing (including interest) <sup>(1)</sup> . . .	\$3,370	\$151	\$303	\$ 757	\$2,159
Purchase obligations <sup>(2)</sup> . . . . .	655	231	209	157	58
Operating leases . . . . .	226	34	42	29	121
Pension and other post-retirement benefit obligations <sup>(4)</sup> . . . . .	312	37	65	64	146
Asset retirement obligations <sup>(5)</sup> . . . . .	446	17	26	25	378
<b>Total</b> . . . . .	<b><u>\$5,009</u></b>	<b><u>\$470</u></b>	<b><u>\$645</u></b>	<b><u>\$1,032</u></b>	<b><u>\$2,862</u></b>

- (1) We calculated the New Term Loan Facility interest at a LIBOR plus a margin of 2.25%. See Note 15 of notes to our consolidated financial statements.
- (2) Includes obligations to purchase requirements of process chemicals, supplies, utilities and services. We have various purchase commitments for materials, supplies, and services entered into in the ordinary course of business. Included in the purchase commitments table above are contracts, which require minimum volume purchases that extend beyond one year or are renewable annually and have been renewed for 2022. Certain contracts allow for changes in minimum required purchase volumes in the event of a temporary or permanent shutdown of a facility. We believe that all of our purchase obligations will be utilized in our normal operations.
- (3) The table excludes contingent obligations, as well as any possible payments for uncertain tax positions given the inability to estimate the possible amounts and timing of any such payments.
- (4) Pension and other post-retirement benefit (“OPEB”) obligations of \$312 million include estimates of pension plan contributions and expected future benefit payments for unfunded pension and OPEB plans. Pension plan contributions are forecasted for 2022 only.

Expected future unfunded pension and OPEB benefit payments are forecasted only through 2031. Contribution and unfunded benefit payment estimates are based upon current valuation assumptions. Estimates of pension contributions after 2022 and unfunded benefit payments after 2031 are not included in the table because the timing of their resolution cannot be estimated. Refer to Note 23 in notes to consolidated financial statements for further discussion on our pension and OPEB plans.

(5) Asset retirement obligations are shown at the undiscounted and uninflated values.

### Non-U.S. GAAP Financial Measures

EBITDA and Adjusted EBITDA, which are used by management to measure performance, are not presented in accordance with U.S. GAAP. We define EBITDA as net income (loss) excluding the impact of income taxes, interest expense, interest income and depreciation, depletion and amortization. We define Adjusted EBITDA as EBITDA excluding the impact of nonrecurring items such as restructuring charges, gain or loss on debt extinguishments, impairment charges, gains or losses on sale of assets, acquisition-related transaction costs and pension settlements and curtailment gains or losses. Adjusted EBITDA also excludes non-cash items such as share-based compensation costs and pension and postretirement costs. Additionally, we exclude from Adjusted EBITDA, realized and unrealized foreign currency remeasurement gains and losses.

Management believes that EBITDA and Adjusted EBITDA is useful to investors, as it is commonly used in the industry as a means of evaluating operating performance. We do not intend for these non-U.S. GAAP financial measures to be a substitute for any U.S. GAAP financial information. Readers of these statements should use these non-U.S. GAAP financial measures only in conjunction with the comparable U.S. GAAP financial measures. Since other companies may calculate EBITDA and Adjusted EBITDA differently than we do, EBITDA and Adjusted EBITDA, as presented herein, may not be comparable to similarly titled measures reported by other companies. Management believes these non-U.S. GAAP financial measures:

- reflect our ongoing business in a manner that allows for meaningful period-to-period comparison and analysis of trends in our business, as they exclude income and expense that are not reflective of ongoing operating results;
- provide useful information in understanding and evaluating our operating results and comparing financial results across periods; and
- provide a normalized view of our operating performance by excluding items that are either noncash or infrequently occurring.

Adjusted EBITDA is one of the primary measures management uses for planning and budgeting processes, and to monitor and evaluate financial and operating results. In addition, Adjusted EBITDA is a factor in evaluating management's performance when determining incentive compensation.

The following table reconciles net income (loss) to EBITDA and Adjusted EBITDA for the periods presented:

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
Net income (loss), (U.S. GAAP) . . . . .	\$303	\$ 995	\$ (97)
Income from discontinued operations, net of tax (see Note 6), (U.S. GAAP) . . . . .	<u>—</u>	<u>—</u>	<u>5</u>
Net income (loss) from continuing operations, (U.S. GAAP) . . . . .	303	995	(102)
Interest expense . . . . .	157	189	201
Interest income . . . . .	(7)	(8)	(18)
Income tax provision . . . . .	71	(881)	14
Depreciation, depletion and amortization expense . . . . .	<u>297</u>	<u>304</u>	<u>280</u>
EBITDA (non-U.S. GAAP) . . . . .	821	599	375
Inventory step-up <sup>(a)</sup> . . . . .	—	—	98
Contract loss <sup>(b)</sup> . . . . .	—	—	19
Share-based compensation <sup>(c)</sup> . . . . .	31	30	32
Transaction costs <sup>(d)</sup> . . . . .	18	14	32
Restructuring <sup>(e)</sup> . . . . .	—	3	22
Integration costs <sup>(f)</sup> . . . . .	—	10	16
Loss on extinguishment of debt <sup>(g)</sup> . . . . .	65	2	3



	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
Foreign currency remeasurement <sup>(h)</sup> . . . . .	(16)	(4)	(6)
Pension settlement and curtailment gains <sup>(i)</sup> . . . . .	—	(2)	(1)
Costs associated with Exxaro deal <sup>(j)</sup> . . . . .	6	—	4
Costs associated with former CEO retirement <sup>(k)</sup> . . . . .	1	—	—
Gain on asset sale <sup>(l)</sup> . . . . .	(2)	—	—
Office closure costs <sup>(m)</sup> . . . . .	3	—	—
Insurance proceeds <sup>(n)</sup> . . . . .	—	(11)	—
Other items <sup>(o)</sup> . . . . .	<u>20</u>	<u>27</u>	<u>21</u>
Adjusted EBITDA (non-U.S. GAAP) . . . . .	<u>\$947</u>	<u>\$668</u>	<u>\$615</u>

- (a) 2019 amount represents a pre-tax charge related to the recognition of a step-up in value of inventories as a result of purchase accounting.
- (b) 2019 amount represents a pre-tax charge for the estimated losses we expect to incur under the supply agreement with Venator. See Note 3 of notes to consolidated financial statements.
- (c) Represents non-cash share-based compensation. See Note 22 of notes to consolidated financial statements.
- (d) 2021 amount represents the breakage fee and other costs associated with the termination of the TTI transaction which were primarily recorded in “Other income (expense)” in the Consolidated Statements of Operations. 2020 amount represents transaction costs associated with the TTI acquisition which were recorded in “Selling, general and administrative expenses” in the Consolidated Statement of Operations. 2019 amounts represent transaction costs associated with the Cristal Transaction which were recorded in “Selling, general and administrative expenses” in the Consolidated Statements of Operations.
- (e) 2020 and 2019 amounts represent amounts for employee-related costs, including severance, which was recorded in “Restructuring” in the Consolidated Statements of Operations. See Note 4 of notes to consolidated financial statements.
- (f) 2020 and 2019 amounts represent integration costs associated with the Cristal transaction after the acquisition which were recorded in “Selling, general and administrative expenses” in the Consolidated Statements of Operations.
- (g) 2021 amount represents the loss in connection with the following: 1) termination of its Wells Fargo Revolver, 2) amendment and restatement of its term loan facility including the new revolving credit facility, 3) termination of its Senior Notes due 2026 and its Senior Notes due 2025, 4) issuance of its Senior Notes due 2029 and 5) several voluntary prepayments made on the New Term Loan Facility. See Note 15 of notes to consolidated financial statements. 2020 amount represents the loss in connection with a voluntary prepayment on the Prior Term Loan Facility. 2019 amount represents the loss in connection with the modification of the Wells Fargo Revolver and termination of the ABSA Revolver and a voluntary prepayment made on the Prior Term Loan Facility.
- (h) Represents realized and unrealized gains and losses associated with foreign currency remeasurement related to third-party and intercompany receivables and liabilities denominated in a currency other than the functional currency of the entity holding them, which are included in “Other income (expense), net” in the Consolidated Statements of Operations.
- (i) 2020 amount represents a curtailment gain due to the freezing of plan benefits partially offset by pension settlements. 2019 amount represents settlement gain related to the U.S. Pension Plan (acquired as part of the Cristal transaction).
- (j) 2021 amount represents costs associated with the Exxaro flip-in transaction which are included in “Selling, general and administrative expenses” in the Consolidated Statements of Operations. 2019 amount represents the payment to Exxaro for capital gains tax on the disposal of its ordinary shares in Tronox Holdings plc included in “Other income (expense), net” in the Consolidated Statements of Operations.
- (k) 2021 amount represents costs, excluding share-based compensation, associated with the retirement agreement of the former CEO which were recorded in “Selling, general and administrative expenses” in the Consolidated Statements of Operations. The \$2 million of share based compensation expense associated with the former CEO is included in the total share-based compensation amounts of \$31 million in the table above.
- (l) 2021 amount represents the gain on European Union carbon credits sold in March 2021 which were recorded in “Cost of goods sold” in the Consolidated Statement of Operations.
- (m) Represents impairments of our right-of-use assets associated with the early termination of our leases and other costs related to the closure of our Baltimore and New York City offices which are included in “Selling, general and administrative expenses” in the Consolidated Statements of Operations.
- (n) 2020 amount represents reimbursement from claims related to the Ginkgo concentrator failure we inherited as a part of the Cristal transaction.
- (o) Includes noncash pension and postretirement costs, accretion expense, severance expense, and other items included in “Selling general and administrative expenses” and “Cost of goods sold” in the Consolidated Statements of Operations.

### **Critical Accounting Policies and Estimates**

The preparation of financial statements in conformity with U.S. GAAP requires management to make certain estimates and assumptions regarding matters that are inherently uncertain and that ultimately affect the reported amounts of assets, liabilities, revenues and expenses, and the disclosure of contingent assets and liabilities. The estimates and assumptions are based on management’s experience and understanding of current facts and

circumstances. These estimates may differ from actual results. Certain of our accounting policies are considered critical, as they are both important to reflect our financial position and results of operations and require significant or complex judgment on the part of management. The following is a summary of certain accounting policies considered critical by management.

### ***Asset Retirement Obligations***

To the extent a legal obligation exists, an asset retirement obligation (“ARO”) is recorded at its estimated fair value and accretion expense is recognized over time as the discounted liability is accreted to its expected settlement value. Because AROs represent financial obligations to be settled in the future, uncertainties exist in estimating the timing and amount of the associated costs to be incurred. Fair value is measured using expected future cash outflows, adjusted for expected inflation and discounted at our credit-adjusted risk-free interest rate. No market-risk premium has been included in our calculation of ARO balances since we can make no reliable estimate. Management believes these estimates and assumptions are reasonable; however, they are inherently uncertain. Refer to Notes 19 to the consolidated financial statements for a summary of the estimates and assumptions utilized. At December 31, 2021, AROs were \$149 million of which the long-term portion of \$139 million is recorded in “Asset retirement obligations” and the short-term portion of \$10 million is recorded in “Accrued liabilities” in the Consolidated Balance Sheet.

### ***Environmental Matters***

Liabilities for environmental matters are recognized when remedial efforts are probable and the costs can be reasonably estimated. Such liabilities are based on our best estimate of the undiscounted future costs required to complete the remedial work. The recorded liabilities are adjusted periodically as remediation efforts progress or as additional technical, regulatory or legal information becomes available. Given the uncertainties regarding the status of laws, regulations, enforcement policies, the impact of other potentially responsible parties, technology and information related to individual sites, we do not believe it is possible to develop an estimate of the range or reasonably possible environmental loss in excess of our recorded liabilities. At December 31, 2021, environmental liabilities (both short term and long term) were \$72 million, primarily related to the Cristal transaction.

For further discussion, see Environmental Matters included elsewhere in this section entitled, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and Notes 2 and 20 to the consolidated financial statements.

### ***Income Taxes***

We have operations in several countries around the world and are subject to income and similar taxes in these countries. The estimation of the amounts of income tax involves the interpretation of complex tax laws and regulations and how foreign taxes affect domestic taxes, as well as the analysis of the realizability of deferred tax assets, tax audit findings and uncertain tax positions. Although we believe our tax accruals are adequate, differences may occur in the future, depending on the resolution of pending and new tax matters.

Deferred tax assets and liabilities are determined based on temporary differences between the financial reporting and tax bases of assets and liabilities 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. A valuation allowance is provided against a deferred tax asset when it is more likely than not that all or some portion of the deferred tax asset will not be realized. We periodically assess the likelihood that we will be able to recover our deferred tax assets and reflect any changes in our estimates in the valuation allowance with a corresponding adjustment to earnings or other comprehensive income (loss) as appropriate. ASC 740, *Income Taxes*, requires that all available positive and negative evidence be weighted to determine whether a valuation allowance should be recorded.

The amount of income taxes we pay are subject to ongoing audits by federal, state and foreign tax authorities, which may result in proposed assessments. Our estimate of the potential outcome for any uncertain tax issue is highly judgmental. We assess our income tax positions, and record tax benefits for all years subject to examination based upon our evaluation of the facts, circumstances and information available at the reporting date. For those tax positions for which it is more likely than not that a tax benefit will be sustained, we record the amount that has a greater than 50% likelihood of being realized upon settlement with a taxing authority that

has full knowledge of all relevant information. Interest and penalties are accrued as part of tax expense, where applicable. If we do not believe that it is more likely than not that a tax benefit will be sustained, no tax benefit is recognized.

See Notes 2 and 8 to the consolidated financial statements for additional information.

### ***Contingencies***

From time to time, we may be subject to lawsuits, investigations and disputes (some of which involve substantial amounts claimed) arising out of the conduct of our business, including matters relating to commercial transactions, prior acquisitions and divestitures including our acquisition of Cristal, employee benefit plans, intellectual property, and environmental, health and safety matters. We recognize a liability for any contingency that is probable of occurrence and reasonably estimable. We continually assess the likelihood of adverse judgments or outcomes in these matters, as well as potential ranges of possible losses (taking into consideration any insurance recoveries), based on a careful analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts. Such contingencies are significant and the accounting requires considerable management judgments in analyzing each matter to assess the likely outcome and the need for establishing appropriate liabilities and providing adequate disclosures.

Refer to Notes 2 and 20 to the consolidated financial statements for additional information.

### ***Long-Lived Assets***

Key estimates related to long-lived assets (property, plant and equipment, mineral leaseholds, and intangible assets) include useful lives, recoverability of carrying values, and the existence of any asset retirement obligations. As a result of future decisions, such estimates could be significantly modified. The estimated useful lives of property, plant and equipment range from three to forty years, and depreciation is recognized on a straight-line basis. Useful lives are estimated based upon our historical experience, engineering estimates, and industry information. These estimates include an assumption regarding periodic maintenance. Mineral leaseholds are depreciated over their useful lives as determined under the units of production method. Intangible assets with finite useful lives are amortized on the straight-line basis over their estimated useful lives. The amortization methods and remaining useful lives are reviewed quarterly.

We evaluate the recoverability of the carrying value of long-lived assets that are held and used whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Under such circumstances, we assess whether the projected undiscounted cash flows of our long-lived assets are sufficient to recover the carrying amount of the asset group being assessed. If the undiscounted projected cash flows are not sufficient, we calculate the impairment amount by discounting the projected cash flows using our weighted-average cost of capital. For assets that satisfy the criteria to be classified as held for sale, an impairment loss, if any, is recognized to the extent the carrying amount exceeds fair value, less cost to sell. The amount of the impairment of long-lived assets is written off against earnings in the period in which the impairment is determined.

### ***Pension and Postretirement Benefits***

We provide pension benefits for qualifying employees in the United States and internationally, with the largest in the United Kingdom. Because pension benefits represent financial obligations that will ultimately be settled in the future with employees who meet eligibility requirements, uncertainties exist in estimating the timing and amount of future payments, and significant estimates are required to calculate pension expense and liabilities relating to these plans. The company utilizes the services of independent actuaries, whose models are used to help facilitate these calculations. Several key assumptions are used in actuarial models to calculate pension expense and liability amounts recorded in the financial statements; the most significant variables in the models are the expected rate of return on plan assets, the discount rate, and the expected rate of compensation increase. Management believes the assumptions used in the actuarial calculations are reasonable, reflect the company's experience and expectations for the future and are within accepted practices in each of the respective geographic locations in which it operates. However, actual results in any given year often differ from actuarial assumptions due to economic events and different rates of retirement, mortality, and turnover. Refer to Notes 2 and 23 to the consolidated financial statements for a summary of the plan assumptions and additional information on our pension arrangements.

*Expected Return on Plan Assets* — In forming the assumption of the long-term rate of return on plan assets, we consider the expected earnings on funds already invested, earnings on contributions expected to be made in the current year, and earnings on reinvested returns. The long-term rate of return estimation methodology for the plans is based on a capital asset pricing model using historical data and a forecasted earnings model. An expected return on plan assets analysis is performed which incorporates the current portfolio allocation, historical asset-class returns, and an assessment of expected future performance using asset-class risk factors. A 100 basis point change in these expected long-term rates of return, with all other variables held constant, would change our pension expense by approximately \$4 million.

*Discount Rate* — The discount rates selected for estimation of the actuarial present value of the benefit obligations are determined based on the prevailing market rate for high-quality, fixed-income debt instruments with maturities corresponding to the expected timing of benefit payments as of the annual measurement date for each of the various plans. These rates change from year to year based on market conditions that affect corporate bond yields. A 100 basis points change in discount rates, with all other variables held constant, would decrease/increase our pension expense by approximately \$1 million. A 100 basis points reduction in discount rates would increase the PBO by approximately \$72 million whereas a 100 basis point increase in discount rates would have a favorable impact to the PBO of approximately \$61 million.

*Rates of Compensation Increase* — We determine these rates based on review of the underlying long-term salary increase trend characteristic of the local labor markets and historical experience, as well as comparison to peer companies. A 100 basis points change in the expected rate of compensation increase, with all other variables held constant, would change our pension expense by approximately \$1 million and would impact the PBO by approximately \$6 million.

### ***Recent Accounting Pronouncements***

See Note 2 of notes to Consolidated Financial Statements for recently issued accounting pronouncements.

### **Environmental Matters**

We are subject to a broad array of international, federal, state, and local laws and regulations relating to safety, pollution, protection of the environment, and the generation, storage, handling, transportation, treatment, disposal, and remediation of hazardous substances and waste materials. In the ordinary course of business, we are subject to frequent environmental inspections and monitoring, and occasional investigations by governmental enforcement authorities. Under these laws, we are or may be required to obtain or maintain permits or licenses in connection with our operations. In addition, under these laws, we are or may be required to remove or mitigate the effects on the environment of the disposal or release of chemical, petroleum, low-level radioactive and other substances at our facilities. We may incur future costs for capital improvements and general compliance under environmental, health, and safety laws, including costs to acquire, maintain, and repair pollution control equipment. Environmental laws and regulations are becoming increasingly stringent, and compliance costs are significant and will continue to be significant in the foreseeable future. There can be no assurance that such laws and regulations or any environmental law or regulation enacted in the future is not likely to have a material effect on our business. We believe we are in compliance with applicable environmental rules and regulations in all material respects.

Refer to Item 3. Legal Proceedings for further information.

## **Item 7A. Quantitative and Qualitative Disclosures About Market Risk**

We are exposed to various market, credit, operational, and liquidity risks in the normal course of business, which are discussed below. We manage these risks through normal operating and financing activities and, when appropriate, with derivative instruments. We do not invest in derivative instruments for speculative purposes, but historically have entered into, and may enter into, derivative instruments for hedging purposes in order to reduce the exposure to fluctuations in interest rates, natural gas prices and exchange rates.

### **Market Risk**

A substantial portion of our products and raw materials are commodities that reprice as market supply and demand fundamentals change. Accordingly, product margins and the level of our profitability tend to vary with changes in the business cycle. Our TiO<sub>2</sub> prices may do so in the near term as ore prices and pigment prices are expected to fluctuate over the next few years. We try to protect against such instability through various business strategies. These include provisions in sales contracts allowing us to pass on higher raw material costs through timely price increases and formula price contracts to transfer or share commodity price risk, as well as using varying contract term lengths and selling to a diverse mix of customers by geography and industry to reap the benefits of a diverse portfolio.

### **Credit Risk**

Credit risk is the risk that a borrower or a counterparty will fail to meet their obligations. A significant portion of our liquidity is concentrated in trade accounts receivable that arise from sales of our products to customers. In the case of TiO<sub>2</sub>, the high level of industry concentration has the potential to impact our overall exposure to credit risk, either positively or negatively, in that our customers may be similarly affected by changes in economic, industry or other conditions. We have significant exposure to credit risk in industries that are affected by cyclical economic fluctuations. We perform ongoing credit evaluations of our customers from time to time, as deemed appropriate, to mitigate credit risk but generally do not require collateral. Our contracts typically enable us to tighten credit terms if we perceive additional credit risk; however, historic losses due to write offs of bad debt have been relatively low. In addition, due to our international operations, we are subject to potential trade restrictions and sovereign risk in certain countries in which we operate. We maintain allowances for potential credit losses based on specific customer review and current financial conditions. During 2021, 2020 and 2019 our ten largest third-party customers represented 28%, 32%, and 31%, respectively, of our consolidated net sales. During 2021, 2020, and 2019, no single customer accounted for 10% of our consolidated net sales.

### **Interest Rate Risk**

Interest rate risk arises from the possibility that changes in interest rates will impact our financial results. We are exposed to interest rate risk on our floating rate debt, the New Term Loan Facility, Standard Bank Term Loan Facility, new Cash Flow Revolver, Standard Bank Revolver, Emirates Revolver and SABB Credit Facility balances. Using a sensitivity analysis as of December 31, 2021, a hypothetical 1% increase in interest rates would result in a net decrease to pre-tax income of approximately \$2 million on an annualized basis. This is due to the fact that earnings on our interest earning financial assets of \$45 million at December 31, 2021 would increase by the full 1%, offsetting the impact of a 1% increase in interest expense on our floating rate debt of \$277 million.

During 2019, we entered into interest-rate swap agreements for a portion of our Prior Term Loan Facility, which effectively convert the variable rate to a fixed rate for a portion of the loan. The agreements expire in September 2024. The Company's objectives in using the interest-rate swap agreements are to add stability to interest expense and to manage its exposure to interest rate movements. There was no impact associated with the New Term Loan Facility as the hedge remained highly effective.

### **Currency Risk**

Currency risk arises from the possibility that fluctuations in foreign exchange rates will impact our balance sheets due to the translation of our assets and liabilities denominated in foreign currencies, as well as our earnings due to the translation of certain of our subsidiaries' statements of operations from local currencies to U.S. dollars, as well as due to remeasurement of assets and liabilities denominated in currencies other than a subsidiary's functional currency. A significant portion of our Adjusted EBITDA is derived from jurisdictions that



are subject to currency risk with Australia, Europe and South Africa representing the largest contributors. We manufacture and market our products in a number of countries throughout the world and, as a result, are exposed to changes in foreign currency exchange rates, particularly in Australia, Brazil, China, South Africa, the Netherlands, France and the United Kingdom. The exposure is more prevalent in South Africa and Australia as the majority of revenues are earned in U.S. dollars while expenses are primarily incurred in local currencies. Since we are exposed to movements in the South African rand and the Australian Dollar versus the U.S. dollar, we may enter into forward contracts to buy and sell foreign currencies as “economic hedges” for these foreign currency transactions.

We periodically enter into foreign currency contracts used to hedge non-functional currency sales for our South African subsidiaries and forecasted non-functional currency cost of goods sold for our Australian subsidiaries. These foreign currency contracts are designated as cash flow hedges. Changes to the fair value of these foreign currency contracts are recorded as a component of other comprehensive income (loss) to the extent such contracts are effective, and are recognized in net sales or costs of goods sold in the period in which the forecasted transaction affects earnings or the transactions are no longer probable of occurring.

As of December 31, 2021, we had notional amounts of 443 million Australian dollars (approximately \$322 million at December 31, 2021 exchange rate) that expire between January 25, 2022 and December 23, 2022 to reduce the exposure of our Australian subsidiaries’ cost of sales to fluctuations in currency rates. At December 31, 2021, we had notional amounts of 4.7 billion South African Rand (approximately \$298 million at December 31, 2021 exchange rate) that expire between January 26, 2022 and December 28, 2022 to reduce the exposure of our South African subsidiaries’ third party sales to fluctuations in currency rates. At December 31, 2021 and December 31, 2020, there was an unrealized net gain of \$15 million and an unrealized net gain of \$58 million, respectively, recorded in “Accumulated other comprehensive loss” on the Consolidated Balance Sheet.

From time to time, we enter into foreign currency contracts to reduce exposure of our subsidiaries’ balance sheet accounts not denominated in our subsidiaries’ functional currency to fluctuations in foreign currency exchange rates. For accounting purposes, these foreign currency contracts are not considered hedges. The change in fair value associated with these contracts is recorded in “Other income (expense), net” within the Consolidated Statement of Operations and partially offsets the change in value of third party and intercompany-related receivables not denominated in the functional currency of the subsidiary. At December 31, 2021, there was (i) 510 million South African Rand (or approximately \$32 million at December 31, 2021 exchange rate) and (ii) 172 million Australian dollars (or approximately \$125 million at December 31, 2021 exchange rate) of notional amount of outstanding foreign currency contracts. At December 31, 2021, the fair value of the foreign currency contracts was a gain of \$1 million.

**Item 8. Financial Statements and Supplementary Data**

	<u>Page No.</u>
<b>Tronox Holdings Audited Annual Financial Statements</b>	
Report of Independent Registered Public Accounting Firm (PCAOB ID 238) . . . . .	57
Consolidated Statements of Operations for the Years Ended December 31, 2021, 2020, and 2019 . . . . .	59
Consolidated Statements of Comprehensive Income (Loss) for the Years Ended December 31, 2021, 2020, and 2019. . . . .	60
Consolidated Balance Sheets at December 31, 2021 and 2020. . . . .	61
Consolidated Statements of Cash Flows for the Years Ended December 31, 2021, 2020, and 2019 . . . . .	62
Consolidated Statements of Changes in Shareholders' Equity for the Years Ended December 31, 2021, 2020, and 2019. . . . .	63
Notes to Consolidated Financial Statements. . . . .	64

## **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Tronox Holdings plc

### ***Opinions on the Financial Statements and Internal Control over Financial Reporting***

We have audited the accompanying consolidated balance sheets of Tronox Holdings plc and its subsidiaries (the “Company”) as of December 31, 2021 and 2020, and the related consolidated statements of operations, of comprehensive income (loss), of shareholders’ equity and of cash flows for each of the three years in the period ended December 31, 2021, 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 December 31, 2021, 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 December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

### ***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 on Internal Control over Financial Reporting appearing under Item 9A. 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.

### ***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.

#### *Valuation Allowance Assessment of Deferred Tax Assets*

As described in Notes 2 and 8 to the consolidated financial statements, the Company has recorded \$1.1 billion of deferred tax assets as of December 31, 2021, net of valuation allowances of \$1.7 billion. Deferred tax assets and liabilities are determined based on temporary differences between the financial reporting and tax bases of assets and liabilities 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. A valuation allowance is provided against a deferred tax asset when it is more likely than not that all or some portion of the deferred tax asset will not be realized. The Company periodically assesses the likelihood that they will be able to recover the deferred tax assets and reflect any changes in estimates of the valuation allowance, with a corresponding adjustment to earnings or other comprehensive income (loss), as appropriate. All available positive and negative evidence is weighted to determine whether a valuation allowance should be recorded.

The principal considerations for our determination that performing procedures relating to the valuation allowance assessment of deferred tax assets is a critical audit matter are the significant judgment by management in determining the realizability of deferred tax assets by jurisdiction, particularly as it relates to the assessment of cumulative tax losses, estimates of future taxable income and assessment of factors that may limit the realizability of certain deferred tax assets. This in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures and in evaluating audit evidence relating to management's assessment of cumulative tax losses, estimates of future taxable income and assessment of factors that may limit the realizability of certain deferred tax assets.

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 valuation allowance assessment of deferred tax assets, including controls over the determination of cumulative tax losses, estimates of future taxable income and assessment of factors that may limit the realizability of certain deferred tax assets. These procedures also included, among others, testing the completeness and accuracy of underlying data used by management, and evaluating management's assessment of the realizability of deferred tax assets by jurisdiction. This included evaluating the reasonableness of management's assumptions related to the assessment of cumulative tax losses, estimates of future taxable income and assessment of factors that may limit the realizability of certain deferred tax assets. Evaluating management's assumptions related to the assessment of cumulative tax losses, estimates of future taxable income and assessment of factors that may limit the realizability of certain deferred tax assets involved evaluating whether the assumptions used by management were reasonable considering the current and past performance of the respective entity and whether the assumptions were consistent with evidence obtained in other areas of the audit.

/s/ PricewaterhouseCoopers LLP

Stamford, Connecticut  
February 22, 2022

We have served as the Company's auditor since 2014.

**TRONOX HOLDINGS PLC**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(Millions of U.S. dollars, except share and per share data)

	Year Ended December 31,		
	2021	2020	2019
<b>Net sales</b> .....	\$ 3,572	\$ 2,758	\$ 2,642
Cost of goods sold .....	2,677	2,137	2,159
Contract loss .....	—	—	19
<b>Gross profit</b> .....	895	621	464
Selling, general and administrative expenses .....	318	347	347
Restructuring .....	—	3	22
<b>Income from operations</b> .....	577	271	95
Interest expense .....	(157)	(189)	(201)
Interest income .....	7	8	18
Loss on extinguishment of debt .....	(65)	(2)	(3)
Other income, net .....	12	26	3
<b>Income (loss) from continuing operations before income taxes</b> .....	374	114	(88)
Income tax (provision) benefit .....	(71)	881	(14)
<b>Net income (loss) from continuing operations</b> .....	303	995	(102)
Net income from discontinued operations, net of tax .....	—	—	5
<b>Net income (loss)</b> .....	303	995	(97)
Net income attributable to noncontrolling interest .....	17	26	12
 <b>Net income (loss) attributable to Tronox Holdings plc</b> .....	 <u>\$ 286</u>	 <u>\$ 969</u>	 <u>\$ (109)</u>
 <b>Net income (loss) per share, basic:</b>			
<b>Continuing operations</b> .....	\$ 1.88	\$ 6.76	\$ (0.81)
<b>Discontinued operations</b> .....	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 0.03</u>
<b>Net income (loss) per share, basic</b> .....	<u>\$ 1.88</u>	<u>\$ 6.76</u>	<u>\$ (0.78)</u>
 <b>Net income (loss) per share, diluted:</b>			
<b>Continuing operations</b> .....	\$ 1.81	\$ 6.69	\$ (0.81)
<b>Discontinued operations</b> .....	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 0.03</u>
<b>Net income (loss) per share, diluted</b> .....	<u>\$ 1.81</u>	<u>\$ 6.69</u>	<u>\$ (0.78)</u>
 <b>Weighted average shares outstanding, basic (in thousands)</b> .....	 <u>152,056</u>	 <u>143,355</u>	 <u>139,859</u>
<b>Weighted average shares outstanding, diluted (in thousands)</b> .....	<u>157,945</u>	<u>144,906</u>	<u>139,859</u>

See notes to consolidated financial statements.



**TRONOX HOLDINGS PLC**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**  
(Millions of U.S. dollars)

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
<b>Net income (loss)</b> .....	\$ 303	\$995	\$ (97)
<b>Other comprehensive income (loss):</b>			
Foreign currency translation adjustments .....	(113)	(4)	19
Pension and postretirement plans (See Note 23):			
Actuarial gains (losses), net of taxes of \$6, \$5 and \$1 in 2021, 2020 and 2019, respectively .....	16	(20)	(11)
Amortization of unrecognized actuarial losses, net of taxes of \$2 in 2021, and less than \$1 in both 2020 and 2019 .....	4	4	2
Total pension and postretirement gains (losses) .....	20	(16)	(9)
Realized (gains) losses on derivative instruments reclassified from accumulated other comprehensive loss to the Consolidated Statements of Operations .....	(32)	4	(7)
Unrealized gains (losses) on derivative financial instruments, (net of taxes of less than \$1, \$5 and \$5 in 2021, 2020, 2019, respectively; See Note 16)....	<u>21</u>	<u>(4)</u>	<u>8</u>
<b>Other comprehensive (loss) income</b> .....	<u>(104)</u>	<u>(20)</u>	<u>11</u>
<b>Total comprehensive income (loss)</b> .....	<u>\$ 199</u>	<u>\$975</u>	<u>\$ (86)</u>
<b>Comprehensive income (loss) attributable to noncontrolling interest:</b>			
Net income .....	17	26	12
Foreign currency translation adjustments .....	<u>(10)</u>	<u>(16)</u>	<u>16</u>
Comprehensive income attributable to noncontrolling interest .....	<u>7</u>	<u>10</u>	<u>28</u>
<b>Comprehensive income (loss) attributable to Tronox Holdings plc</b> .....	<u>\$ 192</u>	<u>\$965</u>	<u>\$(114)</u>

See notes to consolidated financial statements.

**TRONOX HOLDINGS PLC**  
**CONSOLIDATED BALANCE SHEETS**  
(Millions of U.S. dollars, except share and per share data)

	December 31,	
	2021	2020
<b>ASSETS</b>		
<b>Current Assets</b>		
Cash and cash equivalents .....	\$ 228	\$ 619
Restricted cash .....	4	29
Accounts receivable (net of allowance of \$4 in 2021 and \$5 in 2020) .....	631	540
Inventories, net .....	1,048	1,137
Prepaid and other assets .....	132	200
Income taxes receivable .....	6	4
<b>Total current assets</b> .....	2,049	2,529
<b>Noncurrent Assets</b>		
Property, plant and equipment, net .....	1,710	1,759
Mineral leaseholds, net .....	747	803
Intangible assets, net .....	217	201
Lease right of use assets, net .....	85	81
Deferred tax assets .....	985	1,020
Other long-term assets .....	194	175
<b>Total assets</b> .....	<b>\$5,987</b>	<b>\$6,568</b>
 <b>LIABILITIES AND EQUITY</b>		
<b>Current Liabilities</b>		
Accounts payable .....	\$ 438	\$ 356
Accrued liabilities .....	328	350
Short-term lease liabilities .....	26	39
Long-term debt due within one year .....	18	58
Income taxes payable .....	12	2
<b>Total current liabilities</b> .....	822	805
<b>Noncurrent Liabilities</b>		
Long-term debt, net .....	2,558	3,263
Pension and postretirement healthcare benefits .....	116	146
Asset retirement obligations .....	139	157
Environmental liabilities .....	66	67
Long-term lease liabilities .....	55	41
Deferred tax liabilities .....	157	176
Other long-term liabilities .....	32	42
<b>Total liabilities</b> .....	3,945	4,697
 <b>Commitments and Contingencies - Note 20</b>		
<b>Shareholders' Equity</b>		
Tronox Holdings plc ordinary shares, par value \$0.01 — 153,934,677 shares issued and outstanding at December 31, 2021 and 143,557,479 shares issued and outstanding at December 31, 2020 .....	2	1
Capital in excess of par value .....	2,067	1,873
Retained Earnings .....	663	434
Accumulated other comprehensive loss .....	(738)	(610)
<b>Total Tronox Holdings plc shareholders' equity</b> .....	1,994	1,698
Noncontrolling interest .....	48	173
<b>Total equity</b> .....	2,042	1,871
<b>Total liabilities and equity</b> .....	<b>\$5,987</b>	<b>\$6,568</b>

See notes to consolidated financial statements.

**TRONOX HOLDINGS PLC**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(Millions of U.S. dollars)

	Year Ended December 31,		
	2021	2020	2019
<b>Cash Flows from Operating Activities:</b>			
Net income (loss) . . . . .	\$ 303	\$ 995	\$ (97)
Net income from discontinued operations, net of tax . . . . .	—	—	5
Net income (loss) from continuing operations . . . . .	303	995	(102)
Adjustments to reconcile net income (loss) from continuing operations to net cash provided by operating activities, continuing operations:			
Depreciation, depletion and amortization . . . . .	297	304	280
Deferred income taxes . . . . .	15	(899)	(9)
Share-based compensation expense . . . . .	31	30	32
Amortization of deferred debt issuance costs and discount on debt . . . . .	11	10	8
Loss on extinguishment of debt . . . . .	65	2	3
Contract loss . . . . .	—	—	19
Acquired inventory step-up recognized in earnings . . . . .	—	—	98
Other non-cash affecting net income (loss) . . . . .	36	65	25
Changes in assets and liabilities:			
(Increase) decrease in accounts receivable, net . . . . .	(108)	(49)	78
Decrease (increase) in inventories, net . . . . .	53	(21)	(59)
Decrease (increase) in prepaid and other assets . . . . .	53	(29)	20
Increase in accounts payable and accrued liabilities . . . . .	53	17	67
Net changes in income tax payables and receivables . . . . .	9	(2)	(13)
Changes in other non-current assets and liabilities . . . . .	(78)	(68)	(35)
Cash provided by operating activities – continuing operations . . . . .	740	355	412
<b>Cash Flows from Investing Activities:</b>			
Capital expenditures . . . . .	(272)	(195)	(198)
Cristal Acquisition . . . . .	—	—	(1,675)
Proceeds from sale of Ashtabula . . . . .	—	—	701
Insurance proceeds . . . . .	1	1	10
Loans . . . . .	—	(36)	(25)
Proceeds from the sale of assets . . . . .	2	1	2
Cash used in investing activities – continuing operations . . . . .	(269)	(229)	(1,185)
<b>Cash Flows from Financing Activities:</b>			
Repayments of short-term debt . . . . .	—	(13)	—
Repayments of long-term debt . . . . .	(3,212)	(233)	(387)
Proceeds from short-term debt . . . . .	—	13	—
Proceeds from long-term debt . . . . .	2,472	500	222
Repurchase of common stock . . . . .	—	—	(288)
Acquisition of noncontrolling interest . . . . .	—	—	(148)
Debt issuance costs . . . . .	(37)	(10)	(4)
Call premium paid . . . . .	(40)	—	—
Dividends paid . . . . .	(65)	(40)	(27)
Restricted stock and performance-based shares settled in cash for taxes . . . . .	(3)	(3)	(6)
Proceeds from the exercise of stock options . . . . .	8	—	—
Cash (used in) provided by financing activities – continuing operations . . . . .	(877)	214	(638)
<b>Discontinued Operations:</b>			
Cash provided by operating activities . . . . .	—	—	29
Cash used in investing activities . . . . .	—	—	(1)
<b>Net cash flows provided by discontinued operations</b> . . . . .	—	—	28
<b>Effects of exchange rate changes on cash and cash equivalents and restricted cash</b> . . . . .	(10)	(3)	(2)
<b>Net (decrease) increase in cash and cash equivalents and restricted cash</b> . . . . .	(416)	337	(1,385)
<b>Cash and cash equivalents and restricted cash at beginning of period</b> . . . . .	648	311	1,696
<b>Cash and cash equivalents and restricted cash at end of period - continuing operations</b> . . . . .	\$ 232	\$ 648	\$ 311
<b>Supplemental cash flow information - continuing operations:</b>			
<b>Interest paid, net</b> . . . . .	\$ 138	\$ 159	\$ 188
<b>Income taxes paid</b> . . . . .	\$ 47	\$ 17	\$ 34

See notes to consolidated financial statements.

**TRONOX HOLDINGS PC**  
**CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY**  
(Millions of U.S. dollars)

	Tronox Holdings plc Ordinary Shares (in thousands)	Tronox Holdings plc Ordinary Shares (amount)	Capital in Excess of par Value	(Accumulated Deficit) Retained Earnings	Accumulated Other Comprehensive Loss	Total Tronox Limited Shareholders' Equity	Non- controlling Interest	Total Equity
<b>Balance at January 1, 2019</b> . . .	122,934	\$ 1	\$1,579	\$(357)	\$(540)	\$ 683	\$ 179	\$ 862
Net (loss) income. . . . .	—	—	—	(109)	—	(109)	12	(97)
Other comprehensive (loss) income. . . . .	—	—	—	—	(5)	(5)	16	11
Shares-based compensation. . . . .	3,347	—	32	—	—	32	—	32
Shares issued for acquisition. . . . .	37,580	—	526	—	—	526	—	526
Shares repurchased and cancelled. . . . .	(21,453)	—	(288)	—	—	(288)	—	(288)
Shares cancelled. . . . .	(508)	—	(6)	—	—	(6)	—	(6)
Acquisition of noncontrolling interest. . . . .	—	—	3	—	(61)	(58)	(90)	(148)
Cristal acquisition. . . . .	—	—	—	—	—	—	51	51
Ordinary share dividends (\$0.18 per share). . . . .	—	—	—	(27)	—	(27)	—	(27)
<b>Balance at December 31, 2019</b> . .	141,900	\$ 1	\$1,846	\$(493)	\$(606)	\$ 748	\$ 168	\$ 916
Net income. . . . .	—	—	—	969	—	969	26	995
Other comprehensive loss. . . . .	—	—	—	—	(4)	(4)	(16)	(20)
Shares-based compensation. . . . .	2,032	—	30	—	—	30	—	30
Shares cancelled. . . . .	(375)	—	(3)	—	—	(3)	—	(3)
Measurement period adjustment related to Cristal acquisition. . . . .	—	—	—	—	—	—	(3)	(3)
Minority interest dividend. . . . .	—	—	—	—	—	—	(2)	(2)
Ordinary share dividends (\$0.28 per share). . . . .	—	—	—	(42)	—	(42)	—	(42)
<b>Balance at December 31, 2020</b> . .	143,557	\$ 1	\$1,873	\$ 434	\$(610)	\$1,698	\$ 173	\$1,871
Net income. . . . .	—	—	—	286	—	286	17	303
Other comprehensive loss. . . . .	—	—	—	—	(94)	(94)	(10)	(104)
Shares-based compensation. . . . .	2,844	—	31	—	—	31	—	31
Shares cancelled. . . . .	(137)	—	(3)	—	—	(3)	—	(3)
Options exercised. . . . .	425	—	8	—	—	8	—	8
Acquisition of noncontrolling interest. . . . .	7,246	1	158	—	(34)	125	(125)	—
Ordinary share dividends (\$0.36 per share). . . . .	—	—	—	(57)	—	(57)	(7)	(64)
<b>Balance at December 31, 2021</b> . .	<u>153,935</u>	<u>\$ 2</u>	<u>\$2,067</u>	<u>\$ 663</u>	<u>\$(738)</u>	<u>\$1,994</u>	<u>\$ 48</u>	<u>\$2,042</u>

See notes to consolidated financial statements.

**TRONOX HOLDINGS PLC**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
(Millions of U.S. dollars, except share, per share and metric tons data or unless otherwise noted)

**1. The Company**

Tronox Holdings plc (referred to herein as “Tronox”, the “Company”, “we”, “us”, or “our”) operates titanium-bearing mineral sand mines and beneficiation operations in Australia, South Africa and Brazil to produce feedstock materials that can be processed into TiO<sub>2</sub> for pigment, high purity titanium chemicals, including titanium tetrachloride, and Ultrafine© titanium dioxide used in certain specialty applications. It is our long-term strategic goal to be vertically integrated and consume all of our feedstock materials in our own nine TiO<sub>2</sub> pigment facilities which we operate in the United States, Australia, Brazil, UK, France, the Netherlands, China and the Kingdom of Saudi Arabia (“KSA”). We believe that vertical integration is the best way to achieve our ultimate goal of delivering low cost, high-quality pigment to our coatings and other TiO<sub>2</sub> customers throughout the world. The mining, beneficiation and smelting of titanium bearing mineral sands creates meaningful quantities of zircon and pig iron, which we also supply to customers around the world.

We are a public limited company listed on the New York Stock Exchange and are registered under the laws of England and Wales.

***Basis of Presentation***

We are considered a domestic company in the United Kingdom and, as such, are required to comply with filing requirements in the United Kingdom. Additionally, we are not considered a “foreign private issuer” in the U.S.; therefore, we are required to comply with the reporting and other requirements imposed by the U.S. securities law on U.S. domestic issuers, which, among other things, requires reporting under accounting principles generally accepted in the United States of America (“U.S. GAAP”). The consolidated financial statements included in this Form 10-K are prepared in conformity with U.S. GAAP.

Our consolidated financial statements include the accounts of all majority-owned subsidiary companies. All intercompany balances and transactions have been eliminated in consolidation. Certain prior period amounts have been reclassified to conform to the manner and presentation in the current period.

***Use of Estimates***

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. It is at least reasonably possible that the effect on the financial statements of a change in estimate due to one or more future confirming events could have a material effect on the financial statements.

**2. Significant Accounting Policies**

***Foreign Currency***

The U.S. dollar is our reporting currency for our consolidated financial statements in U.S. GAAP. We determine the functional currency of each subsidiary based on a number of factors, including the predominant currency for revenues, expenditures and borrowings. Adjustments from the remeasurement of non-functional currency monetary assets and liabilities are recorded in “Other income, net” in the Consolidated Statements of Operations. When a subsidiary’s functional currency is not the U.S. dollar, translation adjustments resulting from translating the functional currency financial statements into U.S. dollar equivalents are recorded in “Accumulated other comprehensive loss” in the Consolidated Balance Sheets.

Translation adjustments on intercompany foreign currency receivables and payables that are not expected to be settled in the foreseeable future are reported in the same manner as translation adjustments.

***Revenue Recognition***

We recognize revenue at a point in time when the customer obtains control of the promised products. For most transactions this occurs when products are shipped from our manufacturing facilities or at a later point when control of the products transfers to the customer at a specified destination or time. All amounts billed to a



customer in a sales transaction related to shipping and handling represent revenues earned and are reported as “Net sales” in the Consolidated Statements of Operations. Accruals are made for sales returns, rebates and other allowances, which are recorded in “Net sales” in the Consolidated Statements of Operations and are based on our historical experience and current business conditions. Additionally, we have elected the practical expedient to exclude sales taxes and similar taxes that we collect from customers on behalf of government authorities from the revenue transaction price. See Note 5.

### ***Cost of Goods Sold***

Cost of goods sold includes costs for purchasing, receiving, manufacturing, and distributing products, including raw materials, energy, labor, depreciation, depletion, shipping and handling, freight, warehousing, and other production costs.

### ***Research and Development***

Research and development costs, included in “Selling, general and administrative expenses” in the Consolidated Statements of Operations comprised of salaries, building costs, utilities, administrative expenses, third party research, and allocations of corporate costs, were \$13 million, \$12 million, and \$17 million during 2021, 2020, and 2019, respectively, and were expensed as incurred.

### ***Selling, General and Administrative Expenses***

Selling, general and administrative expenses include costs related to marketing, research and development, agent commissions, and legal and administrative functions such as corporate management, human resources, information technology, investor relations, accounting, treasury, and tax compliance.

### ***Income Taxes***

We use the asset and liability method of accounting for income taxes. The estimation of the amounts of income taxes involves the interpretation of complex tax laws and regulations and how foreign taxes affect domestic taxes, as well as the analysis of the realizability of deferred tax assets, tax audit findings, and uncertain tax positions.

Deferred tax assets and liabilities are determined based on temporary differences between the financial reporting and tax bases of assets and liabilities 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. A valuation allowance is provided against a deferred tax asset when it is more likely than not that all or some portion of the deferred tax asset will not be realized. We periodically assess the likelihood that we will be able to recover our deferred tax assets and reflect any changes in our estimates in the valuation allowance, with a corresponding adjustment to earnings or other comprehensive income (loss), as appropriate. All available positive and negative evidence is weighted to determine whether a valuation allowance should be recorded.

The amount of income taxes we pay is subject to ongoing audits by federal, state, and foreign tax authorities, which may result in proposed assessments. Our estimate of the potential outcome for any uncertain tax issue is highly judgmental. We assess our income tax positions, and record tax benefits for all years subject to examination based upon our evaluation of the facts, circumstances, and information available at the reporting date. For those tax positions for which it is more likely than not that a tax benefit will be sustained, we record the amount that has a greater than 50% likelihood of being realized upon settlement with a taxing authority that has full knowledge of all relevant information. Interest and penalties are accrued as part of tax expense, where applicable. If we do not believe that it is more likely than not that a tax benefit will be sustained, no tax benefit is recognized. See Note 8.

### ***Earnings per Share***

Basic and diluted earnings per share are calculated using the two-class method. Under the two-class method, earnings used to determine basic earnings per share are reduced by an amount allocated to participating securities. Participating securities include restricted shares issued under the Tronox Management Equity Incentive Plan (the “MEIP”) (see Note 22), which contains non-forfeitable dividend rights. Our unexercised options and unvested restricted share units do not contain non-forfeitable rights to dividends and, as such, are not considered

in the calculation of basic earnings per share. Our unvested restricted shares do not have a contractual obligation to share in losses; therefore, when we record a net loss, none of the loss is allocated to participating securities. Consequently, in periods of net loss, the two-class method does not have an effect on basic loss per share.

Diluted earnings per share is calculated by dividing net earnings allocable to ordinary shares by the weighted-average number of ordinary shares outstanding for the period, as adjusted for the potential dilutive effect of non-participating restricted share units and options. The options are included in the calculation of diluted earnings per ordinary share utilizing the treasury stock method. See Note 9.

### ***Fair Value Measurement***

We measure fair value on a recurring basis utilizing valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs, to the extent possible, and consider counterparty credit risk in our assessment of fair value. The fair value hierarchy is as follows:

- Level 1 – Quoted prices in active markets for identical assets and liabilities;
- Level 2 – Quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active or other inputs that are observable or can be corroborated by observable market data; and,
- Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities See Note 17.

### ***Cash and Cash Equivalents***

We consider all investments with original maturities of three months or less to be cash equivalents. We maintain cash and cash equivalents in bank deposit and money market accounts that may exceed federally insured limits. The financial institutions where our cash and cash equivalents are held are generally highly rated and geographically dispersed, and we have a policy to limit the amount of credit exposure with any one institution. We have not experienced any losses in such accounts and believe we are not exposed to significant credit risk.

At December 31, 2021, we had restricted cash of \$4 million comprised of \$3 million in Australia related to outstanding performance bonds and \$1 million in Saudi Arabia related to vendor supply agreement guarantees. At December 31, 2020, we had restricted cash of \$29 million comprised of \$18 million in Europe related to the termination fee associated with the TTI acquisition, \$10 million in Australia related to outstanding performance bonds and \$1 million in Saudi Arabia related to vendor supply agreement guarantees.

### ***Accounts Receivable, net of allowance for credit losses***

We perform credit evaluations of our customers, and take actions deemed appropriate to mitigate credit risk. Only in certain specific occasions do we require collateral in the form of bank or parent company guarantees or guarantee payments. We maintain allowances for potential credit losses based on specific customer review and current financial conditions.

### ***Inventories, net***

Pigment inventories are stated at the lower of actual cost and net realizable value, net of allowances for obsolete and slow-moving inventory. The cost of inventories is determined using the first-in, first-out method. Carrying values include material costs, labor, and associated indirect manufacturing expenses. Costs for materials and supplies, excluding titanium ore, are determined by average cost to acquire. Feedstock and co-products inventories including titanium ore are stated at the lower of the weighted-average cost of production or market. Inventory costs include those costs directly attributable to products, including all manufacturing overhead but excluding distribution costs. Raw materials are carried at actual cost.

We review the cost of our inventory in comparison to its net realizable value. We also periodically review our inventory for obsolescence. In either case, we record any write-down equal to the difference between the cost of inventory and its estimated net realizable value based on assumptions about alternative uses, market conditions and other factors. Inventories expected to be sold or consumed within twelve months after the balance sheet date are classified as current assets and all other inventories are classified as non-current assets. See Note 10.

### **Long Lived Assets**

Property, plant and equipment, net is stated at cost less accumulated depreciation, and is depreciated over its estimated useful life using the straight-line method as follows:

Land improvements .....	10 — 20 years
Buildings .....	10 — 40 years
Machinery and equipment .....	3 — 25 years
Furniture and fixtures .....	10 years

Maintenance and repairs are expensed as incurred, except for costs of replacements or renewals that improve or extend the lives of existing properties, which are capitalized. Upon retirement or sale, the cost and related accumulated depreciation are removed from the respective account, and any resulting gain or loss is included in “Cost of goods sold” or “Selling, general, and administrative expenses” in the Consolidated Statements of Operations. See Note 11.

We capitalize costs associated with our asset retirement obligations which are generally included in machinery and equipment. See Note 19.

We capitalize interest costs on major projects that require an extended period of time to complete. See Note 15.

Mineral property acquisition costs are capitalized as tangible assets when management determines that probable future benefits consisting of a contribution to future cash inflows have been identified and adequate financial resources are available or are expected to be available as required to meet the terms of property acquisition and anticipated exploration and development expenditures. Mineral leaseholds are depleted over their useful lives as determined under the units of production method. Mineral property exploration costs are expensed as incurred. When it has been determined that a mineral property can be economically developed as a result of establishing proven and probable reserves, the costs incurred to develop such property through the commencement of production are capitalized. See Note 12.

Intangible assets are stated at cost less accumulated amortization and are amortized on a straight-line basis over their estimated useful lives, which generally range from 3 to 20 years. See Note 13.

We evaluate the recoverability of the carrying value of long-lived assets that are held and used whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Under such circumstances, we assess whether the projected undiscounted cash flows of our long-lived assets are sufficient to recover the carrying amount of the asset group being assessed. If the undiscounted projected cash flows are not sufficient, we calculate the impairment amount by discounting the projected cash flows using our weighted-average cost of capital. For assets that satisfy the criteria to be classified as held for sale, an impairment loss, if any, is recognized to the extent the carrying amount exceeds fair value, less cost to sell. The amount of the impairment of long-lived assets is written off against earnings in the period in which the impairment is determined.

### **Business Acquisitions**

Business acquisitions are accounted for using the acquisition method under Accounting Standards Codification (“ASC”) 805, *Business Combinations* (“ASC 805”), which requires recording assets acquired and liabilities assumed at fair value as of the acquisition date. Under the acquisition method of accounting, each tangible and separately identifiable intangible asset acquired and liabilities assumed is recorded based on their preliminary estimated fair values on the acquisition date. The initial valuations are derived from estimated fair value assessments and assumptions used by management. Acquisition related costs are expensed as incurred and are included in “Selling, general and administrative expenses” in the Consolidated Statements of Operations.

### **Leases**

We determine if a contract is or contains a lease at inception of the contract. Our leases are primarily operating leases. Leased assets primarily include office buildings, rail cars and motor vehicles, forklifts, and other machinery and equipment. Our leases primarily have fixed lease payments, with real estate leases typically requiring additional payments for real estate taxes and occupancy-related costs. Certain of our leases also have variable lease payments. Variable lease payments that depend on an index or a rate (such as the Consumer Price

Index) are included in our initial measurement of the lease right of use assets and lease liabilities. Variable lease payments that are not index or rate based (such as variable payments based on our performance or use of the leased assets) are recorded as expenses when incurred and excluded from the measurement of right of use assets and lease liabilities. Our leases typically have initial lease terms ranging from 1 to 25 years. Some of our lease agreements include options to renew, extend or early terminate the leases. Lease term is the non-cancellable period of a lease, adjusted by the period covered by an option to extend or terminate the lease if we are reasonably certain to exercise (or not exercise) that option. Our operating leases typically do not contain purchase options we expect to exercise, residual value guarantees or other material covenants.

Operating leases are recorded under “Lease right of use assets”, “Short-term lease liabilities”, and “Long-term lease liabilities” on the Consolidated Balance Sheets. Finance leases are recorded under “Property, plant and equipment net”, “Long-term debt due within one year”, and “Long-term debt” on the Consolidated Balance Sheets. Operating lease right of use (“ROU”) assets and lease liabilities are initially recorded at the present value of the future minimum lease payments over the lease term at the commencement date. As most of our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at the lease commencement date in determining the present value of future payments. Lease payments for the initial measurement of lease ROU assets and lease liabilities include fixed payments and variable payments that depend on an index or a rate. Variable lease payments that are not index or rate based are recorded as expenses when incurred. Operating lease ROU assets are amortized on a straight-line basis over the period of the lease. Finance lease ROU assets are amortized on a straight-line basis over the shorter of their estimated useful lives of leased asset and the lease terms. See Note 18.

### ***Long-term Debt***

Long-term debt is stated net of unamortized original issue premium or discount. Premiums or discounts are amortized using the effective interest method with amortization expense recorded in “Interest and debt expense, net” in the Consolidated Statements of Operations. Deferred debt issuance costs related to a recognized debt liability are presented in the Consolidated Balance Sheets as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts and are amortized using the effective interest method with amortization expense recorded in “Interest and debt expense, net” in the Consolidated Statements of Operations. See Note 15.

### ***Asset Retirement Obligations***

Asset retirement obligations are recorded at their estimated fair value, and accretion expense is recognized over time as the discounted liability is accreted to its expected settlement value. Fair value is measured using expected future cash outflows discounted at our credit-adjusted risk-free interest rate, which are considered Level 3 inputs. We classify accretion expense related to asset retirement obligations as a production cost, which is included in “Cost of goods sold” in the Consolidated Statements of Operations. See Note 19.

### ***Environmental Remediation and Other Contingencies***

We record an undiscounted liability when any of the following occur: 1) a claim or assessment has been asserted, 2) a litigation has commenced, or 3) based on available information, it is probable that a claim or an assessment will be asserted or a litigation will commence; and in addition, the outcome is expected to be unfavorable to us and the associated costs can be reasonably estimated. See Note 20.

### ***Self-Insurance***

We are self-insured for certain levels of general and vehicle liability, property, workers’ compensation and health care coverage. The cost of these self-insurance programs is accrued based upon estimated fully developed settlements for known and anticipated claims. Any resulting adjustments to previously recorded reserves are reflected in current operating results. We do not accrue for general or unspecific business risks.

### ***Share-based Compensation***

*Equity Restricted Share and Restricted Share Unit Awards* — The fair value of equity instruments is measured based on the share price on the grant date and is recognized over the vesting period. These awards contain service, market, and/or performance conditions. For awards containing only a service or a market

condition, we have elected to recognize compensation costs using the straight-line method over the requisite service period for the entire award. For awards containing a market condition, the fair value of the award is measured using the Monte Carlo simulation under a lattice model approach. For awards containing a performance condition, the fair value is the grant date close price and compensation expense is not recognized until we conclude that it is probable that the performance condition will be met. We reassess the probability at least quarterly. See Note 22.

### ***Defined Benefit Pension and Postretirement Benefit Plans***

We recognize the funded status of our defined benefit pension plans and postretirement benefit plans in the Consolidated Balance Sheets. The funded status is measured as the difference between the fair value of plan assets and the benefit obligation at the measurement date. The benefit obligation for the defined benefit plans is the projected benefit obligation (PBO), which represents the actuarial present value of benefits expected to be paid upon retirement based on employee services already rendered and estimated future compensation levels. The benefit obligation for our postretirement benefit plans is the accumulated postretirement benefit obligation (APBO), which represents the actuarial present value of postretirement benefits attributed to employee services already rendered. The fair value of plan assets related to our defined benefit plan represents the current market value of assets held in a trust fund, which is established for the sole benefit of plan participants.

If the fair value of plan assets exceeds the benefit obligation, the plan is overfunded, and the excess is recorded as a prepaid pension asset. On the other hand, if the benefit obligation exceeds the fair value of plan assets, the plan is underfunded, and the deficit is recorded as pension and postretirement healthcare benefits obligation in the Consolidated Balance Sheet. The portion of the pension and postretirement healthcare obligations payable within the next 12 months is recorded in accrued liabilities in the Consolidated Balance Sheet.

Net periodic pension and postretirement benefit cost represents the aggregation of service cost, interest cost, expected return on plan assets, amortization of prior service costs or credits and actuarial gains or losses previously recognized as a component of OCI and it is recorded in the Consolidated Statement of Operations. Net periodic cost is recorded in cost of goods sold and selling, general and administrative expenses in the Consolidated Statement of Operations based on the employees' respective functions.

Actuarial gains or losses represents the effect of remeasurement on the benefit obligation principally driven by changes in the plan actuarial assumptions. Prior service costs or credits arise from plan amendments. The actuarial gains or losses and prior service costs or credits are initially recognized as a component of Other Comprehensive income in the Consolidated Statement of Comprehensive Income (Loss). Those gains or losses and prior service costs or credits are subsequently recognized as a component of net periodic cost.

The measurement of benefit obligations and net periodic cost is based on estimates and assumptions approved by management. These valuations reflect the terms of the plans and use participant-specific information such as compensation, age and years of service, as well as certain assumptions, including estimates of discount rates, expected return on plan assets, rate of compensation increases and mortality rates.

*Defined Contribution Plans* — We recognize our contribution as expense when they are due. The expense is recorded in cost of goods sold or selling, general and administrative expenses the Consolidated Statement of Operations based on the employees' respective functions.

*Multiemployer Plan* — We treat our multiemployer plan like a defined contribution plan. A pension plan to which two or more unrelated employers contribute is generally considered to be a multiemployer plan. As a defined contribution plan, we recognize the contribution for the period as a net benefit cost and any contributions due and unpaid as a liability.

### ***Recently Adopted Accounting Pronouncements***

In December 2019, the FASB issued ASU 2019-12, Income Taxes (“Topic 740”): Simplifying the Accounting for Income Taxes. The standard simplifies the accounting for income taxes by removing the exceptions to the incremental approach for intraperiod tax allocation, the requirement to recognize deferred tax liability for equity method investments, the ability not to recognize a deferred tax liability for a foreign subsidiary when a foreign equity method investment becomes a subsidiary, and the general methodology for calculating income taxes in an interim period when a year-to-date loss exceeds the anticipated loss for the year.



This standard is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2020 with early adoption permitted. The adoption of this standard did not have a material impact on our consolidated financial statements.

### ***Recently Issued Accounting Pronouncements***

In March 2020, the FASB issued ASU 2020-04, “Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform Financial Reporting”. This amendment is elective in nature. Amongst other aspects, this standard provides for practical expedients and exceptions to current accounting standards that reference a rate which is expected to be dissolved (e.g., London Interbank Offered Rate “LIBOR”) as it relates to hedge accounting, contract modifications and other transactions that reference this rate, subject to meeting certain criteria. The standard is effective for all entities as of March 12, 2020 through December 31, 2022. The Company is currently evaluating the impact of the standard.

### **3. Acquisitions and Related Divestitures**

#### *TTI Acquisition*

In May 2020, the Company announced that it had signed a definitive agreement to acquire the Tizir Titanium and Iron (“TTI”) business from Eramet S.A. for approximately \$300 million in cash, plus 3% per annum which accrues for the period from January 1, 2020 until the transaction closes. TTI is a titanium smelter located in Tyssedal, Norway which upgrades ilmenite to produce high-grade titanium slag and high-purity pig iron with an annual capacity of approximately 230,000 tons and 90,000 tons, respectively.

Pursuant to the definitive agreement, we were required to pay to Eramet S.A. a termination fee of \$18 million if the agreement is terminated as a result of a failure to satisfy certain regulatory approvals prior to May 13, 2021. During the second quarter of 2020, upon signing of the definitive agreement to acquire TTI, we placed \$18 million into an escrow account with a third-party financial institution.

One of the conditions to the transaction was the obtaining of certain regulatory approvals that would include UK Competition and Markets Authority (“CMA”) approval by no later than a date specified in the definitive agreement (the “Condition Satisfaction Date”). On January 4, 2021, the Company received a decision from the CMA indicating that it intended to open a Phase 2 investigation into the Company’s proposed acquisition of TTI. In response to the concerns presented by the CMA, the Company submitted a remedy proposal, which the CMA rejected on January 18, 2021. As a result of this rejection, the Company concluded that it is not possible to complete the transaction by the Condition Satisfaction Date and elected to terminate the transaction. On January 19, 2021, pursuant to the definitive agreement the \$18 million previously placed into escrow was released to Eramet in satisfaction of the termination fee, which was recorded in “Other income, net” in our Consolidated Statement of Operations. At December 31, 2020, the \$18 million is reflected within “Restricted cash” on the Consolidated Balance Sheet.

#### *Cristal Acquisitions and Related Divestitures*

On April 10, 2019, we completed the acquisition of the TiO<sub>2</sub> business of Cristal for \$1.675 billion of cash, plus 37,580,000 ordinary shares. The total acquisition price, including the value of the ordinary shares at \$14 per share on the closing date of the Cristal Transaction, was approximately \$2.2 billion. With the acquisition of our shares, an affiliate of Cristal became our largest shareholder. At December 31, 2021, Cristal International Holdings B.V. (formerly known as Cristal Inorganic Chemical Netherlands Cooperatief W.A.), a wholly-owned subsidiary of The National Titanium Dioxide Company Limited., continues to own 37,580,000 shares of Tronox, or a 24% ownership interest. The National Titanium Dioxide Company Limited is 79% owned by Tasnee.

In order to obtain regulatory approval for the Cristal Transaction, the FTC required us to divest Cristal’s North American TiO<sub>2</sub> business, which we sold to INEOS on May 1, 2019, for cash proceeds, net of transaction costs, of \$701 million, inclusive of an amount for a working capital adjustment. The operating results of Cristal’s North American TiO<sub>2</sub> business from the acquisition date to the date of divestiture are included in a single caption entitled “Net Income (Loss) from discontinued operations, net of tax” in our Consolidated Statements of Operations. See Note 6 for further information on discontinued operations.

In conjunction with the Cristal Transaction, we entered into a transition services agreement with Tasnee and certain of its affiliates under which we and the Tasnee entities will provide certain transition services to one

another. See Note 24 for further details of the transition services agreement. In conjunction with the divestiture of Cristal’s North American TiO<sub>2</sub> business to INEOS, we entered into a two-year transition services agreement with INEOS. Under the terms of the transition services agreement, INEOS agreed to provide services to Tronox for manufacturing, technology and innovation, information technology, finance, warehousing and human resources. Similarly, Tronox will provide services to INEOS for information technology, finance, product stewardship, warehousing and human resources.

In addition, in order to obtain regulatory approval by the European Commission, we divested the 8120 paper laminate grade, supplied from our Botlek facility in the Netherlands, to Venator Materials PLC (“Venator”). The divestiture was completed on April 26, 2019. Under the terms of the divestiture, we will supply the 8120 grade product to Venator under a supply agreement for an initial term of 2 years, and extendable up to 3 years, to allow for the transfer of the manufacturing of the 8120 grade to Venator. Total cash consideration is 8 million Euros, of which 1 million Euros was paid at the closing, 3.5 million Euros (or approximately \$3.9 million) was received during the second quarter of 2020 and 3.5 million Euros (approximately \$4.2 million) was received in the second quarter of 2021. We recorded a charge of \$19 million during the second quarter of 2019, in “Contract loss” in the Consolidated Statements of Operations, reflecting both the proceeds on sale and the estimated losses we expect to incur under the supply agreement with Venator.

We funded the cash portion of the Cristal Transaction through existing cash, borrowings from our Wells Fargo Revolver, and restricted cash which had been borrowed under the Blocked Term Loan (as defined elsewhere herein) and which became available to us for the purpose of consummating the Cristal Transaction. See Note 15 for further details of the Cristal Transaction financing.

**Supplemental Pro Forma Financial Information**

The following unaudited pro forma information was prepared pursuant to the requirements of ASC 805 and give effect to the Cristal Transaction as if it had occurred on January 1, 2018. The unaudited pro forma financial information reflects certain adjustments related to the acquisition, such as:

- a. conforming the accounting policies of Cristal to those applied by Tronox;
- b. conversion to U.S. GAAP from IFRS for Cristal;
- c. the elimination of transactions between Tronox and Cristal;
- d. recording certain incremental expenses resulting from purchase accounting adjustments, such as inventory step-up amortization, depreciation, depletion and amortization expense in connection with fair value adjustments to property, plant and equipment, mineral leaseholds and intangible assets;
- e. recording the contract loss on the sale of the 8120 product line as a charge in the first quarter of 2018;
- f. recording all transaction costs incurred in the first quarter of 2018;
- g. recording the effect on interest expense related to borrowings in connection with the Cristal Transaction; and
- h. recording the related tax effects and the impacts to EPS for the shares issued in conjunction with the transaction.

The unaudited pro forma financial information should not be relied upon as being indicative of the historical results that would have been obtained if the Cristal Transaction had actually occurred on that date, nor the results of operations in the future.

In accordance with ASC 805, the supplemental pro forma results of operations for the year ended December 31, 2019, as if the Cristal Transaction had occurred on January 1, 2018, are as follows:

	<u>Year Ended</u> <u>December 31, 2019</u>
Net Sales . . . . .	\$3,008
Net income from continuing operations attributable to Tronox Holdings plc . . . . .	\$ 18

For the year ended December 31, 2019, we incurred pre-tax charges of \$98 million related to the recognition of the step up to fair value of inventories acquired. We also incurred a pre-tax charge of \$19 million

in contract losses incurred on the 8120 supply agreement with Venator for the year ended December 31, 2019. See Note 20. The 2019 pro forma results were adjusted to exclude these charges as these costs were reflected within the results of operations in the pro forma results as if they were incurred on January 1, 2018.

#### 4. Restructuring Initiatives

In April 2019, we announced the completion of the Cristal Transaction. During the second quarter of 2019, as a result of the acquisition, we outlined a broad-based synergy savings program that is expected to reduce costs, simplify processes and focus the organization's structure and resources on key growth initiatives. During the years ended December 31, 2020 and 2019, we recorded costs of \$3 million and \$22 million, respectively, in our Consolidated Statement of Operations relating to these initiatives. No material balances were recorded during the year ended December 31, 2021. The costs consisted of charges for employee-related costs, including severance.

The liability balance for restructuring as of December 31, 2021, 2020 and 2019, which is recorded within "Accrued liabilities" in the Consolidated Balance Sheet, is as follows:

	<b>Employee-Related Costs</b>
Balance, January 1, 2019.....	\$ —
Charges.....	22
Cash payments.....	<u>(12)</u>
Balance, December 31, 2019.....	\$ 10
Charges.....	3
Cash payments.....	<u>(11)</u>
Balance, December 31, 2020.....	\$ 2
Cash payments.....	<u>(1)</u>
Balance, December 31, 2021.....	<u>\$ 1</u>

#### 5. Revenue

##### *Nature of Contracts and Performance Obligations*

We primarily generate revenue from selling TiO<sub>2</sub> pigment products and related co-products, primarily zircon and pig iron, to our customers. These products are used for the manufacture of paints, coatings, plastics, paper, and a wide range of other applications. We account for a contract with our customer when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance, and collectability of consideration is probable.

Our promise in a contract typically relates to the transferring of a product or multiple distinct products that are substantially the same and that have the same pattern of transfer, representing a single performance obligation within a contract. We have elected to account for shipping and handling activities that occur after control of the products has transferred to the customer as contract fulfillment activities, rather than a separate performance obligation. Amounts billed to a customer in a sales transaction related to shipping and handling activities continue to be reported as "Net sales" and related costs as "Cost of goods sold" in the Consolidated Statements of Operations.

The duration of our contract period is one year or less. As such, we have elected to recognize incremental costs incurred to obtain contracts, which primarily consist of commissions paid to third-party sales agents, as "Selling, general and administrative expenses" in the Consolidated Statements of Operations. Furthermore, we have elected not to disclose the value of unsatisfied performance obligations at each period end, given the original expected duration of our contracts are one year or less.

##### *Transaction Price*

Revenue is measured as the amount of consideration that we expect to be entitled in exchange for transferring products to the customer. The transaction price typically consists of fixed cash consideration. We also offer various incentive programs to our customers, such as rebates, discounts, and other price adjustments that represent variable consideration. We estimate variable consideration and include such consideration amounts in

the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. Our estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of our anticipated performance and all information (historical, current and forecasted) that is reasonably available to us. We adjust our estimate of revenue at the earlier of when the amount of consideration we expect to receive changes or when the consideration becomes fixed. Sales returns rarely happen in our business; therefore, it is unlikely that a significant reversal of revenue will occur.

Sales and similar taxes we collect on behalf of governmental authorities are excluded from the transaction price for the determination of revenue. The expected costs associated with product warranties continue to be recognized as expense when the products are sold. Customer payment terms and conditions vary by contract and customer, although the timing of revenue recognition typically does not differ from the timing of invoicing. Additionally, as we generally do not grant extended payment terms, we have determined that our contracts generally do not include a significant financing component.

#### *Revenue Recognition*

We recognize revenue at a point in time when the customer obtains control of the promised products. For most transactions this occurs when products are shipped from our manufacturing facilities or at a later point when control of the products transfers to the customer at a specified destination or time.

#### *Contract Balances*

Contract assets represent our rights to consideration in exchange for products that have transferred to a customer when the right is conditional on situations other than the passage of time. For products that we have transferred to our customers, our rights to the consideration are typically unconditional and only the passage of time is required before payments become due. These unconditional rights are recorded as accounts receivable. As of December 31, 2021, and December 31, 2020, we did not have material contract asset balances.

Contract liabilities represent our obligations to transfer products to a customer for which we have received consideration from the customer. When a customer has poor credit worthiness, we may receive advance payment that is accounted for as deferred revenue. Deferred revenue is earned when control of the product transfers to the customer, which is typically within a short period of time from when we received the advanced payment. Contract liability balances as of December 31, 2021 and December 31, 2020 were \$2 million and \$4 million, respectively. Contract liability balances were reported as “Accrued liabilities” in the Consolidated Balance Sheets. All contract liabilities as of December 31, 2020 and 2019 were recognized as revenue in “Net sales” in the Consolidated Statements of Operations during the first quarter of 2021 and first quarter of 2020, respectively.

#### *Disaggregation of Revenue*

We operate under one operating and reportable segment, Tronox. See Note 25 for details. We disaggregate our revenue from contracts with customers by product type and geographic area. We believe this level of disaggregation appropriately depicts how the nature, amount, timing and uncertainty of our revenue and cash flows are affected by economic factors and reflects how our business is managed.

Net sales to external customers by geographic areas where our customers are located were as follows:

	<b>Year Ended December 31,</b>		
	<b>2021</b>	<b>2020</b>	<b>2019</b>
North America . . . . .	\$ 743	\$ 716	\$ 696
South and Central America . . . . .	252	181	164
Europe, Middle-East and Africa . . . . .	1,398	1,013	954
Asia Pacific . . . . .	<u>1,179</u>	<u>848</u>	<u>828</u>
Total net sales . . . . .	<u>\$3,572</u>	<u>\$2,758</u>	<u>\$2,642</u>

The 2020 amounts by geographic area in table above have been corrected for an increase and decrease of \$78 million to Asia Pacific and North America, respectively, as well as an increase and decrease of \$134 million to Europe, Middle-East and Africa and South and Central America, respectively.

Net sales from external customers for each similar type of product were as follows:

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
TiO <sub>2</sub> .....	\$2,793	\$2,176	\$2,049
Zircon .....	478	283	290
Feedstock and other products .....	<u>301</u>	<u>299</u>	<u>303</u>
Total net sales .....	<u>\$3,572</u>	<u>\$2,758</u>	<u>\$2,642</u>

Feedstock and other products mainly include pig iron, ilmenite, chloride (“CP”) slag, TiCl<sub>4</sub> and other mining products. The nature, amount, timing and uncertainty of revenue and cash flows typically do not differ significantly among different products.

## 6. Discontinued Operations and Other Disposition

### *Discontinued Operations - 2019*

As discussed in Note 3, the Company divested Cristal’s North American TiO<sub>2</sub> business to INEOS on May 1, 2019, for cash proceeds, net of transaction costs, of \$701 million, inclusive of an amount for a working capital adjustment. The operating results of Cristal’s North American TiO<sub>2</sub> business from the acquisition date to the date of divestiture are included in a single caption entitled “Net income (loss) from discontinued operations, net of tax” in our Consolidated Statements of Operations and is included in the table below.

The following table presents a summary of the operations of Cristal’s North American TiO<sub>2</sub> business and Cristal Metals line items constituting the “Income from discontinued operations, net of tax” in our Consolidated Statements of Operations for the year ended December 31, 2019. There were no discontinued operations in 2021 and 2020.

	<u>Year ended December 31, 2019</u>
Net sales .....	\$41
Cost of goods sold .....	<u>29</u>
Gross profit .....	12
Selling, general and administrative expense and other expenses .....	<u>5</u>
Income before income taxes .....	7
Income tax provision .....	<u>2</u>
Income from discontinued operations, net of tax .....	<u>\$ 5</u>

## 7. Other Income, Net

Other income, net is comprised of the following:

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
Net realized and unrealized foreign currency gains (losses) .....	\$ 16	\$ 4	\$ 5
Pension and postretirement benefit interest cost, expected return on assets and amortization of actuarial losses .....	5	1	(1)
Pension and postretirement benefit settlement and curtailment gains <sup>(1)</sup> .....	—	2	1
Insurance proceeds <sup>(2)</sup> .....	—	11	—
Breakage fee (Note 3) <sup>(3)</sup> .....	(18)	—	—
AMIC technical service support fee (Note 24) .....	8	5	—
Other, net .....	<u>1</u>	<u>3</u>	<u>(2)</u>
Total .....	<u>\$ 12</u>	<u>\$26</u>	<u>\$ 3</u>

(1) 2020 and 2019 amounts are curtailment gains related to our former U.S. Pension Plan (acquired as part of the Cristal transaction). See Note 23.

(2) 2020 amount represents reimbursement from claims related to the Ginkgo concentrator failure we inherited as a part of the Cristal Transaction.

(3) 2021 amount represents the breakage fee associated with the termination of the TTI acquisition. See Note 3.



## 8. Income Taxes

Our operations are conducted through various subsidiaries in a number of countries throughout the world. We have provided for income taxes based upon the tax laws and rates in the countries in which operations are conducted and income is earned.

Income (loss) from continuing operations before income taxes is comprised of the following:

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
United Kingdom .....	\$ (16)	\$ (12)	\$ 56
International .....	390	126	(144)
Income (loss) from continuing operations before income taxes .....	<u>\$374</u>	<u>\$114</u>	<u>\$ (88)</u>

The income tax (provision) benefit is summarized below:

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
United Kingdom:			
Current .....	\$ (1)	\$ (1)	\$ —
Deferred .....	—	(10)	11
International:			
Current .....	(55)	(17)	(23)
Deferred .....	<u>(15)</u>	<u>909</u>	<u>(2)</u>
Income tax (provision) benefit .....	<u>\$(71)</u>	<u>\$881</u>	<u>\$(14)</u>

The following table reconciles the applicable statutory income tax rates to our effective income tax rates for “Income tax (provision) benefit” as reflected in the Consolidated Statements of Operations.

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
Statutory tax rate .....	19%	19%	19%
Increases (decreases) resulting from:			
Tax rate differences .....	7	10	5
Disallowable expenditures .....	2	17	(29)
Valuation allowances .....	(27)	(849)	(44)
Corporate reorganization .....	17	(96)	—
Tax rate changes .....	2	(8)	17
State and local taxes .....	1	5	(7)
Prior year accruals .....	(2)	131	24
Branch taxation .....	—	—	(1)
Withholding taxes .....	2	—	(2)
Tax credits .....	(2)	(2)	3
Deferred gross margin .....	—	—	(4)
Other, net .....	<u>—</u>	<u>—</u>	<u>3</u>
Effective tax rate .....	<u>19%</u>	<u>(773)%</u>	<u>(16)%</u>

Tronox Holdings plc, a U.K. public limited company, became the public parent during the three months ended March 31, 2019. Prior to that time, Tronox Limited, was the public parent, registered under the laws of the State of Western Australia, but managed and controlled in the U.K. The statutory tax rate in the U.K. at December 31, 2021, 2020 and 2019 was 19%.

The effective tax rates in 2021, 2020 and 2019 are all influenced by a variety of factors, primarily income and losses in jurisdictions with valuation allowances, changes in tax rates, disallowable expenditures, prior year accruals, and rates different than the United Kingdom statutory rate of 19%. The 2021 rate is additionally

impacted by the liquidation of an inactive Dutch subsidiary and the write-off of its historical NOL balances as part of our corporate reorganization. Both the 2021 and 2020 rates are additionally impacted by a corporate reorganization related to our Australian entities and the amendment of prior year returns in resolution of a tax audit which impacted prior year accruals (see below for further discussion regarding the audit agreement). These Australian impacts are fully offset by valuation allowances. The large negative effective tax rate for 2020 is caused by the release of valuation allowances for deferred tax assets in the U.S. and Brazil, partially offset by the recording of valuation allowances in Saudi Arabia and the U.K. The 2019 rate was additionally impacted by a benefit of \$48 million due to the release of a valuation allowance for deferred tax assets associated with our operating subsidiary in the Netherlands.

The Company reached an agreement with the Australian Tax Office (“ATO”) during the year ended December 31, 2020 for the tax years 2016 through 2019 related to the companies operating in Australia acquired in the Cristal transaction, which were under examination by the ATO. Cash tax payments to be made pursuant to this agreement are not reflected in the above table due to the indemnification clause of the Cristal Transaction purchase contract. Refer to Note 24 for further information. As part of the agreement, \$79 million in deferred tax assets related to Australian NOLs were lost. The change to deferred taxes is fully offset by a valuation allowance and results in no impact to the consolidated provision. The NOL adjustment from the ATO agreement is reflected in the “Prior year accruals” line of the effective tax rate table.

Changes in our state apportionment factors and state statutory rate changes caused our overall effective state tax rates to change. Due to the large deferred tax asset created by the Anadarko litigation settlement in 2014, these state rate changes have a material impact on deferred taxes for 2020 and 2019. These are reflected within the “Tax rate changes” line of the effective tax rate table and is offset by a valuation allowance for 2019. During 2020 and 2019, tax law changes fully repealed the future Netherlands rate reduction, and this benefit is also reflected in the “Tax rate changes” line.

Net deferred tax assets (liabilities) at December 31, 2021 and 2020 were comprised of the following:

	<u>December 31,</u>	
	<u>2021</u>	<u>2020</u>
Deferred tax assets:		
Net operating loss and other carryforwards . . . . .	\$ 1,720	\$ 1,788
Property, plant and equipment, net . . . . .	107	153
Reserves for environmental remediation and restoration . . . . .	43	46
Obligations for pension and other employee benefits . . . . .	58	57
Investments . . . . .	4	3
Grantor trusts . . . . .	636	637
Inventories, net . . . . .	8	8
Interest . . . . .	214	232
Lease liabilities . . . . .	23	21
Other accrued liabilities . . . . .	3	6
Foreign exchange . . . . .	9	1
Other . . . . .	<u>7</u>	<u>8</u>
Total deferred tax assets . . . . .	2,832	2,960
Valuation allowance associated with deferred tax assets . . . . .	<u>(1,728)</u>	<u>(1,826)</u>
Net deferred tax assets . . . . .	<u>1,104</u>	<u>1,134</u>
Deferred tax liabilities:		
Inventories, net . . . . .	(5)	(2)
Property, plant and equipment, net . . . . .	(216)	(226)
Intangible assets, net . . . . .	(22)	(30)
Lease assets . . . . .	(24)	(22)
Foreign exchange . . . . .	(1)	—
Other . . . . .	<u>(8)</u>	<u>(10)</u>
Total deferred tax liabilities . . . . .	<u>(276)</u>	<u>(290)</u>
Net deferred tax asset . . . . .	<u>\$ 828</u>	<u>\$ 844</u>

	<u>December 31,</u>	
	<u>2021</u>	<u>2020</u>
Balance sheet classifications:		
Deferred tax assets — long-term .....	\$ 985	\$1,020
Deferred tax liabilities — long-term .....	\$(157)	\$ (176)
Net deferred tax asset .....	<u>\$ 828</u>	<u>\$ 844</u>

The net deferred tax assets reflected in the above table include deferred tax assets related to grantor trusts, which were established as Tronox Incorporated emerged from bankruptcy during 2011. The balances relate to the assets contributed to such grantor trusts by Tronox Incorporated and the proceeds from the resolution of previous litigation of \$5.2 billion during 2014, which resulted in additional deferred tax assets of \$2.0 billion. As the grantor trusts continue to spend funds received from the litigation and earn income from the investment of those funds, the U.S. net operating loss will increase or decrease.

There was a decrease to our valuation allowance of \$98 million during 2021, a decrease of \$965 million in 2020, and an increase of \$172 million in 2019. The table below sets forth the changes, by jurisdiction:

	<u>December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
United Kingdom .....	\$ (1)	\$ (1)	\$ (2)
United States .....	(19)	(944)	54
Australia .....	(43)	(17)	89
The Netherlands .....	(24)	2	—
Saudi Arabia .....	(11)	11	—
Brazil .....	—	(14)	14
Switzerland .....	—	—	15
Belgium .....	<u>—</u>	<u>(2)</u>	<u>2</u>
Total (decrease) increase in valuation allowances .....	<u>\$ (98)</u>	<u>\$ (965)</u>	<u>\$ 172</u>

As part of the functions under business combination accounting pursuant to ASC 805 and deferred income taxes in accordance with ASC 740, the Company evaluated deferred tax attributes in each jurisdiction for application of a valuation allowance. Some operations acquired in the Cristal Transaction included a full or partial valuation allowance at the time of acquisition. Evidence provided to the Company that was maintained previously to support valuation allowances at acquisition was used along with considerations of any changes in operations and possible combinations with deferred tax attributes of the Company's existing operations in each jurisdiction. It was determined that France would remove its valuation allowance so that jurisdiction is not shown in the table above, Australia and Brazil would increase from partial to full valuation allowances, and Switzerland and the United States would sustain full valuation allowances at acquisition.

During the year ended December 31, 2021, operations in Saudi Arabia had a substantially positive improvement in its earnings. The Company's operations there not only turned from net losses to net income, but the amount of net income realized during 2021 and forecasted in the immediate future has been enough to overcome the losses sustained in prior years. A reversal of the valuation allowance in Saudi Arabia resulted in a non-cash deferred tax benefit of \$8 million. This valuation allowance was established during the year ended December 31, 2020 against the net deferred tax assets in Saudi Arabia, and the addition of the valuation allowance in that period resulted in a non-cash deferred tax provision of \$2 million.

During the year ended December 31, 2020, we determined sufficient positive evidence existed to reverse a portion of the valuation allowance attributable to the deferred tax assets associated with our operations in the U.S. This reversal resulted in a non-cash deferred tax benefit of \$909 million. Our analysis considered all positive and negative evidence, including (i) three years of cumulative income for our U.S. subsidiaries, (ii) our continuing and improved profitability over the last twelve months in this jurisdiction, (iii) estimates of continued profitability based on updates to our latest forecasts, (iv) changes in the factors that drove losses in the past, primarily interest expenses incurred in the U.S., and (v) risk that certain deferred tax assets may be subject to limitation under Section 382 of the Code. Based on this analysis, we concluded that it was more likely than not that our U.S. subsidiaries will be able to utilize all of their deferred tax assets with an indefinite life. A portion of

the U.S. deferred tax assets are attributable to NOLs incurred in prior years which are subject to expiration in future years. Our analysis did not support that these limited-life NOLs would be utilized before their expiration, and it is against these deferred tax assets in the U.S. that the Company continues to carry a valuation allowance with a current estimated value of \$1,026 million.

During the year ended December 31, 2020, we also determined sufficient positive evidence existed to reverse the valuation allowance attributable to the deferred tax assets associated with our operations in Brazil. This reversal resulted in a non-cash deferred tax benefit of \$8 million. Our analysis considered all positive and negative evidence, the most significant of which was the continuing and improved profitability of the Brazilian company subsequent to its acquisition in 2019 and estimates of continued profitability based on updates to our latest forecasts. Based on this analysis, we concluded that it is more likely than not that our Brazilian subsidiary will be able to utilize all of its deferred tax assets.

During the year ended December 31, 2020, we established a valuation allowance against the net deferred tax assets in the United Kingdom. The addition of this valuation allowance resulted in a non-cash deferred tax provision of \$10 million. There has been increased profitability in this jurisdiction after the Cristal Transaction; however, it has not yet been sufficient to overcome our cumulative historical losses. Forecasted changes to intercompany interest is recent negative evidence now impacting our analysis. The company expects continued profitability in this jurisdiction but no longer has objective support which can be heavily weighted in this determination.

At December 31, 2021, we have full valuation allowances related to the total net deferred tax assets in Australia, Switzerland, and the United Kingdom, as we cannot objectively assert that these deferred tax assets are more likely than not to be realized. It is reasonably possible that a portion of these valuation allowances could be reversed within the next year due to increased book profitability levels. Future provisions for income taxes will include no tax benefits with respect to losses incurred and tax expense only to the extent of current tax payments until the valuation allowances are eliminated. Additionally, we have valuation allowances against specific tax assets in South Africa and the U.S.

These conclusions were reached by the application of ASC 740, *Income Taxes*, and require that all available positive and negative evidence be weighted to determine whether a valuation allowance should be recorded. The more significant evidential matter in Australia, Switzerland, and the United Kingdom relates to cumulative book losses. The most significant evidential matter for South Africa relates to capital losses and assets that cannot be depleted or depreciated for tax purposes.

An ownership change occurred during 2019 for the Cristal U.S. businesses as a result of the acquisition by the Company. These ownership changes resulted in a limitation under Sections 382 and 383 of the Internal Revenue Code related to the net operating losses of the Cristal U.S. businesses. The net limitations related to the ownership change resulted in a reduction of \$69 million of the acquired U.S. loss carryforward, offset by corresponding reduction to a valuation allowance. The Company did not have any transactions during 2019 that triggered an ownership change under Sections 382 and 383 of the Code for the Tronox U.S. businesses.

The deferred tax assets generated by tax loss carryforwards in Australia, Switzerland, and the United Kingdom have been fully offset by valuation allowances. In the United States, the deferred tax assets generated by tax loss carryforwards are partially offset by a valuation allowance to the extent they are subject to expiration. The expiration of these carryforwards at December 31, 2021 is shown below. The Australian, Saudi Arabian, French, Brazilian and United Kingdom tax loss carryforwards do not expire.

	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027 - 2040</u>	<u>Unlimited</u>	<u>Total Tax Loss Carryforwards</u>
United Kingdom .....	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ (51)	\$ (51)
Australia .....	—	—	—	—	—	—	(355)	(355)
The Netherlands .....	—	—	—	—	—	—	(100)	(100)
France .....	—	—	—	—	—	—	(214)	(214)
Saudi Arabia .....	—	—	—	—	—	—	(23)	(23)
Switzerland .....	(100)	(80)	—	—	—	(1)	—	(181)
U.S. Federal .....	—	—	—	—	—	(3,988)	(334)	(4,322)
U.S. State .....	(3)	(28)	(12)	(41)	(76)	(4,027)	(18)	(4,205)
Total tax loss carryforwards .....	<u>\$(103)</u>	<u>\$(108)</u>	<u>\$(12)</u>	<u>\$(41)</u>	<u>\$(76)</u>	<u>\$(8,016)</u>	<u>\$(1,095)</u>	<u>\$(9,451)</u>

At December 31, 2021, Tronox Holdings plc had foreign subsidiaries with undistributed earnings. Although we would not be subject to income tax on these earnings, amounts totaling \$353 million could be subject to withholding tax if distributed. We have made no provision for deferred taxes for Tronox Holdings plc related to these undistributed earnings because they are in the specific jurisdictions which we assert are indefinitely reinvested outside of the parents' taxing jurisdictions.

The noncurrent liabilities section of our Consolidated Balance Sheet does not reflect any reserves for uncertain tax positions for either 2021 or 2020.

Our Chinese returns are closed through 2014. Our U.K. and Brazilian returns are closed through 2016. Our Australian, South African, and U.S. returns are closed through 2017. Our Netherlands and French returns are closed through 2018.

We believe that we have made adequate provision for income taxes that may be payable with respect to years open for examination; however, the ultimate outcome is not presently known and, accordingly, additional provisions may be necessary and/or reclassifications of noncurrent tax liabilities to current may occur in the future.

## 9. Income (Loss) Per Share

The computation of basic and diluted income per share for the periods indicated is as follows:

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
<b>Numerator – Basic and Diluted:</b>			
Net income (loss) from continuing operations .....	\$ 303	\$ 995	\$ (102)
Less: Net income from continuing operations attributable to noncontrolling interest .....	17	26	12
Undistributed net income (loss) from continuing operations attributable to Tronox Holdings plc .....	286	969	(114)
Net income from discontinued operations available to ordinary shares ...	—	—	5
Net income (loss) available to ordinary shares .....	<u>\$ 286</u>	<u>\$ 969</u>	<u>\$ (109)</u>
<b>Denominator – Basic and Diluted:</b>			
Weighted-average ordinary shares, basic (in thousands) .....	<u>152,056</u>	<u>143,355</u>	<u>139,859</u>
Weighted-average ordinary shares, diluted (in thousands) .....	<u>157,945</u>	<u>144,906</u>	<u>139,859</u>



	Year Ended December 31,		
	2021	2020	2019
<b>Net income (loss) per Ordinary Share:</b>			
Basic net income (loss) from continuing operations per ordinary share . . . . .	\$1.88	\$6.76	\$(0.81)
Basic net income (loss) from discontinued operations per ordinary share . . .	—	—	0.03
Basic net income (loss) per ordinary share . . . . .	<u>\$1.88</u>	<u>\$6.76</u>	<u>\$(0.78)</u>
Diluted net income (loss) from continuing operations per ordinary share . . .	\$1.81	\$6.69	\$(0.81)
Diluted net income (loss) from discontinued operations per ordinary share . .	—	—	0.03
Diluted net income (loss) per ordinary share . . . . .	<u>\$1.81</u>	<u>\$6.69</u>	<u>\$(0.78)</u>

Net income per ordinary share amounts were calculated from exact, unrounded net loss and share information. Prior to January 2019, we had issued shares of restricted stock which were participating securities that did not have a contractual obligation to share in losses; therefore, when we have a net loss, none of the loss is allocated to these participating securities. The restricted stock vested on January 29, 2019. Consequently, for the years ended December 31, 2021, 2020 and 2019, the two-class method did not have an effect on our net loss per ordinary share calculation, and as such, dividends paid during these periods did not impact this calculation.

In computing diluted net income per share under the two-class method, we considered potentially dilutive shares. Anti-dilutive shares not recognized in the diluted net income per share calculation for the years ended December 31, 2021, 2020 and 2019 were as follows:

	Shares		
	2021	2020	2019
Options . . . . .	414,296	1,201,891	1,260,902
Restricted share units . . . . .	—	1,054,994	5,557,659

## 10. Inventories, net

Inventories, net consisted of the following:

	December 31,	
	2021	2020
Raw materials . . . . .	\$ 265	\$ 170
Work-in-process . . . . .	117	103
Finished goods, net . . . . .	461	668
Materials and supplies, net . . . . .	<u>205</u>	<u>196</u>
Inventories, net . . . . .	<u>\$1,048</u>	<u>\$1,137</u>

Materials and supplies, net consists of processing chemicals, maintenance supplies, and spare parts, which will be consumed directly and indirectly in the production of our products. During 2020, Tronox mining facilities sold feedstock to third party customers and as such, \$110 million of feedstock was classified as “Finished goods, net” at December 31, 2020. During 2021, in line with our overall vertical integration strategy, there were no material feedstock sales to third party customers and as such, at December 31, 2021, \$99 million of feedstock has been classified as “Raw materials”.

At December 31, 2021 and 2020, inventory obsolescence reserves were \$43 million and \$41 million, respectively. At December 31, 2021 and December 31, 2020, reserves for lower of cost and net realizable value were \$11 million and \$29 million, respectively.

## 11. Property, Plant and Equipment

Property, plant and equipment, net of accumulated depreciation, consisted of the following:

	December 31,	
	2021	2020
Land and land improvements .....	\$ 188	\$ 189
Buildings .....	365	368
Machinery and equipment .....	2,234	2,197
Construction-in-progress .....	263	192
Other .....	<u>73</u>	<u>86</u>
Total .....	3,123	3,032
Less: accumulated depreciation .....	<u>(1,413)</u>	<u>(1,273)</u>
Property, plant and equipment, net .....	<u>\$ 1,710</u>	<u>\$ 1,759</u>

Substantially all the Property, plant and equipment, net is pledged as collateral for our debt. See Note 15.

The table below summarizes depreciation expense related to property, plant and equipment for the periods presented, recorded in the specific line items in our Consolidated Statements of Operations:

	Year Ended December 31,		
	2021	2020	2019
Cost of goods sold .....	\$222	\$233	\$189
Selling, general and administrative expenses .....	<u>5</u>	<u>5</u>	<u>5</u>
Total .....	<u>\$227</u>	<u>\$238</u>	<u>\$194</u>

## 12. Mineral Leaseholds, net

Mineral leaseholds, net of accumulated depletion, consisted of the following:

	December 31,	
	2021	2020
Mineral leaseholds .....	\$1,306	\$1,333
Less accumulated depletion .....	<u>(559)</u>	<u>(530)</u>
Mineral leaseholds, net .....	<u>\$ 747</u>	<u>\$ 803</u>

Depletion expense related to mineral leaseholds during 2021, 2020, and 2019 was \$37 million, \$33 million, and \$56 million, respectively, and was recorded in “Cost of goods sold” in the Consolidated Statements of Operations.

## 13. Intangible Assets, net

Intangible Assets, net of accumulated amortization, consisted of the following:

	December 31, 2021			December 31, 2020		
	Gross Cost	Accumulated Amortization	Net Carrying Amount	Gross Cost	Accumulated Amortization	Net Carrying Amount
Customer relationships .....	\$291	\$(211)	\$ 80	\$291	\$(193)	\$ 98
TiO <sub>2</sub> technology .....	93	(31)	62	93	(24)	69
Internal-use software and other .....	<u>120</u>	<u>(45)</u>	<u>75</u>	<u>73</u>	<u>(39)</u>	<u>34</u>
Intangible assets, net .....	<u>\$504</u>	<u>\$(287)</u>	<u>\$217</u>	<u>\$457</u>	<u>\$(256)</u>	<u>\$201</u>

As of December 31, 2021 and 2020, internal-use software included approximately \$68 million and \$19 million, respectively, of capitalized software costs which are not being amortized as the software is not ready for its intended use.

The table below summarizes amortization expense related to intangible assets for the periods presented, recorded in the specific line items in our Consolidated Statements of Operations:

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
Cost of goods sold . . . . .	\$ 2	\$ 2	\$ 2
Selling, general and administrative expenses . . . . .	<u>31</u>	<u>31</u>	<u>28</u>
Total . . . . .	<u>\$33</u>	<u>\$33</u>	<u>\$30</u>

Estimated future amortization expense related to intangible assets is \$34 million for 2022, \$34 million for 2023, \$33 million for 2024, \$33 million for 2025, \$15 million for 2026 and \$68 million thereafter.

#### 14. Balance Sheet and Cash Flows Supplemental Information

Accrued liabilities consisted of the following:

	<u>December 31,</u>	
	<u>2021</u>	<u>2020</u>
Employee-related costs and benefits . . . . .	\$155	\$133
Related party payables . . . . .	1	7
Interest . . . . .	20	21
Sales rebates . . . . .	36	43
Restructuring . . . . .	1	2
Taxes other than income taxes . . . . .	18	16
Asset retirement obligations . . . . .	10	9
Interest rate swaps . . . . .	25	57
Other accrued liabilities . . . . .	<u>62</u>	<u>62</u>
Accrued liabilities . . . . .	<u>\$328</u>	<u>\$350</u>

Additional supplemental cash flow information for the year ended and as of December 31, 2021, 2020 and 2019 is as follows:

<u>Supplemental non cash information:</u>	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
Operating activities - MGT sales made to AMIC . . . . .	<u>\$ 4</u>	<u>\$—</u>	<u>\$—</u>
Operating activities - Interest expense on MGT loan . . . . .	<u>\$ 1</u>	<u>\$—</u>	<u>\$—</u>
Investing activities - Acquisition of MGT assets . . . . .	<u>\$ —</u>	<u>\$36</u>	<u>\$—</u>
Financing activities - debt assumed in the acquisition of MGT assets . . . . .	<u>\$ —</u>	<u>\$36</u>	<u>\$—</u>
Financing activities - Acquisition of noncontrolling interest . . . . .	<u>\$125</u>	<u>\$—</u>	<u>\$—</u>
Financing activities - Repayment of MGT loan . . . . .	<u>\$ 3</u>	<u>\$—</u>	<u>\$—</u>
	<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Capital expenditures acquired but not yet paid . . . . .	<u>\$75</u>	<u>\$37</u>	<u>\$23</u>

## 15. Debt

### Long-term Debt

Long-term debt, net of an unamortized discount and debt issuance costs, consisted of the following:

	Original Principal	Annual Interest Rate	Maturity Date	December 31, 2021	December 31, 2020
Prior Term Loan Facility, net of unamortized discount <sup>(1)</sup> . . . . .	\$2,150	Variable	9/22/2024	\$ —	\$1,607
New Term Loan Facility, net of unamortized discount <sup>(1)</sup> . . . . .	1,300	Variable	3/11/2028	897	—
Senior Notes due 2025 . . . . .	450	5.75%	10/1/2025	—	450
Senior Notes due 2026 . . . . .	615	6.50%	4/15/2026	—	615
Senior Notes due 2029 . . . . .	1,075	4.63%	3/15/2029	1,075	—
6.5% Senior Secured Notes due 2025 . . . . .	500	6.50%	5/1/2025	500	500
Prior Standard Bank Term Loan Facility <sup>(1)</sup> . . . . .	222	Variable	3/25/2024	—	115
New Standard Bank Term Loan Facility <sup>(1)</sup> . . . . .	98	Variable	11/11/2026	92	—
Tikon Loan . . . . .	N/A	Variable	5/23/2021	—	17
Australian Government Loan, net of unamortized discount . . . . .	N/A	N/A	12/31/2036	1	1
MGT Loan <sup>(2)</sup> . . . . .	36	Variable	Refer below	33	36
Finance leases . . . . .				<u>14</u>	<u>15</u>
Long-term debt . . . . .				2,612	3,356
Less: Long-term debt due within one year . . . . .				(18)	(58)
Debt issuance costs . . . . .				<u>(36)</u>	<u>(35)</u>
Long-term debt, net . . . . .				<u>\$2,558</u>	<u>\$3,263</u>

(1) The average effective interest rate, including impacts of our interest rate swap, for the New Term Loan Facility was 5.1% for the year ended December 31, 2021. The average effective interest rate, including impacts of our interest rate swap, for the Prior Term Loan Facility was 4.6% for the year ended December 31, 2020. The average effective interest rate on the New Standard Bank Term Loan Facility was 7.3% for the year ended December 31, 2021. The average effective interest rate on the Prior Standard Bank Term Loan Facility was 7.8% for the year ended December 31, 2020.

(2) The MGT loan is a related party debt facility. Average effective interest rate on the MGT loan was 3.1% during the year ended December 31, 2021. Refer below for further details.

At December 31, 2021, the scheduled maturities of our long-term debt were as follows:

	Total Borrowings
2022 . . . . .	18
2023 . . . . .	18
2024 . . . . .	18
2025 . . . . .	518
2026 . . . . .	58
Thereafter . . . . .	<u>1,987</u>
Total . . . . .	2,617
Remaining accretion associated with the New Term Loan Facility and Australian Government Loan . . . . .	<u>(5)</u>
Total borrowings . . . . .	<u>2,612</u>

### Prior Term Loan Facility and New Term Loan Facility

On September 22, 2017, we entered into a new senior secured first lien term loan facility (the “Prior Term Loan Facility”) with the lenders party thereto and Bank of America, N.A., as administrative agent, with a maturity date of September 22, 2024. The Prior Term Loan Facility consisted of (i) a U.S. dollar term facility in

an aggregate principal amount of \$1.5 billion (the “Term Loans”) with our subsidiary, Tronox Finance LLC (“Tronox Finance”) as the borrower and (ii) a U.S. dollar term facility in an aggregate principal amount of \$650 million (the “Blocked Term Loan”) with our unrestricted subsidiary, Tronox Blocked Borrower LLC (the “Blocked Borrower”) as the borrower, which Blocked Term Loan was funded into a blocked account. Upon consummation of the Cristal Transaction on April 10, 2019, the Blocked Borrower merged with and into Tronox Finance, and the Blocked Term Loan became available to Tronox Finance. The Prior Term Loan Facility bore interest at the “Applicable Rate” defined by reference to a grid-pricing matrix that relates to our First Lien Net Leverage Ratio and was issued net of an original issue discount of \$11 million.

On February 25, 2019, we entered into an amendment to both our Prior Term Loan Facility and Wells Fargo Revolver (as defined below). The purpose of each amendment was to make certain of our U.K. subsidiaries restricted subsidiaries, update the relevant indebtedness disclosure schedules to include certain inter-company indebtedness that had been in existence prior to the execution of each such facility, and waive an administrative omission under such facility. As a result of this amendment, the Company made two mandatory principal prepayments on the Prior Term Loan Facility as follows: 1) \$95 million subsequent to the issuance of the Prior Standard Bank Term Loan Facility in March 2019 and 2) \$100 million subsequent to the divestiture of the Cristal North American TiO<sub>2</sub> business. The Company accounted for both of these mandatory principal prepayments as debt modifications in accordance with ASC 470. Additionally, in December 2019, the Company made a voluntary prepayment of \$100 million on the Prior Term Loan Facility. As a result of the voluntary prepayment, we recorded \$1 million in “Loss on extinguishment of debt” within the Consolidated Statement of Operations for the year ended December 31, 2019. No prepayment penalties were required as a result of these principal prepayments. In December 2020, the Company made a voluntary prepayment of \$200 million on the Prior Term Loan Facility. As a result of the voluntary prepayment, we recorded \$2 million in “Loss on extinguishment of debt” within the Consolidated Statement of Operations for the year ended December 31, 2020. No prepayment penalties were required as a result of this principal prepayment.

On March 11, 2021, Tronox Finance LLC entered into an amendment and restatement of its Prior Term Loan Facility pursuant to which, among other thing, we amended and restated the Prior Term Loan Facility with a new amended and restated first lien credit agreement dated as of September 22, 2017 (as amended through and including March 11, 2021, the “New Term Loan Facility”) with a syndicate of lenders and HSBC Bank USA, National Association, as administrative agent and collateral agent. The New Term Loan Facility provides the Company with (a) a new seven-year New Term Loan Facility in an aggregate principal amount of \$1.3 billion and (b) new five-year cash flow revolving facility (the “New Revolving Facility”) providing initial revolving commitments of \$350 million and a sublimit of \$125 million for letters of credit. The maturity date on the New Term Loan Facility and the New Revolving Facility is March 11, 2028 and March 11, 2026, respectively.

The New Term Loan Facility shall bear interest at either the base rate or an adjusted LIBOR rate, in each case plus an applicable margin. The applicable margin in respect of the New Term Loan Facility is either 1.50% or 1.25%, for base rate loans, or 2.50% or 2.25%, for adjusted LIBOR rate loans, in each case determined based on, initially the passage of time, and thereafter upon the Company’s first lien net leverage ratio at the applicable time. Interest is payable on the New Term Loan Facility on the last business of each March, June, September and December. Based on our first lien net leverage ratio, the applicable margin under the New Term Loan Facility as of December 31, 2021 was LIBOR plus a margin of 2.25%. The New Revolving Facility shall bear interest at either the base rate or adjusted LIBOR rate, in each case plus an applicable margin. The applicable margin in respect of the New Revolving Facility is either 1.25%, 1.00% or 0.75% for base rate loans, or 2.25%, 2.00% or 1.75%, for adjusted LIBOR Rate Loans, in each case determined based on, initially the passage of time, and thereafter upon the Company’s first lien net leverage ratio at the applicable time. The New Credit Facility requires the Borrower to pay customary agency fees.

In connection with entering into the New Term Loan Facility, the Company terminated all remaining commitments and repaid all obligations under its Prior Term Loan Facility and Wells Fargo Revolver (defined below). Additionally, we repaid \$313 million of the principal under the Prior Term Loan Facility with cash on hand.

Commencing June 30, 2021, the New Revolving Facility contains a springing financial covenant when a loan amount is drawn exceeding 35% of the New Revolving Facility. In this instance, the first lien net leverage ratio shall not exceed 4.75x at quarter end testing period.



As a result of this transaction in accordance with ASC 470, we recognized approximately \$4 million in “Loss on Extinguishment of Debt” recorded in the Consolidated Statement of Operations for the year ended December 31, 2021.

As of December 31, 2021, there is no outstanding revolving credit loans under the New Revolving Facility, excluding \$21 million of issued and undrawn letters of credit under the New Revolving Facility. Debt issuance costs associated with the New Revolving Facility of \$2 million were included in “Other long-term assets” in the Consolidated Balance Sheets at December 31, 2021 and are being amortized over the life of the New Revolving Facility.

Additionally, during the year ended December 31, 2021, the Company made several voluntary prepayments totaling \$398 million on the New Term Loan Facility. As a result, we recognized approximately \$9 million in “Loss on Extinguishment of Debt” recorded in the Consolidated Statement of Operations for the year ended December 31, 2021.

#### *Senior Notes due 2025*

On September 22, 2017, Tronox Finance plc, issued 5.75% senior notes due 2025 for an aggregate principal amount of \$450 million (the “Senior Notes due 2025”), which notes were issued under an indenture dated September 22, 2017 (the “2025 Indenture”). The 2025 Indenture and the Senior Notes due 2025 provided among other things, that the Senior Notes due 2025 were senior unsecured obligations of Tronox Finance plc and were guaranteed on a senior and unsecured basis by us and certain of our other subsidiaries. The Senior Notes due 2025 were not registered under the Securities Act, and were not offered or sold in the U.S. absent registration or an applicable exemption from registration requirements. Interest was payable on April 1 and October 1 of each year beginning on April 1, 2018 until their maturity date of October 1, 2025. The terms of the 2025 Indenture, among other things, limited, in certain circumstances, the ability of us and certain of our subsidiaries to: incur secured indebtedness, engage in certain sale-leaseback transactions and merge, consolidate or sell substantially all of our assets. The terms of the 2025 Indenture also included certain limitations on our non-guarantor subsidiaries incurring indebtedness. During the year ended December 31, 2021, we paid the outstanding balance of \$450 million on the Senior Notes due 2025 as a result of the issuance of the Senior Notes due 2029 as defined and discussed below.

#### *Senior Notes due 2026*

On April 6, 2018, Tronox Incorporated issued 6.5% Senior Notes due 2026 for an aggregate principal amount of \$615 million (“Senior Notes due 2026”). The 2026 Indenture and the Senior Notes due 2026 provided, among other things, that the Senior Notes due 2026 were senior unsecured obligations of Tronox Incorporated and were guaranteed on a senior and unsecured basis by us and certain of our other subsidiaries. The Senior Notes due 2026 were not registered under the Securities Act and were not offered or sold in the U.S. absent registration or an applicable exemption from registration requirements. Interest was payable on April 15 and October 15 of each year beginning on October 15, 2018 until their maturity date of April 15, 2026. The terms of the 2026 Indenture, among other things, limited, in certain circumstances, our and certain of our subsidiaries ability to: incur secured indebtedness; engage in certain sale-leaseback transactions; and merge, consolidate or sell substantially all of our assets. The terms of the 2026 Indenture also included certain limitations on our non-guarantor subsidiaries incurring indebtedness. The proceeds of the offering were used to fund the redemption of our Senior Notes due 2022. During the year ended December 31, 2021, we paid the outstanding balance of \$615 million on the Senior Notes due 2026 as a result of the issuance of the Senior Notes due 2029 as defined and discussed below.

#### *Senior Notes due 2029*

On March 15, 2021, Tronox Incorporated closed an offering of \$1,075 million aggregate principal amount of its 4.625% senior notes due 2029 (the “Senior Notes due 2029”). The notes were offered at par and issued under an indenture dated as of March 15, 2021 among the Company and certain of the Company’s restricted subsidiaries as guarantors and Wilmington Trust, National Association. The Senior Notes due 2029 provide, among other thing, that the Senior Notes due 2029 are guaranteed by the Company and certain of the Company’s restricted subsidiaries, subject to certain exceptions. The Senior Notes due 2029 and related guarantees are the senior obligations of the Company and the guarantors. The Senior Notes due 2029 have not been registered

under the Securities Act, or any state securities laws, and may not be offered or sold in the United States absent registration requirements. The terms of the indenture, among other things, limit, in certain circumstances, the ability of the Company and its restricted subsidiaries to: incur secured indebtedness, incur indebtedness at a non-guarantor subsidiary, engage in certain sale-leaseback transactions and merge, consolidate or sell substantially all of their assets. Interest is payable on the Senior Notes due 2029 on March 15 and September 15 of each year beginning on September 15, 2021 until their maturity date of March 15, 2029.

During the year ended December 31, 2021, the Company repaid the outstanding principal balance of \$615 million and \$450 million on its Senior Notes due 2026 and its Senior Notes due 2025, respectively. As a result of this transaction, we recorded \$52 million of debt extinguishment costs, including call premiums of \$21 million and \$19 million on the Senior Notes due 2026 and Senior Notes due 2025, respectively, in “Loss on Extinguishment of Debt” on the Consolidated Statement of Operations for the year ended December 31, 2021.

#### *6.5% Senior Secured Notes due 2025*

On May 1, 2020, Tronox Incorporated, a wholly-owned indirect subsidiary of the Company, issued 6.5% senior secured notes due 2025 for an aggregate principal amount of \$500 million (the “6.5% Senior Secured Notes due 2025”), which were issued under an indenture dated May 1, 2020. A portion of the proceeds of this debt offering was utilized to repay the \$200 million of the Company’s outstanding borrowings under its Wells Fargo, Standard Bank, and Emirates revolvers which was originally borrowed during the first quarter of 2020 (as discussed below).

#### *Prior Standard Bank Term Loan Facility*

On March 25, 2019, our South African subsidiaries, Tronox KZN Sands Proprietary Limited and Tronox Mineral Sands Proprietary Limited, entered into the Prior Standard Bank Term Loan Facility with a maturity date of March 25, 2024. The Term Loan Facility consisted of (i) an aggregate principal amount of R2.6 billion (“Amortizing Loan”, approximately \$163 million at December 31, 2021 exchange rate) the principal of which was to be paid back at 5 percent per quarter over the five year term of the loan, and (ii) an aggregate principal amount of R600 million (“Bullet Loan”) the principal of which was to be paid back at the maturity date of the Prior Standard Bank Term Loan Facility. During the third quarter of 2019, we repaid the outstanding balance on the Bullet Loan.

The Amortizing Loan bore interest at JIBAR plus 260 basis points when net leverage of the South African subsidiaries was less than 1.5 and JIBAR plus 285 points when net leverage was greater than 1.5.

During the year ended December 31, 2021, we made several voluntary prepayments totaling R1,040 million (approximately \$69 million) on the Prior Standard Bank Term Loan Facility. No prepayment penalties were required as a result of this principal prepayment. Additionally, during the year ended December 31, 2021, we repaid the remaining outstanding balance of R390 million (approximately \$26 million) of the Prior Standard Bank Term Loan Facility and entered into an amendment and restatement with Standard Bank as is discussed below.

#### *New Standard Bank Term Loan Facility and Revolving Credit Facility*

On October 1, 2021, Tronox Minerals Sands Proprietary Limited, a wholly-owned subsidiary of the Company, entered into an amendment and restatement of a new credit facility with Standard Bank. The new credit facility provides the Company with (a) a new five-year term loan facility in an aggregate principal amount of R1.5 billion (approximately \$98 million) (the “New Standard Bank Term Loan Facility”) and (b) a new three-year revolving credit facility (the “New Standard Bank Revolving Credit Facility”) providing initial revolving commitments of R1.0 billion (approximately \$63 million at December 31, 2021 exchange rate). The maturity date on the New Standard Bank Term Loan Facility and the New Standard Bank Revolving Credit Facility is November 11, 2026 and October 1, 2024, respectively. The New Standard Bank Term Loan Facility has a delayed draw feature up to thirty business days from the effective date of the executed credit agreement. Mandatory capital repayments of R37.5 million (approximately \$2 million at December 31, 2021 exchange rate) are scheduled quarterly with the first mandatory repayment starting in December 2021.

Both the New Standard Bank Term Loan Facility and the New Standard Bank Revolving Credit Facility shall bear interest at an adjusted JIBAR rate plus an applicable margin. The applicable margin on the New

Standard Bank Term Loan Facility is 2.35%. The applicable margin on the New Standard Bank Revolving Credit Facility is based upon average credit utilization during any interest period. If the revolving credit facility utilization is less than 33%, less than 66% but greater than 33%, or greater than 66%, the applicable margin is 2.10%, 2.25%, and 2.40%, respectively. The New Standard Bank Revolving Credit Facility requires the borrower to pay customary agency fees. Interest is payable on the New Standard Bank Term Loan Facility on each of March 31, June 30, September 30 and December 31, and the final maturity date pursuant to the agreement. Interest is payable on the New Standard Bank Revolving Credit Facility on the last day of the applicable interest period pursuant to the agreement.

Pursuant to the credit agreement, on November 11, 2021, the Company drew down the total outstanding principal balance of R1.5 billion (approximately \$98 million) on the New Standard Bank Term Loan Facility.

#### *Tikon Loan*

As part of the Cristal Transaction, we acquired a working capital debt agreement in China (“Tikon Loan”) that matured in April and May of 2021. The Tikon Loan bore interest based on an official lending basis rate per annum as announced and published by the People’s Bank of China plus a 7% premium. During the year ended December 31, 2021, we repaid the remaining outstanding principal balance of CNY 111 million (approximately \$17 million). No prepayment penalties were required as a result of these principal prepayments.

#### *Australian Government Loan*

As part of the Cristal Transaction, we acquired an interest-free loan with the Australian government (“Australian Government Loan”) that matures in December 2022 subject to renewal every 5 years with final termination in December 2036. The loan balance due upon maturity is AUD 6 million (approximately \$5 million at December 31, 2021). At December 31, 2021, the discounted value on the Australian Government Loan was approximately AUD 2 million (approximately \$1 million at December 31, 2021 exchange rate).

#### *MGT Loan*

On December 17, 2020, we completed our agreement with Cristal to acquire certain assets co-located at our Yanbu facility which produce metal grade TiCl<sub>4</sub> (“MGT”) in exchange for a \$36 million note payable. Repayment of the note payable is based on a fixed U.S. dollar per metric ton quantity of MGT delivered by us to Advanced Metal Industries Cluster and Toho Titanium Metal Co. Ltd (ATTM) over time and therefore the ultimate maturity date is variable in nature. If ATTM fails to purchase MGT from us under certain contractually agreed upon conditions, then at our election we may terminate the MGT supply agreement with ATTM and will no longer owe any amount under the loan agreement with Cristal. We currently estimate the ultimate maturity to be between approximately five to seven years, subject to actual future MGT production levels. The interest rate is based on the Saudi Arabian Interbank Offered Rate (“SAIBOR”) plus a premium. As of December 31, 2021, the outstanding balance of the note payable was \$33 million, of which \$7 million is expected to be paid within the next twelve months (recorded within “Long-term debt due within one year” on our Consolidated Balance Sheet). Refer to Note 24 for further information on the MGT transaction.

#### *Short-term Debt*

##### *Wells Fargo Revolver*

On September 22, 2017, we entered into a new global senior secured asset-based syndicated revolving credit facility with Wells Fargo Bank, N.A. (the “Wells Fargo Revolver”). The Wells Fargo Revolver which initially provided us with up to \$550 million of revolving credit lines, with an \$85 million sublimit for letters of credit, and had a maturity date of September 22, 2022. Our availability of revolving credit loans and letters of credit was subject to a borrowing base. Borrowings bore interest at our option, at either an adjusted London Interbank Offered Rate (“LIBOR”) plus an applicable margin that ranges from 1.25% to 1.75%, or a base rate, which was defined to mean the greatest of (a) the administrative agent’s prime rate, (b) the Federal funds effective rate plus 0.50% and (c) the adjusted LIBOR for a one month period plus 1.00% plus a margin that ranges from 0.25% to 0.75%, in each case, based on the average daily borrowing availability.

On March 22, 2019, we entered into a consent and amendment to the Wells Fargo Revolver and an amendment to our Term Loan Facility. The purpose of each amendment was to, among other things, (i) permit

the refinancing of certain existing indebtedness incurred by our South African subsidiaries, Tronox KZN Sands Proprietary Limited and Tronox Mineral Sands Proprietary Limited, and the proposed uses of proceeds thereof, and (ii) implement required provisions in both the Wells Fargo Revolver and Term Loan Facility necessary in connection with the establishment of Tronox Holdings plc.

The Wells Fargo Revolver amendment also modified certain components of the borrowing base in order to increase the potential availability of credit. We also voluntarily reduced the revolving credit lines under the Wells Fargo Revolver from \$550 million to \$350 million. As a result of this modification, during the year ended December 31, 2019, we recorded a charge of \$2 million in “Loss on extinguishment of debt” within the Consolidated Statement of Operations.

As discussed above, the Wells Fargo Revolver was terminated during the year ended December 31, 2021 as a result of the New Revolving Facility.

#### *ABSA Revolving Credit Facility*

In connection with the Standard Bank Revolver (defined below) entered into on March 25, 2019, discussed below, the ABSA Revolver was terminated on March 26, 2019. As a result of the termination, during the year ended December 31, 2019, we recorded less than \$1 million in “Loss on extinguishment of debt” within the Consolidated Statement of Operations.

#### *Standard Bank Credit Facility*

On March 25, 2019, our South African subsidiaries, Tronox KZN Sands Proprietary Limited and Tronox Mineral Sands Proprietary Limited, entered into the Standard Bank Credit Facility (“Standard Bank Revolver”) for an amount up to R1 billion (approximately \$63 million at December 31, 2021 exchange rate) maturing on March 25, 2022. The Standard Bank Credit Facility bore interest at the Johannesburg Interbank Average Rate (“JIBAR”) plus 260 basis points when net leverage for our South African subsidiaries (total combined debt outstanding under the Standard Bank Revolver and Standard Bank Term less cash and cash equivalents divided by the consolidated EBITDA) was less than 1.5 and JIBAR plus 285 basis points when net leverage was greater than 1.5. As discussed above, during the year ended December 31, 2021, the Standard Bank Credit Facility was amended and restated with the New Standard Bank Revolving Credit Facility.

#### *Emirates Revolver*

As part of the Cristal transaction, we acquired a revolving credit facility with Emirates NBD PJSC. In March 2021, the Company entered into an amendment to extend the maturity date of the Emirates Revolver from March 31, 2021 to March 31, 2022. Under the Emirates Revolver, we have the ability to borrow up to approximately \$60 million. The revolver is secured by inventory and trade receivables of Tronox Pigment UK Ltd. Under the terms of the revolver, for U.S. dollar borrowings the interest rate is LIBOR plus 2.25% while the interest rate for Euro borrowings is Euribor plus 2.25%. There were no borrowings outstanding under this revolver at December 31, 2021.

#### *SABB Credit Facility*

On October 16, 2019, our KSA subsidiary entered into a short-term working capital facility with the Saudi British Bank (“SABB Facility”) for an amount up to SAR 70 million (approximately \$19 million). The SABB Facility bears interest at the Saudi Inter Bank Offered Rate plus 180 basis points on outstanding balances. During October 2019, the Company borrowed SAR 50 million (or approximately \$13 million) under the SABB Facility and subsequently repaid the outstanding balance in December 2019. Additionally, in March 2020, the Company borrowed SAR 50 million (or approximately \$13 million) under the SABB Facility and subsequently repaid the outstanding balances. There is no borrowing outstanding under this facility at December 31, 2021. In December 2021, the Company extended the maturity date of the SABB Credit Facility from November 30, 2021 to November 30, 2022.

#### *Debt Covenants*

At December 31, 2021, we are in compliance with all financial covenants in our debt facilities.

## Interest and Debt Expense, Net

Interest and debt expense, net in the Consolidated Statements of Operations consisted of the following:

	Year Ended December 31,		
	2021	2020	2019
Interest on debt . . . . .	\$148	\$174	\$186
Amortization of deferred debt issuance costs and discounts on debt . . . . .	11	10	8
Capitalized interest . . . . .	(7)	(2)	(1)
Interest on capital leases and letters of credit and commitments . . . . .	<u>5</u>	<u>7</u>	<u>8</u>
Total interest and debt expense, net . . . . .	<u>\$157</u>	<u>\$189</u>	<u>\$201</u>

In connection with obtaining debt, we incurred debt issuance costs, which are being amortized through the respective maturity dates using the effective interest method for our long-term debt and on a straight-line basis for our New Revolving Facility. At December 31, 2021 and December 31, 2020, we had deferred debt issuance costs of \$2 million and \$2 million, respectively, related to the New Revolving Facility and Wells Fargo Revolver, respectively, which is recorded in “Other long-term assets” in the Consolidated Balance Sheets. At December 31, 2021 and December 31, 2020, we had debt discount of \$5 million and \$9 million, respectively, and debt issuance costs of \$36 million and \$35 million, respectively, primarily related to our term loan and senior notes, which were recorded as a direct reduction of the carrying value of the long-term debt in the Consolidated Balance Sheets.

## 16. Derivative Financial Instruments

*Derivatives recorded on the Consolidated Balance Sheet:*

The following table is a summary of the fair value of derivatives outstanding at December 31, 2021 and 2020:

	Fair Value			
	December 31, 2021		December 31, 2020	
	Assets <sup>(a)</sup>	Accrued Liabilities	Assets <sup>(a)</sup>	Accrued Liabilities
<b>Derivatives Designated as Cash Flow Hedges</b>				
Currency Contracts . . . . .	\$ 3	\$ 1	\$58	\$—
Interest Rate Swaps . . . . .	\$—	\$25	\$—	\$57
Natural Gas Hedges . . . . .	<u>\$ 1</u>	<u>\$—</u>	<u>\$—</u>	<u>\$—</u>
Total Hedges . . . . .	<u>\$ 4</u>	<u>\$26</u>	<u>\$58</u>	<u>\$57</u>
<b>Derivatives Not Designated as Cash Flow Hedges</b>				
Currency Contracts . . . . .	<u>\$—</u>	<u>\$—</u>	<u>\$ 7</u>	<u>\$—</u>
Total Derivatives . . . . .	<u>\$ 4</u>	<u>\$26</u>	<u>\$65</u>	<u>\$57</u>

(a) At December 31, 2021 and 2020, current assets of \$4 million and \$65 million, respectively, are recorded in prepaid and other current assets on the Consolidated Balance Sheet.



### Derivatives' Impact on the Consolidated Statement of Operations

The following table summarizes the impact of the Company's derivatives on the Consolidated Statement of Operations:

	Amount of Pre-Tax Gain (Loss) Recognized in Earnings																									
	2021			2020			2019																			
	Revenue	Cost of Goods Sold	Other Income, net	Revenue	Cost of Goods Sold	Other Income, net	Revenue	Cost of Goods Sold	Other Income, net																	
Year Ended December 31, 2021									Year Ended December 31, 2020									Year Ended December 31, 2019								
<b>Derivatives Not Designated as Hedging Instruments</b>																										
Currency Contracts . . . . .	\$—	\$—	\$ 1	\$—	\$—	\$ 4	\$—	\$—	\$ 7																	
<b>Derivatives Designated as Hedging Instruments</b>																										
Currency Contracts . . . . .	\$(3)	\$35	\$—	\$(7)	\$ 3	\$—	\$ 5	\$ 3	\$—																	
Natural Gas . . . . .	\$—	\$ 3	\$—	\$—	\$(1)	\$—	\$—	\$—	\$—																	
Total Derivatives . . . . .	<u>\$(3)</u>	<u>\$38</u>	<u>\$ 1</u>	<u>\$(7)</u>	<u>\$ 2</u>	<u>\$ 4</u>	<u>\$ 5</u>	<u>\$ 3</u>	<u>\$ 7</u>																	

### Interest Rate Risk

During the second quarter of 2019, we entered into interest-rate swap agreements with an aggregate notional value of \$750 million representing a portion of our Term Loan Facility, which effectively converts the variable rate to a fixed rate for that portion of the loan. The agreements expire in September 2024. The Company's objectives in using the interest-rate swap agreements are to add stability to interest expense and to manage its exposure to interest rate movements. These interest rate swaps have been designated as cash flow hedges and involve the receipt of variable amounts from a counterparty in exchange for the Company making fixed-rate payments over the life of the agreements without exchange of the underlying notional amount. There was no impact associated with the New Term Loan Facility as the hedge remained highly effective.

Fair value gains or losses on these cash flow hedges are recorded in other comprehensive (loss) income and are subsequently reclassified into interest expense in the same periods during which the hedged transactions affect earnings. For the year ended December 31, 2021, 2020 and 2019, the amounts recorded in interest expense related to the interest-rate swap agreements were \$16 million, \$10 million and less than \$1 million, respectively. At December 31, 2021 and December 31, 2020, the net unrealized loss was \$25 million and \$57 million, respectively, and was recorded in "Accumulated other comprehensive loss" on the Consolidated Balance Sheet.

### Foreign Currency Risk

From time to time, we enter into foreign currency contracts used to hedge forecasted third party non-functional currency sales for our South African subsidiaries and forecasted non-functional currency cost of goods sold for our Australian subsidiaries. These foreign currency contracts are designated as cash flow hedges. Changes to the fair value of these foreign currency contracts are recorded as a component of other comprehensive (loss) income, if these contracts remain highly effective, and are recognized in net sales or costs of goods sold in the period in which the forecasted transaction affects earnings or are recognized in other income, net when the transactions are no longer probable of occurring.

As of December 31, 2021, we had notional amounts of 443 million Australian dollars (approximately \$322 million at December 31, 2021 exchange rate) that expire between January 25, 2022 and December 23, 2022 to reduce the exposure of our Australian subsidiaries' cost of sales to fluctuations in currency rates. At December 31, 2021, we had notional amounts of 4.7 billion South African Rand (approximately \$298 million at December 31, 2021 exchange rate) that expire between January 26, 2022 and December 28, 2022 to reduce the exposure of our South African subsidiaries' third party sales to fluctuations in currency rates. At December 31, 2021 and December 31, 2020, there was an unrealized net gain of \$15 million and an unrealized net gain of \$58 million, respectively, recorded in "Accumulated other comprehensive loss" on the Consolidated Balance Sheet, which is expected to be recognized in earnings over the next twelve months.

From time to time, we enter into foreign currency contracts to reduce exposure of our subsidiaries' balance sheet accounts not denominated in our subsidiaries' functional currency to fluctuations in foreign currency exchange rates. For accounting purposes, these foreign currency contracts are not considered hedges. The change

in fair value associated with these contracts is recorded in “Other income, net” within the Consolidated Statement of Operations and partially offsets the change in value of third party and intercompany-related receivables not denominated in the functional currency of the subsidiary. At December 31, 2021, there was (i) 510 million South African Rand (or approximately \$32 million at December 31, 2021 exchange rate) and (ii) 172 million Australian dollars (or approximately \$125 million at December 31, 2021 exchange rate) of notional amount of outstanding foreign currency contracts.

## 17. Fair Value Measurement

For financial instruments that are subsequently measured at fair value, the fair value measurement is grouped into levels. See Note 2.

Our debt is recorded at historical amounts. The following table presents the fair value of our debt and derivative contracts at both December 31, 2021 and December 31, 2020:

	<u>December 31,</u> <u>2021</u>	<u>December 31,</u> <u>2020</u>
Prior Term Loan Facility . . . . .	\$ —	\$1,610
New Term Loan Facility . . . . .	895	—
Prior Standard Bank Term Loan Facility . . . . .	—	115
New Standard Bank Term Loan Facility . . . . .	92	—
Senior Notes due 2025 . . . . .	—	468
Senior Notes due 2026 . . . . .	—	641
Senior Notes due 2029 . . . . .	1,071	—
6.5% Senior Secured Notes due 2025 . . . . .	526	536
Tikon Loan . . . . .	—	17
Australian Government Loan . . . . .	1	1
MGT Loan . . . . .	33	36
Interest rate swaps . . . . .	25	57
Foreign currency contracts, net . . . . .	2	65

We determined the fair value of the Prior Term Loan Facility, the New Term Loan Facility, the Senior Notes due 2025, the Senior Notes due 2026, the Senior Notes due 2029 and the 6.5% Senior Secured Notes due 2025 using quoted market prices, which under the fair value hierarchy is a Level 1 input. We determined the fair value of the Prior Standard Bank Term Loan

Facility, the New Standard Bank Term Loan Facility and Tikon Loan utilizing transactions in the listed markets for similar liabilities, which under the fair value hierarchy is a Level 2 input. The fair value of the Australian Government Loan and MGT Loan is based on the contracted amount which is a Level 2 input.

We determined the fair value of the foreign currency contracts and interest rate swaps using inputs other than quoted prices in active markets that are observable either directly or indirectly. The fair value hierarchy for the foreign currency contracts and interest rate swaps is a Level 2 input.

The carrying value of cash and cash equivalents, restricted cash, accounts receivable and accounts payable approximate fair value due to the short-term nature of these items.

## 18. Leases

Lease expense for the year ended December 31, 2021, 2020 and 2019 was comprised of the following:

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
Operating lease expense . . . . .	\$47	\$48	\$41
Finance lease expense:			
Amortization of right-of-use assets . . . . .	1	1	\$ 1
Interest on lease liabilities . . . . .	2	2	\$ 2

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
Short term lease expense . . . . .	30	26	\$22
Variable lease expense . . . . .	<u>23</u>	<u>22</u>	<u>\$20</u>
Total lease expense . . . . .	<u>\$103</u>	<u>\$99</u>	<u>\$86</u>

The table below summarizes lease expense for the year ended December 31, 2021, 2020 and 2019 recorded in the specific line items in our Consolidated Statements of Operations:

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
Cost of goods sold . . . . .	\$ 98	\$91	\$80
Selling, general and administrative expenses . . . . .	<u>5</u>	<u>8</u>	<u>6</u>
Total . . . . .	<u>\$103</u>	<u>\$99</u>	<u>\$86</u>

The weighted-average remaining lease term in years and weighted-average discount rates at December 31, 2021 and 2020 were as follows:

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Weighted-average remaining lease term:		
Operating leases . . . . .	8.7	3.3
Finance leases . . . . .	8.8	9.6
Weighted-average discount rate:		
Operating leases . . . . .	7.4%	7.7%
Finance leases . . . . .	14.1%	14.2%

The maturity analysis for operating leases and finance leases at December 31, 2021 were as follows:

	<u>Operating Leases</u>	<u>Finance Leases</u>
2022 . . . . .	30	3
2023 . . . . .	15	3
2024 . . . . .	12	3
2025 . . . . .	8	3
2026 . . . . .	6	3
Thereafter . . . . .	<u>44</u>	<u>11</u>
Total lease payments . . . . .	115	26
Less: imputed interest . . . . .	<u>(34)</u>	<u>(12)</u>
Present value of lease payments . . . . .	<u>\$ 81</u>	<u>\$ 14</u>

Additional information relating to cash flows and ROU assets for the year ended December 31, 2021, 2020 and 2019 is as follows:

	<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows used for operating leases . . . . .	\$51	\$55	\$41
Operating cash flows used for finance leases . . . . .	\$ 2	\$ 2	\$ 2
Financing cash flows used for finance leases . . . . .	\$ 1	\$ 1	\$ 1

Additional information relating to ROU assets for the year ended December 31, 2021 and 2020 is as follows:

	<u>Year Ended December 31,</u>	
	<u>2021</u>	<u>2020</u>
ROU assets obtained in exchange for lease obligations:		
Operating leases obtained in the normal course of business.....	\$49	\$29
Finance leases obtained in the normal course of business .....	\$ 2	\$—

As of December 31, 2021, we have additional operating and finance leases, primarily for equipment and machinery, that have not yet commenced. The related ROU assets of the operating and finance leases are approximately \$63 million and \$40 million, respectively. These leases will commence later in 2022 with lease terms of between approximately 10 and 15 years.

## 19. Asset Retirement Obligations

Asset retirement obligations consist primarily of rehabilitation and restoration costs, landfill capping costs, decommissioning costs, and closure and post-closure costs. Activity related to asset retirement obligations was as follows:

	<u>Year Ended December 31,</u>	
	<u>2021</u>	<u>2020</u>
Balance, January 1 .....	\$166	\$158
Additions .....	5	1
Accretion expense .....	12	12
Remeasurement/translation .....	(9)	7
Changes in estimates, including cost and timing of cash flows .....	(15)	(1)
Settlements/payments.....	(10)	(15)
Other acquisition and divestiture related .....	—	4
Balance, December 31.....	<u>\$149</u>	<u>\$166</u>

	<u>December 31,</u>	
	<u>2021</u>	<u>2020</u>
Asset retirement obligations were classified as follows:		
Current portion included in “Accrued liabilities”.....	\$ 10	\$ 9
Noncurrent portion included in “Asset retirement obligations”.....	<u>139</u>	<u>157</u>
Asset retirement obligations.....	<u>\$149</u>	<u>\$166</u>

We used the following assumptions in determining asset retirement obligations at December 31, 2021: inflation rates between 1.5% - 4.4% per year; credit adjusted risk-free interest rates between 3.9% -16.9%; the life of mines between 3-25 years and the useful life of assets between 1-32 years.

### ***Environmental Rehabilitation Trust***

In accordance with applicable regulations, we have established an environmental rehabilitation trust for the prospecting and mining operations in South Africa, which receives, holds, and invests funds for the rehabilitation or management of asset retirement obligations. The trustees of the fund are appointed by us and consist of sufficiently qualified employees capable of fulfilling their fiduciary duties. At December 31, 2021 and 2020, the environmental rehabilitation trust assets were \$12 million and \$12 million, respectively, which were recorded in “Other long-term assets” in the Consolidated Balance Sheets.

## 20. Commitments and Contingencies

***Purchase and Capital Commitments***—At December 31, 2021, purchase commitments were \$231 million for 2022, \$87 million for 2023, \$122 million for 2024, \$52 million for 2025, \$105 million for 2026, and \$58 million thereafter.

**Letters of Credit**—At December 31, 2021, we had outstanding letters of credit and bank guarantees of \$53 million, of which \$21 million were letters of credit and \$32 million were bank guarantees. Amounts for performance bonds were not material.

**Environmental Matters**—It is our policy to record appropriate liabilities for environmental matters when remedial efforts are probable and the costs can be reasonably estimated. Such liabilities are based on our best estimate of the undiscounted future costs required to complete the remedial work. The recorded liabilities are adjusted periodically as remediation efforts progress or as additional technical, regulatory or legal information becomes available. Given the uncertainties regarding the status of laws, regulations, enforcement policies, the impact of other potentially responsible parties, technology and information related to individual sites, we do not believe it is possible to develop an estimate of the range of reasonably possible environmental loss in excess of our recorded liabilities. We expect to fund expenditures for these matters from operating cash flows. The timing of cash expenditures depends principally on the timing of remedial investigations and feasibility studies, regulatory approval of cleanup projects, remedial techniques to be utilized and agreements with other parties. Included in these environmental matters are the following:

**Hawkins Point Plant.** Residual waste mud, known as Batch Attack Mud, and a spent sulfuric waste stream were deposited in an onsite repository (the “Batch Attack Lagoon”) at a former TiO<sub>2</sub> manufacturing site, Hawkins Point Plant in Baltimore, Maryland, operated by Cristal USA, Inc. from 1954 until 2011. We assumed responsibility for remediation of the Hawkins Point Plant when we acquired the TiO<sub>2</sub> business of Cristal in April 2019. In 1984, a predecessor of Cristal and the Maryland Department of the Environment (“MDE”) entered into a consent decree (the “Consent Decree”) to address the Batch Attack Lagoon. The Consent Decree required that Cristal close the Batch Attack Lagoon when the Hawkins Point Plant ceased operations. In addition, we are investigating whether hazardous substances are migrating from the Batch Attack Lagoon. As of December 31, 2021, a provision of \$59 million is included in “Environmental liabilities” in our Consolidated Balance Sheet for the Hawkins Point Plant consistent with the accounting policy described above. We are in discussions with the MDE regarding a new consent decree to address both the Batch Attack Lagoon as well as other environmental contamination issues associated with the Hawkins Point Plant.

**Other Matters**—We are subject to a number of other lawsuits, investigations and disputes (some of which involve substantial amounts claimed) arising out of the conduct of our business, including matters relating to commercial transactions, prior acquisitions and divestitures, including our acquisition of Cristal, employee benefit plans, intellectual property, and environmental, health and safety matters. We recognize a liability for any contingency that is probable of occurrence and reasonably estimable. We continually assess the likelihood of adverse judgments of outcomes in these matters, as well as potential ranges of possible losses (taking into consideration any insurance recoveries), based on a careful analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts. Included in these other matters is the following:

**Venator Materials plc v. Tronox Limited.** In May 2019, Venator Materials plc (“Venator”) filed an action in the Superior Court of the State of Delaware alleging among other things that we owed Venator a \$75 million “Break Fee” pursuant to the terms of a preliminary agreement dated July 14, 2018 (the “Exclusivity Agreement”). The Exclusivity Agreement required, among other things, Tronox and Venator to use their respective best efforts to negotiate a definitive agreement to sell the entirety of the National Titanium Dioxide Company Limited’s (“Cristal’s”) North American operations to Venator if a divestiture of all or a substantial part of these operations were required to secure the approval of the Federal Trade Commission for us to complete our acquisition of Cristal’s TiO<sub>2</sub> business. In June 2019, we denied Venator’s claims and counterclaimed against Venator seeking to recover \$400 million in damages from Venator that we suffered as a result of Venator’s breaches of the Exclusivity Agreement. Specifically, we alleged, among other things, that Venator’s failure to use best efforts constituted a material breach of the Exclusivity Agreement and directly resulted in and caused us to sell Cristal’s North American operations to an alternative buyer for \$701 million, \$400 million less than the price Venator had agreed to in the Exclusivity Agreement. Though we believe that our interpretation of the Exclusivity Agreement is correct, there can be no assurance that we will prevail in litigation.

**Western Australia Stamp Duty Matter.** In May 2018, we lodged a pre-transaction determination request for a stamp duty exemption with the Western Australia Office of State Revenue (the “WA OSR”) in connection with our re-domicile transaction (the “Re-Domicile Transaction”) which was subsequently granted by the WA OSR in June 2018 on a preliminary basis. Immediately following the consummation of the Re-Domicile Transaction, we filed a confirmation request for the stamp duty exemption with the WA OSR. Following this confirmation



request, we exchanged numerous communications with the WA OSR addressing questions raised and stating our position. In July 2021, the WA OSR informed us that they have reviewed their technical position on the applicability of the stamp duty exemption and have determined that such an exemption is disallowed based upon minor technicalities regarding the application of the governing set of rules. While the Company believe the rules were appropriately applied and will be successful in utilizing the exemption allowed, if an unfavorable ruling ultimately prevails it could result in a material charge to the financial statements. The Company is currently assessing its options with respect to this matter.

## 21. Accumulated Other Comprehensive Income (Loss) Attributable to Tronox Holdings plc and Other Equity Items

The tables below present changes in accumulated other comprehensive income (loss) by component for 2021, 2020 and 2019.

	<u>Cumulative Translation Adjustment</u>	<u>Pension Liability Adjustment</u>	<u>Unrealized Gains (losses) on Derivatives</u>	<u>Total</u>
Balance, January 1, 2019 .....	\$(445)	\$ (95)	\$ —	\$(540)
Other comprehensive income (loss).....	3	(11)	8	—
Acquisition of noncontrolling interest .....	(61)	—	—	(61)
Amounts reclassified from accumulated other comprehensive income (loss).....	<u>—</u>	<u>2</u>	<u>(7)</u>	<u>(5)</u>
Balance, December 31, 2019 .....	(503)	(104)	1	(606)
Other comprehensive income (loss).....	12	(20)	(4)	(12)
Amounts reclassified from accumulated other comprehensive income (loss).....	<u>—</u>	<u>4</u>	<u>4</u>	<u>8</u>
Balance, December 31, 2020 .....	\$(491)	\$(120)	\$ 1	\$(610)
Other comprehensive income (loss).....	(103)	16	21	(66)
Acquisition of noncontrolling interest .....	(34)	—	—	(34)
Amounts reclassified from accumulated other comprehensive income (loss).....	<u>—</u>	<u>4</u>	<u>(32)</u>	<u>(28)</u>
Balance, December 31, 2021 .....	<u>\$(628)</u>	<u>\$(100)</u>	<u>\$(10)</u>	<u>\$(738)</u>

## Repurchase of Common Stock

In addition to the repurchase of 14 million shares from Exxaro in 2019, on June 3, 2019, the Company's Board of Directors authorized the repurchase of up to \$100 million of the Company's stock. During the year ended December 31, 2019, we purchased 7,453,391 shares under the authorization at an average price of \$11.59 per share and at a cost of approximately \$87 million, including sales commissions and fees. We did not complete the full program given certain Section 382 restrictions related to our NOLs. Upon repurchase of the shares by the Company, the shares were cancelled.

On November 9, 2021, the Company's Board of Directors authorized the repurchase of up to \$300 million of the Company's stock through February 2024. As of December 31, 2021, there were no repurchases as part of this program.

## 22. Share-based Compensation

Share-based compensation expense consisted of the following:

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
Total share-based compensation expense (continuing operations) from restricted shares and restricted share units .....	<u>\$31</u>	<u>\$30</u>	<u>\$32</u>

The stock compensation expense for the year ended December 31, 2021 is inclusive of a \$3 million true up of expense due to the 2020 and 2021 performance grants as well as the acceleration of \$2 million of stock

compensation expense associated with the retirement agreement entered into with the former CEO on March 18, 2021. The stock compensation expense for the year ended December 31, 2020 is inclusive of a \$4 million credit for the reversal of expense due to the 2018 performance grants.

### ***Tronox Holdings plc Amended and Restated Management Equity Incentive Plan***

On March 27, 2019, in connection with the Re-domicile Transaction, Tronox Holdings plc assumed the management equity incentive plan previously adopted by Tronox Limited, which plan was renamed the Tronox Holdings plc Amended and Restated Management Equity Incentive Plan. The amendments to the plan were made to provide, among other things, for the appropriate substitution of Tronox Holdings in place of Tronox Limited and to ensure the compliance with the laws of England and Wales law in place of Australian law. The MEIP permits the grant of awards that are comprised of incentive options, nonqualified options, share appreciation rights, restricted shares, restricted share units, performance awards, and other share-based awards, cash payments, and other forms as the compensation committee of the Board of Directors (the “Board”) in its discretion deems appropriate, including any combination of the above. The maximum number of shares which were initially subjected to awards (inclusive of incentive options) was 20,781,225 ordinary shares and was increased by 8,000,000 on the affirmative vote of our shareholders on June 24, 2020.

### ***Restricted Share Units (“RSUs”)***

On an annual basis, the Company grants RSUs which have time and/or performance conditions. Both the time-based awards and the performance-based awards are classified as equity awards.

*2021 Grants* - The Company granted both time-based and performance-based awards to certain members of management and to members of the Board. A total of 659,609 of time-based awards were granted to management which will vest ratably over a three-year period ending March 5, 2024. A total of 56,304 of time-based awards were granted to members of the Board of which will vest in May 2022. A total of 623,112 of performance-based awards were granted, of which 311,556 of the awards vest based on a relative Total Shareholder Return (“TSR”) calculation and 311,556 of the awards vest based on certain performance metrics of the Company. The non-TSR performance-based awards vest on March 5, 2024 based on the achievement against the target average company performance of three separate performance periods, commencing on January 1 of each 2021, 2022, and 2023 and ending on December 31 of each 2021, 2022 and 2023, for which, for each performance period, the performance metric is an average annual return on invested capital (ROIC) improvement versus 2020 ROIC. Similar to the Company’s historical TSR awards granted in prior years, the TSR awards vest based on the Company’s three-year TSR versus the peer group performance levels. Given these terms, the TSR metric is considered a market condition for which we used a Monte Carlo simulation to determine the weighted average grant date fair value of \$29.07.

Similar TSR awards were granted during 2020 and 2019 with grant date fair values of \$10.00 and \$12.65, respectively, which were calculated utilizing a Monte Carlo simulation. The following weighted-average assumptions were utilized to value the grants in 2021, 2020 and 2019:

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Dividend yield . . . . .	1.56%	2.13%	N/A
Expected historical volatility . . . . .	71.10%	58.30%	67.20%
Risk free interest rate . . . . .	0.17%	1.42%	2.50%
Expected life (in years) . . . . .	3	3	3

The following table presents a summary of activity for RSUs for 2021:

	<u>Number of Shares</u>	<u>Weighted Average Grant Date Fair Value</u>
Outstanding, January 1, 2021 . . . . .	7,303,905	\$12.39
Granted . . . . .	1,339,025	20.91
Vested . . . . .	(2,845,305)	14.49
Forfeited . . . . .	(682,680)	15.16
Outstanding, December 31, 2021 . . . . .	<u>5,114,945</u>	<u>\$13.12</u>
Expected to vest, December 31, 2021 . . . . .	<u>7,049,472</u>	<u>\$13.58</u>

At December 31, 2021, there was \$30 million of unrecognized compensation expense related to nonvested RSUs, adjusted for estimated forfeitures, which is expected to be recognized over a weighted-average period of 1.8 years. The weighted-average grant-date fair value of RSUs granted during 2021, 2020 and 2019 was \$20.91 per unit, \$8.89 per unit, and \$10.81 per unit, respectively. The total fair value of RSUs that vested during 2021, 2020 and 2019 was \$41 million, \$30 million and \$20 million, respectively.

### Options

We did not issue any options during 2021 and 2020 and all our options outstanding are fully vested at December 31, 2021. The following table presents a summary of option activity for 2021:

	<u>Number of Options</u>	<u>Weighted Average Exercise Price</u>	<u>Weighted Average Contractual Life (years)</u>	<u>Intrinsic Value</u>
Outstanding, January 1, 2021 . . . . .	1,201,891	\$21.60	2.19	\$—
Exercised . . . . .	(424,832)	20.25		
Forfeited . . . . .	—	—		
Expired . . . . .	<u>(20,732)</u>	<u>28.26</u>		
Outstanding and Exercisable, December 31, 2021 . . . . .	<u>756,327</u>	<u>\$22.13</u>	<u>1.30</u>	<u>\$ 2</u>

The aggregate intrinsic values in the table represent the total pre-tax intrinsic value (the difference between our share price at the indicated dates and the options' exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their in-the-money options at the end of the year. The amount will change based on the fair market value of our stock. There were 424,832 options exercised during 2021 with a total intrinsic value of \$2 million. We issue new shares upon the exercise of options. During 2021, we received \$8 million, in cash for the exercise of stock options. There were no options exercised during both 2020 and 2019 and consequently there was no related intrinsic value. At December 31, 2021, 2020 and 2019, there was no unrecognized compensation expense related to options.

### 23. Pension and Other Postretirement Healthcare Benefits

The following provides information regarding our U.S. and foreign plans:

#### U.S. Plans

*Pension and Postretirement Healthcare Plans* — Tronox has one main U.S. defined benefit plan: the U.S. Qualified Plan. Prior to December 2020, the Company also had the U.S. Pension Plan (which was acquired as part of the Cristal acquisition). In December 2020, the U.S. Pension Plan was frozen and merged into the U.S. Qualified Plan. The U.S. Qualified Plan is a funded noncontributory qualified benefit plan which is in accordance with the Employee Retirement Income Security Act of 1974

(“ERISA”) and the Internal Revenue Code. We made contributions into funds managed by a third party, and those funds are held exclusively for the benefit of the plan participants. Benefits under the U.S. Qualified Plan were generally calculated based on years of service and final average pay. The U.S. Qualified Plan was frozen and closed to new participants on June 1, 2009. We also maintain one postretirement healthcare plan - the U.S. retiree welfare plan.

#### International Plans

*Pension Plans* — Tronox has international defined benefit commitments primarily in the United Kingdom (“U.K. DB Scheme”) and Saudi Arabia. The U.K. DB Scheme is a funded qualified defined benefit plan in the United Kingdom, which is frozen with no additional benefits accruing to the participants. Benefits under the U.K. DB Scheme are generally calculated based on years of credit service and final compensation when benefits ceased to accrue as defined under the plan provisions. We also maintain a Saudi Arabia Cristal End of Service Benefit plan which provides end of service benefits to qualifying participants. End of service benefits are based on years of service and the reasons for which a participant's services to the Company are terminated.

*Multiemployer Pension Plan* — In prior periods, we maintained a defined benefit plan in the Netherlands (the “Netherlands Plan”) to provide defined pension benefits to qualifying employees of Tronox Pigments

(Holland) B.V. and its related companies. During 2014, the Netherlands Plan was replaced with a multiemployer plan, the Netherlands Contribution Plan (the “CDC Plan”) effective January 1, 2015. Under the CDC Plan, employees earn benefits based on their pensionable salaries each year determined using a career average benefit formula. The collective bargaining agreement between us and the participants require us to contribute 20.4% of the participants’ pensionable salaries into a pooled fund administered by the industry-wide PGB. The pensionable salary is the annual income of employees subject to a cap, which is adjusted each year to reflect the current requirements of the Netherlands’ Wages and Salaries Tax Act of 1964. Our obligation under this plan is limited to the fixed percentage contribution we make each year. The employees are entitled to any returns generated from the investment activities of the fund.

The following table outlines the details of our participation in the CDC Plan for the year ended December 31, 2021. The CDC disclosures provided herein are based on the fund’s 2020 annual report, which is the most recently available public information. Based on the total plan assets and accumulated benefit obligation information in the plan’s annual report, the zone status was green as of December 31, 2020. A green zone status indicates that the plan was at least 80 percent funded. The “FIP/RP Status Pending/Implemented” column indicates whether a financial improvement plan (FIP) or a rehabilitation plan (RP) is either pending or has been implemented. As of December 31, 2021, we are not aware of any financial improvement or rehabilitation plan being implemented or pending. The last column lists the expiration date of the collective-bargaining agreement to which the plan is subject.

Pension Fund	EIN/Pension Plan Number	Pension Protection Act Zone Status		FIP/RP Pending/Implemented	Tronox Contributions		Surcharge Imposed	Expiration date of Collective-Bargaining Agreement
		2021	2020		2021	2020		
PGB . . . . .	NA	N/A	Green	No	\$5	\$5	No	12/31/2024

On the basis of the information available in the CDC Plan 2020 annual report, our contribution does not constitute more than 5 percent of the total contribution to the plan by all participants. During 2021, the fund did not impose any surcharge on us.

*Postretirement Healthcare Plans* — We also maintain postretirement healthcare plans in South Africa (the “South African Plan”) and Brazil (the “Brazil Medical Plan”). The South African Plan provides medical and dental benefits to certain South African employees, retired employees and their registered dependents. The South African Plan provides benefits as follows: (i) members employed before March 1, 1994 receive 100% post-retirement and death-in-service benefits; (ii) members employed on or after March 1, 1994 but before January 1, 2002 receive 2% per year of completed service subject to a maximum of 50% post-retirement and death-in-service benefits; and, (iii) members employed on or after January 1, 2002 receive no post-retirement and death-in-service benefits. The Brazil Medical Plan provides post-employment medical benefits to employees who contributed to the medical plan while employed. Retirees receiving a benefit under the plan are required to pay a contribution that varies based on the coverage level elected.

## Pension and Postretirement Benefit Costs / Obligations

*Benefit Obligations and Funded Status* — The following provides a reconciliation of beginning and ending benefit obligations, beginning and ending plan assets, funded status, and balance sheet classification of our U.S. and international pension plans and other post-retirement benefit plans (“OPEB”) as of and for the years ended December 31, 2021 and 2020. The benefit obligations and plan assets associated with our principal benefit plans are measured on December 31.

	Pensions				Other Post Retirement Benefit Plans			
	December 31				December 31			
	2021		2020		2021		2020	
	US	International	US	International	US	International	US	International
<i>Change in benefit obligations:</i>								
Benefit obligation, beginning of year . . .	\$399	\$252	\$398	\$232	\$ 2	\$ 23	\$ 2	\$ 13
Service cost . . . . .	—	4	1	4	—	1	—	—
Interest cost . . . . .	10	4	12	5	—	2	—	1
Net actuarial (gains) losses . . . . .	(10)	(10)	28	20	—	(3)	—	3
Curtailments . . . . .	—	—	(2)	—	—	—	—	(1)
Settlements . . . . .	—	—	(7)	(6)	—	—	—	—
Plan amendments <sup>(1)</sup> . . . . .	—	—	—	—	—	(4)	—	9
Foreign currency rate changes . . . . .	—	(2)	—	6	—	(2)	—	(2)
Benefits paid . . . . .	(30)	(14)	(31)	(9)	—	(1)	—	—
Benefit obligation, end of year <sup>(2)</sup> . . . . .	<u>369</u>	<u>234</u>	<u>399</u>	<u>252</u>	<u>2</u>	<u>16</u>	<u>2</u>	<u>23</u>
<i>Change in plan assets:</i>								
Fair value of plan assets, beginning of year . . . . .	344	195	319	186	—	—	—	—
Actual return on plan assets . . . . .	23	(3)	41	15	—	—	—	—
Employer contributions . . . . .	—	6	22	3	—	1	—	—
Benefits paid . . . . .	(30)	(14)	(31)	(9)	—	(1)	—	—
Foreign currency rate changes . . . . .	—	(1)	—	6	—	—	—	—
Settlements . . . . .	—	—	(7)	(6)	—	—	—	—
Fair value of plan assets, end of year . . .	<u>337</u>	<u>183</u>	<u>344</u>	<u>195</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Net underfunded status of plans . . . . .	<u>\$ (32)</u>	<u>\$ (51)</u>	<u>\$ (55)</u>	<u>\$ (57)</u>	<u>\$ (2)</u>	<u>\$ (16)</u>	<u>\$ (2)</u>	<u>\$ (23)</u>
<i>Classification of amounts recognized in the Consolidated Balance Sheets:</i>								
Other long-term assets . . . . .	\$ —	\$ 20	\$ —	\$ 14	\$—	\$ —	\$—	\$ —
Accrued liabilities . . . . .	—	(4)	—	(5)	(1)	—	—	—
Pension and postretirement healthcare benefits . . . . .	(32)	(67)	(55)	(66)	(1)	(16)	(2)	(23)
Total liabilities . . . . .	(32)	(71)	(55)	(71)	(2)	(16)	(2)	(23)
Accumulated other comprehensive (income) loss . . . . .	<u>81</u>	<u>10</u>	<u>98</u>	<u>12</u>	<u>—</u>	<u>3</u>	<u>—</u>	<u>12</u>
Total . . . . .	<u>\$ 49</u>	<u>\$ (41)</u>	<u>\$ 43</u>	<u>\$ (45)</u>	<u>\$ (2)</u>	<u>\$ (13)</u>	<u>\$ (2)</u>	<u>\$ (11)</u>

(1) Relates to a plan amendment entered into during both 2021 and 2020 related to the Brazil Medical Plan.

(2) Since the benefits under the U.S. Qualified Plan and the U.K. DB Scheme are frozen, the projected benefit obligation and accumulated benefit obligation are the same.

### Contributions

At a minimum, Tronox contributes to its pension plans to comply with local regulatory requirements (e.g., ERISA in the United States). Discretionary contributions in excess of the local minimum requirements are made based on many factors, including long-term projections of the plans’ funded status, the economic environment, potential risk of overfunding, pension insurance costs and alternative uses of the cash. Changes to



these factors can impact the timing of discretionary contributions from year to year. Pension contributions were less than \$1 million in 2021 and are currently expected to be less than \$1 million in 2022.

The following table provides information for pension plans where the accumulated benefit obligation exceeds the fair value of the plan assets:

	<b>Pensions</b>	
	<b>2021</b>	
	<u>US</u>	<u>International</u>
Projected benefit obligation (PBO) . . . . .	\$369	\$71
Accumulated benefit obligation (ABO) . . . . .	\$369	\$47
Fair value of plan assets . . . . .	\$337	\$—

*Expected Benefit Payments* — The following table shows the expected cash benefit payments for the next five years and in the aggregate for the years 2027 through 2031:

	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027-2031</u>
Pensions - US . . . . .	\$32	\$29	\$28	\$27	\$26	\$115
Pensions - International . . . . .	\$11	\$ 9	\$10	\$11	\$11	\$ 57
Other Post Retirement Benefit Plans - US . . . . .	\$—	\$—	\$—	\$—	\$—	\$ 1
Other Post Retirement Benefit Plans - International . . . . .	\$—	\$—	\$ 1	\$ 1	\$ 1	\$ 6

*Retirement and Postretirement Healthcare Expense* — The table below presents the components of net periodic cost associated with the U.S. and foreign plans recognized in the Consolidated Statements of Operations for 2021, 2020, and 2019:

	<u>Pensions</u>			<u>Other Postretirement Benefit Plans</u>		
	<u>Year Ended December 31,</u>			<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>
Net periodic cost:						
Service cost . . . . .	\$ 4	\$ 5	\$ 4	\$ 1	\$—	\$—
Interest cost <sup>(1)</sup> . . . . .	14	17	21	2	1	1
Expected return on plan assets <sup>(1)</sup> . . . . .	(26)	(22)	(22)	—	—	—
Net amortization of actuarial loss <sup>(1)</sup> . . . . .	5	4	2	1	—	—
Settlement losses (gains) <sup>(1)</sup> . . . . .	—	—	(1)	—	—	—
Curtailement (gains) <sup>(1)</sup> . . . . .	—	(2)	—	—	—	—
Total net periodic cost - continuing operations . . . . .	<u>\$ (3)</u>	<u>\$ 2</u>	<u>\$ 4</u>	<u>\$ 4</u>	<u>\$ 1</u>	<u>\$ 1</u>

(1) Recorded in Other income, net in the Consolidated Statement of Operations.

*Assumptions* —

The following weighted average assumptions were used to determine net periodic cost:

	<b>Pension</b>					
	<u>2021</u>		<u>2020</u>		<u>2019</u>	
	<u>US</u>	<u>International</u>	<u>US</u>	<u>International</u>	<u>US</u>	<u>International</u>
Discount rate . . . . .	2.60%	1.47%	3.39%	1.98%	4.34%	2.50%
Expected return on plan assets . . . . .	6.70%	2.50%	6.03%	2.50%	5.69%	3.00%

	<b>OPEB</b>					
	<u>2021</u>		<u>2020</u>		<u>2019</u>	
	<u>US</u>	<u>International</u>	<u>US</u>	<u>International</u>	<u>US</u>	<u>International</u>
Discount rate . . . . .	2.59%	10.19%	3.36%	8.72%	4.00%	10.25%
Expected return on plan assets . . . . .	N/A	N/A	N/A	N/A	N/A	N/A

The following weighted average assumptions were used in estimating the actuarial present value of benefit obligations:

	Pensions					
	2021		2020		2019	
	US	International	US	International	US	International
Discount rate . . . . .	2.97%	1.87%	2.60%	1.45%	3.39%	1.98%
Rate of compensation increase . . . . .	N/A	4.68%	3.00%	4.65%	3.00%	4.67%

	OPEB					
	2021		2020		2019	
	US	International	US	International	US	International
Discount rate . . . . .	2.83%	10.33%	2.59%	9.51%	3.36%	9.91%
Rate of compensation increase . . . . .	N/A	N/A	N/A	N/A	N/A	N/A

For the U.S. Qualified Plan, the mortality assumption was updated on December 31, 2021 to use the Society of Actuaries' most recently published generational projection scale (i.e. MP-2021) and base table (i.e. Pri-2012). The mortality improvement scale that had been used as of December 31, 2020 was the MP-2020 projection scale and the base table was Pri-2012.

*Expected Return on Plan Assets* — In forming the assumption of the U.S. and international long-term rate of return on plan assets, we considered the expected earnings on funds already invested, earnings on contributions expected to be received in the current year, and earnings on reinvested returns. The long-term rate of return estimation methodology for the Company's pension plans is based on a capital asset pricing model using historical data and a forecasted earnings model. An expected return on plan assets analysis is performed which incorporates the current portfolio allocation, historical asset-class returns, and an assessment of expected future performance using asset-class risk factors.

*Discount Rate* — The 2021 and 2020 rates were selected based on the results of a cash flow matching analysis, which projected the expected cash flows of the plans using a yield curves model developed from a universe of Aa-graded U.S. currency corporate bonds (obtained from Bloomberg) with BVAL scores of 6 or greater.

*Plan Assets* — The investments of the U.S. and International pension plans are managed to meet the future expected benefit liabilities of the plan over the long term by investing in diversified portfolios consistent with prudent diversification and historical and expected capital market returns. Tronox's U.S. and international pension plans' weighted-average asset allocations at December 31, 2021 and 2020, and the target asset allocation ranges, by major asset category, are as follows:

	December 31,							
	2021				2020			
	US		International		US		International	
	Actual	Target	Actual	Target	Actual	Target	Actual	Target
Equity securities . . . . .	49%	49%	—%	—%	43%	42%	—%	—%
Debt securities . . . . .	46	48	43	43	39	40	39	30
Real estate . . . . .	1	—	—	—	1	—	—	—
Other . . . . .	4	3	57	57	17	18	61	70
Total . . . . .	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

The fair values of pension investments as of December 31, 2021 are summarized below:

	Fair Value Measurement at December 31, 2021 Using:			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Asset category:				
Equities securities:				
Global equity securities . . . . .	\$ 93 <sup>(1)</sup>	\$ —	\$—	\$ 93
Global comingled equity funds . . . . .	73 <sup>(2)</sup>	—	—	73
Debt securities:				
US government bonds . . . . .	81 <sup>(3)</sup>	—	—	81
Foreign government bonds . . . . .	39 <sup>(3)</sup>	—	—	39
US corporate bonds . . . . .	—	73 <sup>(4)</sup>	—	73
Foreign corporate bonds . . . . .	—	42 <sup>(4)</sup>	—	42
Real Estate:				
Property/ real estate fund . . . . .	—	1 <sup>(5)</sup>	—	1
Other:				
Insurance contracts . . . . .	—	—	98 <sup>(7)</sup>	98
Cash & cash equivalents . . . . .	19 <sup>(6)</sup>	—	—	19
<b>Total at fair value . . . . .</b>	<b><u>\$305</u></b>	<b><u>\$116</u></b>	<b><u>\$98</u></b>	<b><u>\$519</u></b>

- (1) For global equity securities, this category is comprised of shares of common stock in both U.S. and international companies from a diverse set of industries and size. Common stock is valued at the closing market price reported on a U.S. or international exchange where the security is actively traded. Equity securities are classified within level 1 of the fair value hierarchy.
- (2) Global comingled equity funds are comprised of managed funds that invest in common stock of both U.S. and international companies shares from a diverse set of industries and size. Common stock are valued at the closing market price reported on a U.S. or international exchange where the security is actively traded. These funds are classified within level 1 of the fair value hierarchy.
- (3) For US and foreign government bonds, this category includes U.S. treasuries, U.S. federal agency obligations and international government debt. The fair value of these investments are based on observable quoted prices on active exchanges, which are level 1 inputs.
- (4) For US corporate bonds and foreign corporate bonds, this category is comprised of corporate bonds of U.S. and foreign companies from a diverse set of industries and size. The fair values for the U.S. and foreign corporate bonds are determined using quoted prices of similar securities in active markets and observable data or broker or dealer quotations. The fair values for these investments are classified as level 2 within the valuation hierarchy.
- (5) For property / real estate funds, this category includes real estate properties, partnership equities and investments in operating companies. The fair value of the assets is determined using discounted cash flows by estimating an income stream for the property plus a reversion into a present value at a risk adjusted rate. Yield rates and growth assumptions utilized are derived from market transactions as well as other financial and industry data. The fair value of these investments are classified as level 2 in the valuation hierarchy.
- (6) Cash and cash equivalents include cash and short-interest bearing investments with maturities of three months or less. Investments are valued at cost plus accrued interest. Cash and cash equivalents are classified within level 1 of the valuation hierarchy.
- (7) For insurance contracts, the fair value is estimated as the cost of purchasing equivalent annuities on terms consistent with those currently available in the market. The contracts are with highly rated insurance companies and are classified within level 3 of the valuation hierarchy. The following table summarizes changes in fair value of the pension plan assets classified as level 3 for the year ended December 31, 2021:

	<u>Insurance Contracts</u>
Balance, December 31, 2020 . . . . .	\$111
Actual return on plan assets . . . . .	(6)
Purchases, sales, settlements. . . . .	(6)
Transfers in/out of Level 3 . . . . .	—
Foreign currency translation. . . . .	<u>(1)</u>
Balance, December 31, 2021 . . . . .	<u>\$ 98</u>

The fair values of pension investments as of December 31, 2020 are summarized below:

	Fair Value Measurement at December 31, 2020, Using:			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Asset category:				
Equities securities:				
Global equity securities . . . . .	\$ 83 <sup>(1)</sup>	\$ —	\$ —	\$ 83
Global comingled equity funds . . . . .	66 <sup>(2)</sup>	—	—	66
Debt securities:				
US government bonds . . . . .	70 <sup>(3)</sup>	—	—	70
Foreign government bonds . . . . .	37 <sup>(3)</sup>	—	—	37
US corporate bonds . . . . .	—	62 <sup>(4)</sup>	—	62
Foreign corporate bonds . . . . .	—	43 <sup>(4)</sup>	—	43
Real Estate:				
Property/ real estate fund . . . . .	—	1 <sup>(5)</sup>	—	1
Other:				
Insurance contracts . . . . .	—	—	111 <sup>(7)</sup>	111
Cash & cash equivalents . . . . .	66 <sup>(6)</sup>	—	—	66
<b>Total at fair value . . . . .</b>	<b><u>\$ 322</u></b>	<b><u>\$106</u></b>	<b><u>\$111</u></b>	<b><u>\$539</u></b>

- (1) For global equity securities, this category is comprised of shares of common stock in both U.S. and international companies from a diverse set of industries and size. Common stock is valued at the closing market price reported on a U.S. or international exchange where the security is actively traded. Equity securities are classified within level 1 of the fair value hierarchy.
- (2) Global comingled equity funds are comprised of managed funds that invest in common stock of both U.S. and international companies shares from a diverse set of industries and size. Common stock are valued at the closing market price reported on a U.S. or international exchange where the security is actively traded. These funds are classified within level 1 of the fair value hierarchy.
- (3) For US and foreign government bonds, this category includes U.S. treasuries, U.S. federal agency obligations and international government debt. The fair value of these investments are based on observable quoted prices on active exchanges, which are level 1 inputs.
- (4) For US corporate bonds and foreign corporate bonds, this category is comprised of corporate bonds of U.S. and foreign companies from a diverse set of industries and size. The fair values for the U.S. and foreign corporate bonds are determined using quoted prices of similar securities in active markets and observable data or broker or dealer quotations. The fair values for these investments are classified as level 2 within the valuation hierarchy.
- (5) For property / real estate funds, this category includes real estate properties, partnership equities and investments in operating companies. The fair value of the assets is determined using discounted cash flows by estimating an income stream for the property plus a reversion into a present value at a risk adjusted rate. Yield rates and growth assumptions utilized are derived from market transactions as well as other financial and industry data. The fair value of these investments are classified as level 2 in the valuation hierarchy.
- (6) Cash and cash equivalents include cash and short-interest bearing investments with maturities of three months or less. Investments are valued at cost plus accrued interest. Cash and cash equivalents are classified within level 1 of the valuation hierarchy.
- (7) For insurance contracts, the fair value is estimated as the cost of purchasing equivalent annuities on terms consistent with those currently available in the market. The contracts are with highly rated insurance companies and are classified within level 3 of the valuation hierarchy. The following table summarizes changes in fair value of the pension plan assets classified as level 3 for the year ended December 31, 2020:

	<u>Insurance Contracts</u>
Balance, December 31, 2019 . . . . .	\$104
Actual return on plan assets . . . . .	9
Purchases, sales, settlements . . . . .	(5)
Transfers in/out of Level 3 . . . . .	—
Foreign currency translation . . . . .	<u>3</u>
Balance, December 31, 2020 . . . . .	<u>\$111</u>

## **Defined Contribution Plans**

### *U.S. Savings Investment Plan*

In 2006, we established the U.S. Savings Investment Plan (the “SIP”), a qualified defined contribution plan under Section 401(k) of the Internal Revenue Code. Under the SIP, our regular full-time and part-time employees contribute a portion of their earnings, and we match these contributions up to a predefined threshold. Our matching contribution is 100% of the first 6% of employee contributions. Effective January 1, 2013, we established a profit sharing contribution at 6% of employees’ pay (“discretionary contribution”). A discretionary contribution of 6% was made for 2021, 2020 and 2019. Our matching contribution to the SIP vests immediately; however, our discretionary contribution is subject to vesting conditions that must be satisfied over a three-year vesting period. Contributions under the SIP, including our match, are invested in accordance with the investment options elected by plan participants. Compensation expenses associated with our matching contribution to the SIP was \$5 million, \$4 million and \$4 million during 2021, 2020 and 2019, respectively, which was included in “Selling, general and administrative expenses” in the Consolidated Statements of Operations. Compensation expense associated with our discretionary contribution was \$5 million in 2021, \$4 million in 2020 and \$4 million in 2019, which was included in “Selling, general and administrative expenses” in the Consolidated Statements of Operations.

### *U.S. Benefit Restoration Plan*

In 2006, we established the U.S. Benefit Restoration Plan (the “BRP”), a nonqualified defined contribution plan, for employees whose eligible compensation is expected to exceed the IRS compensation limits for qualified plans. Under the BRP, participants can contribute up to 20% of their annual compensation and incentive. Our matching contribution under the BRP is the same as the SIP. Our matching contribution under this plan vests immediately to plan participants. Contributions under the BRP, including our match, are invested in accordance with the investment options elected by plan participants. Compensation expense associated with our matching contribution to the BRP was \$1 million, \$1 million and \$2 million during 2021, 2020 and 2019, respectively, which was included in “Selling, general and administrative expenses” in the Consolidated Statements of Operations.

### *South Africa Defined Contribution Plans*

Tronox Mineral Sands Proprietary Limited, a wholly owned subsidiary of the Company, participates in several defined contribution plans which are registered in the Republic of South Africa and are governed by the South African Pension Funds Act of 1956. These plans provide retirement and other benefits to all permanent employees, and where applicable, retired employees and their dependents. The Company contributes a range of 10% to 15% (depending on the plan) of the employees’ predefined pre-tax pensionable earnings. Compensation expense associated with these plans was \$5 million, \$4 million, and \$4 million during 2021, 2020 and 2019, respectively, which was included in both “Costs of goods sold” and “Selling, general and administrative expenses” in the Consolidated Statements of Operations.

## **24. Related Party Transactions**

### *Exxaro*

In connection with the Company’s acquisition in 2012 of Exxaro Resources Limited’s (“Exxaro”) mineral sands business, Exxaro was granted a “flip in” right such that following the occurrence of certain events, Exxaro could exercise a put option, or the Company could exercise a call option, whereby Exxaro exchanges its 26% shareholding in the Company’s South African operating subsidiaries which hold the Company’s material mining licenses (the “South African Subsidiaries Interest”) for an additional 7,246,035 of our ordinary shares. On November 26, 2018, the Company, certain of the Company’s subsidiaries and Exxaro entered into the Exxaro Mineral Sands Transaction Completion Agreement which amended the “flip in” rights granted to Exxaro to accelerate the occurrence of the “flip in” upon satisfaction of certain conditions, which have now been satisfied. On February 23, 2021, we exercised our call option to complete the “flip in” transaction, pursuant to which we issued to Exxaro 7,246,035 new ordinary shares of the Company in exchange for Exxaro’s South African Subsidiaries Interest. In addition, on March 1, 2021, Exxaro sold its entire share ownership in us, including the “flip-in” shares, totaling 21,975,315 ordinary shares in an underwritten public offering.



## *Tasnee/Cristal*

On April 10, 2019, we announced the completion of the acquisition of the TiO<sub>2</sub> business of Cristal for \$1.675 billion of cash, subject to a working capital and noncurrent liability adjustment, plus 37,580,000 ordinary shares. At December 31, 2021, Cristal International Holdings B.V. (formerly known as Cristal Inorganic Chemical Netherlands Cooperatief W.A.), a wholly-owned subsidiary of Tasnee, continues to own 37,580,000 shares of Tronox, or a 24% ownership interest. In February 2020, Tronox and Cristal resolved the working capital and noncurrent liability adjustment by agreeing that no payment was required by either party.

On May 9, 2018, we entered into an Option Agreement with AMIC which is owned equally by Tasnee and Cristal. Under the terms of the Option Agreement, AMIC granted us an option (the “Option”) to acquire 90% of a special purpose vehicle (the “SPV”), to which AMIC’s ownership in a titanium slag smelter facility (the “Slagger”) in The Jazan City for Primary and Downstream Industries in KSA will be contributed together with \$322 million of AMIC indebtedness (the “AMIC Debt”). The AMIC Debt would remain outstanding debt of the SPV upon exercise of the Option. The Option may be exercised if the Slagger achieves certain production criteria related to sustained quality and tonnage of slag produced (the “Option Criteria”). Likewise, AMIC may require us to acquire the Slagger on the same terms if the Option Criteria are satisfied. Furthermore, pursuant to the Option Agreement and during its term, we agreed to lend AMIC and, upon the creation of the SPV, the SPV, up to \$125 million for capital expenditures and operational expenses intended to facilitate the start-up of the Slagger (the “Tronox Loans”). We have lent AMIC the Tronox Loans maximum amount of \$125 million which is recorded within “Other long-term assets” on the Consolidated Balance Sheet as of both December 31, 2021 and 2020 as well as the related interest of \$9 million and \$6 million, respectively. The Option did not have a significant impact on the financial statements as of or for the periods ended December 31, 2021 and 2020.

On May 13, 2020, we amended the Option Agreement (the “First Amendment”) with AMIC to address circumstances in which the Option Criteria cannot be satisfied. Pursuant to the First Amendment, Tronox has the right to acquire the SPV in exchange for (i) our forgiveness of the Tronox Loans principal and accrued interest thereon, and (ii) the SPV’s assumption of \$36 million of indebtedness plus accrued interest thereon lent by AMIC to the SPV. Under the First Amendment, the SPV would not assume any of the AMIC Debt.

Additionally, on May 13, 2020, we amended a Technical Services Agreement that we had entered with AMIC on March 15, 2018, to add project management support services. Under this arrangement, AMIC and its consultants are still responsible for engineering and construction of the Slagger while we provide technical advice and project management services including supervision and management of third party consultants intended to satisfy the Option Criteria. As compensation for these services, Tronox receives a monthly management fee of approximately \$1 million, which is recorded in “Other income, net” within the Consolidated Statement of Operations and in “Prepaid and other assets” on the Consolidated Balance Sheet. The monthly management fee is subject to certain success incentives if and when the Slagger achieves the Option Criteria. The term of the Amended TSA was extended in December 2021 until December 31, 2022. Tronox recorded approximately \$8 million and \$5 million in “Other Income” for this the management fee for the years ended December 31, 2021 and 2020, respectively, in the Consolidated Statement of Operations. At both December 31, 2021 and 2020, Tronox had a receivable due from AMIC related to management fee of \$1 million that is recorded within “Prepaid and other assets” on the Consolidated Balance Sheet.

At December 31, 2021, Tronox had a receivable due from Tasnee of \$8 million related primarily to \$4 million of stamp duty taxes reimbursable from Tasnee and \$3 million for pre-acquisition period tax settlements in process with certain tax authorities also reimbursable from Tasnee. At December 31, 2020, Tronox had a receivable due from Tasnee of \$9 million related primarily to amounts arising from transition service agreements, stamp duty taxes paid on behalf of Tasnee, pre-acquisition activities and reimbursement of a tax settlement due to the Australian Taxation Office for pre-acquisition tax periods. These receivables are recorded within “Prepaid and other assets” on the Consolidated Balance Sheet.

On December 29, 2019, we entered into an agreement with Cristal to acquire certain assets co-located at our Yanbu facility which produce metal grade TiCl<sub>4</sub> (“MGT”). Consideration for the acquisition is the assumption by Tronox of a \$36 million note payable to Cristal (the “MGT Loan”). MGT is used at a titanium “sponge” plant facility, 65% of the ownership interests of which are held by Advanced Metal Industries Cluster and Toho Titanium Metal Co. Ltd (“ATTM”), a joint venture between AMIC and Toho Titanium Company Ltd. ATTM uses the TiCl<sub>4</sub>, which we supply by pipeline, for the production of titanium sponge, a precursor material used in the production of titanium metal.

On December 17, 2020 we completed the MGT transaction. Repayment of the \$36 million note payable is based on a fixed U.S. dollar per metric ton quantity of MGT delivered by us to ATTM over time and therefore the ultimate maturity date is variable in nature. If ATTM fails to purchase MGT from us under certain contractually agreed upon conditions, then at our election we may terminate the MGT supply agreement with ATTM and will no longer owe any amount under the loan agreement with Cristal. We currently estimate the ultimate maturity to be between approximately five and six years, subject to actual future MGT production levels. The interest rate on the note payable is based on the SAIBOR plus a premium. As of December 31, 2021, the outstanding balance of the note payable was \$33 million, of which \$7 million is expected to be paid within the next twelve months. During the year ended December 31, 2021 and 2020, Tronox recorded interest expense of \$1 million and nil, respectively, related to the MGT Loan, which is recorded in “Interest expense” on the Consolidated Statement of Operations. During the year ended December 31, 2021 and 2020, Tronox recorded \$4 million and nil, respectively, for MGT Loan repayments to Cristal that is recorded within “Net sales” on the Consolidated Statement of Operations.

As a result of these transactions we have entered into related to the MGT assets, Tronox recorded \$8 million and \$5 million for purchase of chlorine gas for the years ended December 31, 2021 and 2020, respectively, from ATTM and such amounts are recorded in “Cost of goods sold” on the Consolidated Statement of Operations. The amount due to ATTM as of December 31, 2021 and 2020, for the purchase of chlorine gas was \$1 million and \$3 million, respectively, and is recorded within “Accrued liabilities” on the Consolidated Balance Sheet.

During the year ended December 31, 2021 and 2020, Tronox recorded \$31 million and \$25 million, respectively, for MGT sales made to AMIC. The MGT sales are recorded in “Net sales” on the Consolidated Statement of Operations. At December 31, 2021 and December 31, 2020, Tronox had a receivable from AMIC of \$6 million and \$7 million, respectively, from MGT sales that is recorded within “Prepaid and other assets” on the Consolidated Balance Sheet.

## 25. Segment Information

We operate our business under one operating segment, Tronox, which is also our reportable segment. The Company’s chief operating decision maker, who are its Co-CEOs, reviews financial information presented at the consolidated level for purposes of allocating resources and evaluating financial performance. Since we operate our business under one segment, there is no difference between our consolidated results and segment results.

We disaggregate revenue from contracts with customers by product type and geographic area as well as sales based on country of production. We believe this level of disaggregation appropriately depicts how the nature, amount, timing and uncertainty of our revenue and cash flows are affected by economic factors and reflects how our business is managed.

During 2021, 2020 and 2019 our ten largest third-party customers represented 28%, 32%, and 31%, respectively, of our consolidated net sales. During 2021, 2020, and 2019, no single customer accounted for 10% of our consolidated net sales.

Net sales to external customers based on country of production, were as follows:

	<u>Year Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
U.S. operations. . . . .	\$ 716	\$ 653	\$ 676
International operations:			
United Kingdom. . . . .	396	301	218
Australia . . . . .	873	637	674
South Africa. . . . .	441	330	370
Saudi Arabia. . . . .	420	269	218
Other - international. . . . .	<u>726</u>	<u>568</u>	<u>486</u>
Total net sales . . . . .	<u>\$3,572</u>	<u>\$2,758</u>	<u>\$2,642</u>

See Note 5 for further information on revenues.

There is no difference between the total consolidated assets of continuing operations and our segment assets. Property, plant and equipment, net, mineral leaseholds, net, and lease right of use assets, net by geographic region, were as follows:

	<u>December 31,</u>	
	<u>2021</u>	<u>2020</u>
U.S. operations .....	\$ 251	\$ 261
International operations:		
United Kingdom .....	97	101
Saudi Arabia .....	241	262
South Africa .....	705	768
Australia .....	1,000	995
Other - international .....	<u>248</u>	<u>256</u>
Total .....	<u>\$2,542</u>	<u>\$2,643</u>

**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***

Under the supervision of and with the participation of Tronox’s management, including our Co-CEOs and CFO, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) (the “Exchange Act”), as of December 31, 2021, the end of the period covered by this report. Based on that evaluation, our co-CEOs and CFO have concluded that the Company’s disclosure controls and procedures were effective as of that date. Tronox’s disclosure controls and procedures are designed to ensure that information required to be disclosed by Tronox in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission’s rules and forms, and that such information is accumulated and communicated to Tronox’s management, including Tronox’s co-CEOs and CFO, or other person performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

***Management’s Report on Internal Control Over Financial Reporting***

Management of Tronox Holdings plc and its subsidiaries is responsible for establishing and maintaining adequate internal control over financial reporting. Internal controls over financial reporting is a process designed under the supervision of our interim principal co-executive officers and principal financial officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company’s financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

Our internal controls over financial reporting include those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of the Company’s management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Management assessed the effectiveness of our internal controls over financial reporting as of December 31, 2021. In making this assessment, management used the criteria in *Internal Control-Integrated Framework* (2013) set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our assessment using those criteria, management concluded that our internal control over financial reporting as of December 31, 2021 was effective.

Because of its inherent limitations, internal controls over financial reporting may not prevent or detect misstatements. 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.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2021 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report, which appears in Item 8 of this Form 10-K.

***Changes in Internal Control Over Financial Reporting***

There have been no changes to our internal control over financial reporting during the quarter ended December 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. Other Information**

None.

**Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections**

Not applicable.

## PART III

### Item 10. Directors, Executive Officers and Corporate Governance

Information about our executive officers as of February 22, 2022:

<u>NAME</u>	<u>POSITION</u>
John D. Romano	Co-Chief Executive Officer
Jean-Francois Turgeon	Co-Chief Executive Officer
Timothy Carlson	Senior Vice President, Chief Financial Officer
Jeff Engle	Senior Vice President, Commercial and Strategy
Russell Austin	Senior Vice President, Operations
Jeffrey Neuman	Senior Vice President, General Counsel and Secretary
D. John Srivisal	Senior Vice President, Business Development and Finance
Melissa Zona	Senior Vice President, External Affairs and Chief Sustainability Officer
Jennifer Guenther	Vice President, Head of Investor Relations
Jonathan P. Flood	Vice President, Controller and Principal Accounting Officer

Information about members of our Board of Directors as of February 22, 2022:

<u>NAME</u>	<u>CURRENT OCCUPATION</u>
Ilan Kaufthal	Chairman of the Board, Tronox Holdings plc; Eastwind Advisors
Mutlaq Al-Morished	CEO, TASNEE
Vanessa Guthrie	Former Managing Director and Chief Executive Officer, Toro Energy Limited
Peter B. Johnston	Former Interim CEO, Tronox Limited; Former Global Head of Nickel Assets, Glencore
Ginger M. Jones	Former Senior Vice President and CFO, Cooper Tire & Rubber Company
Stephen Jones	Former President and CEO, Covanta Holding Corporation
Moazzam Khan	Managing Director, Cristal International Holdings BV
Sipho Nkosi	Former CEO, Exxaro Resources Limited
John Romano	Co-Chief Executive Officer, Tronox
Jean-Francois Turgeon	Co-Chief Executive Officer, Tronox

Other information regarding our executive officers, members of the Board of Directors, including its audit committee and audit committee financial experts, as well as information regarding our Code of Ethics and Business Conduct that applies to our co-Chief Executive Officers and senior financial officers, will be presented in Tronox Holding plc's definitive proxy statement for its 2022 annual general meeting of shareholders, which will be filed not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, under the headings "Proposal 1 - Election of Directors" and "Code of Ethics and Business Conduct" and is incorporated herein by reference.

### Item 11. Executive Compensation

Information regarding executive officer and director compensation will be presented in Tronox Holdings plc's definitive proxy statement for its 2022 annual general meeting of shareholders, filed not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, under the headings "Human Resources and Compensation Committee Interlocks and Insider Participation", "2021 Non-Employee Director Compensation" and "Compensation Discussion and Analysis" and is incorporated herein by reference.

### Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters

Information regarding security ownership of certain beneficial owners and management and related shareholder matters will be presented in Tronox Holdings plc's definitive proxy statement for its 2022 annual general meeting of shareholders, filed not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, under the heading "Security Ownership of Certain Beneficial Owners" and is incorporated herein by reference.



## Equity Compensation Plan Information

The following table provides information as of December 31, 2021 regarding securities issued under the Tronox Holdings plc Amended and Restated Management Equity Incentive Plan (the “Tronox Holdings plc MEIP”).

	Number of securities to be issued upon exercise of outstanding restricted share units and options	Weighted-average exercise price of outstanding options <sup>(1)</sup>	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in the second column) <sup>(2)</sup>
Equity compensation plans approved by security holders . . . . .	5,871,272	\$22.13	8,129,023
Equity compensation plans not approved by security holders . . . . .	<u>—</u>	<u>—</u>	<u>—</u>
Total . . . . .	<u>5,871,272</u>	<u>\$22.13</u>	<u>8,129,023</u>

(1) Because there is no exercise price for restricted share units, such awards are not included in the weighted-average exercise price.

(2) Each restricted share unit awarded under the Tronox Holdings plc MEIP was granted at no cost to the persons receiving them and represents the contingent right to receive the equivalent number of ordinary shares.

### Item 13. Certain Relationships and Related Transactions, and Director Independence.

Information regarding certain relationships and related transactions and director independence will be presented in Tronox Holdings plc’s definitive proxy statement for its 2022 annual general meeting of shareholders, filed not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, under the heading “Certain Relationships and Related Transactions” and is incorporated herein by reference.

### Item 14. Principal Accounting Fees and Services.

Information regarding principal accounting fees and services will be presented in Tronox Holdings plc’s definitive proxy statement for its 2022 annual general meeting of shareholders, filed not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, under the heading “Fees Paid to Independent Registered Public Accounting Firm” and is incorporated herein by reference.

## PART IV

### Item 15. Exhibits, Financial Statement Schedules.

(a) The following documents are filed as part of this Annual Report on Form 10-K:

1. Consolidated Financial Statements

Reference is made to the Index to Consolidated Financial Statements and Consolidated Financial Statement Schedules appearing at “Item 8. Financial Statements and Supplementary Data” in this report.

2. Consolidated Financial Statement Schedules

All financial statement schedules are omitted as they are inapplicable, or the required information has been included in the consolidated financial statements or notes thereto.

3. Exhibits

(b) The exhibits listed in the following table have been filed with, or incorporated by reference into, this Annual Report on Form 10-K.

- |       |   |
|-------|---|
| 2.1   | Transaction Agreement, dated as of February 21, 2017, by and between Cristal, Tronox Limited and Cristal Inorganic Chemicals Netherlands Coöperatief W.A. (incorporated by reference to Exhibit 2.1 of the Current Report on Form 8-K filed on February 21, 2017).  |
| 2.2   | Amendment No. 1 to Transaction Agreement, dated as of March 1, 2018, by and among The National Titanium Dioxide Company Limited, Tronox Limited and Cristal Inorganic Chemicals Netherlands Coöperatief W.A. (incorporated by reference to Exhibit 2.1 of the Current Report on Form 8-K filed on March 1, 2018).                                   |
| 2.3   | Amendment No. 2 to Transaction Agreement dated March 28, 2019, by and among The National Titanium Dioxide Company Limited, Tronox Limited, and, solely for certain purposes, Cristal Inorganic Chemicals Netherlands Coöperatief W.A. (incorporated by reference to Exhibit 2.1 of the Current Report on Form 8-K filed on April 2, 2019).          |
| 2.4   | Stock Purchase Agreement, dated as of March 14, 2019, by and among Tronox Limited, INEOS AG and INEOS Joliet US Holdco, LLC (incorporated by reference to Exhibit 2.1 of the Current Report on Form 8-K filed on March 19, 2019).   |
| 2.5   | Agreement for the sale and purchase of Tizir Titanium & Iron AS, dated as of May 14, 2020, by and between Tronox Holdings plc, Tronox Titanium Holdings AS, Tizir Limited and Eramet S.A. (incorporated by reference to Exhibit 2.1 of the Current Report on Form 8-K/A filed on May 14, 2020)  |
| 3.1   | Articles of Association of Tronox Holdings plc (incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K filed on March 27, 2019).  |
| 4.1   | Specimen ordinary share certificate of Tronox Holdings plc (incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K filed on March 27, 2019).  |
| 4.2   | Shareholders Agreement, dated April 10, 2019, by and between Tronox Holdings plc, Cristal Inorganic Chemicals Netherlands Coöperatief W.A., The National Titanium Dioxide Company Limited, Gulf Investment Corporation and Dr. Talal Al-Shair (incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K filed on April 11, 2019). |
| 4.3   | Description of Securities of the Registrant (filed herewith).   |
| 4.4   | Indenture, dated as of May 1, 2020 among Tronox Incorporated, the Company and the other guarantors named therein and Wilmington Trust, National Association, as trustee (incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K filed on May 1, 2020).  |
| 4.5*  | Indenture, dated as of March 15, 2021, among Tronox Incorporated, Tronox Holdings plc and the guarantors named therein and Wilmington Trust, National Association, as trustee (incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K filed on March 15, 2021).   |
| 10.1* | Tronox Holdings plc Amended and Restated Management Equity Incentive Plan (incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed on March 27, 2019).  |
| 10.2* | Tronox Holdings plc Amended and Restated Annual Bonus Incentive Plan (incorporated by reference to Exhibit 10.3 of the Current Report on Form 8-K filed on March 27, 2019).   |

- 10.3\* Offer letter, dated November 7, 2019 by and between Tronox Holdings plc and Timothy Carlson (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed on November 12, 2019).
- 10.4\* General form of executive officer Time-Based Restricted Share Unit Agreement (filed herewith).
- 10.5\* General form of executive officer TSR Performance-Based Restricted Share Unit Agreement (filed herewith).
- 10.6\* General form of executive officer ROIC Performance-Based Restricted Share Unit Agreement (filed herewith).
- 10.7\* General form of Director Grant Restricted Share Unit Agreement (incorporated by reference to Exhibit 10.3 to the Quarterly Report on Form 10-Q filed on May 4, 2017).
- 10.8 Form of Director Deed of Indemnification (incorporated by reference to Exhibit 10.4 of the Current Report on Form 8-K filed on March 27, 2019).
- 10.9 Agreement for the Provision of Depository Services and Custody Services, dated as of April 10, 2019, in respect of Tronox Holdings plc Depository Receipts among Computershare Trust Company, N.A., Tronox Holdings plc, Cristal Inorganic Chemicals Netherlands Coöperatief W.A. and all other holders from time to time of depository receipts issued in accordance herewith (incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on April 15, 2019).
- 10.10 Underwriting Agreement, dated February 24, 2021, by and among the Company, Exxaro Resources Limited and J.P. Morgan Securities LLC, as representative of the several underwriters named therein (incorporated by reference to Exhibit 1.1 of the Current Report on Form 8-K filed on March 1, 2021).
- 10.11 Amended and Restated First Lien Credit Agreement dated as of September 22, 2017 (as amended through and including March 11, 2021) with a syndicate of lenders and HSBC Bank USA, National Association, as administrative agent and collateral agent (incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on March 11, 2021).
- 10.12\* Retirement Agreement dated as of March 18, 2021 by and between the Company and Mr. Jeffrey N. Quinn (incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on March 18, 2021).
- 10.13\* Employment Agreement dated as of March 18, 2021 by and between the Company and Mr. John D. Romano (incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed on March 18, 2021).
- 10.14\* Employment Agreement dated as of March 18, 2021 by and between the Company and Mr. Jean-Francois Turgeon (incorporated by reference to Exhibit 10.3 of the Current Report on Form 8-K filed on March 18, 2021).
- 14.1 Tronox Code of Ethics and Business Conduct, effective March 27, 2019 (incorporated by reference to Exhibit 14.1 of the Annual Report on Form 10-K filed on March 16, 2020).
- 21.1 Subsidiaries of Tronox Holdings plc. (filed herewith)
- 23.1 Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm for Tronox Holdings plc. (furnished herewith)
- 24.0 Power of Attorney (filed herewith)
- 31.1 Rule 13a-14(a) Certification of John Romano. (furnished herewith)
- 31.2 Rule 13a-14(a) Certification of Jean-Francois Turgeon. (furnished herewith)
- 31.3 Rule 13a-14(a) Certification of Timothy Carlson. (furnished herewith)
- 32.1 Section 1350 Certification for John Romano. (furnished herewith)
- 32.2 Section 1350 Certification for Jean-Francois Turgeon. (furnished herewith)
- 32.3 Section 1350 Certification for Timothy Carlson. (furnished herewith)
- 96.1 Technical Report Summary on the Cooljarloo Australia operations (filed herewith).
- 96.2 Technical Report Summary on the Atlas and Campaspe Australia operations (filed herewith).
- 96.3 Technical Report Summary on the Namakwa Sands South Africa operations (filed herewith).
- 96.4 Technical Report Summary on the KZN Mineral Sands South Africa operations (filed herewith).
- 101.INS Inline XBRL Instance Document (filed herewith)
- 101.SCH Inline XBRL Taxonomy Extension Schema Document (filed herewith)
- 101.CAL Inline XBRL Taxonomy Extension Calculation Linkbase Document (filed herewith)
- 101.LAB Inline XBRL Taxonomy Extension Label Linkbase Document (filed herewith)

101.DEF Inline XBRL Taxonomy Extension Definition Linkbase Document (filed herewith)  
101.PRE Inline XBRL Taxonomy Extension Presentation Linkbase Document (filed herewith)  
104 The cover page from the Company's Annual Report on Form 10-K for the year ended  
December 31, 2021, which has been formatted in Inline XBRL, and included with Exhibit 101.

---

\* Indicates management contract or compensatory plan or arrangement.

**Item 16. Form 10-K Summary.**

None.





[THIS PAGE INTENTIONALLY LEFT BLANK]

## SHAREHOLDER INFORMATION

Tronox Holdings plc is a public limited company incorporated under the laws of England and Wales. We have global operations in North America, South America, Europe, the Middle East, Africa, Asia and Australia.

### CORPORATE OFFICES

#### United Kingdom:

Laporte Road, Stallingborough  
Grimsby, North East Lincolnshire  
DN40 2PR  
United Kingdom

#### United States:

263 Tresser Boulevard,  
Suite 1100  
Stamford, CT 06901  
USA  
+1 203.705.3800

This report is made available to shareholders in advance of the annual meeting of shareholders to be held at 10 a.m. EDT, May 12, 2022. The proxy will be made available to shareholders on or about March 30, 2022, at which time proxies for the meeting will be requested.

Information about Tronox, including financial information, can be found on our website: [www.tronox.com](http://www.tronox.com).

### STOCK LISTING

New York Stock Exchange

### TICKER SYMBOL

TROX

### TRANSFER AGENT AND REGISTRAR

Computershare Trust Company, N.A.

### SHAREHOLDER SERVICES TELEPHONE

Toll-free: +1 800.736.3001  
International: +1 781. 575.3100

### SHAREHOLDER CORRESPONDENCE

### REGULAR MAIL

Computershare  
Investor Services  
P.O. Box 505000  
Louisville, KY, 40233-5000

### OVERNIGHT MAIL

Computershare Investor Services  
462 South 4th Street, Suite 1600  
Louisville, KY, 40202

### SHAREHOLDER EMAIL INQUIRIES

[web.queries@computershare.com](mailto:web.queries@computershare.com)

### ELECTRONIC ACCESS

[www.proxyvote.com](http://www.proxyvote.com)

Copies of the Tronox 2021 Annual Report and proxy statement are available at [www.proxyvote.com](http://www.proxyvote.com)

A copy of the company's Form 10-K and other filings with the U.S. Securities and Exchange Commission are available at [investor.tronox.com](http://investor.tronox.com).

### CERTIFICATIONS

Tronox has included as Exhibits 31.1, 31.2, 31.3, 32.1, 32.2, and 32.3 to its Annual Report on Form 10-K for fiscal year 2021 filed with the Securities and Exchange Commission certificates of its co-Chief Executive Officers and Chief Financial Officer certifying, among other things, the information contained in the Form 10-K.

Annually, Tronox submits to the New York Stock Exchange (NYSE) a certificate of Tronox's co-Chief Executive Officers certifying that they were not aware of any violation by Tronox of NYSE corporate governance listing standards as of the date of the certification.

### SHAREHOLDER INFORMATION

Our website [www.tronox.com](http://www.tronox.com) provides shareholders easy access to Tronox's financial results. Shareholders may also contact Jennifer Guenther, Vice President, Investor Relations, at +1 646.960.6598.

*Tronox and its operating unit names, logos, and product service designators are either the registered or unregistered trademarks or trade names of Tronox Holdings plc and its subsidiaries.*



*This paper has been certified to meet the environmental and social standards of the Forest Stewardship Council® (FSC®) and from well-managed forests and other responsible sources.*

## Our global operations are positioned to meet our customers' needs around the world.

Tronox Holdings plc is a public limited company incorporated under the laws of England and Wales. We are the world's leading integrated manufacturer of titanium dioxide pigment, sold under the TiONA® brand. We operate titanium-bearing mineral sand mines and beneficiation and smelting operations in Australia, South Africa and Brazil to produce feedstock materials that can be processed into titanium dioxide for pigment, as well as high-purity titanium chemicals, including titanium tetrachloride and CristalACTIV™ ultrafine titanium dioxide. We consume a substantial part of our feedstock materials in our own pigment facilities in the United States, Australia, Brazil, United Kingdom, France, the Netherlands, China and Saudi Arabia. The mining, beneficiation and smelting of titanium-bearing mineral sands creates meaningful quantities of zircon that we also supply to customers around the world.



**United Kingdom:**

Laporte Road, Stallingborough  
Grimsby, North East Lincolnshire  
DN40 2PR

**United States:**

263 Tresser Boulevard, Suite 1100  
Stamford, CT 06901