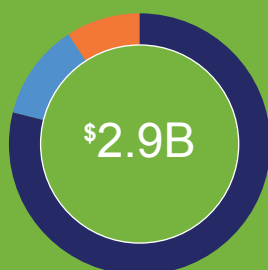




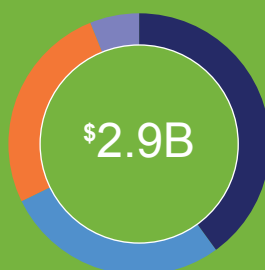
Differentiated Advantage

(Millions of U.S. dollars, except share and per share amounts) ⁽¹⁾	2023	2022	2021
Sales	\$2,850	\$3,454	\$3,572
Net (loss) income	\$ (314)	\$ 500	\$ 303
Diluted (loss) income per share	\$ (2.02)	\$ 3.16	\$ 1.81
Dividend paid per share	\$ 0.50	\$ 0.50	\$ 0.36
Total assets	\$6,134	\$6,306	\$5,987
Shares outstanding (at December 31)	156,793,755	154,496,923	153,934,677

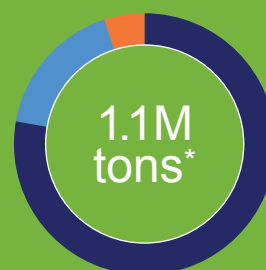
(1) The following information is from our Form 10-K for the year ended December 31, 2023, filed with the Securities and Exchange Commission on February 21, 2024.



Revenue From Product Sales
79% TiO₂
12% Other Products
9% Zircon

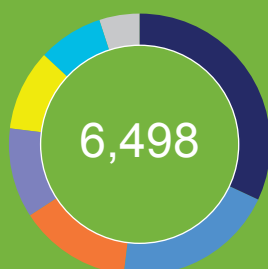


Sales Revenue Distribution by Geography
40% Europe, Middle East and Africa
28% Asia-Pacific
26% North America
6% South and Central America

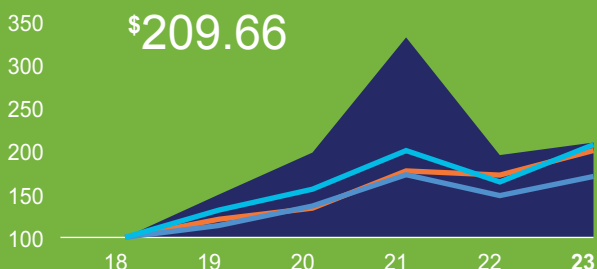


TiO₂ Sales Volume Distribution by End Use
78% Paints and Coatings
17% Plastics
5% Paper and Specialty

(*) Nameplate capacity



Full-Time Employees by Region
32% South Africa
20% Australia
14% Europe
11% Asia-Pacific
10% North America
8% KSA
5% South America



Total Shareholder Return*
\$207.21 S&P 500**
\$200.45 S&P 400 Materials
\$170.43 S&P Midcap 400 Chemicals
\$209.66 Tronox

(*) \$100 investment in stock or index on December 31. Assumes reinvestment of dividends.
(**) Index is utilized in the Company's annual report. Copyright© 2023 Standard & Poor's, a division of S&P Global. All rights reserved.

**John
Romano,**
Chief
Executive
Officer



Dear Shareholders: **It is an honor for me to be writing this year's letter as the Chief Executive Officer of Tronox.** As you know, Jean-Francois (JF) Turgeon and I have worked collaboratively over the last few years as Co-Chief Executive Officers. As part of JF's transition toward retirement, the Board has nominated him for reelection so we can continue to benefit from his decades of leadership and operational experience. I thank JF for being my trusted partner and a force for positive change at Tronox. I also want to acknowledge another important leadership change at Tronox that occurred in 2023 — the successful transition of John Srivisal to become our Chief Financial Officer. I am confident that we have the right executive team in place to lead Tronox.

The Differentiated Advantage **In 2023, we successfully navigated a challenging macroeconomic environment, particularly slowing demand for TiO₂ and zircon, as well as inflation and geopolitical unrest, to deliver the highest EBITDA margins among our TiO₂ peers.** We carefully managed what was within our control by proactively reducing capital expenditures and working capital as well as adjusting production levels to meet lower market demand. Additionally, we secured an incremental term loan of \$350 million to ensure we had adequate liquidity to continue to invest in our business, primarily for the expansion projects we are investing in 2024 for mines in South Africa reaching their end of life. Our differentiated business strategy of vertical integration, coupled with our unique portfolio, geographic footprint and resilient workforce, enabled us to provide value to our customers and shareholders.

Safety and Sustainability **Safety continues to be our highest priority, so we continue to challenge ourselves to achieve zero incidents with aggressive targets for safety performance.** Unfortunately, we fell short of the expectations we set for ourselves in 2023. Our refocused efforts for 2024 include visible leadership, engaging with our people in conversations that build psychological safety and encouraging them to stop work when and if it can't be done safely. Our Leading Safety Indicators program, in which our sites are reducing the risk of accidents by thinking proactively and making work safer before accidents happen, continues to gain momentum and is beginning its third year.

We continue on our path toward "net zero" carbon emissions by 2050 and are progressing projects to achieve our targets. The 200 MW solar energy project in South Africa that we announced in 2022 has started to provide power in March 2024 and will convert approximately 40% of our electricity in South Africa to renewable sources and reduce our Scope 1 and 2 emissions intensity globally by approximately 13%. We are already looking ahead to our next significant renewable energy project in South Africa, which we expect to be just as meaningful in terms of emissions reductions. The benefits of these larger projects are augmented by many others in our pipeline. Emissions reduction projects are underway at every site and we look forward to continuing to progress toward our 2050 net zero target. In addition to reducing carbon emissions, we also continue to progress our 2050 goal of eliminating waste to external landfills, and our R&D teams are actively pursuing alternative uses for waste.

As responsible stewards of the communities in which we operate and live, our sites around the world contribute to making a positive impact. This comes in many forms — from financial support to educational programs and volunteerism — and we take our role as a supportive neighbor very seriously.

I'm pleased to report that in Australia, we received endorsement from Reconciliation Australia for our inaugural Reflect Reconciliation Action Plan (RAP). This is the beginning of what will be a multi-year journey to increase awareness of Aboriginal and Torres Strait Islander cultures while upholding the five dimensions of reconciliation — race relations, equality and equity, institutional integrity, unity and historical acceptance. We are energized to continue nurturing the relationships we hold with the Aboriginal communities where we operate and commit to prioritizing their voices in our reconciliation journey.

Strategic Projects

Investments in our vertical integration strategy came to fruition in 2023 with the commissioning of our Atlas mine, a significant new mine in Eastern Australia. Atlas has replaced feedstock supply from our Snapper/Ginkgo mines in Eastern Australia, which are ceasing operations in the first half of 2024. The new mine is abundant in natural rutile and zircon and will be a significant source of high-grade ilmenite suitable for direct use, synthetic rutile production, or slag processing. Additionally, expansion projects for mines reaching end of life in South Africa are underway. These projects are expected to help sustain Tronox's position as a leading, low-cost titanium dioxide producer due to the significant cost advantage achieved through vertical integration.

Our decrease in capital spend to adapt to the macroeconomic environment entailed a slowing of our Business Transformation project in 2023. However, work has progressed such that, by the end of 2024, all of our Australian operations — our largest number of sites in one country — will be on the same enterprise resource planning (ERP) system. We will continue with the roll out of our global ERP system across the organization over the next couple years, though the majority of our capital expenditures related to this transformation are complete. Other business process and technology improvements have enabled improved efficiencies and yields and will help in our enduring pursuit of lowering costs.

People and Culture

In 2023, we completed our first global organization culture survey. Sixty percent of our employees participated in the survey and through their thoughtful responses we were better able to identify the performance measures and attributes that link company culture to high performance. We intend to use the survey results to reinforce the parts of Tronox culture that make us who we are and to improve in the areas that can create obstacles. By setting high expectations for each other and modelling ways of work done well, enrolling our people into fulfilling our vision and strategy, and investing in the success and fulfillment of our people, we aim to foster a high-performance corporate culture.

Another high-priority area for Tronox is diversity, equity and inclusion. We are committed to creating an organization where leaders foster 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. Through our Tronox Diversity and Inclusion Network (TDIN), teams around the globe and across functions lead initiatives, such as our cultural awareness and young talent programs, both launched in 2023, to augment existing D&I education and training.

Planning for Success We are optimistic about 2024 based in part on the demand recovery for both TiO₂ and zircon we believe is currently underway. Our employees and contractors around the world are relentlessly focusing on safety, and we expect to see operational improvements as we align production with market demand, improving operational performance and efficiency. Our differentiated cost position, sustainability strategy, industry-leading product portfolio, and talented people set us apart. We are excited about the future for Tronox and our people and the value we will continue to create for our customers and shareholders.

Sincerely,



John Romano,
Chief Executive Officer

\$2.9B
in revenue

\$524M
Adjusted EBITDA

18.4%
EBITDA margin

≈6,500
employees
worldwide

9
TiO₂ pigment
facilities

6
mines

5
upgrading
facilities

1.1M
metric tons of
TiO₂ (nameplate
capacity)

≈1,200
customers in
120 countries

≈\$1M
invested in our
communities

Ilan Kaufthal^(3*)

Chair of the Board,
Tronox Holdings plc;
Eastwind Advisors

Peter B. Johnston^(1,2)

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

Ginger M. Jones^(1*,2)

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

Sipho Nkosi^(2,3)

Former Chief Executive
Officer, Exxaro Resources

Stephen Jones^(1,2*)

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^(a)

Co-Chief Executive Officer

Jean-François Turgeon^(b)

Co-Chief Executive Officer

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

- (1) Audit
- (2) Human Resources and Compensation
- (3) Corporate Governance and Sustainability
- (*) Committee Chair

(a) As the Company previously announced, Mr. Romano will become sole CEO effective April 1, 2024.

(b) As the Company previously announced, Mr. Turgeon will be retiring from his position as Co-Chief Executive Officer effective April 1, 2024.

John D. Romano^(a)

Co-Chief Executive Officer

Jean-François Turgeon^(b)

Co-Chief Executive Officer

John Srivisal

Senior Vice President,
Chief Financial Officer

Russell Austin

Senior Vice President,
Global Operations

Jeff Engle

Senior Vice President,
Commercial and Strategy

Jeffrey Neuman

Senior Vice President,
General Counsel and
Corporate Secretary

Melissa H. Zona

Senior Vice President,
Chief Human Resources
Officer and SHEQ

Emad AlJunaidi

Senior Vice President,
Integrated Supply Chain
and Digital Transformation

Jennifer Guenther

Chief Sustainability
Officer and Head of
Investor Relations

Jonathan Flood

Vice President, Controller
and Principal Accounting
Officer

(a) As the Company previously announced, Mr. Romano will become sole CEO effective April 1, 2024.

(b) As the Company previously announced, Mr. Turgeon will be retiring from his position as Co-Chief Executive Officer effective April 1, 2024.

**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, 2023

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

98-1467236

(State or other jurisdiction of incorporation or organization)

(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.

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

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

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, 2023 was approximately \$1,515,118,314.

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, 2024, the registrant had 156,793,755 ordinary shares outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's proxy statement for its 2024 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, 2023
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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 (“TiO₂”), zircon and other feedstock products, as well as global and regional economic downturns, that adversely affect the demand for our end-use products;
- the continued increase in exports from China of TiO₂, both via chloride and sulfate technology, and expansion of Chinese TiO₂ production capacity, including via chloride technology;
- changes in prices or supply availability for energy, other raw materials and/or shipping vessels;
- liability, production delays and additional expenses from environmental and industrial accidents;
- production curtailments, shutdowns or additional expenditures resulting from equipment upgrades, industrial accidents, 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;
- war, political and social instability, and/or hostilities, in the regions in which we operate, including, but not limited to, the ongoing Russia and Ukraine and Middle East conflicts;
- 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 returns or there may be a delay in realizing expected returns on our capital projects, including Project newTRON and our Atlas Campaspe mining investment;
- 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 TiO₂ products are subject to increased regulatory scrutiny that may impede or inhibit widespread usage of TiO₂ 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;
- extreme weather conditions could pose physical risks to our facilities and disrupt the operations of our supply chain and increase operational costs;
- 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 (as defined elsewhere herein) 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.

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PART I

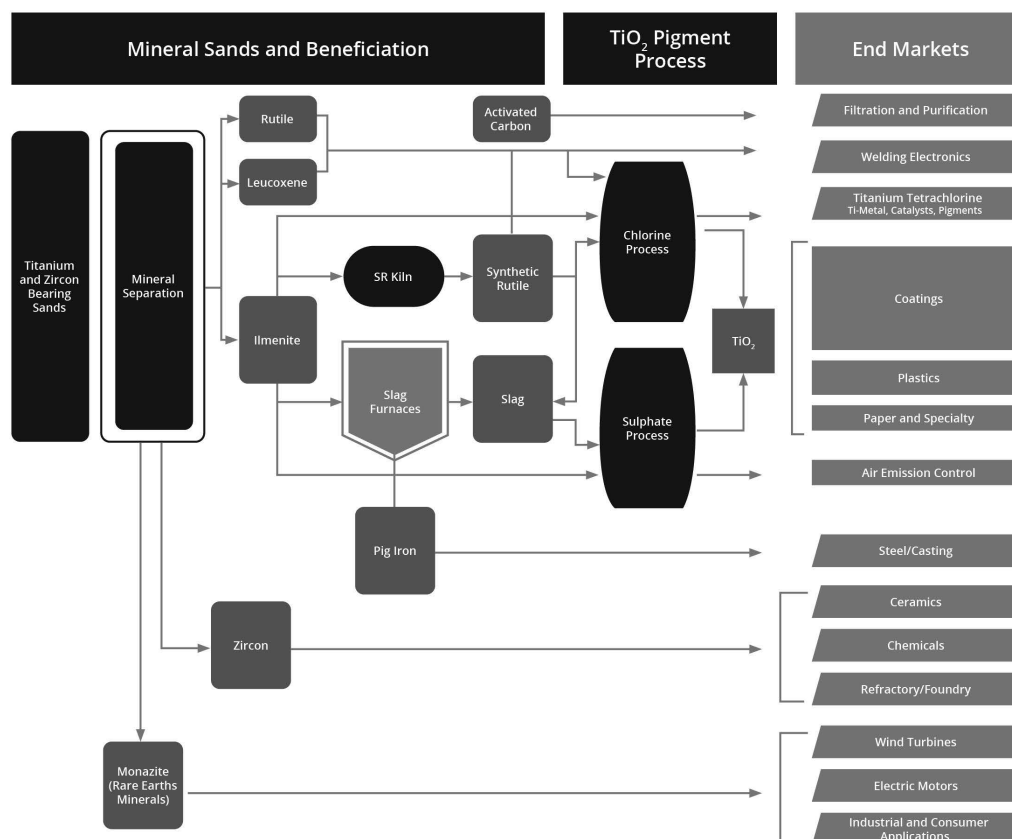
For the purposes of this discussion, references to “we,” “us,” and, “our” refer to Tronox Holdings plc, together with its consolidated subsidiaries (collectively referred to as “Tronox” or the “Company”). We are a public limited company formed under the laws of England and Wales. We are considered a 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

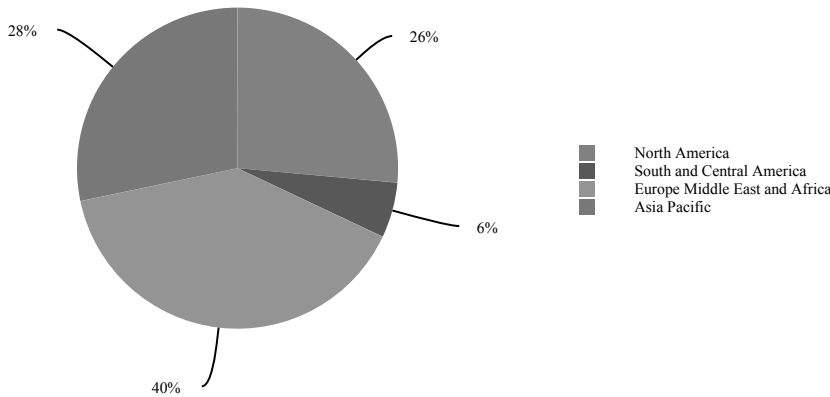
Overview

Tronox is the world’s leading vertically integrated manufacturer of TiO₂ pigment. We operate titanium-bearing mineral sand mines and beneficiation and smelting operations in Australia and South Africa to produce feedstock materials that can be processed into TiO₂ for pigment, high purity titanium chemicals, including titanium tetrachloride, and ultrafine TiO₂ used in certain specialty applications. Our strategy is to be vertically integrated and produce enough feedstock materials to be as self-sufficient as possible in the production of TiO₂ at our nine 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 TiO₂ customers throughout the world. The mining, beneficiation and smelting of titanium bearing mineral sands also creates meaningful quantities of co-products including zircon, pig iron and the rare-earth bearing mineral, monazite, which we also supply to customers around the world.

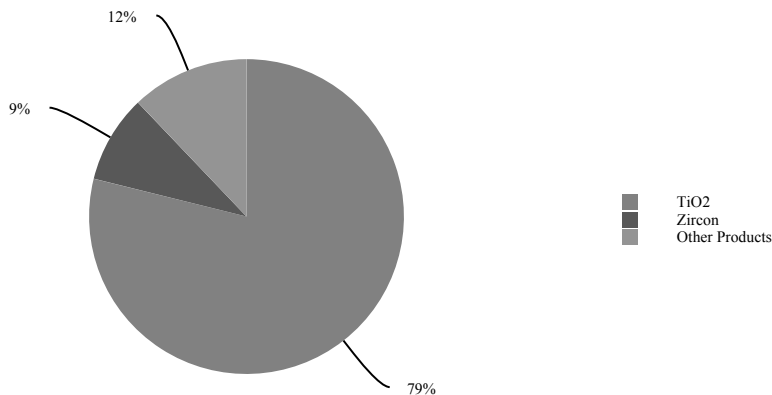
The following chart highlights the TiO₂ value chain we participate in.



The following sets forth the percentage of our revenue derived from sales of our products by geographic region for the year ended December 31, 2023.



The below sets forth the percentage of our revenue derived from sales of our products for the year ended December 31, 2023.



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 3 and 23 of notes to our consolidated financial statements, each included elsewhere in this Form 10-K.

2023 Key Strategic Initiatives

The following sets forth the key strategic initiatives underway in 2023:

Become the Low Cost TiO₂ Producer by Investing in our Business Processes and Strengthening Vertical Integration

Our ability to compete effectively in the TiO₂ industry is determined by many factors, including innovation, reliability, product quality, customer service and price. The business processes that allow 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. During 2023, we continued to progress with our multi-year IT-enabled transformation program that includes both operational and business transformation.

In addition, in terms of strengthening vertical integration, 2023 saw the commencement of a significant new mine in Eastern Australia called Atlas. Atlas has replaced feedstock supply from our Snapper / Ginkgo mines in Eastern Australia which is expected to cease mining operations in the first half of 2024. We believe Atlas is abundant in natural rutile and zircon, and will be a significant source of high grade ilmenite suitable for direct use, synthetic rutile production, or slag processing. The investment in Atlas is expected to generate returns above the Company's cost of capital and sustain Tronox's position as a leading low-cost producer.

Moreover, in 2023, we invested in expanding our Fairbreeze and Namakwa mines in South Africa. Like Atlas, we believe these expansions are extremely attractive mine development projects, rich in ilmenite, rutile and zircon that are expected to replace existing mines which are reaching end of life. 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 our level of feedstock vertical integration. We are also continuing to evaluate opportunities to leverage our expertise in mining and the exposure we have to rare earth materials, including monazite, through our operations.

Capital Allocation

In addition to returning approximately \$89 million in cash to shareholders in the form of dividends and investing \$261 million of capital during 2023, we also strengthened our liquidity position by closing a \$350 million incremental term loan. We believe the added liquidity from this incremental borrowing will enable us to continue our capital investment program — primarily, replacing mineral reserves for mines reaching end of life in South Africa — that we believe will increase shareholder value in the short-, medium- and long-term. At the end of 2023, we had cash on hand of \$273 million and untapped short-term borrowing capacity of \$488 million.

Develop Our Position as a Significant Supplier of Rare Earth Oxides

Tronox's existing mining operations and tailing piles in South Africa and Australia contain significant quantities of monazite, a mineral containing rare earth elements (REEs) widely recognized as a critical mineral for the energy transformation underway to decarbonize the world's economy. For these applications, REE must first be processed into an oxide form --- rare earth oxides or "REO" --- that can then be metallized for the production of permanent magnets. Every step of the REE supply chain today is dominated by China. China's dominance of the processing of REO and production of permanent magnets is widely recognized as a serious strategic challenge by democratic governments around the world.

The separation, beneficiation and processing technologies that Tronox uses to turn titanium-bearing ores into TiO₂ are applicable for turning monazite into REO. In the past, we sold our monazite in unconcentrated form as a waste product but given the increased value associated with REE, we are now seeking to maximize the value of our existing geologic resources and deploy our substantial technical know how and human capital to become a significant supplier of REO to non-Chinese producers of metals and permanent magnets.

Our Principal Products

TiO₂

TiO₂ Pigment

TiO₂ pigment is used in a wide range of products due to its ability to impart whiteness, brightness, and opacity. TiO₂ 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. TiO₂ pigment is considered to be a quality of life product. At present, it is our belief that there is no effective substitute for TiO₂ 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 TiO₂

We produce ultrafine TiO₂ at our manufacturing facility in Thann, France. We market ultrafine TiO₂ products under the CristalActiv® trademark. Ultrafine TiO₂ has highly catalytic properties due to the relatively high surface area of each TiO₂ molecule. The principal use of ultrafine TiO₂ products is in NOx emission control products utilized in stationary, mobile and marine applications.

In 2023, we generated \$2.2 billion in revenue from sales of TiO₂.

Zircon

Zircon ($ZrSiO_4$) is a co-product of mining mineral sands deposits for titanium feedstock. Zircon is 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 2023, we generated \$257 million in revenue from sales of zircon.

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.

Monazite

Like zircon, monazite is a co-product of mining mineral sands deposits for titanium feedstock. Monazite is concentrated and processed to remove contaminants, such as uranium and thorium, before being separated into specific rare earth oxides (REOs) such as neodymium (Nd), praseodymium (Pr), terbium (Tb), and dysprosium (Dy). These REOs can then be metallized and formed into permanent magnets, particularly NdFeB magnets, that are needed to manufacture electric vehicle motors, wind turbines and other green economy applications.

Feedstock

Most TiO_2 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_2 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 our continued pursuit of our vertical integration strategy, we currently do not expect to actively sell feedstock going forward.

Titanium Tetrachloride

We sell titanium tetrachloride (" $TiCl_4$ ") from our facilities in Thann, France and Yanbu, KSA. At our Thann facility in France, we produce $TiCl_4$ dedicated for merchant market sales to customers for use mainly in the production of various types of pigments and catalyst products. At our Yanbu facility, we produce excess $TiCl_4$ which we both sell directly to a joint venture between Advanced Metal Industries Cluster and Toho Titanium Metal Co. Ltd. ("ATTM") for use at ATTM's titanium sponge plant facility that is adjacent to our Yanbu facility and in the merchant market.

In 2023, we generated \$345 million in revenue from the sale of high purity pig iron, monazite, titanium tetrachloride and other products.

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;
- Eastern Australia operations consisting of the Ginkgo mine, a floating heavy mineral concentration plant located there, the Atlas mine and a heavy mineral concentration plant located there and a mineral separation plant located at Broken Hill, New South Wales; and
- Perth Basin operations in Western Australia consisting of the Wonnerup mine and a mineral separation plant.

Zircon and monazite are often, but not always, found in mineral sands deposits containing ilmenite. They are extracted, alongside ilmenite and rutile, as part of the initial mineral sands separation 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 (rutile, zircon and monazite) and magnetic (ilmenite) fractions utilizing a variety of techniques. Through the separation process, we produce zircon which is sold directly to customers, rutile and leucosene which can immediately be used as feedstock material to make TiO₂ pigment, and monazite which we currently sell in a relatively unconcentrated form but which we plan on further processing before sale to extract greater value.

Ilmenite is generally further refined for use in our TiO₂ 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 TiO₂ 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 TiO₂ 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 leucosene, 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 per year.

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 TiO₂ 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 TiO₂ Pigment

TiO₂ 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 TiO₂ pigment production capacity is produced using the chloride process and approximately 13% of our TiO₂ production capacity is produced using the sulfate process.

We use the sulfate process at our manufacturing facility in Thann, France to produce ultrafine TiO₂ products.

In the chloride process, feedstock (slag, synthetic rutile, natural rutile or ilmenite ores) are reacted with chlorine (the chlorination step) and carbon to form TiCl₄ in a continuous fluid bed reactor. Purification of TiCl₄ to remove impurities is accomplished using selective condensation and distillation processes. The purified TiCl₄ 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 TiO₂ are removed during the process. The chloride process currently accounts for substantially all of the industry-wide TiO₂ 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 TiO₂. The product is then further finished in a similar way to TiO₂ produced through the chloride process.

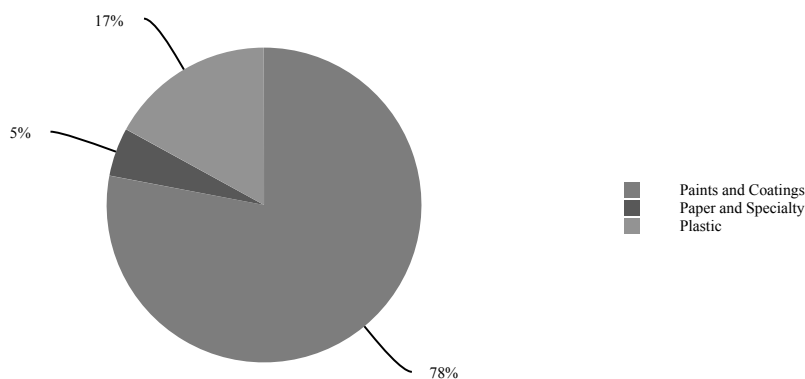
Commercial production of TiO₂ pigment results in one of two different crystal forms: rutile, which is manufactured using either the chloride process or the sulfate process, or anatase, which is only produced using the sulfate process. Rutile TiO₂ is preferred over anatase TiO₂ for many of the largest 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.

The primary raw materials used in the production of chloride TiO₂ 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 TiO₂ 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 TiO₂

We supply and market TiO₂ 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 TiO₂, and we have supplied each of our top ten customers with TiO₂ for more than 10 years. We have implemented a margin stabilization program which we believe provides relative certainty over availability of product and price stability to customers who choose to participate, and have also 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 TiO₂ marketing and sales strategy, enabling us to focus on predictability and reliability of TiO₂ delivery across the supply and demand cycle.

The following sets forth the percentage of our TiO₂ sales volume by end-use market for the year ended December 31, 2023:



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 TiO₂ 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 TiO₂ Pigment

The global market in which our TiO₂ 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, Kronos Worldwide Inc., INEOS, and Venator. 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. The majority of scientists supporting our TiO₂ pigment product development and testing are located in Oklahoma City, Oklahoma, USA and Stallingborough, UK, while the majority of scientists supporting our TiO₂ ultrafine specialty business are located in Thann, France. In addition, the research and development personnel relating to our mineral sands operations are located in Australia and South Africa. Our research and development initiatives for concentration and separation of REOs is centered in Perth, Australia.

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. Process technology research also pertains to concentration and separation of monazite into neodymium (Nd), praseodymium (Pr), terbium (Tb), and dysprosium (Dy), the types of REOs that are most in demand for EV and wind turbine applications.

Product development activities in paints and coatings were focused on product stewardship and sustainability improvements of the product line. Critical development efforts to address the changing regulatory environment were a key focus during 2023

extending across nearly all of the Company's products and applications. In order to enhance production flexibility, the Company continued to focus on technology transfer activities, including further expanding the product offerings at the Yanbu TiO₂ production facility and creating options for the décor paper market in Europe. Moreover, specialty product development in plastics remains a primary objective, which along with an increased emphasis in higher volume plastics applications, are expected to drive further growth in these segments in the coming years. In line with Tronox's sustainability goals, the Company's process and product development teams continue to collaborate on more sustainable, lower carbon footprint technologies for all end use segments. In addition, the development of key competencies to support the rare earth initiatives continued to gain momentum. With regard to our TiO₂ ultrafine specialty business, research and development activities are focused on a broad array of areas including direct lithium extraction, battery components, carbon capture and developing more effective materials for use in environmental catalysis.

Patents, Trademarks, Trade Secrets and Other Intellectual Property Rights

Protection of our proprietary intellectual property is important to our business. At December 31, 2023, we held 90 patents and 6 patent applications in the U.S., and approximately 600 in foreign counterparts, including both issued patents and pending patent applications. Our U.S. patents have expiration dates ranging through 2043. Additionally, we have 11 trademark registrations in the U.S. and 3 trademark applications in the U.S., as well as 312 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 TiO₂ 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, 2023, 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 TiO₂ 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 2023, we created and launched a cultural awareness program in which employees were invited to attend panel-style webinars to learn more about the cultures of the countries where we operate. In addition, in 2023, our D&I regional chapters focused on implementing global initiatives around cultural awareness and young talent programs. Our young talent program was launched in all regions, providing opportunities for new talent to network and learn about other areas of the business.

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 2023, our employees worked more than 12 million hours with 29 recordable injuries and no fatalities from our operations, and our contractors worked more than 9 million hours with 17 recordable injuries and one fatality from our operations.

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. To this end, in 2023, we completed a global organization culture survey. As a result of such survey, we gained further insight of the performance measures that link our culture to high performance. We believe we can have the most success fostering a high performance culture by setting high expectations for each other and modelling ways of work done well, enrolling our people into fulfilling our vision and strategy, and investing the success and fulfillment of our people.

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

At Tronox we lead with safety. To ensure we live this value with impact, a key focus of our strategy is to enhance the leadership capabilities of our workforce. In 2021, we launched a program in which approximately 100 of our leaders were trained in contemporary safety leadership practices. Further in 2022, an additional 350 supervisors and managers across all of our operating regions completed this hands-on leadership training. And in 2023, we provided such training to more of our regional leaders as well as continuing to educate the broader workforce.

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 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 TiO₂ 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. 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.

Our sustainability efforts are also focused on reducing Tronox's carbon footprint. In 2022 we updated our carbon reduction roadmap first disclosed in 2021 that details our plans for reducing carbon emissions in the short-, medium- and long-term. Our roadmap covers 100% of our operations and is based on a detailed analysis of our carbon footprint and ways to reduce it. The roadmap is supported by well-resourced projects and initiatives. The majority of our greenhouse gas ("GHG") emissions are generated from our TiO₂ slag furnaces in South Africa, synthetic rutile kiln in Western Australia, and TiO₂ pigment plants in the United States, United Kingdom, France, Brazil, China, Netherlands, Australia, and Saudi Arabia.

In March 2022 we announced a 200 MW solar energy project in South Africa that was expected to reduce our global Scope 1 and 2 emissions by approximately 13% commencing in the first quarter 2024. As of the date hereof, we currently expect this solar energy project to be fully on-line during the first-half of 2024. We believe this project will be among South Africa's first large-scale renewable energy projects since deregulation of the private electricity market in February 2022. In addition, during 2024, we anticipate announcing a second large renewable energy project in South Africa. When we set our 2025 carbon reduction target of 35% we anticipated that this project would be on-line during 2025; however, the timeline for this second renewable energy project has been delayed by factors beyond the Company's control. We anticipate the timeline to achieve the 35% emissions intensity reduction by 2025 will be updated to reflect our latest views on various project timelines. It remains our long-term goal to achieve "net zero" carbon emissions by 2050. We believe the Company's dedication to these significant renewable energy projects are just two examples of how Tronox is committed to being a leader when it comes to corporate sustainability and protection of the environment.

In 2023, we received a Gold Rating by EcoVadis in recognition of our sustainability efforts. This Gold Rating places Tronox in the Top 5% of the 85,000 companies evaluated around the world by EcoVadis on their sustainability performance. The EcoVadis assessment focuses on four themes: the environment, labor and human rights, ethics, and sustainable procurement.

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. For additional information on this topic, see section entitled "Risk Factors - Risks Relating to our Legal and Regulatory Environment - Our TiO₂ products are subject to increased regulatory scrutiny that may impede or inhibit widespread usage of TiO₂ and / or diminish the Company's ability to sustain or grow its business or may add significant costs of doing business."

Globally, our operations are subject to regulations that seek to reduce emissions of 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

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 and 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 and 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 and 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 TiO₂ 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 TiO₂ 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 economic downturn in China could result in reduced zircon and TiO₂ demand in China which could have a material adverse effect on our business and financial results.

The price of our products, in particular, TiO₂, 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 TiO₂, zircon and pig iron have been volatile, and those markets are likely to remain volatile in the future. Prices for TiO₂, 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 TiO₂ 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;
- political conditions or hostilities and unrest in regions where we manufacture and/or export our TiO₂, zircon and feedstock/other products; and
- major public health issues, such as COVID-19, which could cause, among other things, macroeconomic disruptions.

Pricing pressure with respect to our TiO₂ 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.

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 TiO₂ 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, especially producers in China. Chinese producers have significantly expanded their TiO₂ production capacity in recent years and the volume of their exports, including via chloride technology, as well as have publicly announced their intention to continue to expand their TiO₂ production capacity and aggressive exports efforts. We regard their product quality and technology as substantially on par with non-Chinese producers, particularly with respect to their chloride TiO₂. Moreover, the increased Chinese TiO₂ production capacity, along with the current economic downturn in China, is resulting in increasing quantities of TiO₂ being exported to other regions of the world in which we compete. Currently, the United States government, pursuant to Section 301 of the Trade Act of 1974, has imposed a 25% duty on TiO₂ products imported into the United States from China. Although we expect such 25% duty to continue to be imposed, there is no assurance that it will not be removed in the future. Any removal of the existing duty could cause additional imports of Chinese-produced TiO₂ into the U.S. which may impact our business, financial condition and results of operations. In addition, in November 2023, the European Commission officially initiated an anti-dumping proceeding to investigate whether imports of TiO₂ from China have been dumped into the European Union market and whether they have caused material injury to the EU TiO₂ industry. We understand that the investigative process typically takes 12-14 months and there is no assurance that the outcome will result in duties being imposed on TiO₂ imports from China.

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, payment terms and consistency of supply. Moreover, the increased Chinese zircon production capacity, along with the current economic downturn in China, is resulting in increasing quantities of zircon being exported to other regions of the world in which we compete.

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 TiO₂ via chloride technology by Chinese producers, greater acceptance of TiO₂ produced via sulfate technology in end-market applications previously characterized by TiO₂ 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 and 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 TiO₂ manufacturing and mining operations form an important part of our TiO₂ 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. Moreover, the ongoing Russia and Ukraine conflict has resulted in, and may continue to result in, increased uncertainty with respect to the supply of energy and other energy-dependent commodities for our TiO₂ production facilities located in the European Union and the United Kingdom, as well as other raw materials, such as anthracite, for our slag furnaces located in South Africa. Increased costs of electricity and disruptions in the supply of electricity due to long-standing operational issues at the sole, state-owned energy supplier in the Republic of South Africa, Eskom, could increase the costs of production, or disrupt operations, at our mines and beneficiation operations in that country. 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. In addition, due to our global footprint and reliance on key raw materials from around the world, we are particularly reliant on shipping vessels to transport such raw materials as well as our finished goods. As a result of the current Middle East conflict, there is increasing pressure on shipping vessels to potentially avoid key shipping routes through the Red Sea and the Suez Canal which could result in a reduction of available shipping vessels and/or increased shipping costs. As the costs of raw materials, utilities, transportation and similar costs rise, our operating expenses will increase and could adversely affect our business, especially if we are unable to pass price increases relating to raw materials, utilities, transportation and similar costs 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. TiO₂ 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 TiO₂.

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, certain of our production facilities and mining operations are situated in remote locations which may make it more difficult to attract and retain the skilled workers required. 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.

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

Our business is exposed to, among other things, 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 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. For instance, in 2023, as a result of a fire at the supplier of 100% of our Botlek, Netherlands TiO₂ pigment plant's steam needs, such plant was forced to be taken offline for several months which impacted our 2023 financial

results. If any of the equipment on which we depend were severely damaged or were destroyed by fire 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 and 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 be periodically maintained and upgraded in order to avoid suffering unanticipated breakdowns or failures. The occurrence of equipment failures or deterioration of assets 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. 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 business including, but not limited to, 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, during the normal course of business, we have been the target of cyberattacks, including phishing or ransomware attacks, from time to time, and we expect to be the target of such cyberattacks in the future. 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 and 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 TiO₂ 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.

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 TiO₂ or zircon content in consumer products which in turn could depress the demand and pricing for TiO₂ 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.

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, such as COVID-19, which could cause, and have caused, disruptions in our operations or workforce;
- war, political conditions, hostilities, including, but not limited to, the ongoing Russia and Ukraine and Middle East conflicts, 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, including as a result of climate-related events.

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 and results of operations.

Our operations in South Africa are 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 from where we export bulk quantities of TiO₂ feedstock to our pigment plants worldwide and pig iron. Like Eskom, Transnet faces chronic operational and financial challenges. In 2021, Port of Richards Bay, which is owned and operated by Transnet, was impacted by two separate events, including a significant fire, which damaged part of the Port's infrastructure, causing increased shipment delays. Such shipment delays at the

port of Richards Bay continued in 2022 and 2023, and we believe such delays may continue in 2024 and beyond. 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.

In addition, our KZN Sands operations currently use approximately 280,000 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 and 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.

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 and 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 and results of operations.

The South 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 and 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.

In addition, 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. In addition, the physical security situation continues to deteriorate and we have been the victim of immaterial theft and are aware that other industrial mining operations near ours are frequently the target of sophisticated mineral syndicates capable of stealing industrial minerals on a relatively large scale. Increased volatility, related civil unrest and further deterioration in the security situation may result in

production stoppages and/or the destruction and theft of assets, any of which could have a material adverse effect on our business, financial condition and results of operations.

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 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, and are currently witnessing, 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, there has recently been an increasing number of attacks on commercial shipping vessels in and around the Red Sea which could ultimately impact the availability of shipping routes and/or ocean freight, as well as increase the shipping costs, for raw material to our Yanbu pigment plant as well as TiO₂ exports out of our Yanbu plant. Specifically, 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 TiO₂ plant located in Yanbu could be temporarily disrupted or materially adversely affected and our business and operating results could be materially adversely affected.

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, 2023, our total principal amount of debt was approximately \$2.8 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, for a variety of purposes, including (i) replacement of mines that are end of life, (ii) expansion or optimization of existing production facilities or mining operations, (iii) ongoing research and development activities, (iv) business development opportunities in rare earth or other critical minerals, and (v) general working capital needs. For instance, in 2020 we began the implementation of a multi-year global business transformation that includes the acquisition and implementation of new operational and financial systems, technology and processes, including a global ERP system. The implementation of our business transformation involves numerous risks, including (i) new information and operational technologies and systems not being properly designed, integrated, managed and implemented or a delay in such implementation, (ii) diversion of management's attention away from normal daily business operations, (iii) significant or material weaknesses in our financial controls or delays in timely reporting our results of operations, and (iv) initial dependence on unfamiliar systems while training personnel to use new systems. Such risks could significantly increase the program's costs, cause us to fail to achieve the anticipated benefits from the program, 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, 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. Although the DMRE determined not to appeal such ruling, 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 Resources Limited ("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 and 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 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 TiO₂ products are subject to increased regulatory scrutiny, that may impede or inhibit widespread usage of TiO₂ 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 TiO₂ 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 TiO₂ 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, in 2020, the European Commission adopted a regulation classifying certain forms of TiO₂ with a particular aerodynamic diameter as a Category 2 carcinogen by inhalation. However, in November 2022, the European Court of Justice annulled the European Commission's classification of TiO₂ as a carcinogen primarily on the basis that there was no evidence that TiO₂ may cause cancer when inhaled. The European Commission is currently appealing such decision. In the event that the European Commission's appeal is ultimately successful, the classification of TiO₂ as a Category 2 Carcinogen could impact our business by inhibiting the marketing of products containing TiO₂ to consumers, and subject our manufacturing operations to new regulations that could increase costs. In addition, notwithstanding the European Court of Justice decision, the proposed 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 TiO₂ as a suspected carcinogen (in a powder form containing 1% or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$). 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 TiO₂ 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 TiO₂ 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 TiO₂ products could also be subject to increased regulation which could impact the cost of labelling or the sales of our products. For instance, certain of our plastic grades are used in food contact materials and in October 2022, the European Commission launched a public consultation aiming to revise the European Union regulations on food contact materials. While the outcome of such consultation remains uncertain, any additional regulatory requirements on the use of food contact materials ultimately imposed by the European Commission could have a material adverse effect on our business, financial condition and results of operations.

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.

Climate change resulting from increased concentrations of carbon dioxide and other greenhouse gases in the atmosphere could present risks to our present and future operations from natural disasters and extreme weather conditions, such as flooding, hurricanes, earthquakes and wildfires. Such extreme weather conditions could pose physical risks to our facilities and disrupt the operation of our supply chain, increase operational costs and have a material adverse effect on our business and results of operations. In addition, if any of the equipment on which we depend were severely damaged or were destroyed by environmental hazards 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. For instance, in the fourth quarter of 2022, the region of New South Wales, Australia where our Eastern Operations mining operations are located experienced historic flooding which resulted in, among other things, a delay in the commissioning of our new Atlas Campaspe mine as well as prevented feedstock mined at such sites from being transported to our Australian pigment plants in a timely manner. Such flooding had an adverse effect on our business, financial condition and results of operations in 2022 and 2023. Moreover, the impacts of climate change on global water resources may result in water scarcity, which could impact our ability to access sufficient quantities of water in certain locations and result in increased costs. For instance, we use significant amounts of water in our South Africa operations. 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. 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 and results of operations.

The majority of our greenhouse gas emissions are generated from our TiO₂ slag furnaces in South Africa, synthetic rutile kiln in Australia, and TiO₂ 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 including potentially causing the operation or maintenance of certain sites to be uneconomical, 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.

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 18 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.

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 \$646 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 all of the jurisdictions in which we operate. Our future effective tax rate could be affected by, among other things, changes in statutory rates and other legislative changes, or changes in determinations regarding the jurisdictions in which we are subject to tax or changes in the valuation of our deferred tax assets and liabilities. 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 shareholder 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 TiO₂ 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 inability to complete strategic projects on budget or on schedule, 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, 2023, Cristal International Holdings B.V. (formerly known as Cristal Inorganic Chemical Netherlands Cooperatief W.A.), an affiliate of the National Titanium Dioxide Company Limited ("Cristal"), owned approximately 24% of our outstanding ordinary shares. As such, Cristal International 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 International may not always coincide with our interests or the interests of our other shareholders. Also, Cristal International 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 International 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 would cover shares owned by Cristal.

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 from May 3, 2023 through the end of the Company's 2024 annual general meeting of shareholder, or if earlier, the close of business on the date that is fifteen (15) months after May 3, 2023.

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 from May 3, 2023 through the end of the Company's 2024 annual general meeting of shareholder, or if earlier, the close of business on the date that is fifteen (15) months of May 3, 2023.

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 from May 3, 2023 through the end of the Company's 2024 annual general meeting of shareholder, or if earlier, the close of business on the date that is fifteen (15) months after May 3, 2023.

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 depositary specified by us so that SDRT may be collected in connection with the initial delivery to the depositary. Any such ordinary shares will be evidenced by a receipt issued by the depositary. Before the transfer can be registered in our books, the transferor will also be required to put the depositary 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

None.

Item 1C. Cybersecurity

Risk Management and Strategy

As part of our overall risk management system we maintain comprehensive policies and processes for assessing, identifying and managing material risks from cybersecurity threats, including risks relating to production, safety, reputation, intellectual property, procurement and business continuity. Cybersecurity risk management is included as part of our overall annual Enterprise Risk Management program. As part of this program, our enterprise risk professionals consult with internal cybersecurity subject matter experts to identify cyber risks and evaluate their severity and the efficacy of our mitigation efforts, with the results being reported to the executive leadership team and the Board of Directors.

Our cybersecurity risk management processes and policies include the following:

- We seek to deploy best practice cybersecurity standards promulgated by the National Institute of Standards and Technology Cybersecurity (NIST), the International Organization for Standardization and the Center for Internet Security.
- We employ a dedicated cybersecurity team who routinely conduct specific risk assessments and endeavor to mitigate identified risks. This team is responsible for implementing measures to detect, prevent and respond to threats and malicious activity. We also maintain a Security Operations Center (SOC) that provides a mechanism for addressing cyberthreats before they compromise data security.

- The cybersecurity team operates, maintains and monitors an integrated eco-system of security tools designed to detect, prevent and respond to threats and malicious activity. These tools include, but are not limited to, next generation firewalls, anti-malware, IPS / IDS, end point protection, encryption, email and cloud app security, privileged access management, vulnerability scanning / patching. These are a blend of on-premise, cloud and network hosted tools. Monitoring activities include threat hunting and use of multiple intelligence sources to manage and respond to events.
- Access to information is subject to authorization, review, classification and substantially controlled through multi-factor authentication.
- All employees and contractors who are issued a Tronox user account for our IT system must complete and pass cybersecurity training before being provided full system access.
- All employees and contractors with access to our IT systems must complete and pass a mandatory annual cybersecurity awareness training and acknowledgement of Tronox's Acceptable Use Policy. Failure to complete the training successfully may result in further system access restrictions and HR escalation.
- We periodically orchestrate simulated phishing attacks on all IT system users and those who fall victim to the simulated attacks are required to take additional mandatory cybersecurity training.
- To reduce the risk of phishing attacks, we have identified groups of Tronox employees and contractors who do not require access to external emails in order to perform their work responsibilities and begun a process of blocking their external emails.
- We have a written Incident Response Plan that encompasses a range of activities to detect, respond to and recover from cybersecurity incidents, including compliance with applicable legal obligations and mitigation damage.
- We work closely with a number of regional and international bodies from which we draw intelligence and contribute to cybersecurity initiatives such as incident simulation exercises and development working groups.
- We regularly evaluate the appropriateness of cyber insurance coverage in light of the cyber risks we face and we do not currently carry cyber insurance.

Additionally, in connection with our cybersecurity risk management processes, we engage third-party subject matter experts to supplement our dedicated internal resources and to provide independent review of the Tronox-specific threat landscape as well as our mitigation efforts to counter known threats. These activities include:

- External penetration testing by certified third parties.
- Independent review of the Tronox Information Security Management System (ISMS).
- Participating in industry and government cyber incident exercises run by the National Cyber Security Center (UK Security Services).
- Utilizing a third party (KnowBe4) for the cybersecurity training and phishing tests described above.
- Regularly engaging with statutory auditors in support of specific activities such as SOX 404 audits.
- Engaging outside counsel with expertise in the field to advise on critical IT contracts as well as reporting and disclosure requirements.

Our cybersecurity risk management policies and processes extend to cyber risks posed by our third-party service providers. To manage that risk we have implemented a process to identify critical vendors and perform a reasonable level of due diligence on the adequacy of their cybersecurity policies, processes and capabilities.

Our business strategy, results of operations and financial condition have not been materially affected by risks from cybersecurity threats, including as a result of previous cybersecurity incidents, but we cannot provide assurance that they will not be materially affected in the future by such risks and any future material incidents. Like most major corporations we have been the target of cyberattacks from time to time and we expect to be the target of such attacks in the future. In the past three years, however, we have not experienced a material information security breach. As such, we have not incurred any material expenses from cybersecurity breaches or any expenses from fines, penalties or settlements related to a cybersecurity breach. See "Risk Factors" in Item 1A of this Annual Report on Form 10-K for more information on risks from cybersecurity threats that are reasonably likely to materially affect our business strategy, results of operations and financial condition.

Governance

Our entire Board of Directors provides oversight of the Company's cybersecurity policies, processes and capabilities as part of their overall oversight of risk management. Once a year, our Vice President, Cyber Security reports to the Audit Committee providing a detailed update on the threat landscape, emerging trends and the Company's mitigation efforts. This report also includes Tronox's performance as measured by the NIST Cybersecurity Framework Scorecard. As needed on a periodic basis, our Vice President, Cyber Security updates the Audit Committee on specific cybersecurity events and newly emerging risks and the actions taken by the Company in response to those events and risks. The Audit Committee updates the full board on these matters as necessary. The full Board reviews and assesses cybersecurity risks in connection with its annual Enterprise Risk Management review.

In 2020, Tronox established an IT Security Council to help set corporate risk tolerance and related policy. The council meets quarterly, is chaired by the General Counsel and managed by our Vice President, Cyber Security with senior level representation from key functions and business units. On an annual basis, the Tronox Cybersecurity team reviews and updates the core governance documents, including the Acceptable Use Policy, the Information Security Policy, and the Incident Response Plan. These are then subject to review and approval by the Tronox Security Council with a summary provided to the Audit Committee as a component of the annual cybersecurity Enterprise Risk Management.

Day to day cybersecurity risk oversight governance is the responsibility of our Vice President, Cyber Security who has been with Tronox since 2017 and reports to our Senior Vice President, Integrated Supply Chain and Digital Transformation. Tronox's Vice President, Cyber Security has over 30 years of IT experience, 20 years of security experience and was awarded a Member of the British Empire honor with respect to his work in the field. Previous roles include Interim Chief Information Security Office for Pacnet (Hong Kong) and Director of Security for Level 3 Communications along with multiple engagements for the UK government. He oversees a dedicated security team distributed globally with more than 15 members and over 100 years of aggregate cyber security experience.

Item 2. Properties

SUMMARY DISCLOSURE

Below are our primary offices and facilities at December 31, 2023. We believe our properties are in good operating condition, and are well maintained. Pursuant to separate financing agreements, substantially all 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 TiO₂ pigment. We produce the majority of our internal TiO₂ 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 TiO₂ feedstock materials (titanium slag and synthetic rutile) and nine TiO₂ pigment production facilities located on six continents. The internal TiO₂ feedstocks we produce include titanium slag, synthetic rutile, natural rutile, leucoxene, chloride ilmenite and sulfate ilmenite.

As part of our TiO₂ 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 TiO₂ pigment production facilities. Depending on the TiO₂ content of mined ilmenite, we either use it directly to produce TiO₂ 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 TiO₂ 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 TiO₂ content and supply and demand balances, but also particle size, trace element geochemistry, logistics and other factors. The global TiO₂ industry is a value-added supply chain, with final product prices for TiO₂ 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 2023, 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 TiO₂ pigment plants at Kwinana and Kemerton, both of which are south of Perth in Western Australia.

Mining Operations

Tronox owns and operates six 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 TiO₂ 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 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 MSP 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 includes one operating dredge mine at Ginkgo which is supplemented by a dry open pit mine at Crayfish, a dry open pit mine at Atlas Campaspe and a mineral separation plant at Broken Hill, NSW. The Snapper mine ceased production in April 2022 after 12 years of production. The Ginkgo and Crayfish mines are expected to be mined until mid-2024. Construction at Atlas commenced in 2022 and ramped up to full production in the first quarter of 2023. The Atlas Campaspe 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.

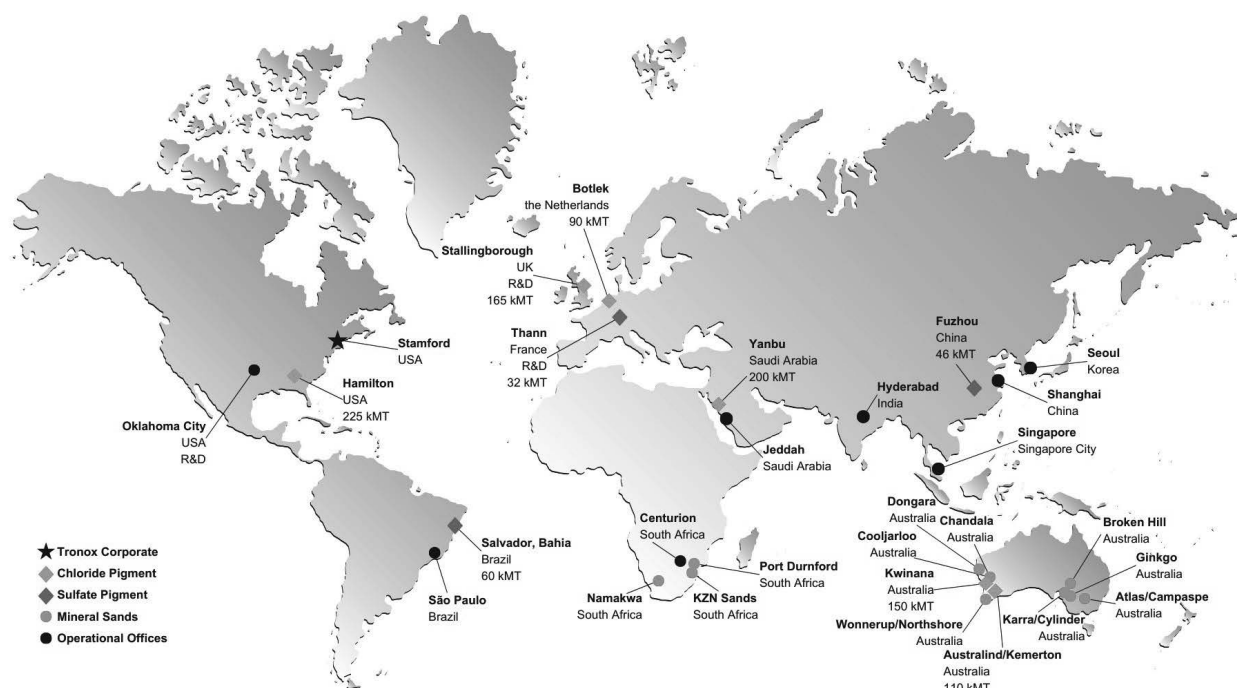


Figure 1 Showing global site and offices including locations with resources and reserves.

Pigment Operations

Our pigment production facilities utilize the titanium mineral feedstock from our mining and processing operations to produce TiO_2 pigment products. The following table lists our TiO_2 pigment production facilities and capacity (in metric tonnes per year), by location:

Facility	Production	TiO_2 Capacity	Process
Hamilton, Mississippi, USA	TiO_2	225,000	Chloride
Yanbu, Saudi Arabia	TiO_2	200,000	Chloride
Stallingborough, England, United Kingdom	TiO_2	165,000	Chloride
Kwinana, Western Australia	TiO_2	150,000	Chloride
Kemerton, Western Australia	TiO_2	110,000	Chloride
Botlek, the Netherlands	TiO_2	90,000	Chloride
Salvador, Bahia, Brazil	TiO_2	60,000	Sulfate
Fuzhou, Jiangxi Province, China	TiO_2	46,000	Sulfate
Thann, Alsace, France	TiO_2	32,000	Sulfate

Aggregate Annual Production

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

Product	2023	2022	2021
Rutile⁽¹⁾			
<i>Australia</i>			
Cooljarloo	15,453	18,850	25,519
Atlas-Campaspe	61,576	—	—
<i>South Africa</i>			
Namakwa Sands	27,929	31,304	28,994
KZN Sands	18,427	16,326	21,478
<i>All Other Properties</i>	29,154	92,644	65,603
Total	152,539	159,124	141,594
Ilmenite⁽²⁾			
<i>Australia</i>			
Cooljarloo	126,675	143,049	185,481
Atlas-Campaspe	172,079	—	—
<i>South Africa</i>			
Namakwa Sands	532,538	567,050	408,471
KZN Sands	318,771	290,407	429,271
<i>All Other Properties</i>	94,649	155,593	167,758
Total	1,244,712	1,156,099	1,190,981
Zircon⁽³⁾			
<i>Australia</i>			
Cooljarloo	18,995	21,694	27,490
Atlas-Campaspe	25,763	—	—
<i>South Africa</i>			
Namakwa Sands	89,803	107,967	112,844
KZN Sands	30,974	31,839	40,368
<i>All Other Properties</i>	14,376	38,233	39,123
Total	179,911	199,733	219,825
HMC⁽⁴⁾			
<i>Australia</i>			
Cooljarloo	231,969	265,982	316,942
Atlas-Campaspe	398,607	—	—
<i>South Africa</i>			
Namakwa Sands	2,350,156	1,576,618	1,663,243
KZN Sands	509,778	429,521	498,502
<i>All Other Properties</i>	202,249	321,902	436,146
Total	3,692,759	2,594,023	2,914,833

(1) includes natural rutile + leucoxene

(2) includes multiple grades of TiO₂ grades of ilmenite

(3) includes multiple grades of zircon

(4) HMC = Heavy Mineral Concentrate

Mineral Properties

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.

Tronox holds mining and exploration licenses totaling 533,500 hectares (1,318,307 acres) in the South Perth Basin and Murray Basin heavy mineral provinces of Australia.

The Southern Operations in the southwest of Western Australia comprises 29 mining leases, 3 exploration licenses, 3 retention licenses, 2 general purpose leases and 2 miscellaneous licenses totaling 9,100 hectares.

Tronox holds 5 mining leases, 16 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 Ginkgo, Crayfish and rehabilitation site at Snapper. 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/cm³). 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 VHM. Typical VHM assemblages include the titanium-iron oxide mineral, ilmenite (FeTiO₃); rutile, a premium TiO₂ feedstock mineral; leucoxene, a natural alteration product of weathered ilmenite; and zircon, a zirconium silicate (ZrSiO₄) 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.

Reporting of Reserves and Resources

The following tables summarize our reserves and resources as well as their contained in situ total heavy minerals (THM) and heavy mineral (HM) assemblages as of December 31, 2023 based on long-term price assumptions. The sole purpose of the operational and related financial data presented is to demonstrate the economic feasibility of the mineral reserves for the purpose of reporting in accordance with subpart 1300 of Regulation S-K, and should not be used for other purposes. The information presented originates from comprehensive techno-economic modelling, which is subject to change as assumptions and inputs are updated, and as a result does not guarantee future operational or financial performance. Consistent with industry standards, Tronox values its mineral reserves based on the prices at which its titanium and zircon mineral products would sell on freely traded markets, as forecasted by third-party industry consultancies.

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.

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, certain of which are set forth below the following tables. 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 following tables have been determined to be economically- exploitable by individuals

competent and qualified to act under the new disclosure requirements as “Qualified Persons.” Each of the Qualified Persons is an employee of an indirect, wholly owned subsidiary of the Company.

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 decrease in resources at all operating sites in 2023 as compared to 2022 is primarily attributed to mining depletion. In addition, as of December 31, 2023 the remaining resources for Crayfish, Ginkgo and Wonnerup were removed from the resources table because they were considered unlikely to ever be economically viable due to their being either too low in grade, too deeply buried, sterilized by previous mining operations or located within environmentally sensitive locations.

The decrease in reserves at all operating sites in 2023 as compared to 2022 is primarily attributed to mining depletion. In July 2023, mining ceased at Crayfish due to poor project economics. The remaining Crayfish material was removed from reserves.

TRONOX MINERAL SANDS - 2023-2022 RESOURCES⁽¹⁾

MINE / DEPOSIT	Resource Category	Material (million tonnes)	HM%	2023			Change (+/-) from 2022 (%) ¹	Material (million tonnes)	HM%	2022		
				Mineral Assemblage (% of THM)						Mineral Assemblage (% of THM)		
				Ilmenite	Rutile and Leucoxene	Zircon				Ilmenite	Rutile and Leucoxene	Zircon
Namakwa Sands Dry Mine - Western Cape RSA⁽²⁾												
	Measured	112	7.0 %	32.6	6.1	7.8		104	8.0 %	30.2	5.9	6.9
	Indicated	84	6.5 %	28.3	5.6	6.9		86	6.5 %	28.3	5.6	6.9
	Measured + Indicated	196	6.7 %	30.8	5.9	7.4		190	7.3 %	29.3	5.8	6.9
	Inferred	110	5.5 %	35.1	8.1	6.6		110	5.5 %	35.1	8.1	6.6
	Total	306	6.3 %	32.3	6.7	7.1	2.0	300	6.7 %	31.4	6.6	6.7
KZN Sands Hydraulic Mine - KwaZulu-Natal RSA⁽³⁾												
	Measured	38	4.1 %	63.5	9.4	7.7		48	4.2 %	64.3	8.1	7.7
	Indicated	—	— %	—	—	—		1	2.0 %	53.5	7.0	7.5
	Measured + Indicated	38	4.1 %	63.5	9.4	7.7		49	4.1 %	64.1	8.1	7.6
	Inferred	55	3.4 %	54.6	7.1	7.1		56	3.4 %	54.6	6.9	7.1
	Total	93	3.7 %	58.2	8.0	7.4	(11.4)	105	3.7 %	59.1	7.4	7.3
Cooljarloo – Dredge Mine - Western Australia⁽⁴⁾												
	Measured	1	0.9 %	54.9	7.2	9.3		10	1.6 %	59.3	7.7	9.8
	Indicated	282	1.5 %	61.3	6.7	10.5		282	1.5 %	61.4	6.7	10.5
	Measured + Indicated	283	1.5 %	61.3	6.7	10.5		292	1.5 %	61.3	6.8	10.4
	Inferred	12	2.9 %	58.0	7.3	9.0		12	2.9 %	58.0	7.3	9.0
	Total	295	1.6 %	61.2	6.8	10.4	(2.9)	304	1.6 %	61.1	6.8	10.4
Dongara Planned Dry Mine - Western Australia⁽⁵⁾												
	Measured	109	4.1 %	50.2	9.0	10.8		109	4.1 %	50.2	9.0	10.8
	Indicated	31	3.5 %	53.7	9.1	12.4		31	3.5 %	53.7	9.1	12.4
	Measured + Indicated	140	3.9 %	52.0	9.1	11.6		140	3.9 %	52.0	9.1	11.6
	Inferred	46	3.7 %	56.1	8.9	9.2		46	3.7 %	56.1	8.9	9.2
	Total	186	3.9 %	52.1	9.0	10.7	0.0	186	3.9 %	52.1	9.0	10.7
Atlas-Campaspe Dry Mine - New South Wales Australia⁽⁶⁾												
	Measured	27	2.5 %	58.8	10.9	11.7		27	2.5 %	58.8	10.9	11.7

Indicated	—	— %	—	—	—	—	—	— %	—	—	—
Measured + Indicated	27	2.5 %	58.8	10.9	11.7		27	2.5 %	58.8	10.9	11.7
Inferred	83	3.1 %	60.1	5.8	13.1		83	3.1 %	60.1	5.8	13.1
Total	110	3.0 %	59.8	6.9	12.8	0.0	110	3.0 %	59.8	6.9	12.8
Port Durnford - KwaZulu-Natal RSA⁽⁷⁾											
Measured	143	4.5 %	67.6	6.0	9.3		143	4.5 %	67.6	6.0	9.3
Indicated	340	4.1 %	67.4	6.1	9.3		340	4.1 %	67.4	6.1	9.3
Measured + Indicated	483	4.2 %	67.5	6.1	9.3		483	4.2 %	67.5	6.1	9.3
Inferred	466	3.5 %	71.8	6.3	10.0		466	3.5 %	71.8	6.3	10.0
Total	949	3.9 %	69.4	6.2	9.6	0.0	949	3.9 %	69.4	6.2	9.6
Wonnerup Dry Mine - Western Australia⁽⁸⁾											
Measured	—	— %	—	—	—		13	4.6 %	77.5	12.0	8.8
Indicated	—	— %	—	—	—		6	4.8 %	86.9	3.3	7.6
Measured + Indicated	—	— %	—	—	—		19	4.6 %	80.5	9.2	8.4
Inferred	—	— %	—	—	—		3	4.4 %	84.0	4.0	8.3
Total	—	— %	—	—	—	(100.0)	22	4.6 %	81.0	8.5	8.4
Ginkgo-Crayfish Dredge/ Dry Mines - New South Wales Australia⁽⁹⁾											
Measured	—	— %	—	—	—		78	1.3 %	47.9	18.2	12.4
Indicated	—	— %	—	—	—		—	— %	—	—	—
Measured + Indicated	—	— %	—	—	—		78	1.3 %	47.9	18.2	12.4
Inferred	—	— %	—	—	—		59	1.1 %	47.9	17.9	13.0
Total	—	— %	—	—	—	(100.0)	137	1.2 %	47.9	18.1	12.6
Kara/Cylinder - New South Wales Australia⁽¹⁰⁾											
Measured	—	— %	—	—	—		—	— %	—	—	—
Indicated	165	4.4 %	49.4	12.9	12.0		165	4.4 %	49.4	12.9	12.0
Measured + Indicated	165	4.4 %	49.4	12.9	12.0		165	4.4 %	49.4	12.9	12.0
Inferred	26	2.8 %	51.1	19.6	14.3		26	2.8 %	54.4	24.4	14.2
Total	191	4.1 %	49.5	13.5	12.2	0.0	191	4.1 %	49.8	13.9	12.2
Total Resources											
Measured	430	4.9 %	50.2	7.1	9.0		532	4.4 %	49.9	7.5	8.8
Indicated	902	3.5 %	55.4	7.7	9.8		911	3.6 %	55.6	7.7	9.7
Measured + Indicated	1,332	4.0 %	53.3	7.5	9.5		1,443	3.9 %	53.2	7.6	9.3
Inferred	798	3.7 %	60.6	7.1	9.4		861	3.5 %	60.6	7.5	9.5
Total	2,130	3.9 %	56.0	7.4	9.4	(7.6)	2,304	3.8 %	55.8	7.6	9.4

(See footnotes below the following table.)

TRONOX MINERAL SANDS - 2023-2022 RESERVES

MINE / DEPOSIT	Reserve Category	Material (million tonnes)	2023				Change (+/-) from 2022 (%) ¹	Material (million tonnes)	2022			
			Mineral Assemblage (% of THM)						Mineral Assemblage (% of THM)			
			HM%	Ilmenite	Rutile and Leucoxene	Zircon			HM%	Ilmenite	Rutile and Leucoxene	Zircon
Namakwa Sands Dry Mine - Western Cape RSA⁽²⁾												
	Proven	121	7.2 %	37.8	8.8	9.1	136	7.4 %	37.6	8.7	9.0	
	Probable	545	5.7 %	51.6	10.7	10.8	551	5.4 %	53.8	11.2	11.4	
	Total Reserves	666	5.9 %	48.6	10.3	10.5	(3.0)	687	5.8 %	49.7	10.6 10.8	
KZN Sands Hydraulic Mine KwaZulu-Natal RSA⁽³⁾												
	Proven	187	5.6 %	61.3	7.6	7.5	198	5.6 %	61.7	7.4	7.6	
	Probable	15	3.9 %	54.8	5.6	7.3	11	3.7 %	51.8	5.0	7.0	
	Total Reserves	202	5.5 %	61.0	7.5	7.5	(2.9)	209	5.5 %	61.3	7.3 7.6	
Cooljarloo – Dredge Mine - Western Australia⁽⁴⁾												
	Proven	177	1.7 %	61.9	7.7	11.0	210	1.6 %	61.5	7.7	10.7	
	Probable	130	2.0 %	60.5	8.3	12.3	130	2.0 %	60.5	8.3	12.3	
	Total Reserves	307	1.8 %	61.2	8.0	11.6	(9.7)	340	1.8 %	61.1	8.0 11.4	
Atlas-Campaspe Dry Mine - New South Wales Australia⁽⁶⁾												
	Proven	107	6.0 %	60.7	11.5	12.7	110	6.3 %	60.7	11.8	12.5	
	Probable	—	— %	—	—	—	—	— %	—	—	—	
	Total Reserves	107	6.0 %	60.7	11.5	12.7	(2.2)	110	6.3 %	60.7	11.8 12.5	
Wonnerup Dry Mine - Western Australia⁽⁸⁾												
	Proven	7	5.4 %	71.1	18.4	9.4	9	5.3 %	70.1	19.1	9.6	
	Probable	4	5.7 %	77.0	11.9	8.9	4	5.7 %	77.5	11.4	8.8	
	Total Reserves	11	5.5 %	73.3	15.9	9.2	(16.2)	13	5.4 %	72.6	16.5 9.4	
Ginkgo Dredge/ Dry Mines - New South Wales Australia⁽⁹⁾												
	Proven	4	1.3 %	57.1	13.0	13.2	26	1.9 %	51.5	16.3	12.7	
	Probable	—	— %	—	—	—	—	— %	—	—	—	
	Total Reserves	4	1.3 %	57.1	13.0	13.2	(84.7)	26	1.9 %	51.5	16.3 12.7	
Total Reserves												
	Proven	603	4.8 %	54.3	9.0	9.5	689	4.7 %	54.0	9.1	9.5	
	Probable	694	5.0 %	52.5	10.4	10.9	696	4.7 %	54.4	10.9	11.4	
	Total Reserves	1,297	4.9%	53.3	9.8	10.2	(6.2)	1,385	4.7%	54.2	10.0 10.5	

1. Mineral resources are exclusive of reserves. Mineral resources and reserves are reported using in-situ points of reference. The term “saleable product yield (recovery)” is used herein to refer to the conversion of contained, in-situ mineral to saleable products, which is equivalent to the term “metallurgical or processing recoveries” used in subpart 1300 of Regulation S-K.
2. For Namakwa Sands, price assumptions used for resource and reserve estimations are \$1,840 per metric ton of Zircon, \$248 per metric ton of Ilmenite and \$1,328 per metric ton of Rutile. The cutoff grade used for the resource estimate is based on a break-even cutoff of 0.3% Zircon. Reserves are defined by a complex optimization process which is explained in detail in the Namakwa Sands TRS. Saleable product yield (recovery) used for our reserve estimates were 63% per metric ton of Zircon, 68% per metric ton of Ilmenite and 63% per metric ton of Rutile.
3. For KZN Sands, price assumptions used for resource and reserve estimations are \$1,835 per metric ton of Zircon, \$248 per metric ton of Ilmenite and \$1,328 per metric ton of Rutile. The cutoff grade used for the resource estimate is based on a break-even cutoff of 1.5% ilmenite. Reserves are defined by a complex optimization process which is explained in detail in the KZN Sands TRS. Saleable product yield (recovery) used for our reserve estimates were 80% per metric ton of Zircon, 66% per metric ton of Ilmenite and 75% per metric ton of Rutile.
4. For Cooljarloo, price assumptions used for resource and reserve estimations are \$1,378 per metric ton of Zircon, \$293 per metric ton of Chloride Ilmenite, \$973 per metric ton of Rutile and \$911 per metric ton of Leucoxene. The cutoff grade used for the resource estimate is based on a nominal bottom cut of 1.0% HM. Reserves are defined by a complex optimization process which is explained in detail in the Cooljarloo TRS. Saleable product yield (recovery) used for our reserve estimates

were 83% per metric ton of Zircon, 85% per metric ton of Chloride Ilmenite, 88% per metric ton of Rutile and 79% per metric ton of Leucoxene.

5. For Dongara, price assumptions used for preliminary resource economic assessments are \$1,491 per metric ton of Zircon, \$313 per metric ton of Chloride Ilmenite, \$960 per metric ton of Rutile and \$900 per metric ton of Leucoxene.
6. For Atlas-Campaspe, price assumptions used for resource and reserve estimations are \$1,495 per metric ton of Zircon, \$246 per metric ton of Chloride Ilmenite, \$162 per metric ton of Sulfate Ilmenite, \$1,088 per metric ton of Rutile and \$314 per metric ton of Leucoxene (East). The cutoff grade used for the resource estimate is based on a nominal bottom cut of 1.0% HM. Reserves are defined by a complex optimization process which is explained in detail in the Atlas-Campaspe TRS. Saleable product yield (recovery) used for our reserve estimates were 79% per metric ton of Zircon, 96% per metric ton of Ilmenite, 92% per metric ton of Rutile and 87% per metric ton of Leucoxene.
7. For Port Durnford, price assumptions used for preliminary resource economic assessments are \$1,835 per metric ton of Zircon, \$248 per metric ton of Ilmenite and \$1328 per metric ton of Rutile.
8. For Wonnerup, price assumptions used for resource and reserve estimations are \$2,023 per metric ton of Zircon, \$291 per metric ton of Chloride Ilmenite, \$256 per metric ton of Sulfate Ilmenite, \$333 per metric ton of Secondary Ilmenite and \$1,122 per metric ton of Leucoxene.
9. For Ginkgo-Crayfish, price assumptions used for resource and reserve estimations are \$1,495 per metric ton of Zircon, \$246 per metric ton of Chloride Ilmenite, \$162 per metric ton of Sulfate Ilmenite, \$1,088 per metric ton of Rutile and \$314 per metric ton of Leucoxene (East).
10. For Kara/Cylinder, price assumptions used for preliminary resource economic assessments are \$1,356 per metric ton of Zircon, \$239 per metric ton of Chloride Ilmenite, \$168 per metric ton of Sulfate Ilmenite, \$1,247 per metric ton of Rutile and \$347 per metric ton of Leucoxene (East).

Abbreviations, Definitions, and Notations

Reserves — mineralized material inclusive of dilution, determined to be economically and legally exploitable as of December 31, 2023, 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/cm³ 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.

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.

INDIVIDUAL PROPERTY DISCLOSURE

Tronox Northern Operations (Cooljarloo)

Tronox Management Pty Ltd is a subsidiary of Tronox Holdings plc and is the operator of Tronox Northern Operations which includes:

- Cooljarloo Mine, 170 km north of Perth, where heavy mineral concentrates are produced from dredge mining operations. The net book value of Cooljarloo, inclusive of mining and beneficiary equipment located in Western Australia as well as relevant mining tenements, as of December 31, 2023 was \$428 million;
- Cooljarloo West and Osprey deposits, which conjoin the Cooljarloo Mine operations;
- Chandala Processing Plant, 60 km north of Perth, where the heavy mineral concentrates (HMC) are separated into saleable mineral products and also where ilmenite is further upgraded to synthetic rutile;
- The laboratory and mineral testing facility is also located at the Chandala site.

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.

Tronox operates under four (4) mining leases which are 100% held by Tronox Management Pty Ltd., a wholly owned subsidiary of Tronox Holdings plc as shown in the Table below.

Mining Tenement Schedule

Region	Tenement	Tenement Type	Area (Ha)	Grant Date	Expiry/ Renewal Date	Commitment US\$/a	Rent US\$/a	Status of Rights
Cooljarloo	M70/1398 (Previously MSA 268)	Mining Lease	9,744	2-Mar-20	1-Mar-41	701,600	138,900	Active Mining Lease
Cooljarloo (West)	M70/1314	Mining Lease	3,782	18-Mar-15	17-Mar-36	272,300	53,915	EPA approval pending
Cooljarloo (West)	M70/1333	Mining Lease	420	4-Apr-16	3-Apr-37	30,310	6,000	EPA approval pending
Osprey	M70/1413	Mining Lease	1,319	5-Jul-22	4-Jul-23	132,000	31,680	Approvals process commenced

Tronox has one active mine site at Cooljarloo that was originally controlled by a State Agreement Act with the State of Western Australia. This area was covered by State Agreement Act MSA 268 which was originally granted in 1989 for a period of 21 years. It was extended for a further 10-year term which expired in 2020. MSA 268 was replaced by Mining Lease M70/1398 which will expire in 2041.

Cooljarloo West is located within Mining Leases 70/1314 and 70/1333. Osprey is located within Mining Lease 70/1413. Granting of rights to mine are pending environmental approval.

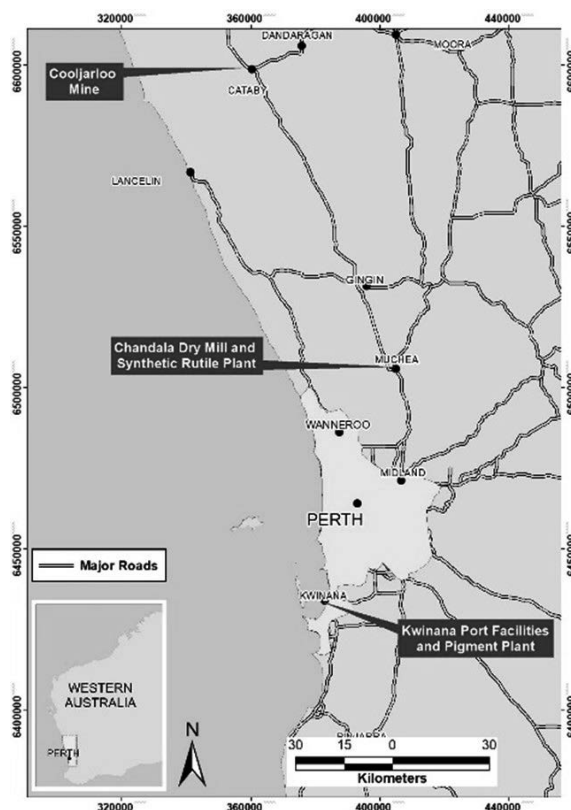
The minerals in Western Australia belong to the Crown (the State of Western Australia) and Tronox is obligated to pay a 5% revenue- based royalty on saleable mineral products. This is factored into the valuation models and optimizations conducted by Tronox.

A private royalty of 10c/t of VHM is paid for a portion of the northern section of the Cooljarloo tenement. Based on the current mine plan, mining in this royalty agreement area will cease by 2025 and the amounts paid are not material to the business.

On Mining Lease 70/1333 Tronox agrees to pay the previous holder of the exploration lease a royalty of 1% of a previously agreed price for each tonne of Valuable Heavy Mineral recovered from the Mining Lease. The cost will also be immaterial to the business.

The Cooljarloo Mine is located at coordinates latitude 30°39'S and longitude 115°27'E.

Location of Western Australian Operations



Infrastructure

The Brand Highway is a major bitumen road running from Muchea, just North of Perth up to Geraldton, a provincial city 450 km north of Perth. The road runs just past the Western boundary of the Chandala site and just past the Eastern boundary of the Cooljarloo mine site. It is suitable for all weather and wide loads.

There is a 132 kV power line that also runs from Perth to Geraldton which passes near the Chandala site and through the mine site. Tronox has a substation on its property that draws and reticulates 22 kV power from the sub-station connected to the main high voltage distribution line. At the various locations power is ultimately transformed down to 415 V. The same situation exists for Chandala and it gets power from the same main line.

Two gas pipelines run just a kilometer to the West of the Chandala site. They are referred to as the Dampier to Bunbury Natural Gas pipeline (DBNG) and also the Parmelia line which originates just south of Geraldton. The Chandala Mineral Separation Plant currently gets supply for driers and re-heaters from the Parmelia line.

The countryside surrounding both Chandala and Cooljarloo is relatively flat. This made the construction of buildings and fixed plant straightforward. Storage ponds for solid waste from the MSP were able to be made quite shallow only being a few meters above natural ground level.

There is a large freshwater aquifer (Yarragadee) immediately to the west of the Brand highway adjacent to the Chandala site. Tronox has a borefield there that supplies the licensed 1 megaliter per annum of water that the site requires. Even in times of severe drought, supply from this aquifer has never been at risk. Cooljarloo draws from an extensive field of relatively shallow bores and also an extension of the Yarragadee aquifer. To limit pumping distances, it has been preferable to have multiple smaller bores around the site since the dredging operation has travelled more than 40 km within the mining lease area since 1989. Tailings disposal at Cooljarloo is all placed behind the dredging operations and incorporated into the rehabilitated profile. There is a registered waste disposal pit where wastes from the MSP, the Synthetic Rutile plant and from the Kwinana pigment plant are licensed to be stored. These pits cells are constructed above the water table and are clay lined. When each cell is full it is capped to minimize the ingress and egress of water.

The Chandala operation utilizes two port facilities. The Port of Fremantle is used for export of bagged and containerized mineral products and the Port of Bunbury is used for bulk shipments. Tronox rents storage and warehousing facilities at or nearby to those sites.

For Cooljarloo there is a well-equipped modern permanent single person's quarters (SPQ), capable of accommodating up to 160 people or approximately 70% of the work force. At Chandala, employees and contractors are primarily sourced from the Perth metropolitan and surrounding areas.

History

Cooljarloo

The Cooljarloo tenements were originally pegged in 1972 by Kamilaroi Oil Company following the discovery of the Eneabba Deposits. They were subsequently obtained by Yalgoo Minerals Pty Ltd and Tific Pty Ltd in 1985 which became part of TiO2 Corporation NL (TiO₂).

In 1988 prior to mining commencing, the Cooljarloo Joint Venture was formed between Kerr-McGee Chemical Corp and Minproc Ltd, subsequent reorganizations of both partners led to 100% ownership under Tronox in 2012.

No geological data generated by owners prior to the formation of the Cooljarloo Joint Venture is in use.

Cooljarloo West

In 1990 drilling by Peko Exploration Ltd delineated a zone of deep low-grade mineralization but further drilling failed to intercept economic mineralization. The tenements were relinquished in 1992.

Image Resources later pegged the area which were acquired by Tronox in 2005. Drilling completed by Tronox in 2007 delineated the deposits named Woolka Road, Harrier and Kestrel and Resources and Reserves are based only on data generated by Tronox.

Summary of Resources and Reserves

Cooljarloo Summary of Mineral Resources as of December 31, 2023

Mine / Deposit	Resource Category	Material (million tonnes)	HM%	Mineral Assemblage (% of THM)			Change from 2022 (%)
				Ilmenite	Rutile + Leucoxene	Zircon	
Cooljarloo	Measured	1	0.9	54.9	7.2	9.3	
	Indicated	202	1.6	61.6	6.2	10.1	
	Measured + Indicated	203	1.6	61.6	6.2	10.1	
	Inferred	12	2.9	58.0	7.3	9.0	
	Total	215	1.7	61.3	6.3	10.0	
Cooljarloo West	Measured	—	—	—	—	—	
	Indicated	80	1.3	60.7	8.5	11.6	
	Measured + Indicated	80	1.3	60.7	8.5	11.6	
	Inferred	—	—	—	—	—	
	Total	80	1.3	60.7	8.5	11.6	
Total Mineral Resources		295	1.6	61.2	6.8	10.4	(2.9)

(1) Mineral resources are exclusive of mineral reserves.

(2) Price assumptions used for resource and reserve estimations are \$1,378 per metric ton of zircon, \$293 per metric ton of Chloride Ilmenite, \$973 per metric ton of Rutile and \$911 per metric ton of Leucoxene. Mineral prices used in Reserve estimation are substantially in line with the prices for each of our products published quarterly by independent consulting companies.

For a comparison of the reported resources as of December 31, 2023 with the resources as of December 31, 2022, see table on page 34. The decrease in resources in 2023 as compared to 2022 is primarily attributable to mining depletion.

Cooljarloo Summary of Mineral Reserves as of December 31, 2023

Mine / Deposit	Reserve Category	Material (million tonnes)	HM%	Mineral Assemblage (% of THM)			Change from 2022 (%)
				Ilmenite	Rutile + Leucoxene	Zircon	
Cooljarloo	Proven	177	1.7	61.9	7.7	11.0	
	Probable	—	—	—	—	—	
	Total	177	1.7	61.9	7.7	11.0	
Cooljarloo West	Proven	—	—	—	—	—	
	Probable	130	2.0	60.5	8.3	12.3	
	Total	130	2.0	60.5	8.3	12.3	
Total Mineral Reserves		307	1.8	61.2	8.0	11.6	(9.7)

(1) Price assumptions used for resource and reserve estimations are \$1,378 per metric ton of zircon, \$293 per metric ton of Chloride Ilmenite, \$973 per metric ton of Rutile and \$911 per metric ton of Leucoxene. Mineral prices used in Reserve estimation are substantially in line with the prices for each of our products published quarterly by independent consulting companies.

(2) Conversion of in ground grade to saleable product yield (recovery), considering all the losses during mining and processing, is typically 85% for ilmenite, 88% for rutile, 79% for Leucoxene and 83% for zircon.

For a comparison of the reported reserves as of December 31, 2023 with the reserves as of December 31, 2022, see table on page 35. The decrease in reserves in 2023 as compared to 2022 is primarily attributable to mining depletion.

Condition of Property

The Cooljarloo project was established in 1988. Being situated on an historical coastline, the ore body is made up of conventional mineral sands strandlines and eminently suited to dredge mining and gravity concentration.

Since commencement, the operation has been running continuously and has thus far consumed 640 Mt of ore at approximately 2.8% HM grade. The current reserves are 307 Mt tons at 1.8% HM grade, which gives a further 15 years of life. The current resources, which are exclusive of reserves, are 295 Mt at 1.6% HM.

Extensive and systematic exploration drilling activities are conducted at Cooljarloo and adjacent deposits on an annual basis to upgrade resources and reserves. Final reserve delineation drilling is completed to a 50m x 40m or 50m x 20m spacing depending on the geological complexities of the orebody. Final drilling is completed three or more years in advance of the mining face to allow timely and accurate mine planning to be completed. Over the past 13 years there has been an average of 52,000 meters of drilling completely annually at Cooljarloo. Drilling will continue in 2024.

Cooljarloo mine has operated with 2 dredges in the one pond since 1999. The original Ellicott Cooljarloo1 dredge operates in tandem with the smaller capacity Neumann built Pelican dredge which was brought into service in 2012. These bucket wheel dredges operate in a purpose-built pond which sits within the ore mining limit. The original dredge and concentrator were sized to operate at 12 Mt per annum but the original dredge has progressively been expanded and addition of the second dredge has seen the project expand to a maximum of 25Mt per annum to counteract the impact of lower ore grades and also enable improved resource utilization through economies of scale and increased product values.

A wet concentrator also floats in the dredge pond and is on two pontoons covering 2,250 square meters. Spiral gravity concentrators separate the higher density valuable minerals from the lower density trash mineral and lowest density tailings quartz grains. The spiral circuit consists of five stages. Roughers, middlings, cleaners, recleaners and classifiers. Both dredges pump their feed simultaneously to the floating wet concentrator via floating pipelines and high voltage cables for power.

Over the past 36 years of operation the metallurgical circuitry of the wet plant has remained relatively unchanged save for expanding the throughput to approximately 2850 tph. This allowed the processing of lower grade ore which has been shown to have a better revenue to cost ratio compared to the original project assumptions. At the time of the capacity increase, spirals that were at the end of their useful life were replaced with more modern units, of higher efficiency, to cope with both additional throughputs, the lower average feed grade, higher clay fines in the ore and maintain an acceptable mineral recovery.

HMC at Cooljarloo is loaded by front end loader into 93 tonne triple road trains for haulage to the Chandala Mineral Separation Plant (MSP). Both the mine and MSP are based on physical separation processes. There is no need for chemical or physical alteration to achieve good product recovery and quality. Attritioning is a critical process step to ensure clean mineral surfaces that are responsive to the electrostatic HT separators. The attritioned HMC is presented by filter belt to a natural gas fired drier that not only removes the moisture but heats the mineral so that it is most responsive to the primary stage electrostatic separation circuit.

The unit operations at the MSP are many and varied but the significant ones are as follows:

- vibrating and reciprocating woven wire screening;
- mechanical slurry attritioning;

- gas fired fluid bed drying, reheating and cooling;
- HT Roll, Coronastat and Plate electrostatic separators;
- Rare Earth Drum, Rare Earth Roll, Induced Roll and Semi-Lift magnetic separators;
- Hydrosizing; and
- spiral gravity and centrifugal jig concentrators.

The equipment and infrastructure at both Cooljarloo and Chandala are in good order having been upgraded several times such that the total throughput of the mining operation now averages 21 Mt per annum and whilst the MSP has not needed capacity increase, updated technology and implementation of continuous improvement programs have resulted in significant increases in mineral recoveries.

Since Cooljarloo is an operating mine and processing plant, capital is mostly a sunk cost. There is minor stay in business capital incurred annually and there is US\$55M of capital forecast with the move to the nearby Cooljarloo West dredging orebody expected in approximately 2033.

Tronox Eastern Operations (Atlas-Campaspe)

Tronox Mining Australia Ltd is a subsidiary of Tronox Holdings plc and is the operator of Tronox Eastern Operations which includes:

- The Ginkgo Mine, 110 km north of Wentworth in southwestern New South Wales, where heavy mineral concentrates are currently produced from dredge mining operations;
- The Snapper and Crayfish rehabilitation sites, adjacent to Ginkgo where former mineral sands mines are undergoing restoration following the completion of mining;
- The Atlas-Campaspe project in southwestern New South Wales, 120 km northeast of Mildura, where heavy mineral concentrates are currently produced from dry mining operations at Atlas and site development and approval activities have commenced for future mining operations at Campaspe;
- A rail siding and HMC stockpile facility at Ivanhoe, approximately 140 km northeast of the Atlas Mine, where HMC is dispatched to Broken Hill for further processing;
- Broken Hill Mineral Separation Plant in southwestern New South Wales, where the HMCs are separated into mineral products and either railed approximately 430 km to the Port of Adelaide or railed directly to Western Australia using the Trans Australian Railway; and
- Port of Adelaide, South Australia, where bulk mineral sands products from Broken Hill are loaded for export.

Mining tenements in Australia are managed at the State or Territorial level. In New South Wales, Mining Leases, Exploration Licenses and Assessment Leases are granted and administered by the New South Wales Department of Primary Industries Mineral Resources Division.

The Development Consent for Atlas and Campaspe was granted in June 2014 and construction of the Atlas Project was completed in early 2023. The Atlas deposit is secured by Mining Lease 1767. The Campaspe deposit is secured by the Atlas/Campaspe Mineral Sands Project Development Consent SSD 5012 from the Government of New South Wales. In November 2023 a mining lease application (MLA 639) was lodged over the Campaspe deposit, Grant of this tenement is pending.

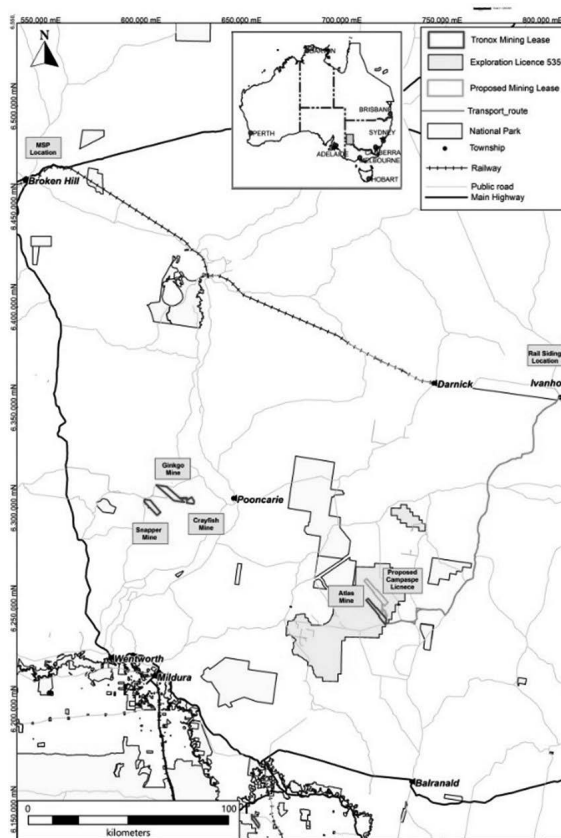
The minerals in New South Wales belong to the Crown (the State of NSW) and Tronox is obligated to pay a 4% revenue-based royalty on all saleable minerals produced.

All the land encompassing the intended mining area has been purchased by Tronox so no mining compensation payments to landowners will be required as part of the Atlas-Campaspe Project.

The net book value of Atlas-Campaspe, inclusive of mining and beneficiary equipment located in New South Wales as well as relevant mining tenements, as of December 31, 2023 was \$322 million.

The Atlas mine is located at coordinates latitude 33°53'S and longitude 143°21'E. The Campaspe mine is located at coordinates latitude 33°49'S and longitude 143°22'E.

Regional location of Atlas/Campaspe Project



Infrastructure Atlas

The Atlas mine site is located in southwestern New South Wales, 120 km northeast of Mildura and 90 km north of Balranald. Access to the license area is via the Balranald Ivanhoe Hwy, the Boree Plains – Gol Gol road and then through the official Atlas Mine Access Road. The Atlas mine consists of a centrally based Wet Concentrator Plant (WCP) and a Dry Mining Unit (DMU) both rated to 500 tph.

An on-site 200-person accommodation village has been constructed to house the workforce and consists of permanent and demountable buildings and facilities such as: Administration and Office Building; Workshops; Process Area Crib Room and Amenities; Gymnasium; Basketball Court and Main Store. Electrical power is supplied directly from a centralized 5 Mwh diesel generation system.

Hydrological investigations identified a bore field location at the Northern end of the mine path, approximately 5km from the central start-up pit location. This bore field supplies water for the mining operations and ancillaries. A total of seven bore pumps supply the required volume.

A RO Plant and potable water treatment plant sized to deliver 115m³/hour has been installed to supply wash water for the HMC and potable water for site buildings, wash pads and the accommodation village.

A communication building is located adjacent to the communication tower for telecom and the Local Area Network (LAN). Data and telephone connection between the communications building, process area, administration area and accommodation village are via a buried fiber optic cable.

HMC from the Atlas mine is transported by a combination of trucks and train. The road network consists of approximately 37 km of existing unsealed roads between the Atlas-Campaspe Mine site access road and the intersection with the sealed Balranald-Ivanhoe Road. The remaining section is a 138 km long bitumen road leading to the Ivanhoe rail siding. HMC is loaded into a train for transport to the Broken Hill Mineral Separation Plant (BH MSP) over approximately 301 km of railway.

Campaspe Project Status and Site Development Works

At the conclusion of mining at Atlas production will transition to Campaspe. Detailed mine planning and final approvals are underway. The development of the Campaspe site and required plant to operate includes:

- fencing of the mine lease (47 km);
- construction of the access road (11 km);
- construction of the mine corridor road (5.4 km);

- construction of the process water dam (210,000 m3);
- development of the mining pit;
- development of the bore field and water reticulation systems;
- relocation of workshops and amenities;
- expansion of the accommodation village from 200 to 300 beds;
- construction of a Primary Concentration Plant (PCP) and
- relocation of Ginkgo/Snapper field booster pumps and piping

History

In the Murray Basin fine heavy mineral occurrences were identified from 1982 to 1986 by Rio Tinto. Subsequently many smaller, coarser and high-grade deposits were also identified, and these formed the first mineral sands mines to be developed in the region. Bemax Resources discovered the Ginkgo, Snapper and Crayfish deposits at Pooncarie in the early to mid-2000's. Mining commenced at Ginkgo in 2005 and Snapper in 2010. Mining at Snapper was completed in April 2022 and Crayfish was completed in July 2023. Ginkgo is still being mined today by Tronox.

The Atlas-Campaspe Project replaces production from the completed Snapper and Crayfish deposits and the Ginkgo mining operation when it ceases production in mid-2024. Atlas commenced full production in early 2023.

Summary of Resources and Reserves

Atlas-Campaspe Summary of Mineral Resources as of December 31, 2023

Mine / Deposit	Resource Category	Material (million tonnes)	HM%	Mineral Assemblage (% of THM)			Change from 2022 (%)
				Ilmenite	Rutile + Leucoxene	Zircon	
Atlas	Measured	9	2.4	57.9	14.1	8.3	
	Indicated	—	—	—	—	—	
	Measured + Indicated	9	2.4	57.9	14.1	8.3	
	Inferred	—	—	—	—	—	
	Total	9	2.4	57.9	14.1	8.3	
Campaspe	Measured	18	2.6	59.3	9.4	13.3	
	Indicated	—	—	—	—	—	
	Measured + Indicated	18	2.6	59.3	9.4	13.3	
	Inferred	83	3.1	60.1	5.8	13.1	
	Total	101	3.0	60.0	6.4	13.1	
Total Mineral Resources		110	3.0	59.8	6.9	12.8	—

(1) Mineral resources are exclusive of mineral reserves.

(2) Price assumptions used for resource and reserve estimations are \$1,495 per metric ton of zircon, \$246 per metric ton of Chloride Ilmenite, \$162 per metric ton of Sulfate Ilmenite, \$1,088 per metric ton of Rutile and \$314 per metric ton of Leucoxene (East). Mineral prices used in reserve estimation are substantially in line with the prices for each of our products, published quarterly by independent consulting companies.

For a comparison of the reported resources as of December 31, 2023 with the resources as of December 31, 2022, see table on page 34.

Atlas-Campaspe Summary of Mineral Reserves as of December 31, 2023

Mine / Deposit	Reserve Category	Material (million tonnes)	HM%	Mineral Assemblage (% of THM)			Change from 2022 (%)
				Ilmenite	Rutile + Leucoxene	Zircon	
Atlas	Proven	9	14.2	60.7	16.7	10.5	
	Probable	—	—	—	—	—	
Campaspe	Proven	98	5.3	60.7	10.3	13.2	
	Probable	—	—	—	—	—	
Total Mineral Reserves		107	6.0	60.7	11.5	12.7	(2.2)

(1) Price assumptions used for resource and reserve estimations are \$1,495 per metric ton of zircon, \$246 per metric ton of Chloride Ilmenite, \$162 per metric ton of Sulfate Ilmenite, \$1,088 per metric ton of Rutile and \$314 per metric ton of Leucoxene (East). Mineral prices used in reserve estimation are substantially in line with the prices for each of our products, published quarterly by independent consulting companies.

(2) Conversion of in ground grade to saleable product yield (recovery), considering all the losses during mining and processing, is typically 96% for ilmenite, 92% for rutile, 87% for Leucoxene and 79% for zircon.

For a comparison of the reported reserves as of December 31, 2023 with the reserves as of December 31, 2022, see table on page 35. The decrease in reserves in 2023 as compared to 2022 is primarily attributable to mining depletion.

Condition of Property

Construction at Atlas commenced in 2022 and ramped up to full production in the first quarter of 2023. The Atlas deposit is mined using a dry mining method for both the overburden stripping and ore extraction.

As the equipment and infrastructure (including the DMU, WCP and all associated infrastructure) at Atlas is new and within its first year of operational life it is in good condition.

Dry mining at Campaspe will replace production from Atlas when Atlas finishes in 2027. Detailed design work and additional approvals are presently being undertaken.

Extensive and systematic exploration drilling activities have been conducted at Atlas and Campaspe on an annual basis to upgrade resources and reserves. Final reserve delineation drilling is completed to 100m x 20m spacing. Final drilling is completed three or more years in advance of the mining face to allow timely and accurate mine planning to be completed. As such, all drilling has been completed at Atlas. Final infill drilling has also been completed for the first five (5) years of mining at Campaspe. Over the past 13 years there has been an average of 50,000 meters of drilling completed annually at Tronox's Eastern Operations. Drilling will continue at Campaspe and surrounding areas in 2024.

Namakwa Mine

Tronox Mineral Sands Pty Ltd is a subsidiary of Tronox Holdings Plc and holds 100% of the rights at the Namakwa Sands Operations, which is located along the west coast of the Western Cape province, South Africa. The Namakwa Sands Operations includes:

- The Northern operations consisting of the Namakwa Sands Mine at Brand-se-Baai and the Mineral Separation Plant at Koekenaap.
- The Southern operations that consist of the Smelting Operations at Saldanha Bay along with administrative headquarters.

Run of mine production at the Namakwa Sands Mine comes from two shallow open-cast mines where excavators and front-end loaders extract free-flowing and lightly cemented sand. The ore is conveyed to two primary concentrator plants (PCP) that utilize wet spirals to produce a heavy mineral concentrate. These concentrates are pumped to a secondary concentrator plant (SCP) where wet high-intensity magnetic separators (WHIMS) and spirals are used to produce a zircon-rich non-magnetic concentrate, and a magnetic concentrate comprising mainly ilmenite. An ilmenite rich secondary stream from the SCP is reprocessed at a separate plant called the UMM Plant to produce a crude ilmenite. SCP and UMM concentrates are separately trucked to and treated at the MSP near Koekenaap, where a series of magnetic and electrical high-tension separators are employed to produce finale saleable ilmenite, rutile, and zircon products. These products are transported from the Mineral Separation Plant to the Smelter using the Saldanha-Sishen railway network.

The Southern Operations consist of the administrative headquarters and smelter operations and are located 3 km from the Saldanha export harbor. The smelting process comprises the carbonaceous reduction of ilmenite using DC arc furnaces to produce titanium slag and pig iron. The received rutile and zircon products as well as the titanium slag are stored in on-site silos from where it is distributed in bag, container, or bulk shipment format.

Mining tenements in South Africa are managed at a national level. In the Western Cape, Mining Rights and Prospecting Rights are granted and administered by the South African Department of Mineral Resources and Energy (DMR&E).

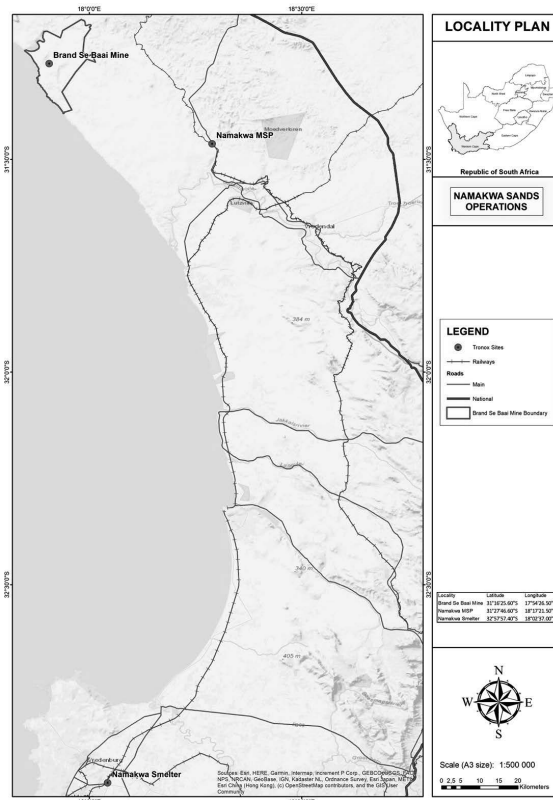
The Mining Rights for Namakwa are shown in the table and figure below.

Tronox Mining Rights, west coast of South Africa

Area/Farm	DMRE Reference number	Area (ha)	Current status
Goeraap 140 Portion 17	WC 30/5/1/2/2/114 MR	250	active, expires 17 August 2038
Graauwduinen 152 Portion 1	WC 30/5/1/2/2/114 MR	2,978	active, expires 17 August 2038
Hartebeeste Kom 156 Portion 1 & 2	WC 30/5/1/2/2/114 MR	3,903	active, expires 17 August 2038
Rietfontein Ext 151 Portion 1 & 2	WC 30/5/1/2/2/114 MR	2,084	active, expires 17 August 2038
Hartebeeste Kom 156 Portion 3	WC 30/5/1/2/2/113 MR	1,790	active, expires 17 August 2038
Houtkraal 143 Portion 3	WC 30/5/1/2/2/113 MR	1,780	active, expires 17 August 2038
Graauwduinen 152 Portion 2	WC 30/5/1/2/2/10040 MR	599	active, expires 29 March 2046
Graauwduinen 152 Remaining Extent	WC 30/5/1/2/2/10040 MR	1,776	active, expires 29 March 2046
Rietfontein Ext 151 Remaining Extent	WC 30/5/1/2/2/10040 MR	2,536	active, expires 29 March 2046
Houtkraal 143 Remainder of Portion 2	WC 30/5/1/2/2/10040 MR	645	active, expires 29 March 2046
Houtkraal 143 Remaining Extent	WC 30/5/1/2/2/10040 MR	864	active, expires 29 March 2046

The net book value of the Namakwa Sands mine, inclusive of mining and beneficiary equipment located in the Western Cape of South Africa as well as relevant mining tenements, as of December 31, 2023 was \$357 million. The Namakwa Sands Mine is located at coordinates 31°16'S and 17°54'E.

Location of Western Cape operations



Infrastructure

Potable water is sourced from the Olifants River Irrigation Scheme canal system. Water is distributed to the MSP and Brand-se-Baai (BsB) for process and domestic use. Water is pumped to BsB via a 56 km pipeline at the rate of 280 m³/h. This line also provides water to farmers along the line and rehabilitation areas at the Namakwa Sands Mine. Namakwa Sands holds servitude rights in the area adjacent to the tar sealed road between the Mineral Separation Plant and the Mine. Seawater is used in the primary and secondary separation processes and is pumped via the seawater pump station installation close to the Namakwa Sands Mine.

ESCOM supplies the MSP via the 132 kV line from the Juno substation. A 132/22 kV, 20 MVA transformer from ESCOM supplies both the MSP and a local farm.

The minerals are transported with purpose-built trailers and trucks between the Namakwa Sands and the MSP at Koekenaap. The trucks travel on a tar seal road constructed for this purpose. A Sishen-Saldanha railway line connects the MSP and Smelter sites. The minerals are transported from the MSP to the Smelter/port storage in closed container trucks, to prevent mineral losses and contamination.

History

Exploration for heavy minerals along the coastal strip of southwest Africa led to the discovery and subsequent delineation of the Namakwa Sands deposit near Brand-se-Baai in 1987. In September 1994 Anglo Operations Ltd commenced mining and processing at the West mine ore body. In 2008 Exxaro Resources acquired the Namakwa operations from Anglo and then in 2012 Tronox acquired 74% of Namakwa Mineral Sands Pty Ltd. In 2021 Tronox acquired the whole of Namakwa Mineral Sands Pty Ltd.

Summary of Resources and Reserves

Namakwa Sands Summary of Mineral Resources as of December 31, 2023

Resource Category	Material (million tonnes)	HM%	Mineral Assemblage (% of THM)			Change from 2022 (%)
			Ilmenite	Rutile + Leucoxene	Zircon	
Measured	112	7.0	32.6	6.1	7.8	
Indicated	84	6.5	28.3	5.6	6.9	
Measured + Indicated	196	6.7	30.8	5.9	7.4	
Inferred	110	5.5	35.1	8.1	6.6	
Total Mineral Resources	306	6.3	32.3	6.7	7.1	2.0

(1) Cutoff grade applied is 0.3% zircon

(2) Mineral Resources are exclusive of mineral reserves. Price assumptions used for resource and reserve estimations are \$1,499 per metric ton of zircon, \$194 per metric ton of Ilmenite and \$925 per metric ton of Rutile.

For a comparison of the reported resources as of December 31, 2023 with the resources as of December 31, 2022, see table on page 34. The increase in resources in 2023 as compared to 2022 is primarily attributable to updated information.

Namakwa Sands Summary of Mineral Reserves as of December 31, 2023

Reserve Category	Material (million tonnes)	HM%	Mineral Assemblage (% of THM)			Change from 2022 (%)
			Ilmenite	Rutile + Leucoxene	Zircon	
Proven	121	7.2	37.8	8.8	9.1	
Probable	545	5.7	51.6	10.7	10.8	
Total Mineral Reserves	666	5.9	48.6	10.3	10.5	(3.0)

(1) Price assumptions used for resource and reserve estimations are \$1,499 per metric ton of zircon, \$194 per metric ton of Ilmenite and \$925 per metric ton of Rutile. Mineral prices used in Reserve estimation are substantially in line with the prices for each of our products published quarterly by third-party industry consultancies.

(2) Conversion of in ground grade to saleable product yield (recovery), considering all the losses during mining and processing, is typically 68% for ilmenite, 63% for rutile, and 63% for zircon.

For a comparison of the reported reserves as of December 31, 2023 with the reserves as of December 31, 2022, see table on page 35. The decrease in reserves in 2023 as compared to 2022 is primarily attributable to mining depletion.

Condition of Property

The operations at Namakwa Sands were originally established by Anglo in 1996 and have operated continuously since that time. Open-cast mining, also known as strip mining, both classified as surface mining techniques, takes place in two distinct areas known as the East and West Mines. The East Mine comprises predominantly shallow mineral sands stripping, whereas the West Mine entails shallow stripping of mineral sands followed by a deeper open-cast mining operation recovering lightly cemented materials to about 40 meters.

More than 200,000 meters of drilling has been completed to date, to define the pre-mine Namakwa mineral resources base from surface down to bedrock. In-fill drilling, assaying and metallurgical test work will continue over the next decade with the strategy to upgrade current mineral resources to fully measured status, as well as converting mineral resources to mineral reserves, with a focus on proven mineral reserves realization.

The mining and mineral processing flowsheet and equipment of the Northern Operations have remained basically the same since the last throughput upgrade in 2008. The equipment and infrastructure at both mines are in sound working order, having been upgraded such that the total throughput of the mining operations now averages around 23 Mt per annum. A major mine development project, expected to be operational in 2026 is currently in the execution stage to extract and beneficiate the deeper lying ore in the East Mine beneath the shallow sands that are nearing its end of life.

Other changes include minor equipment replacements and technology updates, as well as circuit re-configurations as part of an embedded continuous improvement drive. Most recently, a small standalone scavenger plant has been added to the SCP flowsheet to augment attritioned magnetic concentrate production by consuming excess unattritioned ilmenite produced from the WHIMS circuit. Routine work maintenance programs are solidly entrenched, being directed by physical asset care plans targeting the maximum life and efficiency of plant, property and equipment holistically.

KZN Sands

Tronox KZN Sands Operations, which are located along the east coast of the Kwa-Zulu Natal province, South Africa are wholly owned subsidiaries of Tronox Holdings Plc, and include the:

- Fairbreeze Mine, immediately south of the Mtunzini township with the Primary Wet Plant (PWP) situated a further 8 km south of Mtunzini.
- Central Processing Complex (CPC), 50 road km north of Mtunzini, just outside the town of Empangeni, is where heavy mineral concentrates are processed into mineral products and ilmenite is further converted to titanium rich slag and pig iron in two direct current arc furnaces. The laboratory and mineral testing facilities are also located at CPC.

A hybrid mining method is employed at Fairbreeze Mine, utilizing track dozers to break lightly cemented ore layers in combination with high- pressure hydraulic mining using water monitor guns to pump slurried ore to the Primary Wet Concentrator (PWP) for wet gravity recovery of heavy minerals.

The resultant heavy mineral concentrate is trucked to the CPC, which is configured with relatively standard equipment to produce saleable ilmenite, rutile and zircon products. The ilmenite is dispatched to the bordering smelting process encompassing the carbonaceous reduction of ilmenite using DC arc furnaces to produce titanium slag and pig iron. The rutile and zircon products as well as the titanium slag are stored in on-site silos from where it is distributed in bag, container, or bulk shipment format destined for the Richards Bay harbor.

Mining tenements in South Africa are managed at a national government level. In KwaZulu-Natal, Mining Rights and Prospecting Rights are granted and administered by the regional office of the South African Department of Mineral Resources and Energy (DMRE).

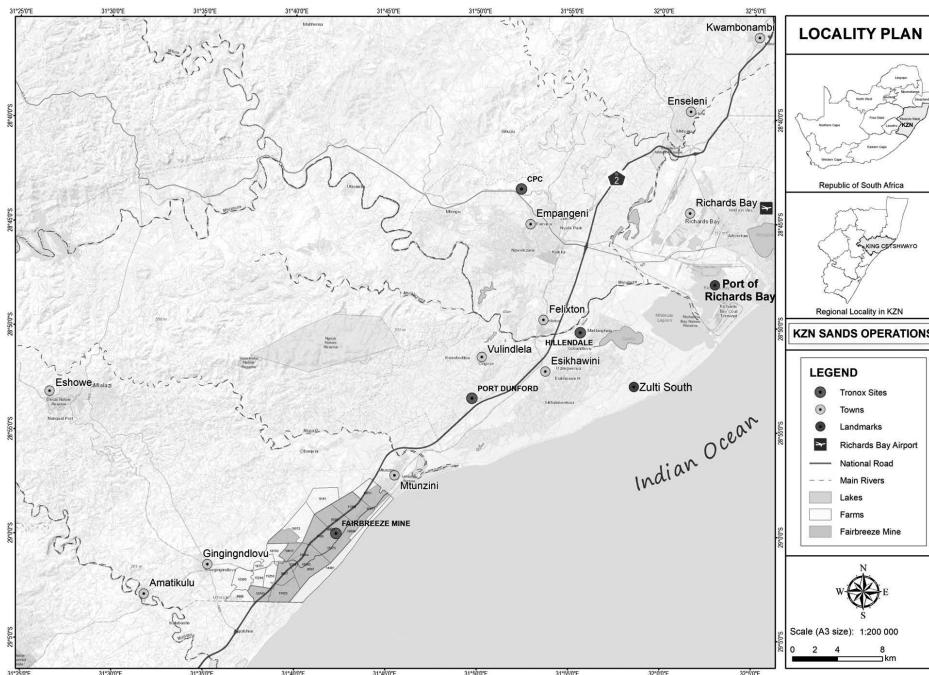
The Mining Rights for Fairbreeze are shown in the table and figure below.

Tronox Mining Rights for Fairbreeze

Area/Farm	DMRE Reference number	Area (ha)	Current status
Fairbreeze A, B, C, D	KZN 30/5/1/2/2/123 MR	3,810	active, expires 24 March 2035
Fairbreeze CX	KZN 30/5/1/2/2/164 MR	231	active, expires 04 August 2039

The net book value of the Fairbreeze mine, inclusive of mining and beneficiary equipment located in the Kwa-Zulu Natal province of South Africa as well as relevant mining tenements, as of December 31, 2023 was \$344 million. The Fairbreeze Mine is located at coordinates 29°00'S and 31°42'E.

Mining Rights and Surface Ownership



Infrastructure

Fresh water is sourced from the Mhlathuze River upgraded installation that originally supplied the Hillendale Mine. This system was upgraded to a pipeline of 750 mm nominal diameter over approximately 33 km to the Fairbreeze Mine and discharging into the raw water dam, from where it is further distributed for mining and minerals processing, as well as potable use.

Bulk electricity supply for the Fairbreeze Mine is from 88 kV and 132 kV ESCOM power lines that run adjacent to the residue storage facilities and feeds the Fairbreeze substation.

Access to the PWP is from off ramps at Bridge 4 on the national highway N2, south of the town of Mtunzini. Road transport for HMC to the MSP at Empangeni, a distance of 50 km, is along the N2 highway utilizing side tipping trucks. Gypsum waste and MSP sand tailings are returned on the backhaul. There is another route between Fairbreeze and the MSP along the R102 that can be used in emergencies. Railway networks in and around the region are suitable for the cargo requirements of the harbor and local industry and are directly connected to the national network for import/export purposes. The Richards Bay harbor operates a very large coal-handling terminal and controls a wide range of import and export cargos. Durban also has port facilities that Tronox uses to export containerized and bagged product from.

History

Natal Mineral Sands (NMS), prospected for mineral sands on Hillendale and Fairbreeze in the northern coast of KwaZulu-Natal during the 1980's. Iscor Limited purchased NMS in 1994 and mining activities commenced in 2001 at the Hillendale Mine. In 2012, Tronox announced the acquisition of 74% of KZN Mineral Sands operations. Production commenced at Fairbreeze in 2015 and in 2021 Tronox acquired the whole of the remaining portion it did not own of the KZN Sands operations.

Summary of Resources and Reserves

Fairbreeze Summary of Mineral Resources as of December 31, 2023

Resource Category	Material (million tonnes)	HM%	Mineral Assemblage (% of THM)			Change from 2022 (%)
			Ilmenite	Rutile + Leucoxene	Zircon	
Measured	38	4.1	63.5	9.4	7.7	
Indicated	—	—	—	—	—	
Measured + Indicated	38	4.1	63.5	9.4	7.7	
Inferred	55	3.4	54.6	7.1	7.1	
Total Mineral Resources	93	3.7	58.2	8.0	7.4 (11.4)	

(1) Cutoff grade applied is 1.5% ilmenite.

(2) Mineral Resources are exclusive of mineral reserves. Price assumptions used for resource and reserve estimations are \$1,554 per metric ton of zircon, \$205 per metric ton of Ilmenite and \$1,183 per metric ton of Rutile.

For a comparison of the reported resources as of December 31, 2023 with the resources as of December 31, 2022, see table on page 34. The decrease in resources in 2023 as compared to 2022 is primarily attributable to mining depletion.

Fairbreeze Summary of Mineral Reserves as of December 31, 2023

Reserve Category	Material (million tonnes)	HM%	Mineral Assemblage (% of THM)			Change from 2022 (%)
			Ilmenite	Rutile + Leucoxene	Zircon	
Proven	187	5.6	61.3	7.6	7.5	
Probable	15	3.9	54.8	5.6	7.3	
Total Mineral Reserves	202	5.5	61.0	7.5	7.5	(2.9)

(1) Price assumptions used for resource and reserve estimations are \$1,554 per metric ton of zircon, \$205 per metric ton of Ilmenite and \$1,183 per metric ton of Rutile. Mineral prices used in Reserve estimation are substantially in line with the prices for each of our products published quarterly by third-party industry consultancies.

(2) Conversion of in ground grade to saleable product yield (recovery), considering all the losses during mining and processing, is typically 76% for ilmenite, 75% for rutile, and 80% for zircon.

For a comparison of the reported reserves as of December 31, 2023 with the reserves as of December 31, 2022, see table on page 35. The decrease in reserves in 2023 as compared to 2022 is primarily attributable to updated information.

Condition of Property

In 2001, the Hillendale Mine started to supply HMC concentrate to the CPC, in Empangeni for further minerals processing to saleable mineral products. In 2015 after its useful life, and a production-break, most of the Hillendale Mine's useful, movable equipment was transferred to the nearby newly established Fairbreeze Mine. Mining at Hillendale Mine was exclusively hydraulic mining, but due to the partially semi-consolidated nature of the Fairbreeze ore bodies, a hybrid open-cast mining method is employed at Fairbreeze Mine, utilizing track dozers to break up the ore where required to assist high- pressure hydraulic mining using water monitor guns to pump slurried ore to the PWP for wet gravity recovery of heavy minerals.

Close to 90,000 meters of drilling has been completed to date to define the pre-mine Fairbreeze mineral resources base from surface down to bedrock. Drilling, assaying and metallurgical test work will continue over the next decade with the strategy to upgrade current mineral resources to fully measured status, as well as converting mineral resources to mineral reserves, with a focus on proven mineral reserves realization. The equipment and infrastructure of the Fairbreeze Mine and PWP are in sound working order, having been upgraded as such that the total throughput of the mining operation averaged around 10 Mt per annum for the initial Phase 1 upgrade. Freshly supplied HMC continued to utilize the existing infrastructure at the CPC, Empangeni, being a fully functional mineral separation plant for zircon, ilmenite and rutile products and smelting operations using two DC arc furnaces to produce of TiO₂ slag and pig iron, on the same site.

More recently a Phase 2 expansion of the operation at Fairbreeze Mine was commissioned in order to maintain heavy mineral concentrate (HMC) production due to lower THM grades in the ore. The expansion involves increasing the mining and PWP processing rate to about 16 Mt per annum, which require upgrades to the upfront desliming circuit, a further upgrade of the clay fines thickening and residue disposal equipment, rougher spiral capacity, increased concentrator building and additional process water pumping capacity. Mineral recoveries will be maintained following the expansion as will product quality. A residue storage facility (RSF) called MegaSebeka is currently in place and operational, however with the recent increase in mineral reserves, mine life and planned mining rate, an adjacent area called the Everglades RSF will be constructed nearby.

Otherwise, the MSP used to convert HMC into saleable mineral products is the same that was used for the KZN project's original mining at Hillendale. Other changes include minor equipment replacements and technology updates, as well as circuit re-configurations as part of an embedded continuous improvement drive. Routine work maintenance programs are solidly entrenched, being directed by physical asset care plans targeting the maximum life and efficiency of plant, property and equipment holistically.

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

Item 3. Legal Proceedings

Information required by this item is incorporated herein by reference to the section captioned "Notes to Consolidated Financial Statements, Note 18 - 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.”

Holder of Record

As of January 31, 2024, there were approximately 56 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.

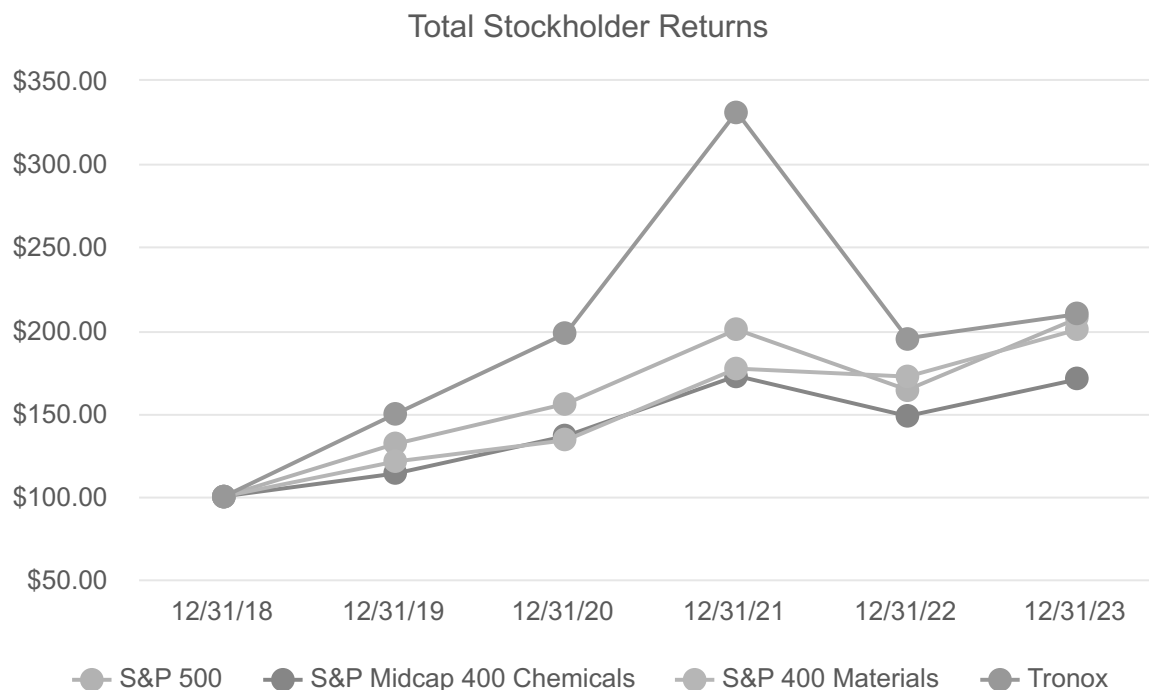
Issuer Purchases of Equity Securities

2023	Total Number of Shares Purchased	Weighted Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan ⁽¹⁾	Maximum Approximate Dollar Value that May Yet be Purchased Under the Plan ⁽¹⁾
October 1 - October 31	—	\$ —	—	\$ 250,536,235
November 1 - November 30	—	—	—	250,536,235
December 1 - December 31	—	—	—	250,536,235
Total	—	\$ —	—	\$ 250,536,235

- (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. There were no share repurchases made during the year ended December 31, 2023, see “Note 19” of notes to consolidated financial statements for further details. In connection with the expiration in February 2024 of the Company’s existing share repurchase program, on February 21, 2024, the Company’s Board of Directors authorized the repurchase of up to \$300 million of the Company’s stock through February 21, 2027.

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, 2018, 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 (loss) income 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 and South Africa to produce feedstock materials that can be processed into TiO₂ for pigment, high purity titanium chemicals, including titanium tetrachloride, and Ultrafine© titanium dioxide used in certain specialty applications. Our strategy is to be vertically integrated and produce enough feedstock materials to be as self-sufficient as possible in the production of TiO₂ at our nine 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 coatings and other TiO₂ customers throughout the world. The mining, beneficiation and smelting of titanium bearing mineral sands creates meaningful quantities of zircon, pig iron and the rare-earth bearing mineral, monazite, 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:

In 2023, demand softness continued across both TiO₂ and zircon end markets. As a result, Tronox ran its operations at the lowest utilization rates on record in order to manage inventories and free cash flow, though this resulted in higher production costs including unfavorable fixed cost absorption, lower of cost or market charges, and idle facility charges. We continued to proactively manage expenses and cash to mitigate the operational cost pressures.

Fourth quarter revenue increased 6% compared to the prior year, driven by higher TiO₂ and other product sales volumes. For the fourth quarter of 2023 as compared to the fourth quarter of 2022, TiO₂ revenue increased 9% driven by a 16% increase in volumes and a 1% exchange rate tailwind partially offset by a 6% decrease in average selling prices and a 2% unfavorable mix impact. Zircon sales volumes and average selling prices decreased 26% and 11%, respectively. Revenue from other products increased 38% from the fourth quarter 2022 to the fourth quarter of 2023 due to opportunistic sales of ilmenite and a portion of a rare earths tailings deposit in South Africa. Gross profit decreased for the fourth quarter of 2023 as compared to the fourth quarter

of 2022 due to the unfavorable impact of average selling prices of TiO₂, zircon and pig iron and unfavorable overhead absorption. These unfavorable impacts were partially offset by lower commodity costs and favorable exchange rates.

Sequentially, revenue increased 4% in the fourth quarter of 2023 compared to the third quarter of 2023 primarily driven by higher zircon and other products sales volumes. TiO₂ revenue decreased 7% in the fourth quarter of 2023 compared to the third quarter of 2023 driven by a 4% decrease in volumes, a 1% unfavorable product mix impact, a 1% decline in average selling prices and a 1% exchange rate headwind. Zircon sales volumes increased 82% partially offset by a 9% decrease in average selling prices in the fourth quarter of 2023 compared to the third quarter of 2023. Other products revenues increased 55% sequentially from the third quarter of 2023 to the fourth quarter of 2023 due to additional sales of pig iron, as well as opportunistic sales of ilmenite and a portion of a rare earths tailings deposit in South Africa. Gross profit decreased sequentially from the third quarter of 2023 to the fourth quarter of 2023 due to decreases in sales volumes and average selling prices of TiO₂ and decreases in average selling prices of zircon and pig iron as well as increases in idle facility charges and higher production and commodity costs. These unfavorable impacts were partially offset by increases in sales volumes of zircon and other products as well as favorable impacts of foreign currency.

As of December 31, 2023, our total available liquidity was \$761 million, including \$273 million in cash and cash equivalents and \$488 million available under revolving credit agreements. As of December 31, 2023, our total debt was \$2.8 billion and net debt to trailing-twelve month Adjusted EBITDA was 4.9x. The Company also has no financial covenants on its term loans 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. Refer to Note 13 of notes to consolidated financial statements for further details.

Consolidated Results of Operations

Year Ended December 31, 2023 Compared to the Year Ended December 31, 2022

	Year Ended December 31,		
	2023	2022	Variance
	(Millions of U.S. Dollars)		
Net sales	\$ 2,850	\$ 3,454	\$ (604)
Cost of goods sold	2,388	2,622	(234)
Gross profit	\$ 462	\$ 832	\$ (370)
Gross Margin	16.2 %	24.1 %	(7.9) pts
Selling, general and administrative expenses	276	289	(13)
Venator settlement	—	85	(85)
Income from operations	186	458	(272)
Interest expense	(158)	(125)	(33)
Interest income	18	9	9
Loss on extinguishment of debt	—	(21)	21
Other income (expense), net	3	(13)	16
(Loss) Income before income taxes	49	308	(259)
Income tax (provision) benefit	(363)	192	(555)
Net (loss) income	<u>\$ (314)</u>	<u>\$ 500</u>	<u>\$ (814)</u>
Effective tax rate	741 %	(62)%	803 pts
EBITDA⁽¹⁾	\$ 464	\$ 693	\$ (229)
Adjusted EBITDA⁽¹⁾	\$ 524	\$ 875	\$ (351)
Net (loss) income as % of Net Sales	(11.0)%	14.5 %	(25.5) pts
Adjusted EBITDA as % of Net Sales⁽¹⁾	18.4 %	25.3 %	(6.9) pts

(1) EBITDA, Adjusted EBITDA and Adjusted EBITDA as a % of Net Sales 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 (loss) income.

Net sales of \$2,850 million for the year ended December 31, 2023 decreased by 17% compared to \$3,454 million for the same period in 2022. Revenue decreased primarily due to lower TiO₂ and zircon sales volumes. Net sales by type of product for the years ended December 31, 2023 and 2022 were as follows:

The table below presents reported revenue by product:

(Millions of dollars, except percentages)	Year Ended December 31,		Variance	Percentage
	2023	2022		
TiO ₂	\$ 2,248	\$ 2,693	\$ (445)	(17)%
Zircon	257	438	(181)	(41)%
Other products	345	323	22	7 %
Total net sales	\$ 2,850	\$ 3,454	\$ (604)	(17)%

For the year ended December 31, 2023, TiO₂ revenue decreased \$445 million, or 17%, compared to the prior year due to a \$416 million decrease in sales volumes and a decrease of \$43 million in average selling prices. Foreign currency positively impacted TiO₂ revenue by \$14 million due primarily to the weakening of the Euro. Zircon revenues decreased \$181 million primarily due to a 42% decrease in sales volumes partially offset by a 1% increase in average selling prices. Other products revenue increased \$22 million primarily due to the sale of a portion of a rare earths tailings deposit in South Africa as well as an increase in pig iron sales volumes. These increases in other products were partially offset by a decrease in average selling prices of pig iron.

Gross profit of \$462 million for the year ended December 31, 2023 was 16.2% of net sales compared to 24.1% of net sales for the same period in 2022. The decrease in gross margin is primarily due to:

- the net unfavorable impact of 7 points due to product mix and higher production and commodity costs,
- the unfavorable impact of 2 points due to increased cost structures and idle facility charges,
- the unfavorable impact of 2 points primarily due to a decrease in TiO₂ and zircon selling prices, partially offset by
- the favorable impact of 1 point from the sale of a portion of a rare earths tailings deposit in South Africa, and
- the net favorable impact of approximately 2 points due to changes in foreign exchange rates. This is primarily due to the South African Rand and Australian dollar given costs in these regions are primarily incurred in local currencies while revenues are tied to the U.S. dollar whereas within our European region both revenues and costs of goods sold are denominated in Euros and as such did not have a significant impact to gross margin.

Selling, general and administrative ("SG&A") expenses decreased \$13 million when comparing the year ended December 31, 2023 to the prior year. The SG&A expenses decrease was primarily driven by a \$7 million decrease in employee costs primarily due to lower incentive compensation, \$2 million of lower travel and entertainment expenses and lower amortization cost of \$2 million. The remaining net decrease was driven by individually immaterial amounts.

Income from operations for the year ended December 31, 2023 of \$186 million, decreased by \$272 million or 59% compared to the same period in 2022 which is primarily attributable to lower sales volumes of TiO₂ and zircon as well as higher production costs and unfavorable product mix partially offset by the lower selling, general and administrative expenses.

Interest expense for the year ended December 31, 2023 increased \$33 million compared to the same period in 2022. The increase is primarily due to the increase in the effective interest rates and higher average outstanding debt balances.

Interest income for the year ended December 31, 2023 increased \$8 million compared to the same period in 2022 primarily due to an overall increase in our cash investments and higher interest rates on those cash balances period over period.

Other income (expense), net for the year ended December 31, 2023 primarily consisted of \$6 million of net realized and unrealized foreign currency gains and \$6 million associated with the monthly technical service fee relating to the Jazan slagger we receive from AMIC partially offset by \$9 million of other individually immaterial amounts.

We continue to maintain full valuation allowances related to the total net deferred tax assets in the United Kingdom. During the year ended December 31, 2023, the Company has applied a full valuation allowance against the deferred tax assets in Australia. Future 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 741% and (62)% for the years ended December 31, 2023 and 2022, respectively. The effective tax rates for the year ended December 31, 2023 and 2022 are influenced by a variety of factors, primarily income and losses in

jurisdictions with valuation allowances, non-taxable income and expenses, prior year accruals, and our jurisdictional mix of income at tax rates different than the U.K. statutory rate. Additionally, the effective tax rates for each year is significantly influenced by the release of the valuation allowance against deferred tax assets in Australia during the year ended December 31, 2022 and the subsequent reapplication of the valuation allowance against deferred tax assets in Australia during the year ended December 31, 2023. Refer to Note 5 of notes to consolidated financial statements for further information.

Net (loss) income as a percentage of net sales was (11.0)% for the year ended December 31, 2023 as compared to 14.5% for the year ended December 31, 2022. The primary driver of the year-over-year decrease in Net (loss) income as a percentage of net sales is the timing of the deferred tax assets' valuation allowance adjustments as well as the lower gross profit due to higher production costs and unfavorable product mix and lower selling prices. Adjusted EBITDA as a percentage of net sales was 18.4% for the year ended December 31, 2023, a decrease of 6.9 points from 25.3% in the prior year. The lower gross profit as a result of higher production costs and unfavorable product mix as well as lower selling prices as discussed above were the primary drivers of the year-over-year decrease in Adjusted EBITDA percentage.

Year Ended December 31, 2022 Compared to the Year Ended December 31, 2021

A discussion of our results of operations for the year ended December 31, 2022 versus December 31, 2021 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, 2022.

Other Comprehensive Income (Loss)

There was an other comprehensive loss of \$42 million for the year ended December 31, 2023 compared to other comprehensive loss of \$27 million for the year ended December 31, 2022. This increase in comprehensive loss was primarily driven by net losses on derivative instruments of \$13 million in the year ended December 31, 2023 as compared to net gains on derivative instruments of \$30 million in the prior year as well as pension and postretirement losses of \$14 million for the year ended December 31, 2023 as compared to pension and postretirement gains of \$22 million in the prior year. In addition, we recognized unfavorable foreign currency translation adjustments of \$15 million for the year ended December 31, 2023 as compared to unfavorable foreign currency translation adjustments of \$79 million in the prior year.

A discussion of our comprehensive (loss) income for the year ended December 31, 2022 versus December 31, 2021 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, 2022.

Liquidity and Capital Resources

During 2023, our liquidity increased by \$153 million to \$761 million.

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

	December 31, 2023	December 31, 2022
Cash and cash equivalents	\$ 273	\$ 164
Available under the Cash Flow Revolver	343	300
Available under the Standard Credit Facility	55	59
Available under the Emirates Revolver	64	60
Available under the SABB Facility	20	19
Available under the Bank Itau Facility	6	6
Total	\$ 761	\$ 608

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 short-term credit facilities (see Note 13 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, including, among other things, macroeconomic conditions, inflationary pressures, political instability including the ongoing Russia and Ukraine and Middle East conflicts and any expansion of such conflicts, and supply chain disruptions. 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 \$1.4 billion at December 31, 2023, compared to \$1.1 billion at December 31, 2022.

As of and for the year ended December 31, 2023, the non-guarantor subsidiaries of our Senior Notes due 2029 represented approximately 17% of our total consolidated liabilities, approximately 34% of our total consolidated assets, approximately 43% of our total consolidated net sales and approximately 55% of our Consolidated EBITDA (as such term is defined in the 2029 Indenture). In addition, as of December 31, 2023, our non-guarantor subsidiaries had \$688 million of total consolidated liabilities (including trade payables but excluding intercompany liabilities), all of which would have been structurally senior to the 2029 Notes. See Note 13 of notes to consolidated financial statements for additional information.

At December 31, 2023, we had outstanding letters of credit and bank guarantees of \$109 million. See Note 13 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, 2023, our credit rating with Moody's remained unchanged from December 31, 2022 at Ba3 stable outlook. As of December 31, 2023, our credit rating with Standard & Poor's remained unchanged from December 31, 2022 at B positive outlook, but the outlook was changed in August 2023 from positive to stable. See Note 13 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, 2023, 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, cash taxes, making pension contributions and making quarterly dividend payments. Going forward, we 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, continued reductions in our debt, continued dividends and share repurchases.

Repatriation of Cash

At December 31, 2023, we held \$273 million in cash and cash equivalents in these respective jurisdictions: \$98 million in the United States, \$19 million in South Africa, \$62 million in Australia, \$40 million in Brazil, \$12 million in Saudi Arabia, \$17 million in China, \$24 million in Europe and \$1 million in India. Our credit facilities limit transfers of funds from subsidiaries in the United States to certain foreign subsidiaries. In addition, at December 31, 2023, we held less than \$1 million of restricted cash which is in Australia related to performance bonds.

At December 31, 2023, Tronox Holdings plc had foreign subsidiaries with undistributed earnings. Although we would not be subject to income tax on these earnings, we have asserted that amounts in specific jurisdictions are indefinitely reinvested outside of the parent's taxing jurisdictions. These amounts could be subject to withholding tax if distributed, but the Company has made no provision for tax related to these undistributed earnings. The Company has removed its assertion that earnings in China are indefinitely reinvested, and the withholding tax accruals for potential repatriations from that jurisdiction are now reflected in the effective tax rate reconciliation in Note 5 to the consolidated financial statements.

Stock Repurchases

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. During the year ended December 31, 2023, we made no repurchases of the Company's stock. In connection with the expiration in February 2024 of the Company's existing share repurchase program, on February 21, 2024, the Company's Board of Directors authorized the repurchase of up to \$300 million of the Company's stock through February 21, 2027.

Cash Dividends on Ordinary Shares

On February 21, 2024, the Board declared a quarterly dividend of \$0.125 per share to holders of our ordinary shares at the close of business on March 4, 2024, which will be paid on April 5, 2024.

Debt Obligations

2023 Term Loan Facility

In August 2023, the Borrower, the Company, certain of the Company's subsidiaries, the incremental term lender party thereto and HSBC Bank USA, National Association, as Administrative Agent and Collateral Agent, entered into Amendment No. 3 to the Amended and Restated First Lien Credit Agreement (the "2023 Amendment"). The 2023 Amendment provides the Borrower with a new five-year incremental term loan facility ("the 2023 Term Loan Facility" and, the loans thereunder, the "2023 Incremental Term Loans") under its credit agreement in an aggregate initial principal amount of \$350 million. A portion of the proceeds of the 2023 Term Loan Facility were used to repay \$159 million of then-outstanding borrowings under the Company's existing revolving credit facilities and to enhance available liquidity for upcoming capital expenditures. Refer to Note 13 in notes to consolidated financial statements for further details.

At December 31, 2023 and 2022, our long-term debt, net of unamortized discount and debt issuance costs was \$2.8 billion and \$2.5 billion, respectively.

At December 31, 2023 and 2022, our net debt (the excess of our debt over cash and cash equivalents) was \$2.6 billion and \$2.4 billion, respectively. See Note 13 of notes to consolidated financial statements.

Off-Balance Sheet Arrangements

In March 2022, the Company entered into an accounts receivable securitization program ("Securitization Facility") with a financial institution, through our wholly-owned special purpose bankruptcy-remote subsidiary, Tronox Securitization LLC ("SPE"). The Securitization Facility permitted the SPE to sell accounts receivable up to \$75 million.

In November 2022, the Company amended the receivable purchase agreement to expand the program to include receivables generated by its wholly-owned Australian operating subsidiaries, Tronox Pigment Pty Ltd., Tronox Pigment Bunbury Ltd. and Tronox Mining Australia Ltd. which increased the facility limit to \$200 million and to extend the program term to November 2025.

In June 2023, the Company entered into an additional amendment (the "Second Amendment") to further include receivables generated by our wholly-owned European operating subsidiaries, Tronox Pigment Holland BV and Tronox Pigment UK Limited. Neither the facility limit nor the program term were changed as a result of the Second Amendment, and remain at \$200 million and November 2025, respectively.

See "Note 7 - Accounts Receivable Securitization Program" in notes to consolidated financial statements for further details regarding this off-balance sheet program.

Cash Flows

Years Ended December 31, 2023 and 2022

The following table presents cash flow for the periods indicated:

	Year Ended December 31,	
	2023	2022
	(Millions of U.S. dollars)	
Net cash provided by operating activities	\$ 184	\$ 598
Net cash used in investing activities	(255)	(415)
Net cash provided by (used in) financing activities	176	(250)
Effect of exchange rate changes on cash	4	(1)
Net increase (decrease) in cash and cash equivalents	<u>\$ 109</u>	<u>\$ (68)</u>

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

operating activities for 2023 and 2022:

	Year Ended December 31,	
	2023	2022
	(Millions of U.S. dollars)	
Net (loss) income	\$ (314)	\$ 500
Net adjustments to reconcile net (loss) income to net cash provided by operating activities	672	113
Income related cash generation	358	613
Net change in assets and liabilities	(174)	(15)
Net cash provided by our operating activities	<u>\$ 184</u>	<u>\$ 598</u>

Net cash provided by operating activities was \$184 million in 2023 as compared to \$598 million in 2022. The decrease of \$414 million period over period is primarily due to a \$255 million reduction in net (loss) income net of non-cash adjustments and an increase of \$159 million use of cash for net assets and liabilities. The higher use of cash for working capital was primarily driven by increases in inventories of \$151 million and decreases in accounts payable and accrued liabilities of \$84 million partially offset by a decrease in accounts receivable of \$84 million and a decrease in prepaids and other current assets of \$37 million in the current year. Additionally, there was a use of cash for long-term other assets and liabilities of \$36 million.

Cash Flows used in Investing Activities — Net cash used in investing activities for the year ended December 31, 2023 was \$255 million as compared to \$415 million for the year ended December 31, 2022. The \$160 million decrease in use of cash year over year is primarily driven by lower capital expenditures of \$261 million partially offset by \$6 million of proceeds from the sale of assets in the current year.

Cash Flows provided by (used in) Financing Activities — Net cash provided by financing activities during the year ended December 31, 2023 was \$176 million as compared to cash used in financing activities of \$250 million for the year ended December 31, 2022. The current year is primarily comprised of proceeds from long-term debt of \$347 million from our 2023 Term Loan Facility partially offset by repayments of long-term and short-term debt of \$165 million. Additionally, during the current year, \$89 million of cash used to pay dividends during the year ended December 31, 2023. In the prior year, we used \$50 million of cash for repurchases of common stock of which there were none in the current year.

Years Ended December 31, 2022 and 2021

A discussion of our cash flows for the year ended December 31, 2022 versus 2021 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, 2022.

Contractual Obligations

The following table sets forth information relating to our contractual obligations as of December 31, 2023:

	Contractual Obligation Payments Due by Period ⁽³⁾				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
	(Millions of U.S. dollars)				
Long-term debt and lease financing (including interest) ⁽¹⁾	\$ 3,697	\$ 215	\$ 445	\$ 1,547	\$ 1,490
Purchase obligations ⁽²⁾	2,554	285	340	454	1,475
Operating leases	231	36	44	31	120
Pension and other post-retirement benefit obligations ⁽⁴⁾	225	27	46	46	106
Asset retirement obligations and environmental liabilities ⁽⁵⁾	462	19	58	63	322
Total	<u>\$ 7,169</u>	<u>\$ 582</u>	<u>\$ 933</u>	<u>\$ 2,141</u>	<u>\$ 3,513</u>

(1) We calculated our various term loan facilities’ interest at a SOFR plus an applicable margin. See Note 13 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 2024. 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 \$225 million include estimates of pension plan contributions and expected future benefit payments for unfunded pension and OPEB plans. Pension plan contributions are forecasted for 2024 only. Expected future unfunded pension and OPEB benefit payments are forecasted only through 2032. Contribution and unfunded benefit payment estimates are based upon current valuation assumptions. Estimates of pension contributions after 2024 and unfunded benefit payments after 2033 are not included in the table because the timing of their resolution cannot be estimated. Refer to Note 21 in notes to consolidated financial statements for further discussion on our pension and OPEB plans.
- (5) Amounts are shown at the undiscounted and uninflated values.

Non-U.S. GAAP Financial Measures

EBITDA, Adjusted EBITDA, Adjusted net (loss) income attributable to Tronox and Diluted adjusted net income per share attributable to Tronox, which are used by management to measure performance, are not presented in accordance with U.S. GAAP. We define EBITDA as net (loss) income 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, pension and postretirement costs, and realized and unrealized foreign currency remeasurement gains and losses. We define Adjusted net income attributable to Tronox as net (loss) income attributable to Tronox excluding the impact of nonrecurring items which are the Company believes are not indicative of its core operating results 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. We define Diluted adjusted net income per share attributable to Tronox as Diluted net income per share excluding the impact of nonrecurring items which the Company believes are not indicative of its core operating results 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.

Management believes that EBITDA, Adjusted EBITDA, Adjusted net income attributable to Tronox and Diluted adjusted net income per share attributable to Tronox are 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, Adjusted EBITDA, Adjusted net income attributable to Tronox and Diluted adjusted net income per share attributable to Tronox differently than we do, EBITDA, Adjusted EBITDA, Adjusted net income attributable to Tronox and Diluted adjusted net income per share attributable to Tronox, 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.

These non-U.S. GAAP measures are 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 (loss) income to EBITDA and Adjusted EBITDA, Adjusted EBITDA as a % of net sales for the periods presented and Net Debt to Trailing Twelve Month Adjusted EBITDA as of December 31, 2023 and December 31,

2022:

	Year Ended December 31,		
	2023	2022	2021
Net (loss) income (U.S. GAAP)	(314)	500	303
Interest expense	158	125	157
Interest income	(18)	(9)	(7)
Income tax provision	363	(192)	71
Depreciation, depletion and amortization expense	275	269	297
EBITDA (non-U.S. GAAP)	464	693	821
Share-based compensation ^(a)	21	26	31
Transaction costs ^(b)	—	—	18
Venator settlement ^(c)	—	85	—
Loss on extinguishment of debt ^(d)	—	21	65
Foreign currency remeasurement ^(e)	(6)	3	(16)
Pension settlement loss ^(f)	—	20	—
Accretion expense and other adjustments to asset retirement and environmental obligations ^(g)	22	19	15
Accounts receivable securitization program ^(h)	12	3	—
Other items ⁽ⁱ⁾	11	5	13
Adjusted EBITDA (non-U.S. GAAP)	<u>\$ 524</u>	<u>\$ 875</u>	<u>\$ 947</u>

	Year Ended December 31,		
	2023	2022	2021
Net sales	\$ 2,850	\$ 3,454	\$ 3,572
Net (loss) income (U.S. GAAP)	\$ (314)	\$ 500	\$ 303
Net (loss) income (U.S. GAAP) as a % of Net sales	(11.0)%	14.5 %	8.5 %
Adjusted EBITDA (non-U.S. GAAP) (see above) as a % of Net sales	18.4 %	25.3 %	26.5 %

	December 31,	
	2023	2022
Long-term debt, net	\$ 2,786	\$ 2,464
Short-term debt	11	50
Long-term debt due within one year	27	24
(Less) Cash and cash equivalents	(273)	(164)
Net debt	\$ 2,551	\$ 2,374
Adjusted EBITDA (non-U.S. GAAP) (see above)	\$ 524	\$ 875
Net debt to trailing-twelve month Adjusted EBITDA (non-U.S. GAAP) (see above)	4.9x	2.7x

(a) Represents non-cash share-based compensation. See Note 20 of notes to consolidated financial statements.

(b) 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), net" in the Consolidated Statements of Operations.

(c) Represents the breakage fee including interest associated with the Venator settlement which were recorded in "Venator settlement" in the Consolidated Statements of Operations.

(d) 2022 amount represents the loss in connection with the redemption of the 6.5% Senior Secured Notes and the issuance of a new loan which closed in April 2022. 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 Term Loan Facility. See Note 13 of notes to consolidated financial statements.

- (e) 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 (expense) income, net" in the Consolidated Statements of Operations.
- (f) 2022 amount represents a non-cash pension settlement loss due to the settling of low-dollar valued amounts in our U.S. Qualified Plan.
- (g) Primarily represents accretion expense and other noncash adjustments to asset retirement obligations and environmental liabilities.
- (h) Primarily represents expenses associated with the Company's accounts receivable securitization program which is used as a source of liquidity in the Company's overall capital structure.
- (i) Includes noncash pension and postretirement costs, asset write-offs and other items included in "Selling general and administrative expenses", "Cost of goods sold" and "Other income (expense), net in the Consolidated Statements of Operations.

The following table reconciles Net (loss) income attributable to Tronox to Adjusted net income attributable to Tronox for the periods presented:

	Year Ended December 31,		
	2023	2022	2021
Net (loss) income attributable to Tronox Holdings plc (U.S. GAAP)	\$ (316)	\$ 497	\$ 286
Transaction costs ^(a)	—	—	18
Venator settlement ^(b)	—	85	—
Loss on extinguishment of debt ^(c)	—	21	57
Pension settlement loss ^(d)	—	15	—
Other ^(e)	(1)	(3)	12
Withholding tax accrued ^(f)	—	4	—
Tax valuation allowance ^(g)	293	(301)	(8)
Brazilian tax credits ^(h)	—	—	(3)
Income tax expense - deferred tax assets ⁽ⁱ⁾	—	(7)	—
Adjusted net (loss) income attributable to Tronox Holdings plc (non-U.S. GAAP) (1)(2)	<u>\$ (24)</u>	<u>\$ 311</u>	<u>\$ 362</u>
Diluted net (loss) income per share (U.S. GAAP)	\$ (2.02)	\$ 3.16	\$ 1.81
Transaction costs, per share	—	—	0.11
Venator settlement, per share	—	0.54	—
Loss on extinguishment of debt, per share	—	0.13	0.36
Pension settlement loss, per share	—	0.09	—
Other, per share	(0.01)	(0.02)	0.08
Withholding tax accrued	—	0.03	—
Tax valuation allowance, per share	1.88	(1.92)	(0.05)
Brazilian tax credits, per share	—	—	(0.02)
Income tax expense - deferred tax assets, per share	—	(0.04)	—
Diluted adjusted net (loss) income per share attributable to Tronox Holdings plc (non-U.S. GAAP)	<u>\$ (0.15)</u>	<u>\$ 1.98</u>	<u>\$ 2.29</u>
Weighted average shares outstanding, diluted (in thousands)	156,397	157,110	157,945

- (a) Represents breakage fee and other costs associated with termination of TTI Transaction which were primarily recorded in "Other income (expense)" in the Consolidated Statements of Operations.
 - (b) Represents the breakage fee including interest associated with the Venator settlement which were recorded in "Venator settlement" in the Consolidated Statements of Operations.
 - (c) 2022 amount represents the loss in connection with the redemption of the 6.5% Senior Secured Notes and the issuance of a new term loan which closed in April 2022. 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) certain discretionary prepayments made primarily on our term loan in the US.
 - (d) 2022 amount represents a non-cash pension settlement loss due to the settling of low-dollar valued amounts in our U.S. Qualified Plan.
 - (e) Represents other activity not representative of the ongoing operations of the Company.
 - (f) Represents potential withholding tax due to the Chinese government for historic distributable income generated.
 - (g) 2022 amount represents changes primarily within the Company's Australian deferred tax assets' valuation allowance. 2021 amount represents the reversal of the tax valuation allowance associated with unlimited live deferred tax assets within our Saudi Arabia jurisdiction.
 - (h) Represents a portion of Brazilian tax credits realized during 2021 generated from operations prior to the Cristal acquisition.
 - (i) Represents a charge to tax expense for the impact on deferred tax assets from a change in tax rates in a foreign tax jurisdiction.
- (1) Only the pension settlement loss amount and certain other items have been tax impacted. No income tax impacts have been given to other items as they were recorded in jurisdictions with full valuation allowances.
- (2) Diluted adjusted net income per share attributable to Tronox Holdings plc was calculated from exact, not rounded. Adjusted net income attributable to Tronox Holdings plc and share information.

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 17 to the consolidated financial statements for a summary of the estimates and assumptions utilized. At December 31, 2023, AROs were \$186 million of which the long-term portion of \$172 million is recorded in "Asset retirement obligations" and the short-term portion of \$14 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, 2023, environmental liabilities (both short term and long term) were \$51 million.

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 18 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 weighed 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 5 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 18 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 21 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 \$2 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 have a less than \$1 million impact to our pension expense. A 100 basis points reduction in discount rates would increase the PBO by approximately \$34 million whereas a 100 basis point increase in discount rates would decrease the PBO of approximately \$29 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. A 100 basis points change in rate of compensation would change the PBO by approximately \$5 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 TiO₂ 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 TiO₂, 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 2023, 2022 and 2021 our ten largest third-party customers represented 39%, 30%, and 28%, respectively, of our consolidated net sales. During 2023, 2022, and 2021, 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 Term Loan Facility, 2022 Term Loan Facility, the 2023 Term Loan Facility, Standard Bank Term Loan Facility, Cash Flow Revolver, Standard Bank Revolver, Emirates Revolver and SABB Credit Facility balances. Using a sensitivity analysis as of December 31, 2023, a hypothetical 1% increase in interest rates would result in a net decrease to pre-tax income of approximately \$7 million on an annualized basis. This is due to the fact that earnings on our interest earning financial assets of \$115 million at December 31, 2023 would increase by the full 1%, offsetting the impact of a 1% increase in interest expense on our floating rate debt of \$784 million.

During 2019, we entered into interest-rate swap agreements for a portion of our previous Term Loan Facility, which effectively convert the variable rate to a fixed rate for a portion of the loan. The agreements were to expire in September 2024.

On March 27, 2023, the Company entered into amendments with two of our existing interest rate swap agreements with the counterparty banks. As a result of these amendments, the Company terminated two of our existing interest rate swap contracts which were indexed to LIBOR with an aggregate notional value of \$500 million which had maturity dates of September 2024. At the time of these amendments, the Company determined that the interest payments hedged are still probable to occur, therefore, the gains accumulated of \$11 million on the interest rate swaps prior to the amendments are being amortized into interest expense through September 22, 2024, the original maturity of the interest rate swap agreements.

We simultaneously entered into two SOFR-indexed forward starting interest rate swaps with the same counterparty banks with no change to the aggregate notional value. The forward starting swaps will be effective from June 2023 and will mature in March 2028 which will align with the maturity date of the Term Loan Facility. Indexing forward starting swaps to SOFR will also ensure that the reference rates in our hedge instruments will align with the interest rate terms of the Term Loan Facility which is expected to change from LIBOR to SOFR effective June 30, 2023 in anticipation of Reference Rate Reform and pursuant to the loan agreement. We elected to apply the hedge accounting expedients in ASC Topic 848, Reference Rate Reform on Financial Reporting related to the following: 1) the assertion that the future forecasted transaction is still probable of occurring despite reference rate changes and 2) the assumption that the index of the future hedged transactions will match the index of the corresponding hedge instruments for the assessment of effectiveness.

Additionally, on March 27, 2023, the Company entered into a new interest rate swap with a \$200 million notional value which matures in March 2028 and effectively converts the variable rate to a fixed rate for that portion of the 2022 Term Loan Facility.

On May 17, 2023, the Company entered into an agreement with the counterparty bank to amend the remaining \$250 million notional of the three original interest rate swap contracts of \$750 million aggregate notional value. As a result of this amendment, the Company changed the rate indexed in the contract from LIBOR to SOFR, effective June 30, 2023 in anticipation of the Reference Rate Reform and to align the index rate in this contract to that in the Term Loan Facility, as described above. This amendment did not change the notional value and the expiration date of this contract, which is set to expire in September 2024. We completed a hedge effectiveness test as a result of this amendment and determined that this hedge instrument continues to be highly effective, enabling us to continue to apply hedge accounting over the remaining term of this hedge relationship.

As of December 31, 2023, the Company maintains a total of \$950 million of interest rate swaps with the objective in using the interest-rate swap agreements to add stability to interest expense and to manage the Company's 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. 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.

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 Income 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, the Australian Dollar, the Euro and the Pound Sterling 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, 2023, we had no outstanding amounts to reduce the exposure of our Australian subsidiaries' cost of sales to fluctuations in currency rates or to reduce the exposure of our South African subsidiaries' third party sales to fluctuations in currency rates. Refer to Note 13 in notes to consolidated financial statements.

From time to time, we enter into foreign currency contracts for the South African Rand, Australian Dollar, Euro, Pound Sterling, and Saudi Riyal 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 Statements 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, 2023, there was (i) 837 million South African Rand (or approximately \$46 million at the December 31, 2023 exchange rate), (ii) 153 million Australian dollars (or approximately \$105 million at the December 31, 2023 exchange rate), (iii) 45 million Pound Sterling (or approximately \$57 million at the December 31, 2023 exchange rate), (iv) 45 million Euro (or approximately \$50 million at the December 31, 2023 exchange rate) and (v) 67 million Saudi Riyal (or approximately \$18 million at the December 31, 2023 exchange rate) of notional amount of outstanding foreign currency contracts.

Item 8. Financial Statements and Supplementary Data

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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, 2023 and 2022, and the related consolidated statements of operations, of comprehensive (loss) income, of changes in shareholders' equity and of cash flows for each of the three years in the period ended December 31, 2023, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023 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, 2023, 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.

Realizability of Australia Deferred Tax Assets

As described in Notes 2 and 5 to the consolidated financial statements, as of December 31, 2023, the Company has \$1.1 billion of net deferred tax assets, inclusive of valuation allowances associated with deferred tax assets of \$1.9 billion. 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. Management periodically assesses the likelihood that the Company will be able to recover the deferred tax assets and reflects any changes in 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 weighed to determine whether a valuation allowance should be recorded. During the year ended December 31, 2023, management identified negative evidence concerning the Company's ability to realize the net balance of the Australia group deferred tax assets. This evidence primarily relates to losses generated during the current year and uncertainty regarding the region's ability to generate income in the near term. After weighing all the positive and negative evidence, management determined that it is more likely than not that the Australia deferred tax assets may not be realized. As a result, the Company recorded a \$293 million non-cash charge to tax expense for the year ended December 31, 2023.

The principal considerations for our determination that performing procedures relating to the realizability of Australia deferred tax assets is a critical audit matter are the (i) significant judgment by management in determining whether it is more likely than not that the Australia deferred tax assets will not be realized in the future and (ii) a high degree of auditor judgment in evaluating audit evidence related to management's assessment of the realizability of the Australia 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 income tax process, including controls over management's assessment of the realizability of deferred tax assets. These procedures also included, among others (i) evaluating the positive and negative evidence available to support management's assessment of the realizability of the Australia deferred tax assets; (ii) testing the completeness and accuracy of underlying data used in management's assessment; and (iii) testing the completeness and accuracy of the tax expense related to the establishment of the valuation allowance on the Australia deferred tax assets.

/s/ PricewaterhouseCoopers LLP
Stamford, Connecticut
February 21, 2024

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,		
	2023	2022	2021
Net sales	\$ 2,850	\$ 3,454	\$ 3,572
Cost of goods sold	2,388	2,622	2,677
Gross profit	462	832	895
Selling, general and administrative expenses	276	289	318
Venator settlement	—	85	—
Income from operations	186	458	577
Interest expense	(158)	(125)	(157)
Interest income	18	9	7
Loss on extinguishment of debt	—	(21)	(65)
Other income (expense), net	3	(13)	12
Income before income taxes	49	308	374
Income tax (provision) benefit	(363)	192	(71)
Net (loss) income	(314)	500	303
Net income attributable to noncontrolling interest	2	3	17
Net (loss) income attributable to Tronox Holdings plc	<u>\$ (316)</u>	<u>\$ 497</u>	<u>\$ 286</u>
(Loss) Earnings per share:			
Basic	<u>\$ (2.02)</u>	<u>\$ 3.21</u>	<u>\$ 1.88</u>
Diluted	<u>\$ (2.02)</u>	<u>\$ 3.16</u>	<u>\$ 1.81</u>
Weighted average shares outstanding, basic (in thousands)	<u>156,397</u>	<u>154,867</u>	<u>152,056</u>
Weighted average shares outstanding, diluted (in thousands)	<u>156,397</u>	<u>157,110</u>	<u>157,945</u>

See notes to consolidated financial statements.

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

	Year Ended December 31,		
	2023	2022	2021
Net (loss) income	\$ (314)	\$ 500	\$ 303
Other comprehensive income (loss):			
Foreign currency translation adjustments	(15)	(79)	(113)
Pension and postretirement plans (See Note 21):			
Actuarial (losses) gains, net of tax benefit of \$5, tax expense of \$4 and tax expense of \$6 in 2023, 2022 and 2021, respectively	(14)	5	16
Amortization of unrecognized actuarial losses, net of tax expense of nil in 2023, tax benefit of \$2 in 2022 and tax benefit of \$2 in 2021	—	2	4
Settlement loss reclassified from accumulated other comprehensive loss to the Consolidated Statements of Operations, net of nil taxes in 2023, tax benefit of \$5 in 2022 and nil taxes in 2021	—	15	—
Total pension and postretirement (losses) gains	(14)	22	20
Realized losses (gains) on derivative instruments reclassified from accumulated other comprehensive loss to the Consolidated Statements of Operations (net of tax benefit of \$3 in 2023, net of tax expense of \$1 in both 2022 and 2021.	2	(23)	(32)
Unrealized (losses) gains on derivative financial instruments, (net of tax benefit of \$1, tax expense of \$5 and tax expense of \$1 in 2023, 2022, 2021, respectively; See Note 14)	(15)	53	21
Other comprehensive loss	(42)	(27)	(104)
Total comprehensive (loss) income	\$ (356)	\$ 473	\$ 199
Comprehensive income (loss) attributable to noncontrolling interest:			
Net income	2	3	17
Foreign currency translation adjustments	4	3	(10)
Comprehensive income attributable to noncontrolling interest	6	6	7
Comprehensive (loss) income attributable to Tronox Holdings plc	\$ (362)	\$ 467	\$ 192

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,	
	2023	2022
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 273	\$ 164
Accounts receivable (net of allowance of \$3 in 2023 and \$4 in 2022)	290	377
Inventories, net	1,421	1,278
Prepaid and other assets	141	135
Income taxes receivable	10	6
Total current assets	2,135	1,960
Noncurrent Assets		
Property, plant and equipment, net	1,835	1,830
Mineral leaseholds, net	654	701
Intangible assets, net	243	250
Lease right of use assets, net	132	136
Deferred tax assets	917	1,233
Other long-term assets	218	196
Total assets	\$ 6,134	\$ 6,306
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	\$ 461	\$ 486
Accrued liabilities	230	252
Short-term lease liabilities	24	20
Short-term debt	11	50
Long-term debt due within one year	27	24
Income taxes payable	—	18
Total current liabilities	753	850
Noncurrent Liabilities		
Long-term debt, net	2,786	2,464
Pension and postretirement healthcare benefits	104	89
Asset retirement obligations	172	153
Environmental liabilities	48	51
Long-term lease liabilities	103	110
Deferred tax liabilities	149	153
Other long-term liabilities	39	33
Total liabilities	4,154	3,903
Commitments and Contingencies - Note 18		
Shareholders' Equity		
Tronox Holdings plc ordinary shares, par value \$0.01 — 156,793,755 shares issued and outstanding at December 31, 2023 and 154,496,923 shares issued and outstanding at December 31, 2022	2	2
Capital in excess of par value	2,064	2,043
Retained Earnings	684	1,080
Accumulated other comprehensive loss	(814)	(768)
Total Tronox Holdings plc shareholders' equity	1,936	2,357
Noncontrolling interest	44	46
Total equity	1,980	2,403
Total liabilities and equity	\$ 6,134	\$ 6,306

See notes to consolidated financial statements.

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

	Year Ended December 31,		
	2023	2022	2021
Cash Flows from Operating Activities:			
Net (loss) income	(314)	500	303
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation, depletion and amortization	275	269	297
Deferred income taxes	330	(261)	15
Share-based compensation expense	21	26	31
Amortization of deferred debt issuance costs and discount on debt	9	8	11
Loss on extinguishment of debt	—	21	65
Other non-cash affecting net (loss) income	37	50	36
Changes in assets and liabilities:			
Decrease (increase) in accounts receivable, net	84	233	(108)
(Increase) decrease in inventories, net	(151)	(255)	53
Decrease in prepaid and other assets	37	47	53
(Decrease) increase in accounts payable and accrued liabilities	(84)	(5)	53
Net changes in income tax payables and receivables	(24)	5	9
Changes in other non-current assets and liabilities	(36)	(40)	(78)
Cash provided by operating activities	<u>184</u>	<u>598</u>	<u>740</u>
Cash Flows from Investing Activities:			
Capital expenditures	(261)	(428)	(272)
Insurance proceeds	—	—	1
Proceeds from the sale of assets	6	13	2
Cash used in investing activities	<u>(255)</u>	<u>(415)</u>	<u>(269)</u>
Cash Flows from Financing Activities:			
Repayments of short-term debt	(148)	(113)	—
Repayments of long-term debt	(17)	(516)	(3,212)
Proceeds from short-term debt	86	142	—
Proceeds from long-term debt	347	396	2,472
Repurchase of common stock	—	(50)	—
Debt issuance costs	(3)	(4)	(37)
Call premium paid	—	(18)	(40)
Dividends paid	(89)	(87)	(65)
Restricted stock and performance-based shares settled in cash for taxes	—	—	(3)
Proceeds from the exercise of stock options	—	—	8
Cash provided by (used in) financing activities	<u>176</u>	<u>(250)</u>	<u>(877)</u>
Effects of exchange rate changes on cash and cash equivalents and restricted cash	<u>4</u>	<u>(1)</u>	<u>(10)</u>
Net increase (decrease) in cash and cash equivalents and restricted cash	<u>109</u>	<u>(68)</u>	<u>(416)</u>
Cash and cash equivalents and restricted cash at beginning of period	<u>164</u>	<u>232</u>	<u>648</u>
Cash and cash equivalents and restricted cash at end of period	<u>\$ 273</u>	<u>\$ 164</u>	<u>\$ 232</u>
Supplemental cash flow information:			
Interest paid, net	<u>\$ 143</u>	<u>\$ 114</u>	<u>\$ 138</u>
Income taxes paid	<u>\$ 54</u>	<u>\$ 60</u>	<u>\$ 47</u>

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
Balance at January 1, 2021	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)
Share-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)
Balance at December 31, 2021	153,935	\$ 2	\$ 2,067	\$ 663	\$ (738)	\$ 1,994	\$ 48	\$ 2,042
Net income	—	—	—	497	—	497	3	500
Other comprehensive (loss) income	—	—	—	—	(30)	(30)	3	(27)
Share-based compensation	3,420	—	26	—	—	26	—	26
Shares cancelled	(28)	—	—	—	—	—	—	—
Options exercised	14	—	—	—	—	—	—	—
Shares repurchased and cancelled	(2,844)	—	(50)	—	—	(50)	—	(50)
Noncontrolling interest dividend	—	—	—	—	—	—	(8)	(8)
Ordinary share dividends (\$0.50 per share)	—	—	—	(80)	—	(80)	—	(80)
Balance at December 31, 2022	154,497	\$ 2	\$ 2,043	\$ 1,080	\$ (768)	\$ 2,357	\$ 46	\$ 2,403
Net (loss) income	—	—	—	(316)	—	(316)	2	(314)
Other comprehensive (loss) income	—	—	—	—	(46)	(46)	4	(42)
Share-based compensation	2,320	—	21	—	—	21	—	21
Shares cancelled	(23)	—	—	—	—	—	—	—
Noncontrolling interest dividend	—	—	—	—	—	—	(8)	(8)
Ordinary share dividends (\$0.50 per share)	—	—	—	(80)	—	(80)	—	(80)
Balance at December 31, 2023	156,794	\$ 2	\$ 2,064	\$ 684	\$ (814)	\$ 1,936	\$ 44	\$ 1,980

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 and South Africa to produce feedstock materials that can be processed into TiO₂ for pigment, high purity titanium chemicals, including titanium tetrachloride, and Ultrafine© titanium dioxide used in certain specialty applications. Our strategy is to be vertically integrated and produce enough feedstock materials to be as self-sufficient as possible in the production of TiO₂ at our nine 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 coatings and other TiO₂ customers throughout the world. The mining, beneficiation and smelting of titanium bearing mineral sands creates meaningful quantities of zircon, pig iron and the rare-earth bearing mineral, monazite, 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 (expense), 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 3.

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 \$12 million, \$12 million, and \$13 million during 2023, 2022, and 2021, 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 weighed 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 5.

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 15.

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 both December 31, 2023 and December 31, 2022, we had restricted cash of less than \$1 million which was in Australia related to outstanding performance bonds.

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 8.

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 9.

We capitalize costs associated with our asset retirement obligations which are generally included in machinery and equipment. See Note 17.

We capitalize interest costs on major projects that require an extended period of time to complete. See Note 13.

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 10.

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 11.

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.

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 assets are amortized on a straight-line basis over the shorter of their estimated useful lives and the lease terms. See Note 16.

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 13.

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 17.

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 18.

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 20.

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 Statements of Operations. Net periodic cost is recorded in cost of goods sold and selling, general and administrative expenses in the Consolidated Statements 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 (loss) in the Consolidated Statement of Comprehensive Income. 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 Statements 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 Issued Accounting Pronouncements

In November 2023, the FASB issued ASU 2023-07, "Improvements to Reportable Segment Disclosures". The amendment requires additional disclosures by public entities, including those with a single reportable segment, to disclose significant segment expenses and other segment items for each reportable segment. The guidance applies to fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted. We are currently evaluating any incremental disclosures required as a result of this standard.

In December 2023, the FASB issued ASU 2023-09, "Income Taxes (Topic 740): Improvements to Income Tax Disclosures". The amendments in this update apply to all entities that are subject to Topic 740, Income Taxes. The standard requires disaggregated information about a reporting entity's effective tax rate reconciliation as well as information on income taxes paid. The amendments in this update are effective for annual periods beginning after December 15, 2024. The guidance will be applied on a prospective basis with the option to apply the standard retrospectively. Early adoption is permitted. We are currently evaluating any incremental disclosures required as a result of this standard.

Recently Adopted 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. In December 2022, the FASB issued ASU 2022-06, which defers the sunset date of ASC 848, Reference Rate Reform, from December 31, 2022 to December 31, 2024. ASU 2022-06 is effective immediately for all entities.

We completed an internal assessment to identify items that were impacted as a result of the dissolution of LIBOR. Based upon this assessment, we determined that this change was most impactful to our intercompany debt agreements and interest rate swap agreements. Upon conversion of these benchmark rates, we elected the practical expedients allowed under this standard which resulted in an immaterial impact to the financial statements. In addition, during the year ended December 31, 2023, we elected to utilize certain exemptions allowed by this pronouncement as it relates to our interest rate swap transactions. Refer to Note 14 for further details.

3. Revenue

Nature of Contracts and Performance Obligations

We primarily generate revenue from selling TiO₂ 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, 2023, and December 31, 2022, 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 both December 31, 2023 and December 31, 2022 were less than \$1 million. Contract liability balances were reported as “Accrued liabilities” in the Consolidated Balance Sheets. All material contract liabilities as of December 31, 2022 and 2021 were recognized as revenue in “Net sales” in the Consolidated Statements of Operations during the first quarter of 2023 and first quarter of 2022, respectively.

Disaggregation of Revenue

We operate under one operating and reportable segment, Tronox. See Note 23 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:

	Year Ended December 31,		
	2023	2022	2021
North America	\$ 754	\$ 790	\$ 743
South and Central America	159	264	252
Europe, Middle-East and Africa	1,131	1,335	1,398
Asia Pacific	806	1,065	1,179
Total net sales	<u>\$ 2,850</u>	<u>\$ 3,454</u>	<u>\$ 3,572</u>

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

	Year Ended December 31,		
	2023	2022	2021
TiO ₂	\$ 2,248	\$ 2,693	\$ 2,793
Zircon	257	438	478
Other products	345	323	301
Total net sales	<u>\$ 2,850</u>	<u>\$ 3,454</u>	<u>\$ 3,572</u>

Other products mainly include pig iron, TiCl₄ and other mining products. The nature, amount, timing and uncertainty of revenue and cash flows typically do not differ significantly among different products.

4. Other Income (Expense), Net

Other income (expense), net is comprised of the following:

	Year Ended December 31,		
	2023	2022	2021
Net realized and unrealized foreign currency gains (losses)	\$ 6	\$ (3)	\$ 16
Pension and postretirement benefit interest cost, expected return on assets and amortization of actuarial losses	—	4	5
Pension settlement loss ⁽¹⁾	—	(20)	—
Breakage fee ⁽²⁾	—	—	(18)
AMIC technical service support fee (Note 22)	6	8	8
Other, net	(9)	(2)	1
Total	<u>\$ 3</u>	<u>\$ (13)</u>	<u>\$ 12</u>

(1) 2022 amount is a settlement loss related to our U.S. Qualified Plan.

(2) 2021 amount represents the breakage fee associated with the termination of the TTI acquisition.

5. 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) before income taxes is comprised of the following:

	Year Ended December 31,		
	2023	2022	2021
United Kingdom	\$ (47)	\$ (130)	\$ (16)
International	96	438	390
Income before income taxes	<u>\$ 49</u>	<u>\$ 308</u>	<u>\$ 374</u>

The income tax (provision) benefit is summarized below:

	Year Ended December 31,		
	2023	2022	2021
United Kingdom:			
Current	\$ 1	\$ —	\$ (1)
Deferred	—	—	—
International:			
Current	(34)	(69)	(55)
Deferred	(330)	261	(15)
Income tax (provision) benefit	<u>\$ (363)</u>	<u>\$ 192</u>	<u>\$ (71)</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.

	Year Ended December 31,		
	2023	2022	2021
Statutory tax rate	24 %	19 %	19 %
Increases (decreases) resulting from:			
Tax rate differences	(26)	9	7
Non-taxable income and expenses	29	8	2
Valuation allowances	670	(100)	(27)
Corporate reorganization	—	—	17
Tax rate changes	10	(3)	2
State and local taxes	14	1	1
Prior year accruals	9	—	(2)
Branch taxation	—	—	—
Withholding taxes	—	2	2
Tax credits	—	—	(2)
Expiration of net operating loss	11	2	—
Other, net	—	—	—
Effective tax rate	<u>741 %</u>	<u>(62)%</u>	<u>19 %</u>

Tronox Holdings plc is a U.K. public limited company and the parent company for the business group. The statutory tax rate in the U.K. at December 31, 2023 was 25% and at December 31, 2022 and 2021 was 19%. The statutory rate in the U.K. changed to 25% effective April 1, 2023 and a weighted average rate of 23.5% was applied for the full year 2023.

The effective tax rates in 2023, 2022 and 2021 are all influenced by a variety of factors, primarily income and losses in jurisdictions with valuation allowances, changes in tax rates, non-taxable income and expenses, prior year accruals, and rates different than the United Kingdom statutory rate. The valuation allowances in each year were impacted by items other than income and losses as follows: 2023 was impacted by recording valuation allowances in China and Australia, 2022 was impacted by releasing a valuation allowance in Australia, and 2021 was impacted by releasing a valuation allowance in Saudi Arabia. Additional factors of significance in the above table are as follows: 1) the Non-taxable income and expenses amount for 2022 includes the Venator settlement, 2) the Corporate reorganization amount for 2021 includes the liquidation of the inactive Dutch subsidiary and the write-off of its net operating losses, and 3) the Corporate reorganization amounts for 2021 include the restructuring of our Australian entities. Each of these additional factors were fully offset by valuation allowances.

Net deferred tax assets (liabilities) at December 31, 2023 and 2022 were comprised of the following:

	December 31,	
	2023	2022
Deferred tax assets:		
Net operating loss and other carryforwards	\$ 1,800	\$ 1,739
Property, plant and equipment, net	182	200
Reserves for environmental remediation and restoration	53	47
Obligations for pension and other employee benefits	50	46
Investments	3	4
Grantor trusts	609	621
Inventories, net	10	6
Interest	161	190
Lease liabilities	46	48
Other accrued liabilities	4	2
Foreign exchange	0	1
Other	4	5
Total deferred tax assets	2,922	2,909
Valuation allowance associated with deferred tax assets	(1,860)	(1,527)
Net deferred tax assets	1,062	1,382
Deferred tax liabilities:		
Inventories, net	(3)	(3)
Property, plant and equipment, net	(223)	(228)
Intangible assets, net	(9)	(15)
Lease assets	(43)	(38)
Foreign exchange	(6)	(4)
Interest	(7)	(9)
Other	(3)	(5)
Total deferred tax liabilities	(294)	(302)
Net deferred tax asset	\$ 768	\$ 1,080
Balance sheet classifications:		
Deferred tax assets — long-term	\$ 917	\$ 1,233
Deferred tax liabilities — long-term	\$ (149)	\$ (153)
Net deferred tax asset	\$ 768	\$ 1,080

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 an increase to our valuation allowance of \$333 million during 2023 and a decrease of \$314 million in 2022. The table below sets forth the changes, by jurisdiction:

	December 31,	
	2023	2022
United Kingdom	\$ 11	\$ 13
United States	(18)	(5)
Australia	346	(314)
Switzerland	(7)	(8)
China	1	—
Total increase (decrease) in valuation allowances	\$ 333	\$ (314)

During the year ended December 31, 2023, the Company identified negative evidence concerning our ability to realize the net balance of our Australia group deferred tax assets. This evidence primarily relates to losses generated during the current year and uncertainty regarding the region's ability to generate income in the near term. After weighing all the positive and negative evidence, we determined that it is more likely than not that the Australia deferred tax assets may not be realized. As a result, we recorded a \$293 million non-cash charge to tax expense for the year ended December 31, 2023.

The Company has a Swiss entity acquired in the Cristal transaction that had net operating loss carryovers. During the year ended December 31, 2023, a majority of these losses expired unused because the Swiss entity no longer has significant income-generating activities. A valuation allowance was previously carried against these losses and is no longer required.

During the year ended December 31, 2022, the Company had determined that sufficient positive evidence existed to reverse a portion of the valuation allowance in Australia. This reversal resulted in a non-cash deferred tax benefit of \$300 million. Our analysis considered all positive and negative evidence, including (i) three years of cumulative income of our Australian subsidiaries, (ii) our continuing and improved profitability over the last twelve months, (iii) estimates of continued profitability based on updated to our latest forecasts, (iv) changes in the factors that drove losses in the past, and (v) an evaluation of specific deferred tax assets for limitations under certain Australian tax provisions. Based on this analysis, we concluded that it is more likely than not that our Australian subsidiaries will be able to utilize all of their deferred tax assets except for those which are classified as Capital Gains Tax (CGT) assets.

At December 31, 2023, we continue to maintain full valuation allowances related to the total net deferred tax assets in the United Kingdom, as we cannot objectively assert that these deferred tax assets are more likely than not to be realized. Future provisions for income taxes in Australia and the United Kingdom 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 China, 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 weighed to determine whether a valuation allowance should be recorded. The more significant evidential matter in the United Kingdom relates to cumulative book losses. The most significant evidential matter for Australia and South Africa relates to capital losses and assets that cannot be depleted or depreciated for tax purposes.

The deferred tax assets generated by tax loss carryforwards in Australia, China 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, 2023 is shown below. The tax loss carryforwards in Australia, Saudi Arabia, France, Brazil and the United Kingdom do not expire.

	2024	2025	2026	2027	2028	2029 - 2040	Unlimited	Total Tax Loss Carryforwards
United Kingdom	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ (135)	\$ (135)
Australia	—	—	—	—	—	—	(622)	(622)
The Netherlands	—	—	—	—	—	—	(122)	(122)
France	—	—	—	—	—	—	(179)	(179)
Saudi Arabia	—	—	—	—	—	—	(4)	(4)
China	—	—	—	(3)	(6)	—	—	(9)
Brazil	—	—	—	—	—	—	(11)	(11)
Other	—	—	—	—	—	—	(2)	(2)
U.S. Federal	—	—	—	—	—	(3,919)	(334)	(4,253)
U.S. State	(12)	(39)	(66)	(27)	(12)	(3,969)	(19)	(4,144)
Total tax loss carryforwards	<u>\$ (12)</u>	<u>\$ (39)</u>	<u>\$ (66)</u>	<u>\$ (30)</u>	<u>\$ (18)</u>	<u>\$ (7,888)</u>	<u>\$ (1,428)</u>	<u>\$ (9,481)</u>

At December 31, 2023, Tronox Holdings plc had foreign subsidiaries with undistributed earnings. Although we would not be subject to income tax on these earnings, amounts totaling \$535 million are in specific jurisdictions which we assert are indefinitely reinvested outside of the parents' taxing jurisdictions. These amounts could be subject to withholding tax if distributed, but the Company has made no provision for tax related to these undistributed earnings. The Company has removed its assertion that earnings in China are indefinitely reinvested, and the withholding tax accruals for potential repatriations from that jurisdiction are now reflected in the effective tax rate reconciliation above.

The noncurrent liabilities section of our Consolidated Balance Sheet does not reflect any reserves for uncertain tax positions for either 2023 or 2022.

Our France returns are closed through 2020. Our Brazil, China, Netherlands, South Africa, U.K. and U.S. returns are closed through 2019. Our Australia returns are being held open back to 2017 for an on-going risk review.

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.

During the year ended December 31, 2023, the United Kingdom enacted legislation consistent with guidance from the Organization for Economic Co-operation and Development ("OECD") for the implementation of Pillar Two, effective in 2024. The Company does not believe this will have a significant impact on future financial results.

6. (Loss) Income Per Share

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

	Year Ended December 31,		
	2023	2022	2021
Numerator – Basic and Diluted:			
Net (loss) income	\$ (314)	\$ 500	\$ 303
Less: Net income attributable to noncontrolling interest	2	3	17
Net (loss) income available to ordinary shares	<u>\$ (316)</u>	<u>\$ 497</u>	<u>\$ 286</u>
Denominator – Basic and Diluted:			
Weighted-average ordinary shares, basic (in thousands)	<u>156,397</u>	<u>154,867</u>	<u>152,056</u>
Weighted-average ordinary shares, diluted (in thousands)	<u>156,397</u>	<u>157,110</u>	<u>157,945</u>
Net (loss) income per Ordinary Share:			
Basic net (loss) income per ordinary share	<u>\$ (2.02)</u>	<u>\$ 3.21</u>	<u>\$ 1.88</u>
Diluted net (loss) income per ordinary share	<u>\$ (2.02)</u>	<u>\$ 3.16</u>	<u>\$ 1.81</u>

Net (loss) income per ordinary share amounts were calculated from exact, unrounded net (loss) income and share information. Anti-dilutive shares not recognized in the diluted net (loss) income per share calculation for the years ended December 31, 2023, 2022 and 2021 were as follows:

	Shares		
	2023	2022	2021
Options	217,643	515,092	414,296
Restricted share units	2,475,125	1,590,086	—

7. Accounts Receivable Securitization Program

On March 15, 2022, the Company entered into an accounts receivable securitization program ("Securitization Facility") with a financial institution ("Purchaser"), through our wholly-owned special purpose bankruptcy-remote subsidiary Tronox Securitization LLC ("SPE"). The purpose of this program is to enhance the Company's financial flexibility by providing additional liquidity. The Securitization Facility permitted the SPE to sell accounts receivable up to \$75 million (the "Facility Limit"). Under the Securitization Facility, our wholly-owned U.S. operating subsidiary, Tronox LLC ("Originator"), sells its entire accounts receivable on a periodic basis to the SPE. The SPE in turn sells undivided interests in the receivables that meet certain eligibility criteria, pursuant to the terms of a receivable purchase agreement, to the Purchaser in exchange for cash, not to exceed the Facility Limit. The SPE retains the remaining receivables as unsold receivables which are pledged as a collateral for the sold receivables to which the purchaser is granted a first priority security interest.

Following the sale of the receivables by the Originator to the SPE, the receivables are legally isolated from Tronox and its affiliated entities, and upon the subsequent sale and transfer of the receivables from the SPE to the administrative agent, effective control of the receivables is passed to the purchaser, which has all rights, including the right to pledge or sell the receivables. Any new receivables that are not sold to the purchaser by the SPE are added to the unsold receivables held as collateral.

In November 2022, the Securitization Facility was amended (the "First Amendment") to include receivables generated by our wholly-owned Australian operating subsidiaries, Tronox Pigment Pty Ltd., Tronox Pigment Bunbury Ltd. and Tronox Mining Australia Ltd. which increased the Facility Limit to \$200 million and extended the program term to November 2025. Following

this amendment, we sold additional accounts receivable in exchange for net cash proceeds of \$72 million, for a total aggregate amount of \$147 million for the combined program.

In June 2023, the Company entered into an additional amendment (the "Second Amendment") to further include receivables generated by our wholly-owned European operating subsidiaries Tronox Pigment Holland BV and Tronox Pigment UK Limited. Neither the facility limit nor the program term were changed as a result of the Second Amendment, which remain at \$200 million and November 2025, respectively. As a result of the Second Amendment, during the year ended December 31, 2023, we incurred \$1 million of transaction costs, which are recorded in "Other income (expense), net" in our Consolidated Statement of Operations.

As the Company does not maintain effective control over the sold receivables, we derecognize the sold receivables from our Consolidated Balance Sheet and classify the cash proceeds as source of cash from operating activities in our Consolidated Statement of Cash Flows.

The program is structured on a revolving basis under which cash collections from receivables are used to fund additional purchases of receivables at 100% face value, not to exceed the facility limit. At December 31, 2023 and 2022, the total value of accounts receivable sold under the Securitization Facility and derecognized from the Company's Consolidated Balance Sheet was \$186 million and \$123 million, respectively. This resulted in the Company recording \$5 million and \$24 million within "Accounts payable" on the Consolidated Balance Sheet at December 31, 2023 and 2022, respectively, as this amount is due to the Purchaser as a result of a periodic decrease in accounts receivable sold to the Purchaser, which was paid in January 2024 and January 2023, respectively. Additionally, at December 31, 2023 and 2022, respectively, we retained \$129 million and \$69 million of unsold receivables that we pledged as collateral for the sold receivables.

The following table sets forth a summary of the receivables sold and fees incurred under the program during the related periods:

	Year Ended December 31,	
	2023	2022
Cash proceeds from collections reinvested in the program	\$ 821	\$ 426
Incremental accounts receivables sold	884	549
Fees incurred ¹	11	2

¹ Fees due to the Purchaser relate to monthly utilization of the Securitization Facility and are recorded in "Other income (expense), net" in our Consolidated Statements of Operations.

8. Inventories, net

Inventories, net consisted of the following:

	December 31,	
	2023	2022
Raw materials	\$ 352	\$ 261
Work-in-process	141	125
Finished goods, net	688	641
Materials and supplies, net	240	251
Inventories, net	<u>\$ 1,421</u>	<u>\$ 1,278</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.

At December 31, 2023, there was approximately \$57 million of inventory that is not expected to be sold within in one year and as such, has been recorded in "Other long-term assets" on the Consolidated Balance Sheet.

At December 31, 2023 and 2022, inventory obsolescence reserves were \$42 million and \$42 million, respectively. At December 31, 2023 and December 31, 2022, reserves for lower of cost and net realizable value were \$50 million and \$27 million, respectively.

9. Property, Plant and Equipment

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

	December 31,	
	2023	2022
Land and land improvements	\$ 237	\$ 226
Buildings	404	390
Machinery and equipment	2,530	2,330
Construction-in-progress	319	370
Other	60	62
Subtotal	3,550	3,378
Less: accumulated depreciation	(1,715)	(1,548)
Property, plant and equipment, net	<u>\$ 1,835</u>	<u>\$ 1,830</u>

Substantially all the Property, plant and equipment, net is pledged as collateral for our debt. See Note 13.

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,		
	2023	2022	2021
Cost of goods sold	\$ 210	\$ 205	\$ 222
Selling, general and administrative expenses	4	4	5
Total	<u>\$ 214</u>	<u>\$ 209</u>	<u>\$ 227</u>

10. Mineral Leaseholds, net

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

	December 31,	
	2023	2022
Mineral leaseholds	\$ 1,260	\$ 1,282
Less accumulated depletion	(606)	(581)
Mineral leaseholds, net	<u>\$ 654</u>	<u>\$ 701</u>

Depletion expense related to mineral leaseholds during 2023, 2022, and 2021 was \$30 million, \$29 million, and \$37 million, respectively, and was recorded in "Cost of goods sold" in the Consolidated Statements of Operations.

11. Intangible Assets, net

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

	December 31, 2023			December 31, 2022		
	Gross Cost	Accumulated Amortization	Net Carrying Amount	Gross Cost	Accumulated Amortization	Net Carrying Amount
Customer relationships	\$ 291	\$ (250)	\$ 41	\$ 291	\$ (231)	\$ 60
TiO ₂ technology	93	(44)	49	93	(37)	56
Internal-use software and other	201	(48)	153	179	(45)	134
Intangible assets, net	<u>\$ 585</u>	<u>\$ (342)</u>	<u>\$ 243</u>	<u>\$ 563</u>	<u>\$ (313)</u>	<u>\$ 250</u>

As of December 31, 2023 and 2022, internal-use software included approximately \$125 million and \$106 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:

	Year Ended December 31,		
	2023	2022	2021
Cost of goods sold	\$ 3	\$ 2	\$ 2
Selling, general and administrative expenses	28	29	31
Total	\$ 31	\$ 31	\$ 33

Estimated future amortization expense related to intangible assets is \$32 million for 2024, \$39 million for 2025, \$26 million for 2026, \$24 million for 2027, \$24 million for 2028 and \$98 million thereafter.

12. Balance Sheet and Cash Flows Supplemental Information

Accrued liabilities consisted of the following:

	December 31,	
	2023	2022
Employee-related costs and benefits	\$ 111	\$ 107
Related party payables	1	15
Interest	16	15
Sales rebates	36	37
Taxes other than income taxes	6	13
Asset retirement obligations	14	8
Other accrued liabilities	46	57
Accrued liabilities	\$ 230	\$ 252

Additional supplemental cash flow information for the year ended and as of December 31, 2023, 2022 and 2021 is as follows:

Supplemental non cash information:	Year Ended December 31,		
	2023	2022	2021
Operating activities - Chloride slag inventory purchases made from AMIC	\$ 51	\$ —	\$ —
Operating activities - reduction of Hawkins Point environmental obligation	\$ —	\$ 12	\$ —
Operating activities - MGT sales made to AMIC	\$ 6	\$ 3	\$ 4
Operating activities - Interest expense on MGT loan	\$ 2	\$ 1	\$ 1
Investing activities - In-kind receipt of AMIC loan repayment	\$ 51	\$ —	\$ —
Investing activities - sale of Hawkins Point land	\$ —	\$ 12	\$ —
Financing activities - Acquisition of noncontrolling interest	\$ —	\$ —	\$ 125
Financing activities - Repayment of MGT loan	\$ 6	\$ 3	\$ 3
Financing activities - Initial commercial insurance premium financing agreement	\$ 18	\$ 21	\$ —

	December 31,		
	2023	2022	2021
Capital expenditures acquired but not yet paid	\$ 67	\$ 72	\$ 75

13. 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, 2023	December 31, 2022
Term Loan Facility, net of unamortized discount ⁽¹⁾	\$ 1,300	Variable	3/11/2028	\$ 898	\$ 898
2022 Term Loan Facility, net of unamortized discount ⁽¹⁾	400	Variable	4/4/2029	390	393
2023 Term Loan Facility, net of unamortized discount ⁽¹⁾	350	Variable	8/16/2028	347	—
Senior Notes due 2029	1,075	4.63 %	3/15/2029	1,075	1,075
Standard Bank Term Loan Facility ⁽¹⁾	98	Variable	11/11/2026	64	77
Australian Government Loan, net of unamortized discount	N/A	N/A	12/31/2036	1	1
MGT Loan ⁽²⁾	36	Variable	Variable	25	30
Finance leases				43	47
Long-term debt				2,843	2,521
Less: Long-term debt due within one year				(27)	(24)
Debt issuance costs				(30)	(33)
Long-term debt, net				<u>\$ 2,786</u>	<u>\$ 2,464</u>

⁽¹⁾The average effective interest rate, including impacts of our interest rate swap, for the Term Loan Facility was 6.6% and 4.8% for the year ended December 31, 2023 and 2022, respectively. The average effective interest rate on the 2022 Term Loan Facility was 8.7% and 5.8% for the year ended December 31, 2023 and 2022, respectively. The average effective interest rate on the 2023 Term Loan Facility was 10.1% for the year ended December 31, 2023. The average effective interest rate on the Standard Bank Term Loan Facility was 10.3% and 7.2% for the year ended December 31, 2023 and 2022, respectively.

⁽²⁾The MGT loan is a related party debt facility. Average effective interest rate on the MGT loan was 6.0% and 4.4% during the year ended December 31, 2023 and 2022, respectively. Refer below for further details.

At December 31, 2023, the scheduled maturities of our long-term debt were as follows:

	Total Borrowings
2024	27
2025	28
2026	67
2027	16
2028	1,247
Thereafter	1,468
Total	2,853
Remaining accretion associated with the Term Loan Facility, the 2022 Term Loan Facility and the 2023 Term Loan Facility	(10)
Total borrowings	<u>2,843</u>

Long-term Debt

Term Loan Facility and Cash Flow Revolver

On March 11, 2021, Tronox Finance LLC (the "Borrower", the Borrower's indirect parent company, Tronox Holdings plc (the "Company")), and certain of the Company's subsidiaries, entered into an amendment and restatement of its then existing senior secured first lien term loan credit facility dated as of September 22, 2017 pursuant to which, among other things, the Borrower amended and restated such existing credit facility with a new amended and restated senior secured first lien credit agreement dated as of September 22, 2017 (as amended through and including March 11, 2021, the "New Credit Agreement") with a syndicate of lenders and HSBC Bank USA, National Association, as administrative agent and collateral agent. The New Credit Agreement provides the Borrower with (a) a new seven-year term loan facility (the "Term Loan Facility") in an aggregate

initial principal amount of \$1.3 billion and (b) new five-year cash flow revolving facility (the "Cash Flow Revolver") providing initial revolving commitments of \$350 million and a sublimit of \$125 million for letters of credit. The maturity date on the Term Loan Facility and the Cash Flow Revolver is March 11, 2028 and March 11, 2026, respectively.

Subject to certain customary and other exceptions, the obligations of the Borrower under the New Credit Agreement are (a) guaranteed on a joint and several basis by the Company and certain of the Company's restricted subsidiaries, and (b) secured by a first priority lien on substantially all of the Borrower's and guarantors' assets, including inventory, receivables and related assets, and equipment, equity interests in subsidiaries, and material real property, in each case subject to certain limitations and principles.

In connection with entering into the New Credit Agreement, the Company terminated all remaining commitments and repaid all obligations under its prior term loan facility and prior revolving credit facility totaling \$1.6 billion (of which \$313 million of the principal under the prior term loan facility was repaid with cash on hand). 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 Statements of Operations for the year ended December 31, 2021. Additionally, during the year ended December 31, 2021, the Company made several voluntary prepayments totaling \$398 million on the Term Loan Facility. As a result, we recognized approximately \$9 million in "Loss on Extinguishment of Debt" recorded in the Consolidated Statements of Operations for the year ended December 31, 2021.

In June 2023, in anticipation of Reference Rate Reform, we amended our interest rate terms of the Term Loan Facility and Cash Flow Revolver from LIBOR to SOFR pursuant to the New Credit Agreement (the "Second Amendment"). The Term Loan Facility and Cash Flow Revolver bear interest at either the base rate or the SOFR rate, at the Company's discretion, in each case plus an applicable margin. Based on our first lien net leverage ratio pursuant to the credit agreement, the applicable margin under the Term Loan Facility and Cash Flow Revolver as of December 31, 2023 was 2.50% and 2.25%, respectively.

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

During the year ended December 31, 2022, we drew down \$133 million on our Cash Flow Revolver and repaid \$103 million as of December 31, 2022. As of December 31, 2022, there was \$30 million outstanding revolving credit loans (recorded within "Short-term debt" on the Consolidated Balance Sheet) under the Cash Flow Revolver, which was fully repaid during the year ended December 31, 2023. The average effective interest rate on the Cash Flow Revolver for the year ended December 31, 2022 was 5.1%. Additionally, there was \$7 million of issued and undrawn letters of credit under the Cash Flow Revolver as of December 31, 2023. Additionally, in connection with the sale of the Hawkins Point Plant (refer to Note 18 - *Commitments & Contingencies* for further details), in December 2022, a \$50 million undrawn letter of credit was issued as a bi-lateral, stand-alone arrangement. Debt issuance costs associated with the Cash Flow Revolver of \$1 million and \$2 million were included in "Other long-term assets" in the Consolidated Balance Sheets at December 31, 2023 and 2022, respectively, and are being amortized over the life of the Cash Flow Revolver.

2022 Term Loan Facility

On April 4, 2022, the Borrower, the Company, certain of the Company's subsidiaries, the incremental term lender party thereto, and HSBC Bank USA, National Association, as Administrative Agent and Collateral Agent, entered into Amendment No. 1 to the New Credit Agreement (the "First Amendment"). The First Amendment provides the Borrower with a new seven-year incremental term loan facility (the "2022 Term Loan Facility" and, the loans thereunder, the "2022 Incremental Term Loans") under the New Credit Agreement in an aggregate initial principal amount of \$400 million.

The obligations of the Borrower under the 2022 Term Loan Facility are guaranteed and secured by the same guarantees and liens under the New Credit Agreement with respect to the Term Loan Facility (as discussed above). The 2022 Incremental Term Loans are a separate class of loans under the credit agreement, and if the Borrower elects to make an optional prepayment under the credit agreement or is required to make a mandatory prepayment under the credit agreement, the Borrower, may, in each case, select which class or classes of loans to prepay.

The 2022 Incremental Term Loans will amortize in equal quarterly installments in an aggregate annual amount equal to 1.0% of the original principal amount of the 2022 Incremental Term Loans commencing with the second full fiscal quarter after the effective date of the 2022 Incremental Term Loan Facility. The final maturity of the 2022 Incremental Term Loans will occur on the seventh anniversary of the effective date of the 2022 Incremental Term Loan Facility. The 2022 Incremental Term Loan Facility permits amendments thereto whereby individual lenders may extend the maturity date of their outstanding loans upon the Borrower's request without the consent of any other lender, so long as certain conditions are met.

The 2022 Incremental Term Loans shall bear interest, at the Borrower's option, at either the base or the SOFR rate, in each case plus an applicable margin. The applicable margin in respect of the 2022 Incremental Loans is 2.25% per annum, for base rate

loans, or 3.25% per annum, for SOFR rate loans. The 2022 Incremental Term Loans have an interest rate floor of 0.50%. As of December 31, 2023, the applicable margin under the 2022 Term Loan Facility was 3.25%.

The 2022 Incremental Term Loan Facility contains the same negative covenants applicable to the term loans outstanding under the New Credit Agreement immediately prior to the effectiveness of the First Amendment, which covenants, subject to certain limitations, thresholds and exceptions, limit the Company and its restricted subsidiaries to (among other restrictions): incur indebtedness; grant liens; pay dividends and make subsidiary and certain other distributions; sell assets; make investments; enter into transactions with affiliates; and make certain modifications to material documents (including organizational documents).

The proceeds of the 2022 Incremental Term Loans were used on April 4, 2022, along with cash on hand, to redeem previous senior notes of \$500 million. As a result of this transaction, we recognized approximately \$21 million, including a call premium of \$18 million, in "Loss on extinguishment of debt" on the Consolidated Statements of Operations for the year ended December 31, 2022.

As of December 31, 2023, the total outstanding principal balance is \$393 million, of which \$4 million is recorded within "Long-term debt due within one year" on the Consolidated Balance Sheet.

2023 Term Loan Facility

In August 2023, the Borrower, the Company, certain of the Company's subsidiaries, the incremental term lender party thereto and HSBC Bank USA, National Association, as Administrative Agent and Collateral Agent, entered into Amendment No. 3 to the New Credit Agreement (the "Third Amendment"). The Third Amendment provides the Borrower with a new five-year incremental term loan facility ("the 2023 Term Loan Facility" and, the loans thereunder, the "2023 Incremental Term Loans") under the New Credit Agreement in an aggregate initial principal amount of \$350 million. A portion of the proceeds of the 2023 Term Loan Facility were used to repay \$159 million of then-outstanding borrowings under the Company's existing revolving credit facilities and to enhance available liquidity for upcoming capital expenditures.

The obligations of the Borrower under the 2023 Term Loan Facility are guaranteed and secured by the same guarantees and liens under the New Credit Agreement with respect to the Term Loan Facility and 2022 Term Loan Facility (as discussed above). The 2023 Incremental Term Loans are a separate class of loans under the credit agreement, and if the Borrower elects to make an optional prepayment under the credit agreement or is required to make a mandatory prepayment under the credit agreement, the Borrower, may, in each case, select which class or classes of loans to prepay.

The 2023 Incremental Term Loans will amortize in equal quarterly installments in an aggregate annual amount equal to 1.0% of the original principal amount of the 2023 Incremental Term Loans commencing with the second full fiscal quarter after the effective date of the 2023 Incremental Term Loan Facility. The final maturity of the 2023 Incremental Term Loans will occur on August 16, 2028. The 2023 Incremental Term Loan Facility permits amendments thereto whereby individual lenders may extend the maturity date of their outstanding loans upon the Borrower's request without the consent of any other lender, so long as certain conditions are met.

The 2023 Incremental Term Loans bear interest, at the Borrower's option, at either the base or the SOFR rate, in each case plus an applicable margin. The applicable margin in respect of the 2023 Incremental Term Loans is 2.50% per annum for base rate loans, or 3.50% per annum for SOFR rate loans. The 2023 Incremental Term Loans have an interest rate floor of 0.50%. As of December 31, 2023, the applicable margin under the 2023 Term Loan Facility was 3.50%.

The 2023 Incremental Term Loan Facility contains the same negative covenants applicable to the term loans outstanding under the New Credit Agreement immediately prior to the effectiveness of the Third Amendment, which covenants, subject to certain limitations, thresholds and exceptions, limit the Company and its restricted subsidiaries to (among other restrictions): incur indebtedness; grant liens; pay dividends and make subsidiary and certain other distributions; sell assets; make investments; enter into transactions with affiliates; and make certain modifications to material documents (including organizational documents).

As of December 31, 2023, the total outstanding principal balance is \$350 million, of which \$4 million is recorded within "Long-term debt due within one year" on the Consolidated Balance Sheet.

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.

During the year ended December 31, 2021, the Company utilized the proceeds of the Senior Notes due 2029 to repay our previous senior notes which had an aggregate outstanding principal balance of \$1.1 billion. As a result of this transaction, we recorded \$52 million of debt extinguishment costs, including call premiums of \$40 million in the aggregate on the previous senior notes, in "Loss on Extinguishment of Debt" on the Consolidated Statement of Operations for the year ended December 31, 2021.

Standard Bank Term Loan Facility and Revolving Credit Facility

During the year ended December 31, 2021, we made several voluntary prepayments totaling R1,040 million (approximately \$69 million) on our previous facility with Standard Bank as well as mandatory quarterly repayments totaling approximately \$24 million. 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 previous facility with Standard Bank and entered into an amendment and restatement with Standard Bank as is discussed below.

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 "Standard Bank Term Loan Facility") and (b) a new three-year revolving credit facility (the "Standard Bank Revolving Credit Facility") providing initial revolving commitments of R1.0 billion (approximately \$55 million at the December 31, 2023 exchange rate). The maturity date on the Standard Bank Term Loan Facility and the Standard Bank Revolving Credit Facility is November 11, 2026 and October 1, 2024, respectively. The 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 the December 31, 2023 exchange rate) are scheduled quarterly with the first mandatory repayment which started in December 2021.

Both the Standard Bank Term Loan Facility and the Standard Bank Revolving Credit Facility shall bear interest at an adjusted JIBAR rate plus an applicable margin. The applicable margin on the Standard Bank Term Loan Facility is 2.35%. The applicable margin on the 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.

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 Standard Bank Term Loan Facility. As of December 31, 2023, the total outstanding principal balance is R1.2 billion (approximately \$64 million at the December 31, 2023 exchange rate), of which R150 million (approximately \$8 million at the December 31, 2023 exchange rate) is recorded within "Long-term debt due within one year" on the Consolidated Balance Sheet. Additionally, during the year ended December 31, 2023, we drew down R650 million (approximately \$36 million at the December 31, 2023 exchange rate) under the Standard Bank Revolving Credit Facility for general corporate purposes and fully repaid the outstanding amount during the year.

Australian Government Loan

We maintain an interest-free loan with the Australian government ("Australian Government Loan") that is subject to renewal every 5 years and is contingent on renewal of our Australind site leases with final maturity in December 2036. The loan balance due upon maturity is AUD 6 million (approximately \$4 million at the December 31, 2023 exchange rate). At December 31, 2023, the discounted value on the Australian Government Loan was approximately AUD 2 million (approximately \$1 million at the December 31, 2023 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 TiCl₄ ("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 six 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, 2023, the outstanding balance of the note payable was \$25 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 22 for further information on the MGT transaction.

Tikon Loan

We maintained a working capital debt agreement in China (“Tikon Loan”) that matured in 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.

Short-term Debt

Cash Flow Revolver

For a description of the Cash Flow Revolver, see details above under “*Term Loan Facility and Cash Flow Revolver*”.

Standard Bank Revolving Credit Facility

For a description of the Standard Bank Revolving Credit Facility, see details above under “*Standard Bank Term Loan Facility and Revolving Credit Facility*”.

Emirates Revolver

In June 2023, Tronox Pigment UK Limited, as borrower, and Tronox Holdings plc, as guarantor, entered into a new revolving credit facility with Emirates NBD PJSC (“Emirates”) which replaced the existing revolving credit facility with Emirates. The new Emirates revolving credit facility is secured by inventory of Tronox Pigment UK Limited and will mature in June 2024. The facility limit is 50 million Pound Sterling (approximately \$64 million at the December 31, 2023 exchange rate) and can be drawn in either Pound Sterling, Euro or US Dollar. Under the terms of the revolver, for U.S. dollar borrowings, the interest rate is SOFR plus 1.75%, for Euro borrowings, the interest rate is Euribor plus 1.75% and for Pound Sterling borrowings, the interest rate is SONIA plus 1.75%. During the year ended December 31, 2023, we drew down 35 million Pound Sterling (approximately \$43 million) and fully repaid the outstanding amount as of December 31, 2023.

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. In November 2023, the Company amended the agreement which amongst other things, extended the maturity date of the SABB Credit Facility from November 30, 2023 to November 30, 2024 and increased the facility limit to SAR 75 million (approximately \$20 million at the December 31, 2023 exchange rate). During the year ended December 31, 2023, we drew down SAR 16 million (approximately \$4 million at the December 31, 2023 exchange rate) under the SABB Facility for general corporate purposes and fully repaid the outstanding amount as of December 31, 2023.

Itaù Unibanco S.A. Credit Facility

In November 2022, our Brazilian subsidiary entered into a working capital facility with Itaù Unibanco S.A. in Brazil for an amount up to 30 million BRL (approximately \$6 million at the December 31, 2023 exchange rate). There is no maturity date under this facility until written notice is given. The facility bears interest at the Bolsa do Basil reference rate on outstanding balances. There is no borrowings outstanding under this facility at December 31, 2023.

Insurance premium financing

In August 2022, the Company entered into a \$21 million insurance premium financing agreement with a third-party financing company. The balance was repaid in monthly installments over 10 months at a 5% fixed annual interest rate. In August 2023, the Company entered into a \$27 million insurance premium financing agreement with a third-party financing company. The financing balance required a 33% down payment and will be repaid in monthly installments over 9 months at a 8% fixed annual interest rate. As of December 31, 2023 and 2022, the financing balance of these arrangements was \$11 million and \$10 million, respectively, and is recorded in “Short-term debt” in the Consolidated Balance Sheet.

Debt Covenants

At December 31, 2023, 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,		
	2023	2022	2021
Interest on debt	\$ 157	\$ 132	\$ 148
Amortization of deferred debt issuance costs and discounts on debt	9	8	11
Capitalized interest	(17)	(17)	(7)
Interest on capital leases and letters of credit and commitments	9	2	5
Total interest and debt expense, net	\$ 158	\$ 125	\$ 157

In connection with obtaining debt, we incurred debt issuance costs, which are being amortized through the respective maturity dates on a straight-line basis for all of our debt facilities. At December 31, 2023 and December 31, 2022, we had deferred debt issuance costs of \$1 million and \$2 million, respectively, related to the Cash Flow Revolver, which is recorded in "Other long-term assets" in the Consolidated Balance Sheets. At December 31, 2023 and December 31, 2022, we had debt discounts of \$10 million and \$8 million, respectively, and debt issuance costs of \$30 million and \$33 million, respectively, primarily related to our term loans and senior notes, which were recorded as a direct reduction of the carrying value of the long-term debt in the Consolidated Balance Sheets.

14. 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, 2023 and 2022:

	Fair Value			
	December 31, 2023		December 31, 2022	
	Assets(a)	Accrued Liabilities	Assets(a)	Accrued Liabilities
Derivatives Designated as Cash Flow Hedges				
Interest Rate Swaps	\$ 18	\$ —	\$ 30	\$ —
Natural Gas Hedges	\$ —	\$ 1	\$ 1	\$ 2
Total Hedges	\$ 18	\$ 1	\$ 31	\$ 2
Derivatives Not Designated as Cash Flow Hedges				
Currency Contracts	\$ 1	\$ 1	\$ 1	\$ —
Total Derivatives	\$ 19	\$ 2	\$ 32	\$ 2

(a) At December 31, 2023 and 2022, current assets of \$19 million and \$32 million, respectively, are recorded in prepaid and other current assets on the Consolidated Balance Sheet.

Derivatives' Impact on the Consolidated Statements of Operations

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

Amount of Pre-Tax Gain (Loss) Recognized in Earnings									
	Year Ended December 31, 2023			Year Ended December 31, 2022			Year Ended December 31, 2021		
	Revenue	Cost of Goods Sold	Other Income (Expense), net	Revenue	Cost of Goods Sold	Other Income (Expense), net	Revenue	Cost of Goods Sold	Other Income (Expense), net
Derivatives Not Designated as Hedging Instruments									
Currency Contracts	\$ —	\$ —	\$ 3	\$ —	\$ —	\$ 1	\$ —	\$ —	\$ 1
Derivatives Designated as Hedging Instruments									
Currency Contracts	\$ —	\$ (4)	\$ —	\$ 4	\$ 13	\$ —	\$ (3)	\$ 35	\$ —
Natural Gas	\$ —	\$ (5)	\$ —	\$ —	\$ 5	\$ —	\$ —	\$ 3	\$ —
Total Derivative	\$ —	\$ (9)	\$ 3	\$ 4	\$ 18	\$ 1	\$ (3)	\$ 38	\$ 1

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 converted the variable rate to a fixed rate for that portion of the loan. The agreements were to expire in September 2024.

On March 27, 2023, the Company entered into amendments to two of our existing interest rate swap agreements with the counterparty banks. As a result of these amendments, the Company terminated two of our existing interest rate swap contracts which were indexed to LIBOR with an aggregate notional value of \$500 million which had maturity dates of September 2024. At the time of these amendments, the Company determined that the interest payments hedged are still probable to occur, therefore, the gains accumulated of \$11 million on the interest rate swaps prior to the amendments are being amortized into interest expense through September 22, 2024, the original maturity of the interest rate swap agreements.

We simultaneously entered into two SOFR-indexed forward starting interest rate swaps with the same counterparty banks with no change to the aggregate notional value. The forward starting swaps became effective in June 2023 and will mature in March 2028 which is aligned with the maturity date of the Term Loan Facility. Indexing forward starting swaps to SOFR also ensured that the reference rates in our hedge instruments are now aligned with the interest rate terms of the Term Loan Facility which also changed from LIBOR to SOFR in June 2023 in anticipation of Reference Rate Reform and pursuant to the loan agreement. We elected to apply the hedge accounting expedients in ASC Topic 848, *Reference Rate Reform on Financial Reporting* related to the following: 1) the assertion that the future forecasted transaction is still probable of occurring despite reference rate changes and 2) the assumption that the index of the future hedged transactions will match the index of the corresponding hedge instruments for the assessment of effectiveness.

Additionally, on March 27, 2023, the Company entered into a new interest rate swap with a \$200 million notional value which matures in March 2028 and effectively converts the variable rate to a fixed rate for that portion of the 2022 Term Loan Facility.

On May 17, 2023, the Company entered into an agreement with the counterparty bank to amend the remaining \$250 million notional of the three original interest rate swap contracts of \$750 million aggregate notional value. As a result of this amendment, the Company changed the rate indexed in the contract from LIBOR to SOFR, effective June 30, 2023 in anticipation of the Reference Rate Reform and to align the index rate in this contract to that in the Term Loan Facility, as described above. This amendment did not change the notional value and the expiration date of this contract, which is set to expire in September 2024. We completed a hedge effectiveness test as a result of this amendment and determined that this hedge instrument continues to be highly effective, enabling us to continue to apply hedge accounting over the remaining term of this hedge relationship.

As of December 31, 2023, the Company maintains a total of \$950 million of interest rate swaps with the objective in using the interest-rate swap agreements to add stability to interest expense and to manage the Company's 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.

Fair value gains or losses on these cash flow hedges are recorded in accumulated other comprehensive loss and are subsequently reclassified into interest expense in the same periods during which the hedged transactions affect earnings. For the year ended December 31, 2023, 2022 and 2021, the amounts recorded in interest expense related to the interest-rate swap agreements were \$26 million, \$4 million and \$16 million, respectively. At December 31, 2023 and December 31, 2022, the net unrealized gain was \$18 million and the unrealized gain was \$30 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 (expense), net when the transactions are no longer probable of occurring.

As of December 31, 2023, we had no outstanding amounts to reduce the exposure of our Australian subsidiaries' cost of sales to fluctuations in currency rates or to reduce the exposure of our South African subsidiaries' third party sales to fluctuations in currency rates. At December 31, 2022, there was an unrealized net loss of \$4 million recorded in "Accumulated other comprehensive loss" on the Consolidated Balance Sheet, which was fully recognized in earnings during the year ended December 31, 2023.

From time to time, we enter into foreign currency contracts for the South African Rand, Australian Dollar, Euro, Pound Sterling and Saudi Riyal to reduce exposure of our subsidiaries' balance sheet accounts not denominated in our subsidiaries' functional currency to fluctuations in foreign currency exchange rates. Historically, we have used forward contracts to reduce the

exposure. 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 Statements 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, 2023, there was (i) 837 million South African Rand (or approximately \$46 million at the December 31, 2023 exchange rate), (ii) 153 million Australian dollars (or approximately \$105 million at the December 31, 2023 exchange rate), (iii) 45 million Pound Sterling (or approximately \$57 million at the December 31, 2023 exchange rate), (iv) 45 million Euro (or approximately \$50 million at the December 31, 2023 exchange rate) and (v) 67 million Saudi Riyal (or approximately \$18 million at the December 31, 2023 exchange rate) of notional amount of outstanding foreign currency contracts.

15. 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, 2023 and December 31, 2022:

	December 31, 2023		December 31, 2022	
	Asset	Liability	Asset	Liability
Term Loan Facility	\$ —	\$ 903	\$ —	\$ 876
2022 Term Loan Facility	—	394	—	388
2023 Term Loan Facility	—	351	—	—
Standard Bank Term Loan Facility	—	64	—	77
Senior Notes due 2029	—	956	—	893
Australian Government Loan	—	1	—	1
MGT Loan	—	25	—	30
Interest rate swaps	18	—	30	—
Natural gas hedges	—	1	1	2
Foreign currency contracts	1	1	1	—

We determined the fair value of the Term Loan Facility, the 2022 Term Loan Facility, the 2023 Term Loan Facility, and the Senior Notes due 2029 using quoted market prices, which under the fair value hierarchy is a Level 1 input. We determined the fair value of the Standard Bank Term Loan Facility 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, natural gas hedges, and the 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, natural gas hedges, 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.

16. Leases

Lease expense for the year ended December 31, 2023, 2022 and 2021 was comprised of the following:

	Year Ended December 31,		
	2023	2022	2021
Operating lease expense	\$ 37	\$ 39	\$ 47
Finance lease expense:			
Amortization of right-of-use assets	6	4	\$ 1
Interest on lease liabilities	5	4	\$ 2
Short term lease expense	36	35	\$ 30
Variable lease expense	5	14	\$ 23
Total lease expense	<u>\$ 89</u>	<u>\$ 96</u>	<u>\$ 103</u>

The table below summarizes lease expense for the year ended December 31, 2023, 2022 and 2021 recorded in the specific line items, which are subsequently recorded in our Consolidated Statements of Operations:

	Year Ended December 31,		
	2023	2022	2021
Cost of goods sold	\$ 87	\$ 92	\$ 98
Selling, general and administrative expenses	2	4	5
Total	<u>\$ 89</u>	<u>\$ 96</u>	<u>\$ 103</u>

The weighted-average remaining lease term in years and weighted-average discount rates at December 31, 2023 and 2022 were as follows:

	December 31, 2023	December 31, 2022
Weighted-average remaining lease term:		
Operating leases	11.1	11.6
Finance leases	8.0	8.8
Weighted-average discount rate:		
Operating leases	12.1 %	10.8 %
Finance leases	12.1 %	12.2 %

The maturity analysis for operating leases and finance leases at December 31, 2023 were as follows:

	Operating Leases	Finance Leases
2024	36	10
2025	24	9
2026	20	8
2027	16	8
2028	15	7
Thereafter	120	25
Total lease payments	<u>231</u>	<u>67</u>
Less: imputed interest	(104)	(24)
Present value of lease payments	<u>\$ 127</u>	<u>\$ 43</u>

Additional information relating to cash flows and ROU assets for the year ended December 31, 2023, 2022 and 2021 is as follows:

	December 31, 2023	December 31, 2022	December 31, 2021
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows used for operating leases	\$ 40	\$ 39	\$ 51
Operating cash flows used for finance leases	\$ 5	\$ 4	\$ 2
Financing cash flows used for finance leases	\$ 5	\$ 3	\$ 1

Additional information relating to ROU assets for the year ended December 31, 2023 and 2022 is as follows:

	Year Ended December 31,	
	2023	2022
ROU assets obtained in exchange for lease obligations:		
Operating leases obtained in the normal course of business	\$ 21	\$ 83
Finance leases obtained in the normal course of business	\$ 3	\$ 37

17. 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:

	Year Ended December 31,	
	2023	2022
Balance, January 1	\$ 161	\$ 149
Additions	11	3
Accretion expense	15	12
Remeasurement/translation	1	(7)
Changes in estimates, including cost and timing of cash flows	7	7
Settlements/payments	(9)	(3)
Other acquisition and divestiture related	—	—
Balance, December 31	<u>\$ 186</u>	<u>\$ 161</u>
	December 31,	
	2023	2022
Asset retirement obligations were classified as follows:		
Current portion included in "Accrued liabilities"	\$ 14	\$ 8
Noncurrent portion included in "Asset retirement obligations"	172	153
Asset retirement obligations	<u>\$ 186</u>	<u>\$ 161</u>

We used the following assumptions in determining asset retirement obligations at December 31, 2023: inflation rates between 1.5% - 5.5% per year; credit adjusted risk-free interest rates between 6.0% -22.0%; the life of mines from less than 1 to 23 years and the useful life of assets between 5-44 years.

Environmental Rehabilitation Scheme

In accordance with applicable regulations, we established an environmental rehabilitation scheme for the prospecting and mining operations in South Africa, which receives, holds, and invests funds for the rehabilitation or management of asset retirement obligations. At December 31, 2023 and 2022, the total value of the assets held in the environmental rehabilitation scheme were \$15 million and \$12 million, respectively, which were recorded in "Other long-term assets" in the Consolidated Balance Sheets.

18. Commitments and Contingencies

Purchase and Capital Commitments—At December 31, 2023, purchase commitments were \$285 million for 2024, \$173 million for 2025, \$167 million for 2026, \$163 million for 2027, \$291 million for 2028, and \$1,475 million thereafter.

Letters of Credit—At December 31, 2023, we had outstanding letters of credit and bank guarantees of \$109 million, of which \$70 million were letters of credit (inclusive of \$50 million related to the sale of Hawkins Point as discussed below) and \$39 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 TiO₂ 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 TiO₂ business of Cristal in April 2019. On December 21, 2022, we sold the Hawkins Point Plant to the Maryland Port Administration (“MPA”), a state agency controlled by the Maryland Department of Transportation. Pursuant to the terms of the transaction, MPA became the lead party in developing and implementing appropriate measures to address, treat, control, and mitigate the environmental conditions at the property under the regulatory oversight of the Maryland Department of the Environment (“MPE”). Under MPA ownership, the Hawkins Point Plant will be utilized for storage and beneficial reuse of dredged material from the Port of Baltimore. In exchange for transferring ownership of the site to MPA, Tronox has agreed to make scheduled, annual payments to MPA which together with scheduled, annual contributions from MPA will be used to remediate the property. The sale of the property to MPA did not have a material impact to the Consolidated Statements of Operations. As of December 31, 2023, we have a provision of \$42 million included in “Environmental liabilities” in our Consolidated Balance Sheet for the Hawkins Point Plant consistent with the accounting policy described above.

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:

UK Health and Safety Matter. In April 2023, we received a summons from the UK Health and Safety Executive (HSE) alleging non-compliance with UK health and safety legislation at the Stallingborough pigment plant resulting from an incident involving a contractor in August 2021. In June 2023, Tronox Pigment UK Limited, the entity which owns the Stallingborough plant, pled guilty to the allegation. The sentencing hearing to determine monetary penalties occurred in September 2023. At such hearing, the judge imposed a monetary penalty in the amount of £207,681, inclusive of costs. We do not believe this matter will have a material adverse effect on our business, financial condition and results of operations. In addition, in February 2024, we received a second summons from the HSE alleging non-compliance with UK health and safety legislation at the Stallingborough pigment plant resulting from a separate incident involving an employee in August 2022. Based upon our current understanding, we do not believe the enforcement action with regards to this second incident will have a material adverse effect on our business, financial condition and results of operations.

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 TiO₂ 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. On April 6, 2022, the Judge presiding over the case in the Superior Court of the State of Delaware delivered a directed verdict in favor of Venator without allowing the jury to deliberate. The Company determined not to appeal the Judge's verdict, and as such, on April 18, 2022, the Company and Venator entered into a settlement agreement whereby the Company paid \$85 million, inclusive of interest, on April 25, 2022. As a result, we recorded the charge within "Venator settlement" on the Consolidated Statement of Operations for the year ended December 31, 2022.

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”). The WA OSR subsequently granted our request for an exemption 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. On April 8, 2022, the Company lodged an appeal of the WA OSR's decision with the Western Australia State Administrative Tribunal. On March 3, 2023, the WA OSR officially granted us the stamp duty exemption in connection with the Re-Domicile Transaction, and as such, the Tribunal proceeding was withdrawn.

19. Accumulated Other Comprehensive Loss Attributable to Tronox Holdings plc and Other Equity Items

The tables below present changes in accumulated other comprehensive loss by component for 2023, 2022 and 2021.

	Cumulative Translation Adjustment	Pension Liability Adjustment	Unrealized Gains (losses) on Derivatives	Total
Balance, January 1, 2021	\$ (491)	\$ (120)	\$ 1	\$ (610)
Other comprehensive income (loss)	(103)	16	21	(66)
Acquisition of noncontrolling interest	(34)	—	—	(34)
Amounts reclassified from accumulated other comprehensive loss	—	4	(32)	(28)
Balance, December 31, 2021	(628)	(100)	(10)	(738)
Other comprehensive (loss) income	(82)	5	53	(24)
Amounts reclassified from accumulated other comprehensive loss	—	17	(23)	(6)
Balance, December 31, 2022	\$ (710)	\$ (78)	\$ 20	\$ (768)
Other comprehensive (loss) income	(19)	(14)	(15)	(48)
Amounts reclassified from accumulated other comprehensive loss	—	—	2	2
Balance, December 31, 2023	\$ (729)	\$ (92)	\$ 7	\$ (814)

Repurchase of Common Stock

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. During the year ended December 31, 2023, we made no repurchases of the Company's stock. In connection with the expiration in February 2024 of the Company's existing share repurchase program, on February 21, 2024, the Company's Board of Directors authorized the repurchase of up to \$300 million of the Company's stock through February 21, 2027.

20. Share-based Compensation

Share-based compensation expense consisted of the following:

	Year Ended December 31,		
	2023	2022	2021
Total share-based compensation expense from restricted share units	\$ 21	\$ 26	\$ 31

The stock compensation expense for the year ended December 31, 2023 is inclusive of a \$4 million reduction of expense due to the 2021 performance grants. 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.

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.

2023 Grants- The Company granted both time-based and performance-based awards to certain members of management. A total of 872,660 of time-based awards were granted to management which will vest ratably over a three-year period ending March 5, 2026. A total of 90,088 of time-based awards were granted to non-employee members of the Board which will vest in May 2024. A total of 872,660 of performance-based awards were granted, of which 436,330 of the awards vest based on a relative Total Shareholder Return ("TSR") calculation and 436,330 of the awards vest based on certain performance metrics of the Company. The non-TSR performance-based awards vest on March 5, 2026 based on the actual 2025 annual return on invested capital (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 \$22.42.

Similar TSR awards were granted during 2022 and 2021 with a grant date fair values of \$34.41 and \$29.07 which was calculated utilizing a Monte Carlo simulation. The following weighted-average assumptions were utilized to value the grants in 2023, 2022 and 2021:

	2023	2022	2021
Dividend yield	N/A	3.22 %	1.56 %
Expected historical volatility	67.1 %	68.0 %	71.1 %
Risk free interest rate	4.47 %	3.06 %	0.17 %
Expected life (in years)	3	3	3

The following table presents a summary of activity for RSUs for 2023:

	Number of Shares	Weighted Average Grant Date Fair Value
Outstanding, January 1, 2023	3,790,404	\$ 17.01
Granted	1,958,242	16.33
Vested	(2,326,611)	11.72
Forfeited	(103,691)	19.92
Outstanding, December 31, 2023	<u>3,318,344</u>	<u>\$ 20.22</u>
Expected to vest, December 31, 2023	<u>2,430,837</u>	<u>\$ 19.36</u>

The 2020 performance-based RSUs vested above target in 2023 and resulted in 122,834 additional RSU shares being granted and vested immediately. At December 31, 2023, there was \$29 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 2023, 2022 and 2021 was \$16.33 per unit, \$19.47 per unit, and \$20.91 per unit, respectively. The total fair value of RSUs that vested during 2023, 2022 and 2021 was \$27 million, \$44 million and \$41 million, respectively.

Options

We did not issue any options during 2023, 2022 and 2021 and all our options outstanding are fully vested at December 31, 2023. The following table presents a summary of option activity for 2023:

	Number of Options	Weighted Average Exercise Price	Weighted Average Contractual Life (years)	Intrinsic Value
Outstanding, January 1, 2023	515,092	\$ 20.55	0.62	\$ —
Exercised	—	—		
Forfeited	3,842	20.30		
Expired	(301,291)	19.41		
Outstanding and Exercisable, December 31, 2023	<u>217,643</u>	<u>\$ 22.13</u>	<u>0.13</u>	<u>\$ —</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. During 2022 and 2021, there were 13,881 and 424,832 options exercised, respectively, with a total intrinsic value of less than \$1 million and \$2 million, respectively. We issue new shares upon the exercise of options. During 2022 and 2021, we received less than \$1 million and \$8 million, respectively, in cash for the exercise of stock options. There were no options exercised during 2023 and consequently, there was no related intrinsic value. At December 31, 2023, 2022 and 2021, there was no unrecognized compensation expense related to options.

21. 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. 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. In October 2022, the Company entered into an irrevocable arrangement with an insurance provider to settle certain lower dollar valued accounts within its frozen U.S. Qualified Plan to reduce PBGC premiums. As a result of this arrangement, the Company recorded a non-cash pension settlement charge of approximately \$20 million during the fourth quarter of 2022. 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, 2023. The CDC disclosures provided herein are based on the fund’s 2022 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, 2022. 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, 2023, 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
		2023	2022		2023	2022		
PGB	NA	N/A	Green	No	\$ 5	\$ 5	No	12/31/2024

On the basis of the information available in the CDC Plan 2022 annual report, our contribution does not constitute more than 5 percent of the total contribution to the plan by all participants. During 2023, 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, 2023 and 2022. 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			
	2023		2022		2023		2022	
	US	International	US	International	US	International	US	International
Change in benefit obligations:								
Benefit obligation, beginning of year	\$ 199	\$ 154	\$ 369	\$ 234	\$ 1	\$ 17	\$ 2	\$ 16
Service cost	—	3	—	4	—	1	—	1
Interest cost	11	7	10	4	—	2	—	2
Net actuarial (gains) losses	13	5	(77)	(61)	—	6	(1)	(1)
Curtailments	—	—	—	—	—	(1)	—	—
Settlements	—	—	(81)	—	—	—	—	—
Plan amendments ⁽¹⁾	—	—	—	—	—	—	—	—
Foreign currency rate changes	—	5	—	(17)	—	—	—	—
Benefits paid	(24)	(11)	(22)	(10)	—	(1)	—	(1)
Benefit obligation, end of year ⁽²⁾	199	163	199	154	1	24	1	17
<i>Change in plan assets:</i>								
Fair value of plan assets, beginning of year	180	106	337	183	—	—	—	—
Actual return on plan assets	20	3	(63)	(53)	—	—	—	—
Employer contributions	—	5	—	4	—	1	—	1
Benefits paid	(24)	(11)	(22)	(10)	—	(1)	—	(1)
Foreign currency rate changes	—	6	—	(18)	—	—	—	—
Settlements	—	—	(72)	—	—	—	—	—
Fair value of plan assets, end of year	176	109	180	106	—	—	—	—
Net underfunded status of plans	\$ (23)	\$ (54)	\$ (19)	\$ (48)	\$ (1)	\$ (24)	\$ (1)	\$ (17)
<i>Classification of amounts recognized in the Consolidated Balance Sheets:</i>								
Other long-term assets	\$ —	\$ 10	\$ —	\$ 10	\$ —	\$ —	\$ —	\$ —
Accrued liabilities	—	(7)	—	(6)	—	(1)	—	—
Pension and postretirement healthcare benefits	(23)	(57)	(19)	(52)	(1)	(23)	(1)	(17)
Total liabilities	(23)	(64)	(19)	(58)	(1)	(24)	(1)	(17)
Accumulated other comprehensive (income) loss	64	11	55	4	—	8	—	2
Total	\$ 41	\$ (43)	\$ 36	\$ (44)	\$ (1)	\$ (16)	\$ (1)	\$ (15)

- (1) Relates to a plan amendment entered into during 2021 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 for its US and international plans were approximately \$6 million in 2023 and are currently expected to be approximately \$8 million in 2024.

The following table provides information for pension plans where the accumulated benefit obligation exceeds the fair value of the plan assets:

	Pensions	
	2023	
	US	International
Projected benefit obligation (PBO)	\$ 198	\$ 63
Accumulated benefit obligation (ABO)	\$ 198	\$ 42
Fair value of plan assets	\$ 175	\$ —

Expected Benefit Payments — The following table shows the expected cash benefit payments for the next five years and in the aggregate for the years 2029 through 2033:

	2024	2025	2026	2027	2028	2029-2032
Pensions - US	\$ 19	\$ 19	\$ 19	\$ 18	\$ 17	\$ 76
Pensions - International	\$ 13	\$ 9	\$ 10	\$ 10	\$ 11	\$ 51
Other Post Retirement Benefit Plans - US	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 1
Other Post Retirement Benefit Plans - International	\$ —	\$ 1	\$ 1	\$ 1	\$ 1	\$ 10

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 2023, 2022, and 2021:

	Pensions			Other Postretirement Benefit Plans		
	Year Ended December 31,			Year Ended December 31,		
	2023	2022	2021	2023	2022	2021
Net periodic cost:						
Service cost	\$ 3	\$ 5	\$ 4	\$ 1	\$ —	\$ 1
Interest cost ⁽¹⁾	18	14	14	2	2	2
Expected return on plan assets ⁽¹⁾	(20)	(24)	(26)	—	—	—
Net amortization of actuarial loss ⁽¹⁾	—	4	5	—	—	1
Settlement losses (gains) ⁽¹⁾	—	20	—	—	—	—
Curtailement (gains) ⁽¹⁾	—	—	—	—	—	—
Total net periodic cost	<u>\$ 1</u>	<u>\$ 19</u>	<u>\$ (3)</u>	<u>\$ 3</u>	<u>\$ 2</u>	<u>\$ 4</u>

(1) Recorded in Other income (expense), net in the Consolidated Statements of Operations.

Assumptions —

The following weighted average assumptions were used to determine net periodic cost:

	Pension					
	2023		2022		2021	
	US	International	US	International	US	International
Discount rate	5.70 %	4.70 %	2.97 %	1.91 %	2.60 %	1.47 %
Expected return on plan assets	7.50 %	4.00 %	6.80 %	2.50 %	6.70 %	2.50 %

	OPEB					
	2023		2022		2021	
	US	International	US	International	US	International
Discount rate	5.62 %	10.59 %	2.83 %	10.29 %	2.59 %	10.19 %
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					
	2023		2022		2021	
	US	International	US	International	US	International
Discount rate	5.42 %	4.45 %	5.70 %	4.70 %	2.97 %	1.87 %
Rate of compensation increase	N/A	4.76 %	N/A	4.72 %	N/A	4.68 %

	OPEB					
	2023		2022		2021	
	US	International	US	International	US	International
Discount rate	5.95 %	10.50 %	5.62 %	11.10 %	2.83 %	10.33 %
Rate of compensation increase	N/A	N/A	N/A	N/A	N/A	N/A

For the U.S. Qualified Plan, at both December 31, 2023 and December 31, 2022, the mortality assumption was determined using the Society of Actuaries' the generational projection scale (i.e. MP-2021) and base table (i.e. 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 2023 and 2022 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, 2023 and 2022, and the target asset allocation ranges, by major asset category, are as follows:

	December 31,							
	2023				2022			
	US		International		US		International	
	Actual	Target	Actual	Target	Actual	Target	Actual	Target
Equity securities	49 %	50 %	— %	— %	49 %	46 %	— %	— %
Debt securities	47	47	38	38	46	46	37	37
Real estate	1	1	—	—	1	—	—	—
Other	3	2	62	62	4	8	63	63
Total	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %

The fair values of pension investments as of December 31, 2023 are summarized below:

Fair Value Measurement at December 31, 2023 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	\$	48	(1)	\$	—	\$	48
Global commingled equity funds		38	(2)		—		38
Debt securities:							
US government bonds		48	(3)		—		48
Foreign government bonds		22	(3)		—		22
US corporate bonds		—		34	(4)		34
Foreign corporate bonds		—		21	(4)		21
Real Estate:							
Property/ real estate fund		—		1	(5)		1
Other:							
Insurance contracts		—			63	(7)	63
Cash & cash equivalents		10	(6)		—		10
Total at fair value	\$	166		\$	56	\$	285

- (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 commingled 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, 2023:

	Insurance Contracts	
Balance, December 31, 2022	\$	63
Actual return on plan assets		2
Purchases, sales, settlements		(5)
Transfers in/out of Level 3		—
Foreign currency translation		3
Balance, December 31, 2023	<u>\$</u>	<u>63</u>

The fair values of pension investments as of December 31, 2022 are summarized below:

	Fair Value Measurement at December 31, 2022, Using:				Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)		
Asset category:					
Equities securities:					
Global equity securities	\$ 53 ⁽¹⁾	\$ —	\$ —	\$ —	\$ 53
Global commingled equity funds	35 ⁽²⁾	—	—	—	35
Debt securities:					
US government bonds	48 ⁽³⁾	—	—	—	48
Foreign government bonds	19 ⁽³⁾	—	—	—	19
US corporate bonds	—	34 ⁽⁴⁾	—	—	34
Foreign corporate bonds	—	22 ⁽⁴⁾	—	—	22
Real Estate:					
Property/ real estate fund	—	1 ⁽⁵⁾	—	—	1
Other:					
Insurance contracts	—	—	63 ⁽⁷⁾	—	63
Cash & cash equivalents	11 ⁽⁶⁾	—	—	—	11
Total at fair value	<u>\$ 166</u>	<u>\$ 57</u>	<u>\$ 63</u>	<u>\$ —</u>	<u>\$ 286</u>

- (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 commingled 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, 2022:

	Insurance Contracts	
Balance, December 31, 2021	\$	98
Actual return on plan assets		(20)
Purchases, sales, settlements		(5)
Transfers in/out of Level 3		—
Foreign currency translation		(10)
Balance, December 31, 2022	\$	<u>63</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 2023, 2022 and 2021. 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 \$4 million, \$5 million and \$5 million during 2023, 2022 and 2021, 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 2023, \$5 million in 2022 and \$5 million in 2021, 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 \$1 million during 2023, 2022 and 2021, 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 \$8 million, \$7 million, and \$5 million during 2023, 2022 and 2021, respectively, which was included in both "Costs of goods sold" and "Selling, general and administrative expenses" in the Consolidated Statements of Operations.

22. Related Party Transactions

Tasnee / Cristal

At December 31, 2023 Cristal International Holdings B.V. (formerly known as Cristal Inorganic Chemical Netherlands Cooperatief W.A.), a subsidiary of Tasnee, continues to own 37,580,000 shares of Tronox, or a 24% ownership interest.

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 we lent AMIC \$125 million for capital expenditures and operational expenses intended to facilitate the start-up of the Slagger (the "Tronox Loans").

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.

On May 10, 2023, AMIC and Tronox further amended the Option Agreement (the "Second Amendment"). In the Second Amendment the parties acknowledged that the Option expired on May 10, 2023 without being exercised but agreed to continue negotiating until September 30, 2023 (the "Renegotiation Period") as to whether, and under what circumstances, Tronox may acquire the Slagger. Subsequent to September 30, 2023, the parties continued to negotiate as to whether, and under what circumstances, Tronox may acquire the Slagger and on February 21, 2024 they again amended the Option Agreement (the "Third Amendment"), which extended the Renegotiation Period until the earlier of the repayment of the Tronox Loans or December 31, 2024, subject to certain early termination rights. The Third Amendment also provided that from the date the parties entered into the Second Amendment and through December 31, 2023, all chloride slag produced by the Slagger was to be delivered to Tronox as repayment in-kind of the Tronox Loans at a price based on a widely published index for feedstock less a nominal discount (the "Slag Price"). Thereafter and until the end of the Renegotiation Period, 65% of all chloride slag produced by the Slagger will be delivered to Tronox as repayment in-kind of the Tronox Loans based on the Slag Price and Tronox will purchase via cash settlements the remaining 35% at the Slag Price. Full repayment of the Tronox Loans is required by January 2025 in either cash or in-kind through chloride slag deliveries. During July 2023, we also entered into an agreement with AMIC to act as their sales agent with regard to sales of slag fines to customers outside of the Kingdom of Saudi Arabia for an agreed upon commission fee to be paid.

The following table shows the outstanding balance of the Tronox Loans, which is recorded in "Other long-term assets" on the Consolidated Balance Sheet:

	December 31,	
	2023	2022
Principal balance	80	125
Accrued interest income balance	12	13
Total outstanding balance	92	138

The following table shows the interest income earned on the Tronox Loans, which is recorded in "Interest income" on our Consolidated Statement of Operations:

	December 31,		
	2023	2022	2021
Interest income	5	4	3

The following table shows the amount of feedstock purchased from the Slagger, which is subsequently recorded in "Cost of goods sold" on our Consolidated Statement of Operations:

	December 31,		
	2023	2022	2021
Settled as in-kind repayment of Tronox Loans	44	—	—
Settled in cash	80	60	—
Total chloride slag purchases	124	60	—

The following table shows the amounts due to AMIC at period-end regarding the purchase feedstock purchased from the Slagger, which are recorded in "Accrued liabilities" on our Consolidated Balance Sheet:

	December 31,	
	2023	2022
Amount due to AMIC for slag purchases	—	14

In addition, on March 15, 2018 Tronox and AMIC entered into a Technical Services Agreement (the "Original Technical Services Agreement"), which was subsequently amended on May 13, 2020, May 10, 2023 and February 21, 2024 (the "Restated Technical Services Agreement"). Through September 30, 2023 we provided technical advice and project management services, however AMIC and its consultants were still responsible for engineering and construction of the Slagger. As compensation for these services, Tronox received certain fees, including a management fee. In the Consolidated Statement of Operations and shown in the table below, the management fees per the Original Technical Services Agreement were recorded within "Other income, net" and other technical support fees, including fees per the Restated Technical Services Agreement, are recorded within "Selling, general and administrative" costs. From and after October 1, 2023, we no longer receive a management fee and the scope of services we provide is more limited, for which we receive cost reimbursement plus a nominal margin.

	December 31,		
	2023	2022	2021
Management fees	6	8	8
Other technical support fees	2	2	—
Total fees received	8	10	8

Outstanding balances for these fees receivable are shown below, which are recorded within "Prepaid and other assets" on the Consolidated Balance Sheet:

	December 31,	
	2023	2022
Management fees and other technical support fees	1	2

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 TiCl₄ ("MGT"). Consideration for the acquisition was 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 TiCl₄, 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 four and five years, subject to actual future MGT production levels. The interest rate on the note payable is based on the SAIBOR plus a premium. As shown in the table below, the note payable is recorded within "Long-term debt, net" and "Long-term debt due within one year" on the Consolidated Balance Sheet.

	December 31,	
	2023	2022
Note payable, due within 1 year	7	7
Note payable, due longer than 1 year from now	18	23
Total outstanding note payable	25	30

Amounts regarding interest expense and loan repayments for the MGT loan, which are recorded on the Consolidated Statement of Operations within “Interest expense” and “Net sales,” respectively, are shown below:

	December 31,		
	2023	2022	2021
Interest expense	2	1	1
Loan Repayment via MGT delivered to ATTM	6	3	4

As a result of these transactions we have entered into related to the MGT assets, Tronox purchases chlorine gas from ATTM for use in the production of MGT and such transactions are reflected as follows:

	December 31,		
	2023	2022	2021
Purchases of chlorine gas	5	4	8

These purchases are subsequently recorded within “Cost of goods sold” on the Consolidated Statement of Operations. Amounts due at period end, which are presented below, are recorded within “Accrued liabilities” on the Consolidated Balance Sheet.

	December 31,	
	2023	2022
Amount due related to purchases of chlorine gas	1	1

As Tronox delivers MGT product to ATTM, amounts are recorded within “Net sales” on the Consolidated Statement of Operations, as shown below:

	December 31,		
	2023	2022	2021
MGT sales made to ATTM as product is delivered	47	29	31

Amounts related to MGT deliveries that are outstanding at period end are recorded in “Prepaid and other assets” on the Consolidated Balance Sheet, as shown below:

	December 31,	
	2023	2022
Due from ATTM for MGT deliveries	9	6

23. 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 2023, 2022 and 2021 our ten largest third-party customers represented 39%, 30%, and 28%, respectively, of our consolidated net sales. During 2023, 2022, and 2021, 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>2023</u>	<u>2022</u>	<u>2021</u>
U.S. operations	\$ 686	\$ 733	\$ 716
International operations:			
United Kingdom	267	331	396
Australia	659	822	873
South Africa	398	484	441
Saudi Arabia	318	419	420
Other - international	522	665	726
Total net sales	<u>\$ 2,850</u>	<u>\$ 3,454</u>	<u>\$ 3,572</u>

See Note 3 for further information on revenues.

There is no difference between the total consolidated assets 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>2023</u>	<u>2022</u>
U.S. operations	\$ 299	\$ 308
International operations:		
United Kingdom	103	93
Saudi Arabia	222	226
South Africa	701	705
Australia	1,048	1,093
Other - international	248	242
Total	<u>\$ 2,621</u>	<u>\$ 2,667</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, 2023, 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, 2023. 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, 2023 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, 2023 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

We are currently undergoing a multi-year IT-enabled transformation program that includes increased automation of both operational and financial systems, including the global enterprise risk management program, through new and upgraded systems, technology and processes. As part of such transformation program, during the third quarter of 2022, we implemented upgrades to our financial systems and platforms in certain regions. The full implementation is expected to occur in phases over a number of years. As the phased implementation of this system occurs, we expect certain changes to our processes and procedures which, in turn, will result in changes to our internal control over financial reporting.

While we expect this transformation program to strengthen our internal financial controls, management will continue to evaluate and monitor our internal controls as processes and procedures in each of the affected areas evolve.

Other than as discussed above, there have been no changes to our internal control over financial reporting during the quarter ended December 31, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

During the three months ended December 31, 2023, none of our directors or officers (as defined in Rule 16a-1(f) under the Exchange Act) had any contact, instruction or written plan for the purchase or sale of our securities that was intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) under the Exchange Act for any "non-Rule 10b5-1 trading arrangement" as defined in Item 408(c) of Regulation S-K.

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 21, 2024:

NAME	POSITION
John D. Romano	Co-Chief Executive Officer ⁽¹⁾
Jean-Francois Turgeon	Co-Chief Executive Officer ⁽²⁾
D. John Srivisal	Senior Vice President, Chief Financial Officer
Jeff Engle	Senior Vice President, Commercial and Strategy
Russell Austin	Senior Vice President, Global Operations
Jeffrey Neuman	Senior Vice President, General Counsel and Secretary
Melissa Zona	Senior Vice President, Chief Human Resources Officer and SHEQ
Emad AlJunaidi	Senior Vice President, Integrated Supply Chain and Digital Transformation
Jennifer Guenther	Vice President, Chief Sustainability Officer and Head of Investor Relations
Jonathan P. Flood	Vice President, Controller and Principal Accounting Officer

(1) As the Company previously announced, Mr. Romano will become sole CEO effective April 1, 2024.

(2) As the Company previously announced, Mr. Turgeon will be retiring from his position as Co-Chief Executive Officer effective April 1, 2024.

Information about members of our Board of Directors as of February 21, 2024:

NAME	CURRENT OCCUPATION
Ilan Kaufthal	Chairman of the Board, Tronox Holdings plc; Eastwind Advisors
Mutlaq Al-Morished	CEO, TASNEE
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 2024 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 2024 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", "2023 Non-Employee Director Compensation" and "Compensation Discussion and Analysis" and is incorporated herein by reference, except as to information required pursuant to Item 402(v) of Regulation S-K relating to pay versus performance.

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 2024 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, 2023 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 ⁽¹⁾	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in the second column) ⁽²⁾
Equity compensation plans approved by security holders	3,535,987	\$ 22.13	4,700,201
Equity compensation plans not approved by security holders	—	—	—
Total	3,535,987	\$ 22.13	4,700,201

(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 2024 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 2024 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).
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 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).
4.5	Form of 4.625 % Senior Notes due 2029 (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 (filed herewith).
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 (incorporated by reference to Exhibit 10.4 of the Annual Report on Form 10-K filed on February 22, 2022).
10.5*	General form of executive officer TSR Performance-Based Restricted Share Unit Agreement (incorporated by reference to Exhibit 10.5 of the Annual Report on Form 10-K filed on February 22, 2022).
10.6*	General form of executive officer ROIC Performance-Based Restricted Share Unit Agreement (incorporated by reference to Exhibit 10.6 of the Annual Report on Form 10-K filed on February 22, 2022).
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 Depositary Services and Custody Services, dated as of April 10, 2019, in respect of Tronox Holdings plc Depositary 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 depositary 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	Amended and Restated First Lien Credit Agreement dated as of March 1, 2021 (as amended by that certain Amendment No. 1 to Amended and Restated First Lien Credit Agreement, dated as of April 4, 2022, that certain Amendment No. 2 to Amended and Restated First Lien Credit Agreement, dated as of May 19, 2023 and Amendment No. 3 to Amended and Restated First Lien Credit Agreement, dated as of August 16, 2023) by and among Tronox Holdings plc, Tronox Finance LLC, certain of Holding plc's subsidiaries, as Subsidiary Loan Parties (as defined therein), the lenders party thereto from time to time 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 August 16, 2023).
10.11*	Offer letter dated March 15, 2023 by and between Tronox Holdings plc and D. John Srivisal (incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K/A filed on March 16, 2023).
10.12*	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).
10.13*	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 D. John Srivisal. (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 D. John Srivisal. (furnished herewith)
96.1	Amended and Restated Technical Report Summary on the Cooljarloo Australia operations (filed herewith).
96.2	Amended and Restated Technical Report Summary on the Atlas and Campaspe Australia operations (filed herewith).
96.3	Amended and Restated Technical Report Summary on the Namakwa Sands South Africa operations (filed herewith).
96.4	Amended and Restated Technical Report Summary on the KZN Mineral Sands South Africa operations (filed herewith).
97.1	Tronox Holdings plc Dodd-Frank Clawback Policy (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, 2023, 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.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on this 21st day of February 2024.

TRONOX HOLDINGS PLC
(Registrant)

By: /s/ Jonathan P. Flood

Name: Jonathan P. Flood

Title: Vice President, Controller and Principal Accounting Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ John Romano John Romano	Co-Chief Executive Officer, Director (Principal Executive Officer)	February 21, 2024
/s/ Jean-Francois Turgeon Jean-Francois Turgeon	Co-Chief Executive Officer, Director (Principal Executive Officer)	February 21, 2024
/s/ D. John Srivisal D. John Srivisal	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	February 21, 2024
/s/ Jonathan P. Flood Jonathan P. Flood	Vice President and Controller (Principal Accounting Officer)	February 21, 2024
* Ilan Kaufthal	Chairman of the Board of Directors	February 21, 2024
* Mutlaq Al-Morished	Director	February 21, 2024
* Stephen Jones	Director	February 21, 2024
* Moazzam Khan	Director	February 21, 2024
* Peter B. Johnston	Director	February 21, 2024
* Sipho Nkosi	Director	February 21, 2024
* Ginger M. Jones	Director	February 21, 2024
*By: /s/ Jeffrey Neuman Jeffrey Neuman, Attorney-in- fact	Senior Vice President, General Counsel and Secretary	February 21, 2024

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. GMT, May 8, 2024. The proxy will be made available to shareholders on or about March 28, 2024, 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.

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
150 Royall Street
Canton, MA 02021

Overnight Mail

Computershare
Investor Services
150 Royall Street
Canton, MA 02021

Shareholder Email Inquiries

web.queries@computer-share.com

Electronic access

www.proxyvote.com

Copies of the Tronox 2023 Annual Report and proxy statement are available at 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.

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 2023 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 provides shareholders easy access to Tronox's financial results. Shareholders may also contact Jennifer Guenther, Chief Sustainability Officer and Head of 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.

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 and South Africa 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 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 also creates meaningful quantities of co-products including zircon, pig iron and the rare-earth bearing mineral, monazite, which we also supply to customers around the world.

Our global operations are positioned to meet our customers' needs around the world.



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

United States:
 263 Tresser Boulevard, Suite 1100
 Stamford, CT 06901