



2023 Sustainability Report

Tronox Holdings plc





About This Report

Tronox prides itself on transparent reporting of our sustainability journey. This report highlights progress toward our sustainability goals and targets, and our overall approach to integrating sustainability throughout Tronox's business. We report in-line with a number of global disclosure initiatives to meet the needs of our stakeholders, including Task Force on Climate-related Financial Disclosures (TCFD), Sustainability Accounting Standards Board (SASB) and Global Reporting Initiative (GRI). Tronox became a signatory to the United Nations Global Compact (UNGC) in 2021 and considers the United Nations Sustainable Development Goals (SDGs) when setting our strategy.

Content of this report is approved by the CEO and the Chief Sustainability Officer. Before publication, the Board's Governance and Sustainability Board Committee meets with the Chief Sustainability Officer to review how the report will be prepared. Data covers all sites under Tronox's operational control, including associated offices and warehouses. We exclude certain offices outside of our production sites, such as the R&D Center in Oklahoma and the distribution warehouse in Belgium, because these sites are generally leased offices and/or their contribution to our overall environmental performance is negligible.

We report data based on our financial year, which runs from January 1 to December 31. Greenhouse gases (GHGs) reported are in line with the GHGs covered by the United Nations Kyoto Protocol, the World Resources Institute and the World Business Council for Sustainable Development GHG Protocol Corporate Accounting and Reporting Standard. All financial data is taken from our 2023 Annual Report, prepared in accordance with the U.S. Generally Accepted Accounting Principles. DNV Business Assurance Germany GmbH was commissioned to provide independent limited assurance over selected data and KPIs. For more details, please refer to their assurance statement on [page 107](#).



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Letter From the CEO

Tronox's "differentiated advantage" is a theme that has resonated with us over the past year. Our vertically integrated strategy, geographic footprint and resilient workforce has enabled us to provide superior service to our customers and create long-term value for our shareholders. I believe that our rigorous attention to sustainability – and our unique portfolio of products that help address some of the world's most pressing sustainability issues – is a key component of Tronox's value proposition.

In 2023, Tronox continued to implement our sustainability strategy, even while navigating a challenging macroeconomic environment. Most notable is the successful completion of the 200 megawatts solar project in South Africa, which at the time of commissioning was the largest solar facility in the country and is anticipated to provide 40% of our total energy needs in the region. As of April 25, 2024, we officially began receiving allocated power from the project, which will reduce our global Scope 1 and Scope 2 greenhouse gas (GHG) emissions in 2024 by approximately 13%. We are already making progress on a second large renewable project in South Africa, this time harnessing a combination of wind and solar, which is expected to be on a similar scale to the solar project and, therefore, have a significant impact on further reducing our GHG emissions. The completion of this project was originally contemplated in the setting of our 35% reduction target for 2025. Due to delays with the developers in getting this latest project to announcement, we have reduced our 2025 goal to a 25% reduction in Scope 1 and Scope 2 GHG emissions. We expect to achieve the 35% reduction target after this latest South Africa renewable project comes online.

Electricity to run our smelters in South Africa alone makes up approximately 30% of our Scope 1 and Scope 2 baseline, so the two renewable energy projects there have an outsized impact on our carbon footprint. Nonetheless, we are implementing numerous projects across all of our sites in order to deliver on our ambitious medium- and long-term targets: 50% reduction in Scope 1 and 2 GHG emissions intensity by 2030 and 100% net zero by 2050.

Additional steps taken to advance the environmental sustainability of our business include:

- **REDUCED SCOPE 1 EMISSIONS** by implementing automated process controls (APCs) for chlorination to reduce coke consumption at our pigment plants.
- **ENGAGED TOP-EMITTING SUPPLIERS** in planning to reduce their GHG emissions as part of our Scope 3 emissions reduction strategy.
- **PROGRESSED TOWARD OUR 2050 GOAL OF ELIMINATING WASTE** to external landfills by creating new markets for waste byproducts or reusing waste streams as raw material at our operations.
- **COMMITTED TO ALIGNMENT** with the Taskforce on Nature-related Financial Disclosures (TNFD) and Science Based Nature Targets (SBTN) in the next two years to improve our management of biodiversity.

The future of our business also depends on the continued development of our workforce and the communities where we operate.

In 2023, we furthered these relationships by:

- **CONDUCTING AN EMPLOYEE CULTURE SURVEY** to understand the performance measures and attributes that yield high performance and identify areas for improvement to guide our employee engagement strategy.
- **HEIGHTENING OUR EFFORTS** to create more inclusive work environments, such as improving female change houses and modifying our uniforms to better accommodate body shapes and traditional clothing customs.
- **RECEIVING ENDORSEMENT FROM RECONCILIATION AUSTRALIA** for our inaugural Reflect Reconciliation Action Plan (RAP) – part of our efforts to continue nurturing relationships with Aboriginal and Torres Strait Islander communities near our operations.
- **RECEIVING APPROVAL** on the next five-year iteration of our Social and Labor Plan (SLP) in South Africa, which will include an investment of R67 million (South African Rand) in projects designed to meet critical community needs.

We are proud of the progress we made during a challenging year, but will relentlessly strive to improve, particularly with regard to the safety of our employees and contractors. We tragically lost a valued contractor in South Africa in 2023, which was a stark reminder that the most important aspect of our jobs is returning our employees and contractors home safely each day. In that regard, we continue to maintain a "journey to zero harm" as an aspirational goal, while establishing aggressive annual safety performance metrics for disabling injuries and lost-time accidents. In order to achieve these goals, we will strengthen our focus on training and intervention programs, such as our Leading Safety Indicators program, to prevent accidents and protect every person at our operations.

I am confident we are on the right path for the future. We continue to hear positive feedback from stakeholders about Tronox's sustainability commitments and progress. It is clear that our differentiated advantage extends beyond being a vertically integrated titanium dioxide (TiO₂) producer to being a company that is committed to the sustainability of our environment, our workforce, our communities and our business. At the end of the day, our people and our planet enable us to carry out our work. As a result, we have a responsibility to conduct ourselves in a manner that is both safe and sustainable. We firmly believe that preserving our privilege to operate is critical for our strategy today and for our future.

Sincerely,



John D. Romano



About Tronox

Tronox is the world's leading vertically integrated manufacturer of titanium dioxide (TiO₂) pigment.

By mining our own mineral sands in Australia and South Africa, we are vertically integrated such that we have the capacity to meet 85% of our own TiO₂ feedstock needs. This level of control over our own supply chain enables us to more reliably serve customers.



Watch how our vertically integrated process transforms the sand we mine into the broadest TiO₂ product portfolio in the industry.



2023 Highlights

Named to [America's Most Responsible Companies list](#)



Our Business

MINING AND MANUFACTURING

Our core values guide our business operations and reinforce our commitment to maintaining safe, reliable and responsible operations to benefit our employees, our communities and our world. We understand our duty to use our global footprint for good. Our TiO₂ product portfolio contributes to essential products that help keep our world healthier and more sustainable.

IMPACTS:

- Fair employment practices
- Local economic development
- Community and rights of Indigenous peoples
- Ethical business practices
- Health and safety
- Diversity, equity and inclusion
- Environmental and climate impact

RESEARCH AND DEVELOPMENT

The majority of our R&D is located in Oklahoma City, Oklahoma, the United States; Stallingborough, the United Kingdom; and Thann, France. The process and product development teams are collaborating on more sustainable, lower carbon footprint technologies for all end use segments, as well as the separation of monazite into rare earth minerals that are in demand for EV and wind turbine applications.

IMPACTS:

- Product development
- Product stewardship
- Ethical business practices

END MARKETS

TiO₂ is used in essential products, such as paints, paper, plastics, catalysts, packaging, pharmaceutical products and more. The processing of titanium-bearing mineral sands also creates meaningful quantities of zircon and pig iron, which we supply to customers around the world.

[Read more here.](#)

IMPACTS:

- Value for shareholders
- Economic development
- Ethical business practices
- Product stewardship

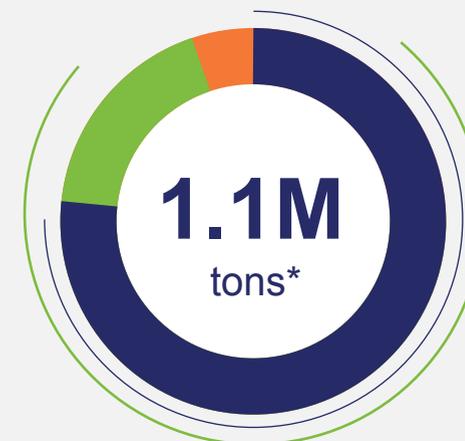
Sustainable Growth

Tronox proudly offers the broadest TiO₂ product portfolio in the industry. The TiO₂ we produce is used in paints, paper, plastics, catalysts, packaging, pharmaceutical products and more.



REVENUE FROM PRODUCT SALES

- TiO₂ | 79%
- Other Products | 12%
- Zircon | 9%



TiO₂ SALES VOLUME DISTRIBUTION BY END USE

- Paints and Coatings | 78%
- Plastics | 17%
- Paper and Specialty | 5%

*Nameplate capacity

Driven By Our 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.**



~6,500

full-time employees



20

mines and manufacturing sites



\$2.9B

in revenue

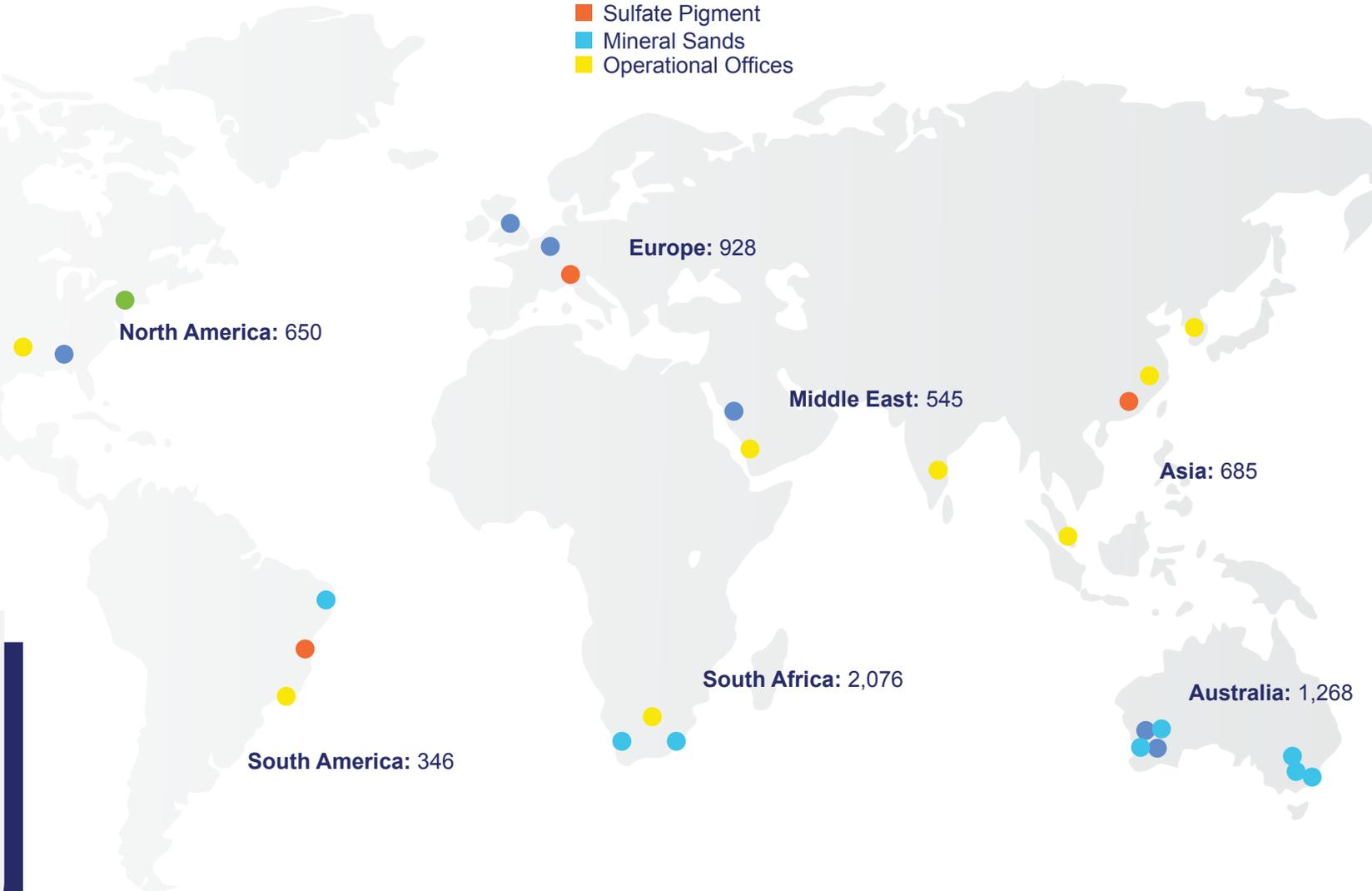


35

ISO certifications

GLOBAL OPERATIONS AND FULL-TIME EMPLOYEES BY REGION

- Employees
- Tronox Corporate
- Chloride Pigment
- Sulfate Pigment
- Mineral Sands
- Operational Offices



See a list of our global locations on [p. 106](#)

Sustainability Strategy and Goals

At Tronox, sustainability is more than a goal; it is our “values in action.” We have always operated with sustainability integrated into our strategy, operations and culture, and continue to accelerate our commitment through purposeful investments in the areas where we believe we have the greatest responsibility – and the greatest opportunity to make an impact.

We hold ourselves to high standards, and 2023 proved challenging because we were not able to deliver on all of these standards. In many cases, these factors, such as the softening global market and delays impacting the timelines of our renewable energy projects, are outside of our control. However, we remain committed to moving forward and have adjusted our short-term carbon targets from a 35% reduction in 2025 to 25% in 2025 to more realistically accommodate these delays.

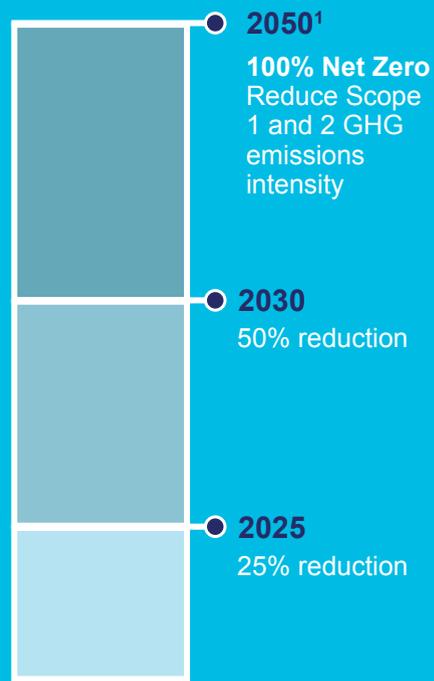
While our short-term performance in carbon reduction has fallen behind, we have not lost sight of our medium- and long-term sustainability goals. Despite a year of adversity, we continue to focus on what matters most – being responsible stewards of the environment, a safe and inclusive employer, a respectful neighbor to our host communities, and a producer of products that contribute to a cleaner, more sustainable planet.



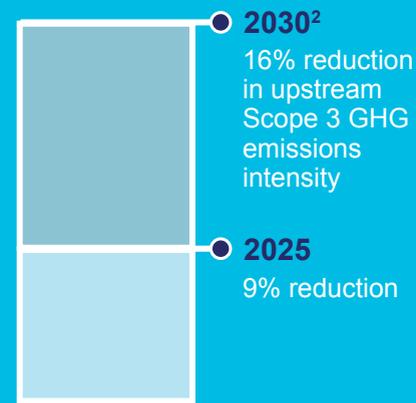
Goals and Targets



ACHIEVE NET ZERO BY 2050



REDUCE SCOPE 3 EMISSIONS IN OUR SUPPLY CHAIN



ZERO WASTE TO EXTERNAL DEDICATED LANDFILLS



ACHIEVE ZERO HARM BY BUILDING CAPACITY IN OUR PEOPLE, PLANTS AND PROCESSES

ZERO
INJURIES | INCIDENTS | HARM



FOSTER AND BUILD A WORKPLACE THAT REFLECTS THE COMMUNITIES IN WHICH WE OPERATE

IMPROVE
GENDER BALANCE AND DIVERSITY
of our workforce, leadership and succession planning

Our goals cover 100% of our global operations and employees.

¹Versus 2019 baseline

²Tronox added Scope 3 emissions intensity reduction goals in 2022 and will expand and refine this goal as we gain better understanding of our suppliers' emissions and reduction plans

Performance Improvement Targets

Short-term targets keep us on track toward our global sustainability goals.

 LAGGING OR NOT STARTED

 ON TRACK

 AHEAD OR COMPLETED

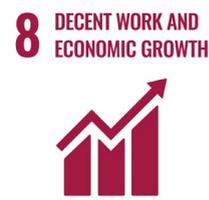
TARGETS	WHEN	STATUS	HOW WE PROGRESSED IN 2023
Sustainability Strategy: Operate with sustainability integrated into our business strategy			
Update materiality assessment to understand evolving goals and needs of stakeholders	2024		Will perform a double materiality assessment following the completion of a transition risk assessment in 2024.
Update climate transition risk assessment	2024		Expect to complete by end of 2024.
Implement data management system for sustainability metrics	2024		Partner selected, expected to be completed by end of 2024.
Offer companywide sustainability training	2025		All employees have access to educational sustainability videos, and commercial, sales and procurement departments participated in targeted training. Exploring teach-in options for employees in 2024-2025.
SAFETY			
Health and Safety: Zero injuries, incidents or harm			
Zero fatalities companywide	2023		In 2023, we tragically lost a valued contractor in a scaffolding accident in South Africa.
Achieve 0.36 total recordable injury frequency rate	2023		0.43 TRIFR
Reduce frontline risk through the Tronox leading safety indicator program	2023		Continued program with an emphasis on reducing hazards in the workplace.
ENVIRONMENT			
Reduce Scope 1 and 2 GHG Emissions Intensity: 25% by 2025 and 50% by 2030			
Prepare for proposed corporate climate disclosure reporting requirements	2023		Gap assessment completed, and results show we are ahead in terms of readiness to respond to the U.S. SEC climate-related disclosures.

TARGETS	WHEN	STATUS	HOW WE PROGRESSED IN 2023
ENVIRONMENT			
External assurance of Scope 1 and 2 emissions reporting	2023		Limited assurance completed for 2023 Sustainability Report on most of ESG metrics in the sustainability report, including Scope 1 and 2 emissions.
Implement internal carbon costing mechanism	2023		Methodology is in place, and every significant capital project now includes a carbon assessment.
Move South Africa operations to renewable energy	2023		Solar project in South Africa now online and providing power to Tronox operations. Second significant renewable project in South Africa underway.
Align with the Minerals Council of Australia's Enduring Value Framework	2024		In progress and will be completed by the end of 2024.
Expand climate reporting frameworks to include Carbon Disclosure Project (CDP) and Science Based Targets initiative (SBTi)	2025		Intend to begin CDP reporting for the 2024 performance year.
Reduce Upstream Scope 3 GHG Emissions Intensity: 9% by 2025 and 16% by 2030			
Work with top 20 emitters in supply chain to reduce impact	2024		Achieved 6% Scope 3 emissions reduction in 2023 and focusing on decarbonization plans for top 20 emitters in 2024.
Implement action plan for supply chain emissions	2024		Identified opportunities to reduce Scope 3 emissions and evaluating the financial impacts associated with accelerating Scope 3 reduction targets.
Reduce Absolute Waste to External Dedicated Landfills: 15% by 2025 and 25% by 2030			
Pilot process changes to reduce waste at Bahia and Yanbu Pigment Plants	2024		Bahia waste sales increased from 90 to 300 tons per month. Waste pilot to be implemented at Yanbu in 2024, with the potential to expand to other sites.
Safe and Responsible Mine Tailings Management			
Achieve full compliance with Global Industry Standards on Tailings Management (GISTM)	2025		Completed audit, and each site was rated in terms of progress against all GISTM standards and recommendations we proposed. The target date for follow-up actions is August 2025.
Water Management			
Roll out global program to reduce freshwater use in high-stress areas	2024		Risk assessment to be conducted in 2024 to set global targets. Currently, targets are set in sites operating in high water-stress areas.

TARGETS	WHEN	STATUS	HOW WE PROGRESSED IN 2023
ENVIRONMENT			
Biodiversity Management			
Align with TNFD and Science Based Nature Targets for nature disclosures in sustainability reporting	2025		Initial TNFD assessment planned for 2025.
EMPLOYEES			
Improve Gender Balance and Diversity of Our Workforce, Leadership and Succession Planning			
Establish paid parental leave policy in regions	2023		Set a paternity and maternity leave policy for the U.S. in January 2023 and reviewed regional policies to be at or above legislative requirements in all operating region.
100% of employees receive Diversity & Inclusion training	2024		Completed a cultural awareness series in Saudi Arabia, France, the Netherlands, United Kingdom and South Africa. These trainings are available to all employees on the Learning Management System. Remaining regions will be targeted in 2024. Additional D&I training planned for Band 1 leaders.
Continue annual Women in Leadership training through 2025, then refresh program as needed	2025		Trained another class of 12 participants. 12% of female leaders have completed the program since it was implemented in 2022, and annual training will continue in coming years.
Invest In the Success of Our People			
Conduct employee culture survey and develop employee engagement plan	2024		Employee culture survey completed with 60% employee participation. Feedback will be used to guide employee engagement plan in 2024.
COMMUNITIES			
Be Valued Contributors to Local Economies and the Quality of Life in Our Shared Communities			
Partner with local communities on 2023-2027 Social and Labor Plan for South Africa Operations	2023		Used a collaborative process to work with the communities to identify local economic development projects. 2023-2027 plan has been approved.
Advance Cultural Heritage Management and Reconciliation Plans	2023		Aligned Cultural Heritage practices with new legislation and best practices and received approval on our first Reflect Reconciliation Action Plan in Australia.
Expand community engagement plans	2024		Continued to expand our Stakeholder Relationship Management Platform pilot in Australia and South Africa. While 100% of Tronox sites have community engagement plans, we will work with our major contractors to identify opportunities and remove barriers for Indigenous participation.

TARGETS	WHEN	STATUS	HOW WE PROGRESSED IN 2023
COMMUNITIES			
Increase spend with Indigenous suppliers	2024		Outlined next steps in Reconciliation Action Plan, including developing a case for increasing procurement from Aboriginal and Torres Strait Islander-owned businesses and investigating Supply National membership.
Expand “Cultural Conversations” trainings from Traditional Landowners	2024		Successful pilot expanded to Northern Operations employees in 2023. Other Australian Operations will begin pilot programs. Also in 2023, senior leadership participated in a two-day cultural immersion session.
RESPONSIBLE BUSINESS			
Contribute to a Circular Economy Through More Sustainable Products and Supplier Relationships			
Improve cyber security in our supply chain	2023		Added <u>Vendor Information & Cyber Security Assurance Policy</u> and aligned with ISO 27001 standard for information security.
Understand our product environmental footprint	2023		Completed detailed regional decarbonization roadmaps for all regions and incorporating findings into CAPEX plans.
Train 100% of supply chain team members in sustainable procurement	2023		Completed internal training on the ISO 20400 Guidelines for Sustainable Procurement standard and launched a sustainable procurement internal newsletter.
Embed Safe and Sustainable by Design (SSbD) criteria in all new product risk assessments	2024		Reviewing criteria and on track to complete by end of 2024.
Complete a horizon scan of long-term regulatory risks for all existing products	2024		Scan is underway and will be completed by end of 2024.

We consider the UN SDGs when setting goals for our own business. We believe Tronox can most impact:



Setting Priorities

Our sustainability strategy is informed by the goals and needs of our stakeholders. We regularly engage with key stakeholder groups to ensure we are prioritizing sustainability issues that are of importance to them and our business. Our stakeholders want to know how we plan to prepare for climate change and manage our carbon emissions and other environmental impacts. Likewise, we have customers that partner with us to learn how to reduce their Scope 3 emissions. Tronox also held customer and supplier events where we engaged in deeper conversations about our sustainability efforts.

Setting priorities is an ongoing process, and we welcome feedback from our stakeholders to ensure we are continuing to address what is most important to them. Please send any feedback to sustainability@tronox.com.



ENVIRONMENT

- Climate Change
- Circular Economy
- Product Stewardship
- Water and Effluents
- Biodiversity
- Management of Tailings
- Storage Facilities

Of interest to the following stakeholders:
Employees, customers, communities, investors, government/regulators, NGOs and industry

SOCIAL

- Health and Safety
- Community and Rights of Indigenous People
- Fair Employment Practices
- Diversity, Equity and Inclusion

Of interest to the following stakeholders:
Employees, customers, communities, investors, government/regulators, NGOs and industry

RESPONSIBLE BUSINESS

- Economic Performance
- Financial Disclosure of Climate-related Risks
- Market Presence
- Procurement Practices
- Fair Business Practices

Of interest to the following stakeholders:
Employees, customers, communities, investors, suppliers and industry

GOVERNANCE

- Board Governance
- Sustainability Governance and Grievance Mechanisms
- Compliance

Of interest to the following stakeholders:
Employees, customers, communities, investors, government/regulators and suppliers

Stakeholder Engagement

Stakeholder engagement is conducted at the local, regional and corporate levels. We collect input from many external and internal stakeholder groups to understand their expectations of Tronox and make adjustments in our behaviors and actions accordingly.

STAKEHOLDER GROUP	TRONOX REPRESENTATIVE	CHANNELS OF ENGAGEMENT	KEY TOPICS COVERED
<p>Employees</p>	<ul style="list-style-type: none"> • Board Members • Senior Leaders • Managing Directors • General Managers and Site Directors • HR and Communications Managers • VP Sustainability 	<ul style="list-style-type: none"> • Town halls • Face-to-face meetings • Newsletters • Surveys and focus groups • Email newsletters • Intranet 	<ul style="list-style-type: none"> • Safety, health and wellness • Diversity, equity and inclusion • Fair employment practices • Fair business practices • Company updates, priorities and challenges • Celebrations and employee recognition • Sustainability approach • Environmental stewardship • Community engagement
<p>Customers</p>	<ul style="list-style-type: none"> • CEO • SVP Commercial and Strategy • SVP Operations • Sales Teams • VP Sustainability 	<ul style="list-style-type: none"> • Customer survey • Face-to-face meetings • Site tours 	<ul style="list-style-type: none"> • Product stewardship • Fair business practices • Market presence • Environmental stewardship
<p>Communities</p>	<ul style="list-style-type: none"> • Chief Sustainability Officer and Head of Investor Relations • VP of Safety, Health, Environmental and Quality (SHEQ) • Managing Directors • General Managers and Site Directors • Site Safety, Health and Environmental (SHE) Managers • HR and Communications Managers 	<ul style="list-style-type: none"> • Face-to-face meetings • Site tours • Community forums • External events • Community sponsorships 	<ul style="list-style-type: none"> • Community investments and rights of Indigenous peoples • Fair employment practices • Diversity, equity and inclusion • Environmental stewardship • Procurement practices • Company updates • Job opportunities • Safety performance

STAKEHOLDER GROUP	TRONOX REPRESENTATIVE	CHANNELS OF ENGAGEMENT	KEY TOPICS COVERED
<p>Investors and Lenders</p>	<ul style="list-style-type: none"> • Board Members • CEO • CFO • Chief Sustainability Officer and Head of Investor Relations • SVP General Counsel and Corporate Secretary • SVP Commercial and Strategy • SVP Operations • VP Treasury 	<ul style="list-style-type: none"> • Sell-side hosted conferences • Externally hosted events • Company-hosted events, including investor days • Face-to-face meetings • Calls • Email newsletters • Website • Press releases 	<ul style="list-style-type: none"> • Economic performance • Risk disclosure, including climate-related risk • Board governance • Sustainability governance and approach • Compliance • Market presence • Circular economy • Environmental stewardship • Community engagement • Labor relations
<p>Suppliers</p>	<ul style="list-style-type: none"> • SVP Integrated Supply Chain and Digital Transformation • Supply Chain Team • VP Sustainability 	<ul style="list-style-type: none"> • Face-to-face meetings • Site tours • Letters • Contractor safety forums • Supplier day events 	<ul style="list-style-type: none"> • Procurement practices • Market presence • SHE practices, performance and controls • Sustainability governance and approach
<p>Government and Regulators</p>	<ul style="list-style-type: none"> • Board Members • CEO • SVP General Counsel and Corporate Secretary • Deputy General Counsel • Assistant General Counsels • Chief Sustainability Officer • VP of SHEQ • Managing Directors • General Managers and Site Directors • Site SHE Managers 	<ul style="list-style-type: none"> • Face-to-face meetings • Site tours • Letters 	<ul style="list-style-type: none"> • Environmental stewardship • Social responsibility • Fair employment practices • Risk disclosure, including climate-related risk • Board governance • Sustainability governance and approach • Economic performance and investment • SHE practices, performance and controls • Procurement practices • Market challenges

STAKEHOLDER GROUP	TRONOX REPRESENTATIVE	CHANNELS OF ENGAGEMENT	KEY TOPICS COVERED
<p>Non-governmental Bodies and Industry Initiatives</p>	<ul style="list-style-type: none"> • Chief Sustainability Officer and Head of Investor Relations • VP of SHEQ • Managing Directors • General Managers and Site Directors • Site SHE Managers • VP Sustainability 	<ul style="list-style-type: none"> • Face-to-face meetings • Site tours • Community forums • Sponsorship agreements 	<ul style="list-style-type: none"> • Environmental stewardship • Fair employment practices • Sustainability grievance mechanisms • Board governance • Sustainability governance • Economic performance and investment • SHE practices, performance and controls



Creating Products for a **Cleaner World**

TiO₂ is all around in the essential products people use every day. Sustainability at Tronox is about more than how we operate – it’s about our contribution to a cleaner, brighter future with the products we make.

We’re proud that our products not only help our customers progress toward their sustainability goals – our products help address some of the world’s most pressing sustainability issues. For example, the unique properties of TiO₂ help products last longer to reduce resource use and waste, and even support carbon capture.

Almost all the products Tronox provides enable or enhance sustainable solutions, and approximately 71% of our total revenue comes from products with a sustainable impact.

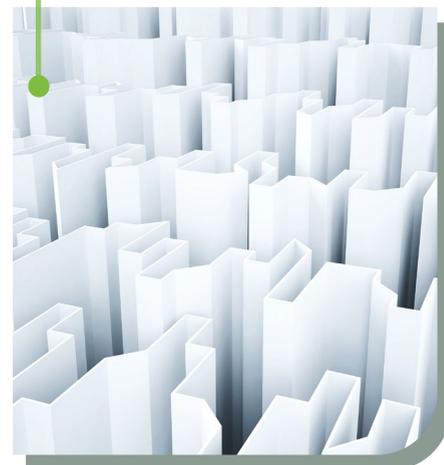
Successes like these motivate us to keep pursuing innovations that solve critical needs for our world while fueling next-level business growth.

Titanium Products

TiO₂ is an inorganic white pigment used in many products and industries. Coatings and plastics account for more than 80% of use globally.



Coatings and Plastics



Tronox's TiO₂ products have powerful properties that aid waste and GHG emissions reduction efforts and improve energy efficiency, with no negative impact on a product's look, feel or performance. Additional products, like our ultrafine CristalACTiV™, are core to many emerging, high-potential environmental technologies for catalysis, energy storage, electronics performance and more.



CLIMATE CHANGE MITIGATION

Several titanium-based products have the potential to counter the negative effects of climate change:

Carbon capture use and storage (CCUS): TiO₂-based adsorbers are being developed to help capture CO₂ through a Direct Air Capture (DAC) device or at point source capture (PSC).

TiO₂ roof coatings: TiO₂ absorbs UV radiation and scatters visible and near-infrared light, keeping buildings cooler, saving energy, and reducing the strain on air conditioners and the mechanical strain of building materials' expansion and contraction.

Battery and energy storage: Specialty TiO₂ and titanium chemicals are now increasingly used for the design and manufacture of novel and performance battery components that can support the electrification of transportation and industry.

Lithium production: TiO₂ is being developed for use in lithium ion extraction technologies to increase production of lithium for energy storage applications.

Solar cell usage: Ultrafine TiO₂ supports the production of thin solar cells, which can provide limitless power to connected devices.



AIR QUALITY IMPROVEMENT

Ultrafine TiO₂-based products are at the core of catalyst technologies for nitrogen oxide (NOx) abatement in power plants, marine applications and heavy-duty diesel. Vehicle manufacturers use these sophisticated catalysts to reduce NOx emissions and meet global regulations. For two decades, our products have been incorporated in DeNOx catalysts for several of the world's most recognizable brands of trucks.

TiO₂ also plays an important role in photocatalysts for self-cleaning and depollution. Exposing TiO₂ to UV light creates reactions that convert harmful materials, like nitrogen, volatile organic compounds (VOCs) and organic matter, into harmless substances.



RESOURCE EFFICIENCY AND WASTE REDUCTION

TiO₂'s unique properties provide high opacity in a wide range of colors. Paint and coatings with TiO₂ offer high opacity, durability and protection, leading to fewer reapplications needed and prolonged life of the treated item, reducing costs and waste.



CLEANER WATER

Ultrafine TiO₂ is used in water purification for its ability to degrade (photocatalysis) and filter (adsorption) contaminants.



Mineral Sands Products



ZIRCON: We produce zircon from our mineral sands ore deposits. Zircon has many uses – from providing opacity to ceramic tiles and tableware to being an essential component in catalysts, electronics coatings, biomedical products and more. On the sustainability front, zircon plays several important roles:

- **Improves solar reflectance** in roof and facade tiles, keeping buildings cooler and combating the heat-island effect in large cities.
- **Supports production of nuclear fuel rods**, a clean fuel source used to generate electricity with no direct carbon emissions.
- **Enhances jet engine turbine blades** to run at higher temperatures, improving fuel efficiency and extending the life of the engine’s thermal components to drive down waste.

Plus, zircon earned high environmental marks in a Zircon Industry Association (ZIA) life cycle assessment study. Compared with alumina, a frequently used opacifier in tile production, zircon generated significantly lower overall impacts across many environmental indicators.

Activated Carbon

Another product with sustainability benefits is activated carbon, a by-product of synthetic rutile production. Activated carbon is used by municipal water plants to filter drinking water and treat waste and run-off water prior to releasing it to public drains or waterways. Its filtering properties remove toxic substances in waste gases from incinerators and furnaces and can be used to remediate soil at contaminated sites prior to land redevelopment. Activated carbon also can extend the reuse of catalysts in industrial processes.



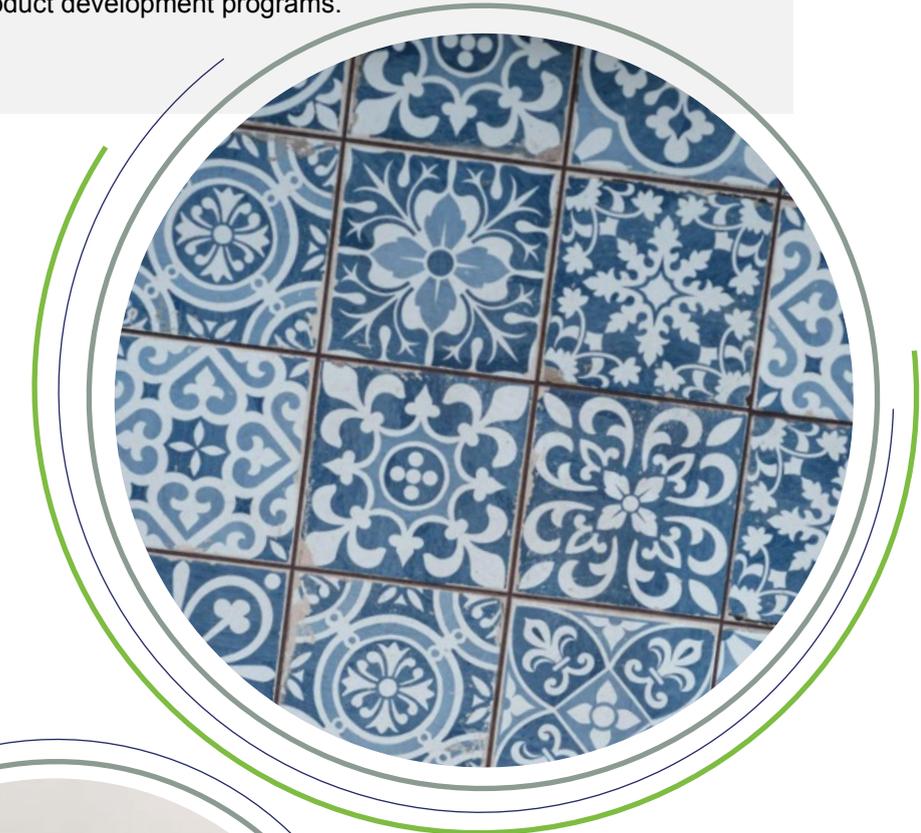
INVESTING IN SUSTAINABLE INNOVATIONS

Our research group is continuously expanding our product portfolio to unlock new revenue streams and expand our ability to contribute to a cleaner, brighter world. Our newest innovations also expand into minerals and metals that are critical to clean energy. In total, products with sustainable attributes account for nearly all our R&D investments and product development programs.



In today’s market, sustainability considerations are a fundamental component and proxy of innovation.”

STEVE FORREST
Director of Marketing



Rare Earths

Rare earth minerals are crucial to the clean energy transition. It's no surprise that demand for them has skyrocketed in recent years and is expected to grow at rates far greater than GDP growth for the next 10 years.

Neodymium (Nd), praseodymium (Pr), dysprosium (Dy) and terbium (Tb) are rare earths essential for the powerful permanent magnets needed for today's electric vehicles and wind turbines. Our existing mines in South Africa and Australia contain ample quantities of monazite, a rare earth element-bearing mineral from which Nd, Pr, Dy and Tb can be extracted. In 2023, we began selling monazite concentrates to customers that have downstream processing capacity to separate out the oxides of these four magnet metals.

Inspired by our success in selling monazite concentrate, we are actively developing the capabilities to separate and process the four magnet metals needed for the energy transition. In 2023, we joined the Rare Earth Industry Association to connect with other leaders in the sector.

Lithium

From electric vehicles and solar panels to laptops and mobile devices, many of the technologies we use every day get their power from rechargeable lithium-ion batteries.

We can play a role in meeting our world's surging demand for lithium in a sustainable way through a breakthrough technology we've been developing in partnership with French startup GeoLith and several academic institutions. This patented technology uses TiO_2 to produce an adsorbent lithium titanate (LTO) to capture lithium from the brines of geothermal wells for use in battery manufacturing.

Always preparing for what's next, we're developing a dedicated LTO plant to improve and scale up production, with a target opening date by 2026.



Many of the everyday quality-of-life products around us contain components from Tronox. View our complete portfolio at Tronox.com/products.



ESSENTIAL PRODUCTS FOR TODAY'S INDUSTRIES





Leading With Safety

No other sustainability initiative is as important to us as each and every employee and contractor working at a Tronox site going home uninjured every day.

IN THIS SECTION

Workforce Safety Metrics • Safety Training • Safety Audits
Occupational Safety • Mental Health



GOAL

ZERO injuries, incidents or harm



**2023-2024
TARGETS**

ZERO fatalities company-wide

ACHIEVE 0.36 total recordable injury frequency rate

REDUCE front-line risk through the Tronox leading safety indicator program

3 GOOD HEALTH
AND WELL-BEING



8 DECENT WORK AND
ECONOMIC GROWTH



Safety Management Approach

We lead with safety. As a mining and manufacturing company, we understand the health and safety risks associated with our business operations and proactively manage these to safeguard our employees and contractors, our communities and the planet. To meet our commitment to the safety of our team in 2023, we set the same aggressive stretch goal for safety performance in total disabling injury frequency rates (DIFR) and total recordable injury frequency rates (TRIFR) as set in 2022. Our goal of 0.15 DIFR and 0.36 TRIFR are equivalent to top-quartile peer performance, and we tied 15% of the annual incentive plan to meet our safety targets.

We did not meet our 2023 safety goals with 0.23 DIFR and 0.43 TRIFR for the year. Unfortunately, teams experienced an uptick in injuries – primarily hand injuries. Though these rates are only slightly above our performance for the past three years, we strive to do better. Across Tronox, we have analyzed trends among injuries and addressed areas with increases more rigorously through training refreshers. At one facility where finger and hand injuries increased, the team installed a talking hand at the entrance of the plant to remind employees how to avoid incidents.

Unfortunately, there will always be risks associated with the work we do, no matter how much we emphasize safety. In 2023, we experienced a fatal workplace accident involving a contractor at one of our South African mining operations. As with any serious injury, we investigated the circumstances to learn from this loss and improve scaffolding safety companywide. As a result of the fatality, the Board applied negative discretion and reduced the Tronox-wide component of the annual incentive plan payout from 64.5% to 50% of the target for all the Company's functional and operational leadership positions, including the executive team. The Board took this significant action to reinforce the importance of employee and contractor safety at the Company's operations and the Board's commitment to safety and sustainability.

We continue our uncompromising focus on safe operations and are keeping the same DIFR and TRIFR safety stretch goals in 2024.



Leading Safety Indicators

One way we work toward improving safety performance is to continue to emphasize Tronox’s Leading Safety Indicator program. The program aims to empower employees to proactively identify and mitigate workplace hazards across our work sites before incidents occur – and reward them for their efforts. For example, successful programs like our Hazard Hunt competitions turn the hazard mitigation process into a team participation activity.

In 2023, we placed more emphasis on measures that can most effectively reduce hazards in the workplace:



Elimination to Remove the Hazard: For example, we relocated the pipework and pumping systems in an area of the Thann Pigment Plant to a ground-level location. This reduced the number of pipework blockages and also completely eliminated the need for maintenance workers to repair the system from greater heights.



Substitution to Replace the Hazard: At Tronox’s Wonnerup Mine, replacing manual post drivers with mechanical post drivers significantly reduced the physical effort required and the potential for injury.



Engineering Controls to Isolate People from the Hazard: We installed a series of rain runoff drainage pipes near our Brand-se-Baai Mine to prevent vehicles from becoming trapped or overbalancing in waterlogged roads.

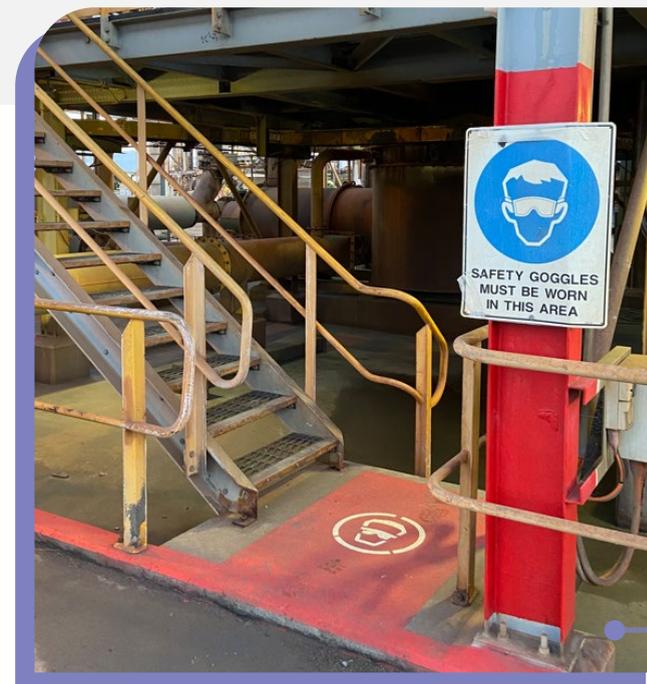
A new mobile app makes it faster and easier for Tronox team members to log and track leading indicators during the workday. This provides valuable data at both the site and global level.

The Leading Safety Indicator efforts are part of our larger Safety, Health and Environment (SHE) strategy that started in 2021. Tronox continues to apply the SHE strategy framework to give each operating location the ability to launch initiatives tailored to their needs. Through our global and localized efforts, we aim to progressively build capacity in our people, plants and processes through skills, time and resources.

LEARNING FROM NEAR MISSES

Tronox’s Kwinana Pigment Plant logged a number of near-miss isolation events. This triggered a more in-depth investigation by a team of safety, production, maintenance and electrical employees. They identified one of the primary causes was inconsistent application of isolations in motor control centers (MCCs) due to not understanding how to interpret the phase lights on the MCC display box to confirm that the isolation is effective.

To address this, the Kwinana team developed a specific training package that included a practical examination at a “training MCC,” where individuals can practice and demonstrate their proficiency. This training has been rolled out to all isolation officers at Kwinana, and other Tronox sites have also begun incorporating this training.



The Kwinana Pigment Plant implemented new visual indicators to designate safety zones and provide reminders to employees.



While most of our safety efforts center on our operating sites, we also are working to ensure the safety of our customers. TiO₂ delivered to end users is stacked on pallets, which have the potential to shift during transport and unloading. To avoid injury, we have improved the pallet and bag design and also the method of securing bags in transit.

Workforce Safety Metrics

Disabling injuries are defined as fatalities, lost-time injuries and restricted work cases.

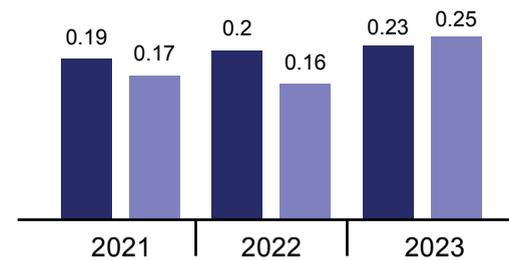
Disabling Injury Frequency Rate is the number of disabling injuries per 200,000 hours worked.

Recordable injuries are defined as disabling injuries and medical treatment cases.

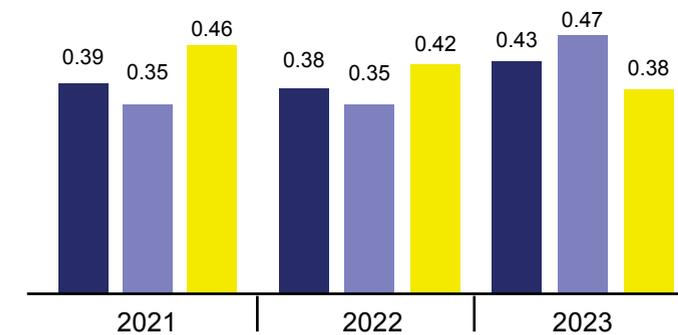
Recordable Injury Frequency Rate is the number of recordable injuries per 200,000 hours worked.

DISABLING INJURY FREQUENCY RATE

- Employees and contractors
- Employees only
- Contractors only



TOTAL RECORDABLE INJURY FREQUENCY RATE



	2021			2022			2023		
	Employees	Contractors	Total	Employees	Contractors	Total	Employees	Contractors	Total
Fatalities	0	0	0	0	0	0	0	1	1
Lost-Time Incidents	8	8	16	7	5	12	10	6	16
Restricted Work Cases	3	1	4	5	5	10	5	3	8
Disabling Injuries	11	9	20	12	10	22	15	10	25
Medical Treatment Cases	11	11	22	10	10	20	13	8	21
Recordable Injuries	22	20	42	22	20	42	28	18	46
Reversible Occupational Health Illnesses	0	0	0	0	0	0	0	0	0

For more information about how health and safety incidents are reported, read our guidelines [here](#).

Safety Training

Accelerating the pace of skills-building improves our team competency, which is the foundation of safe work. Each region and site has different needs based on the work and environment at that location. Tronox sites implemented a variety of safety trainings in 2023:

- **Australia:** Northern Operations in Australia gathered for Safety Leadership Days, which provided education and roundtables to better understand how to maintain a safe workplace, identify common errors that could lead to incidents, and develop personal safety commitments.
- **Saudi Arabia:** The Yanbu Pigment Plant has been conducting SHE trainings covering hazardous materials awareness and operation for emergency response team members.
- **South Africa:** In South Africa, teams have undergone training to improve the identification of hazards by using collaborative hazard hunts when planning tasks and taking timeouts during the execution of tasks to check and reset barriers before teams interact with the highest hazards.
- **The Netherlands:** At the Botlek Pigment Plant, we launched a new site-specific safety training program that gives employees more time to practice the tools, receive feedback and discuss with supervisors.
- **France:** The Thann Pigment Plant participated in a month-long chemical safety training, featuring educational videos, interactive quizzes, video games, treasure hunts and mystery games.
- **United Kingdom:** At the Stallingborough Plant, we launched Thrive training, an immersive experience in which employees witnessed actors portraying a safety incident that led to a fatality. Watching the actors play coworkers and family members grappling with the tragedy struck an emotional chord that resonated far beyond typical classroom training, leading to a renewed commitment to safe work.

Although each site is different, many have similar safety needs. After a training is piloted, we review it to see if it could potentially be leveraged at our other sites. For example, both the Stallingborough Pigment Plant and Thann Pigment Plant launched site-specific idea systems designed to collect employees' safety feedback and suggestions for improvements – an idea that the Botlek Pigment Plant first launched as the Botlek Best program in 2022.



Tronox also works to build safety awareness in our communities. Employees at the Yanbu Pigment Plant brought safety training to AlGhazali Elementary School, teaching children what to do in case of a fire and how to respond to other safety concerns at school and home.



I spent 10 years as a firefighter and have sat in many safety training sessions, but the Thrive course was like nothing I had witnessed before. I was captivated and inspired by the way the message was delivered, and I believe wholeheartedly that Thrive will elevate our awareness and ability to work safely and challenge unsafe decisions and actions in our teams. Safety is paramount to Tronox's success and sustainability and has my full support."

JAMES SMITH

Senior Shift Operator at Stallingborough Pigment Plant

Safety Audits

Tronox SHE processes are reviewed via internal audits, external surveillance audits and yearly recertification audits for any relevant ISO standards. In 2023, on-the-ground audit and assurance activities were conducted at all sites. These audits review process safety and organizational health and safety requirements against internal standards, as well as test major incident scenarios. In recent years, we have increased the number of trained internal auditors. This creates a greater shared understanding of the requirements of regulatory standards and will drive better compliance.

Emergency Response

Emergencies can happen at any company in any location, anytime. It is our responsibility to be prepared to respond. Each Tronox site has an emergency response plan and functions in place. Regular drills enable us to test and improve on those plans and train employees to handle potential scenarios. In 2023, emergency preparedness efforts included the following:

- **RE-ESTABLISHED** our emergency response teams at our eastern Australia sites and more than doubled the number of emergency-trained employees in that region.
- **CONDUCTED** emergency management refresher training and a desktop drill at the Yanbu Pigment Plant.
- **PARTNERED** with emergency training specialists to improve our emergency response plan and deliver training to the crisis management team at the Hamilton Pigment Plant. In addition, 32 employees completed emergency certifications in disciplines such as advanced exterior firefighting, emergency medical response and technical rescue.
- **INSTALLED** a high-tech early warning fire detection system at the Fairbreeze Mine following a significant fire incident and added 13 emergency response team members at KwaZulu-Natal Sands.



PRACTICE SCENARIOS PREPARE EMPLOYEES TO MANAGE POTENTIAL EMERGENCIES

In November 2023, the Yanbu Pigment Plant team hosted the annual Yanbu Area Mutual Aid (YAMA) Drill to review emergency response plans and hone the necessary skills in the case of a $TiCl_4$ release. Tronox personnel organized the event in partnership with neighboring companies, YAMA and the Royal Commission Fire/Environment Departments.

Our Emergency Response Team members simulated a $TiCl_4$ and injury scenario, in which they had to suppress the release, and then conduct search and rescue for any injured coworkers. Performance during the training was much improved from last year, thanks to increased communication training, new radios and enhanced camera systems throughout the site.

Occupational Health and Process Safety

Operating safely also means reducing our employees' and contractors' exposure to occupational health risks as much as possible. Some of the ways we reduce exposure to health risks include:

- **IDENTIFYING** exposure sources and extent of exposures in the workplace
- **USING** exposure controls, such as material substitution
- **IMPLEMENTING** personal protective equipment (PPE), noise reduction measures and more
- **MAINTAINING** documentation and employee notification requirements, including a repository of exposure results and work conditions that serves as the baseline for future assessments and a resource for epidemiology

In 2023, we focused on improving radiation reporting and management plans to remain in compliance with changing local regulations in Australia.



IMPROVING LAB SAFETY

Effluent mud left over from TiO_2 processing has traditionally been tested for additional TiO_2 using hydrofluoric acid. Skin exposure to hydrofluoric acid can cause serious injury or even death; and while the labs follow extensive safety procedures, accidents can happen. Thanks to extensive research, Kemerton's quality lab was able to replace the use of hydrofluoric acid with a new method using a precipitation step in the sample preparation to produce a solid ash that can be measured by X-ray fluorescence. This change makes the workplace safer for our lab technicians and also contributes to our goal of producing safe, quality, low-cost, sustainable TiO_2 .



Mental Health

Mental health and wellbeing continue to be an important aspect of our employees' health and safety. Tronox teams across the globe have expanded how we support employee mental health in 2023.

- **Australia:** Developed a comprehensive mental health strategy, psychosocial safety policy, risk management procedure and guidance, along with a regional steering team to ensure strategic objectives are accomplished. In addition, all Australia employees observed R U OK? Day on September 14. Posters around the sites reminded employees that "seeing who's struggling isn't always obvious" and encouraged them to check on one another."
- **South Africa:** Launched the Village Focus Group, where representatives from different work groups offered feedback and developed initiatives to improve the village experience, such as new lighting, gym and recreation room upgrades, and developing a Good Neighbor Guide. In addition, some operations created an awareness campaign to educate employees on different types of mental health challenges and the services Tronox offers employees and their families.
- **Saudi Arabia:** Employees and their families held a four-kilometer race along the beachfront to raise awareness on the importance of taking care of our physical and mental health.
- **United Kingdom:** Talking about mental health is often taboo among men, so a day was set aside to bring awareness to how male employees can support one another.
- **France and the United Kingdom:** Employees participated in a wellness challenge consisting of physical activities and education sessions on topics like sleep, nutrition and stress management. The employees also raised \$92,000 for a French charity, Premiers de Cordée, which organizes physical activities for differently abled children and hospitalized children.

Tronox also provides access to counseling and other professional services through its Employee Assistance Programs.



EMPLOYEE PROFILE

JOHN OAKES

AUSTRALIA

At Tronox, safety is core to our culture, and everyone has a role to play. We have a responsibility to ourselves and each other to take the necessary precautions to reduce the risk of accident or injury.

John Oakes, production operator and 18-year employee at the Kwinana Pigment Plant, takes this responsibility personally. He noticed a possible traffic hazard onsite: a route to one of the loading areas led to heavy and small vehicles merging onto the same road, which increased the likelihood that front-end loaders, trucks and forklifts could collide.

“I was motivated to take action when I heard about a traffic-related fatality at another company’s mine site in Western Australia,” said John. “A close friend of mine was meant to be in that vehicle, but circumstances kept him from that task at the time. I realized that I had an obligation to my coworkers and myself to take action and find a solution to prevent a similar tragedy here.”



I realized that I had an obligation to my coworkers and myself to take action and find a solution to prevent a similar tragedy here.”

He approached his supervisor about his concern, who helped him elevate it to the shift safety representative, the safety team and the area manager. John worked with them to develop – and execute – a complete solution to improve the traffic flow and protect his fellow employees. Together they:

- **IDENTIFIED** a permanent alternative route for light-duty vehicles.
- **COLLABORATED** with the area manager to navigate the regulatory and approval processes, which included excavation permitting and capital expenditures.
- **CLEARED** and flattened the new route.
- **PARTNERED** with a colleague to fill in the previous access point.
- **ENHANCED** barricade reels to limit traffic when heavy front-end loaders are in use nearby.

Since moving the road and implementing new safety measures, traffic in the area has reduced dramatically, lessening the likelihood of dangerous collisions. John now shares his experiences with colleagues so they can develop a proactive approach to workplace safety as well.

“With so many new employees onsite these days, it is important to understand that good safety practices go beyond following the established regulations and wearing personal protective equipment,” said John. “You have to observe your surroundings. And if you notice something unsafe, you too can play a role in finding and implementing solutions that protect all of us.”





Advancing Environmental Stewardship

Natural resources are the foundation of our business. We believe in our responsibility to care for our environment.

IN THIS SECTION

Climate and Energy • Waste • Water • Biodiversity



GOALS

- REDUCE** Scope 1 & 2 GHG emissions intensity: 25% by 2025 and 50% by 2030
- REDUCE** upstream Scope 3 GHG emissions intensity: 9% by 2025 and 16% by 2030
- REDUCE** absolute waste to external dedicated landfills: 15% by 2025 and 25% by 2030
- MANAGE** water use



2023-2024 TARGETS

- PREPARE** for proposed corporate climate disclosure reporting requirements
- ALIGN** with the Minerals Council of Australia's Enduring Value Framework
- OBTAIN** external assurance of Scope 1 and 2 emissions reporting
- APPLY** internal carbon costing mechanism
- MOVE** South Africa operations to renewable energy
- WORK** with top 20 emitters in supply chain to reduce impact
- IMPLEMENT** action plan for supply chain emissions
- PILOT** process changes to reduce waste at Bahia and Yanbu Pigment Plants
- ROLL OUT** global program to reduce fresh water use in high-stress areas

6 CLEAN WATER AND SANITATION



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



13 CLIMATE ACTION



15 LIFE ON LAND



Climate and Energy Approach

Climate change remains one of the most pressing issues threatening our ecosystems, communities and businesses worldwide. Tronox continues to act on our decarbonization roadmap to achieve our goal of net zero by 2050.

Our Scope 1 greenhouse gas (GHG) emissions intensity in 2023 decreased by around 7% compared to 2022, largely due to expanding automated process controls (APCs) for chlorination to more of our pigment plants. A green power purchase in Brazil and improved emission factors in Australia also contributed to reductions in Scope 2 emissions.

We expect significant Scope 2 emissions reductions in 2024 and beyond, thanks to our 200 megawatt (MW) solar facility in South Africa. While this will move us closer to our 2025 goal of 35% reduction in Scope 1 and 2 GHG emissions intensity, we will not achieve that milestone by 2025 due to delays in negotiations with the project developers for a second renewable energy project in South Africa. We are therefore updating our 2025 target to 25% and expect to achieve the 35% target when the wind project is completed, which is currently estimated to be by 2027.

Despite the delay in achieving our 2025 goal, we remain on track to reach our goals of a 50% reduction in Scope 1 and 2 GHG emissions intensity by 2030 and net zero by 2050. We are learning and improving through every project and action along our roadmap. Much of our progress towards these goals will center on incorporating clean, renewable energy sources while also reducing total energy consumption through efficiency measures. Our shareholders and customers are supportive of our decarbonization roadmap, and we continue to receive positive feedback from ratings agencies regarding our climate action and commitments.

Tronox's commitment to mitigating the impact of climate change goes beyond our own footprint. We also aim to:

- **ACHIEVE** carbon emission reductions both up and downstream from our operations.
- **ENSURE** the resilience of our communities and operations against the physical impacts of climate change.
- **OFFER** products with the lowest carbon content that is reasonably achievable, as well as develop products that actively contribute to a greener economy to help our customers transition to a low-carbon economy.

The Governance and Sustainability Committee of the Board of Directors remains responsible for oversight of sustainability at Tronox and is comprised of four independent members of the Board of Directors, including the non-executive Chairman of the Board.

Tronox completed our first Taskforce on Climate-related Financial Disclosures (TCFD) Report in 2022, helping us understand how the relevant climate change transition scenarios could impact Tronox's business operations and strategy. We have taken measures to address the physical risk assessment conducted at all our sites. We are conducting an updated physical risk assessment in 2024 to ensure that all the mitigation measures are taken and that we maintain our resilience against the potential risks associated with climate change. View our most recent [TCFD Report](#).



CASE STUDY

Solar-Powered in South Africa

In April 2024, Tronox celebrated a critical step in our net zero journey – the activation of a 200 MW solar facility. The largest solar facility commissioned in South Africa consists of more than 380,000 panels covering four square kilometers. Approximately 40% of the power needed to run our mines and smelters in South Africa will now be from renewable solar energy. We expect a 37% reduction in Scope 2 emissions for our South Africa operations, contributing to a 13% reduction in companywide Scope 2 emissions. In addition to the environmental benefits, the project will provide greater energy reliability and cost savings to Tronox.

Tronox hired SOLA Group, a 100% South African-owned independent power producer, to develop and commission the project. Recognizing the importance of strong community relations to the project's success, SOLA engaged with affected stakeholders to determine the community's needs. These engagements aligned with Tronox's desire to create employment and social development opportunities for the relatively impoverished area where the project is located. The project provided 675 temporary jobs for residents and \$4 million in payroll over 18 months, and targeted local schools to enhance educational opportunities.

"We understand our role in creating positive opportunities for the local communities while building our own sustainable business," said Mpho Mthoa, Managing Director-South Africa and KSA.



It is for this reason that we invest in programs that not only advance environmental stewardship, but also empower the communities in which we operate."

MPHO MTHOA

Managing Director-South Africa and KSA

In June, Tronox announced the next step towards obtaining most of its power in South Africa from renewable sources: a long-term power purchase agreement with NOA Group, an integrated energy utility, for approximately 497 gigawatt (GWh) of total contracted energy. This energy will be served by NOA plants with capacity in excess of 200 MW of renewable wind and solar power. Together with the SOLA project, the NOA facilities will replace approximately 70% of our coal-based electricity use in South Africa and contribute significantly to our goal of cutting carbon emissions by 50% by 2030.

Our experience with commercial developers in South Africa has prepared us to better understand how to pursue renewables in other parts of the globe. In 2023, we began exploring renewable energy generation and sourcing options in Australia, which we expect to reduce Tronox's global emissions by 4% by 2030. A prefeasibility study is underway, and we hope to announce more about these plans in late 2024.

We obtain electricity from renewable sources outside of South Africa, too. A nearby waste incineration plant in Botlek, the Netherlands, supplies partially renewable steam to satisfy the majority of the plant's steam needs. In Bahía, Brazil, more than 99% of our electricity supply was sourced through a green power purchase agreement. The wind turbines on our land in Paraíba, Brazil, satisfied the mine's energy needs before it reached end of life, and now generate valuable renewable energy for the local community.

Journey to Net Zero

We first disclosed a detailed road map to net zero in 2022. The decarbonization roadmap has since been updated to reflect feedback from stakeholders as well as progress on implementing various components of the roadmap, such as the delay in the second leg of our South African renewable energy strategy.

As of 2023, all our operating regions have detailed decarbonization roadmaps in place and are working to integrate projects into each site's five-year business plan. This is an intentional step to ensure that all locations contribute to GHG reduction while also looking at priority projects to help us achieve short-, medium- and long-term goals. Tronox has allocated a dedicated budget for GHG management to enable this work.

Tronox's decarbonization roadmap covers 100% of our operations and is focused on three key areas: source 100% renewable electricity, phase out fossil fuel energy for thermal needs (natural gas in particular), and switch to low-carbon reductants, all by 2050. Below is our detailed five-year approach:

2021

- **ENTERED** into a renewable energy agreement with SOLA Group for a 200 MW solar project in South Africa.
- **COMPLETED** GHG reduction opportunity assessments for our sites in Australia and Europe.
- **COMPLETED** key climate studies examining transitional business and physical risks.
- **COMPLETED** Scope 3 emissions determination capabilities (e.g., carbon footprint of raw materials, such as chlorine, additives, and process gases).

2022

- **COMPLETED** accounting for Scope 3 emissions and established initial targets to reduce the intensity of our Scope 3 emissions by 9% by 2025 and 16% by 2030, in each case against our 2019 baseline.
- **COMPLETED** organization-wide assessment of transitional risks and opportunities and physical risk.
- **COMMENCED** a third-party limited assurance review with respect to our global Scope 1 and 2 emissions.
- **COMPLETED** Phases 1 and 2 of regional carbon emission roadmaps in Australia, Europe and the United Kingdom.

- **COMMENCED** Phase 1 of regional carbon emission roadmaps for the United States, South Africa, Saudi Arabia and Brazil.
- **FORMULATED** physical resilience plans for realistic climate change scenarios.
- **ASSESSED** robustness of Tronox GHG reduction strategy using the Assessing low-Carbon Transition (ACT) chemical industry framework.
- **IMPLEMENTED** APC for chlorination in the United States and the United Kingdom to improve redundant consumption. Started similar projects in the Netherlands and Australia.
- **PILOTED** energy management system in France. Site certified against ISO 50001 Standard.
- **ENGAGED** with our high-emitting suppliers to discuss their approach and programs related to sustainability.

2023

- **IMPLEMENTED** our internal carbon pricing tool to enable management to make better-informed decisions on capital projects that take account of carbon emissions.
- **MET** with our top 20 suppliers to explore Scope 3 reduction opportunities and to inform our future Scope 3 emissions intensity reduction targets.
- **EXPANDED** APC for chlorination to most pigment sites.
- **INTRODUCED** energy management systems at Stallingborough, Botlek and Yanbu sites, including energy performance indicators and targets.
- **INITIATED** R&D projects for alternative reductants (e.g., bio sources).
- **REACHED** 99% renewable electricity (wind) in Brazil in 2023.
- **ESTABLISHED** GHG and energy reduction project portfolio for our entire business.
- **EXPLORING** alternative renewable energy supply for the United Kingdom site.
- **DEVELOPED** and initiated a strategy to address the Australian Safeguard Mechanism as it applies to our two safeguard facilities, Chandala and Kwinana.

2024 —————

- **COMMISSIONED** the first of two large-scale renewable energy projects in South Africa.
- **ANNOUNCED** the signing of agreements for the second large renewable energy project in South Africa.
- **BEGIN** transition to renewable energy opportunities in Australia.
- **START** strategic renewable energy purchasing in China.
- **BEGIN** key strategic process transformation initiatives.
- **COMPLETE** APC for chlorination at all remaining pigment plants.
- **ACHIEVE** ISO 50001 certification for all European Union and Saudi Arabia sites.
- **UPDATE** global GHG reduction roadmap to account for new innovations, opportunities and Scope 3 initiatives.
- **EXPLORE** signing Science Based Target initiative (Sectoral Decarbonization Approach).

2025 —————

- **PROGRESS** strategic renewable projects and process transformation initiatives.
- **ASSESS** R&D opportunities for scale-up.
- **CONTINUE** Scope 3 project collaboration.
- **ROLL OUT** ISO 50001 program to other regions.
- **DEVELOP** an electrification strategy to change out our natural gas boilers, which are used to produce steam, to technologies that can be powered by renewable energy.

2030 —————

- **COMMENCE** conversion of our natural gas-fired industrial boilers at our TiO₂ facilities to green electricity.
- **SUBSTANTIALLY TRANSITION** electricity supply to renewable sources in all jurisdictions (appreciative of regional policies).
- **CONTINUE** plant electrification program to reduce natural gas consumption (e.g., for heat, power, steam).

- **EXPLORE** fuel substitution (e.g., biodiesel, hydrogen) and electrification for mining vehicles.
- **PILOT** carbon capture and storage (CCS) and carbon capture, utilization and storage (CCUS) at TiO₂ facilities.

2050 —————

- **ACHIEVING** net zero by 2050 is dependent on a range of initiatives. First, we will need to develop our technology to use alternate non-carbon-based reductants. This will require access to alternate supply sources and appropriate infrastructure to be established to facilitate transition. All of our purchased power will need to be generated by renewable sources. We will also need to electrify our mining and earthmoving equipment, which currently runs on diesel. We consider carbon off-sets, either self-generated or purchased, as a last resort for hard-to-abate emissions, or where the rate of technological change is slower than announced.

By 2050, we also will have collaborated with our upstream and downstream suppliers and partners to decarbonize their processes in order to achieve net zero.



Managing Energy Consumption

The majority of Tronox's GHG emissions are generated from energy use in the reduction process at our TiO₂ slag furnaces in South Africa, synthetic rutile kiln in Western Australia, and nine TiO₂ pigment plants. While our 2030 plans include transitioning to more renewable energy sources at many of these sites, we also have identified process improvements to reduce energy consumption.

In 2023, our absolute energy consumption decreased by 11% and energy intensity decreased by 8%, compared to 2022, thanks in large part to these steps:

- **IMPLEMENTED** APC for the chlorination process at all pigment plant sites, except Yanbu, which is underway and will be completed in 2024.
- **WORKED** toward ISO 50001 energy management certification at several pigment plants.
- **SET** site-specific budgets for energy consumption per ton of product, including steam and electricity usage, for all pigment plants.
- **MONITORED** reductant consumption per ton of production.

All these efforts build on previous work to reduce energy use or reuse process emissions.

Our facilities have also been designed with efficiency in mind, with combined heat and power plants generating electricity and steam for the Kwinana and Stallingborough Pigment Plants. At our Thann Specialty Plant and Botlek Pigment Plant, our operations are integrated with the local industrial ecosystem, utilizing byproducts from adjacent processes. In South Africa, we operate a cogeneration plant for electricity production at our Namakwa Sands smelter and are capturing and reusing CO gas formed during smelting at the KwaZulu-Natal smelter.

Energy performance, KPIs, and short-, medium-, and long-term goals are reviewed with regional and site leadership on a quarterly basis.

FRANCE'S DECARB FLASH WINNER

Tronox won the "Fossil Zero Industry – DECARB FLASH" call for projects – part of the France 2030 plan to expand investments to accelerate the decarbonization of industrial sites by 2030. The €95,000 (approximately US\$103,000) award will fund equipment to continue our decarbonization efforts at our Thann Specialty Plant.



ENERGY SAVINGS AT PIGMENT PLANTS

Coke is the primary energy input in our pigment plant processes and accounts for 15% of Tronox's global carbon emissions. Since 2022, we have been rolling out APC technology in our pigment plant chlorinators to reduce emissions. In 2023, over 5,500 tons of coke were saved as a direct result of the APC implementation at three of our pigment plants. Yet, there is more to be done to fully leverage the benefits of APC. We have additional work planned at all sites, and we are continuously learning and improving the processes and modeling. For example, Hamilton Pigment Plant, the first site where APC was introduced, achieved an additional savings of 2,000 tons of titanium ore and over 1,600 million British thermal units (MMBTUs) of natural gas in 2023.

IMPROVING ENERGY MANAGEMENT THROUGH ISO 50001 CERTIFICATION

The Yanbu Pigment Plant began pursuing ISO 50001 energy management certification in 2023. We were able to expedite this process, which includes understanding our current energy use and establishing an energy management system, due to learnings gained from piloting the certification process at our Thann Specialty Plant. Based on the analysis, we determined the Yanbu Pigment Plant would strive for a 10% energy reduction target over the next five years. We expect to achieve this through heat recovery plans and energy-efficiency programs.



Formal programs, like ISO certification, are an important way to bring external perspective to our sites, helping us leverage best practices and formal processes that can improve our energy consumption and reduce overall emissions.”

SUHAIB YAMANI

SHEQ Systems and Certification Coordinator
at Yanbu Pigment Plant

Yanbu earned certification in early 2024. The pigment plants at Stallingborough and Botlek have also started the ISO 50001 certification process and expect to earn certification in 2024.

Internal Carbon Pricing

Tronox began applying an internal carbon pricing methodology in 2023. The methodology measures the financial impact of business decisions that increase or decrease our Scope 1, 2 and 3 emissions based on actual or potential per ton emission costs in the areas where we operate. By applying this lens, we can navigate the continually evolving GHG regulations and stress test our investments. Every significant capital project now includes a carbon assessment, which helps us evaluate the viability and value of the project beyond just the economics of it. Internal carbon pricing better prepares Tronox for evolving environmental regulations. For example, proactively reducing the carbon impact of our products can help us avoid tariffs, such as the European Union Carbon Border Adjustment Mechanism for pig iron enacted in 2023. Read more in our updated [TCFD disclosures](#).

Scope 3 Emissions Targets

Approximately one-third of Tronox’s carbon emissions for our pigment products stem from Scope 3 emissions in our supply chain, primarily from the manufacturing and transportation of the chemicals and other raw materials used in our production processes. Tronox has set a goal to achieve a 9% reduction in upstream Scope 3 emissions by 2025 and a 16% reduction by 2030, compared to a revised 2021 baseline based on the refined GHG emissions calculation methodology. With these reductions, we will be able to offer our customers sustainable TiO₂ products that will help them reduce their own Scope 3 emissions.

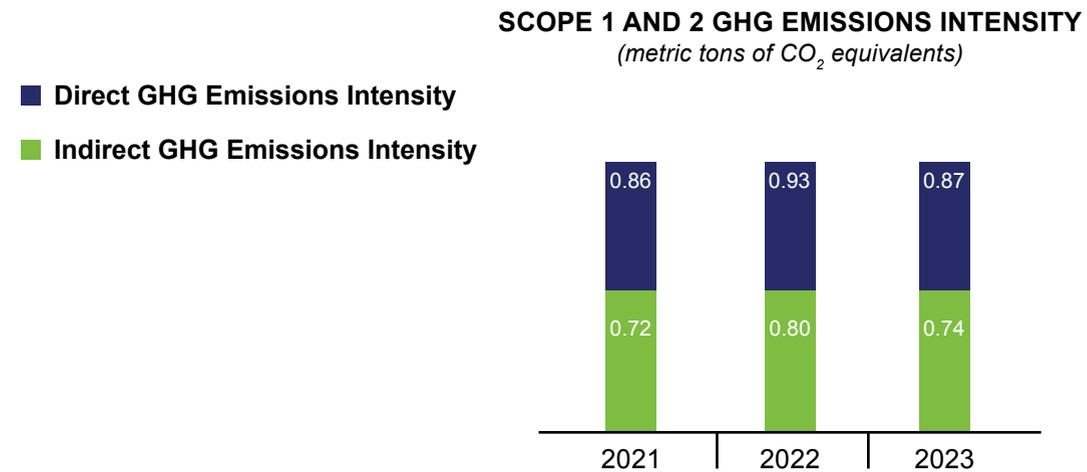
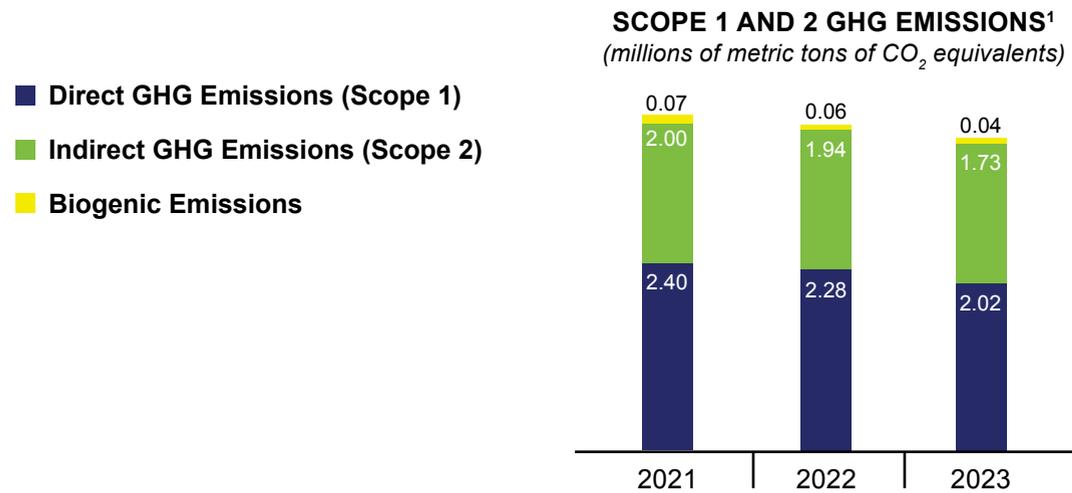
In 2023, we achieved a 6% reduction in upstream Scope 3 emissions intensity. We are currently evaluating high carbon emission raw materials in our supply chain so we can develop the necessary plans to either substitute or collaborate with our suppliers to reduce the carbon footprint of these materials, as well as consider the potential risk to our supply chain security from any changes. Read more on [pg. 82](#). We will continue this work in 2024 by actively collaborating with our Top 20 suppliers to develop integrated decarbonization roadmaps. We are also updating our calculation methodology in 2024 to be more inclusive of packaging and other elements of our business.

We recognize there are also downstream Scope 3 impacts for our products. However, the number of end markets we serve and the global geographical distribution of our sales make it difficult to accurately estimate downstream Scope 3 emissions.

Emissions Metrics

Tronox’s 2023 target of 5% reduction in GHG emissions intensity was based on the installation of APC at several additional TiO₂ facilities and the related reduction in pet coke usage, as well as increased production at our mining operations. The actual reduction in 2023 was 4.4% against the 2019 baseline, due to lower production than anticipated as a result of market conditions beyond our control. If production had remained in line with expectations, we calculate that the reduction would have exceeded the 5% target.

For more details on the overall strategy, view our full TCFD Disclosure [here](#).



SCOPE 3 GHG EMISSIONS (millions of metric tons of CO₂ equivalents)

	Raw Materials	Energy	Water	Wastewater	Waste	Total
2022	1,279,815	618,031	3,004	10	6,989	1,907,850
2023	1,280,060	345,844	2,605	56	6,324	1,634,889

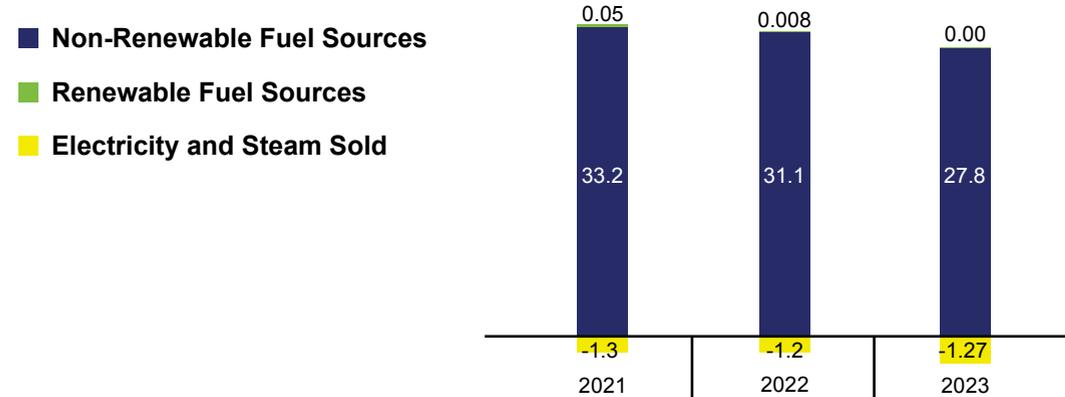
DNV Business Assurance Germany GmbH provided assurance for the data above.

Environmental data covers all manufacturing and mining sites under our operational control, including associated offices and warehouses. We exclude offices outside of our production sites, the R&D Center in Oklahoma and the distribution warehouse in Belgium, because these sites are generally leased offices and/or their contribution to our overall environmental performance is negligible. Read our environmental reporting guidelines [here](#).

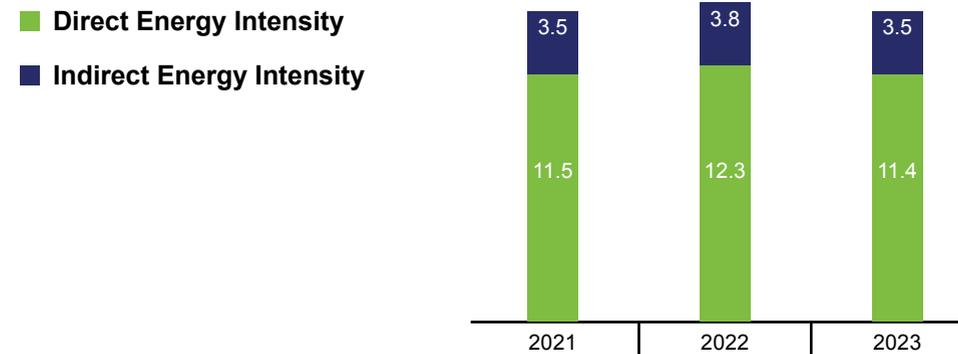
Energy Metrics

Total energy use decreased in 2023. The energy intensity also decreased by around 8% despite lower production compared to 2022. The reduction in renewable fuel sources was driven by the closure of the Paraíba Mine, together with the lower percentage of renewable biogenic steam at the Botlek site. This was partially mitigated by the increase in renewable energy sourcing at our Bahía Pigment Plant. We expect to see a significant increase in renewable energy use in 2024 now that the solar facility in South Africa is online.

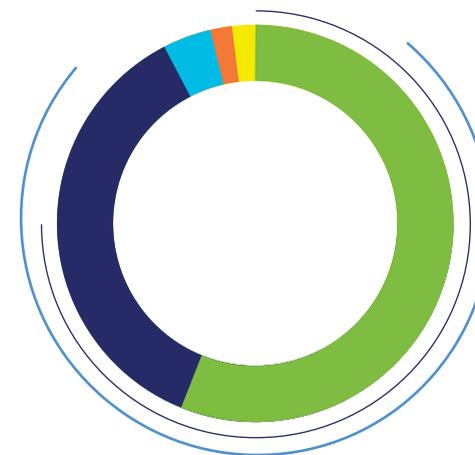
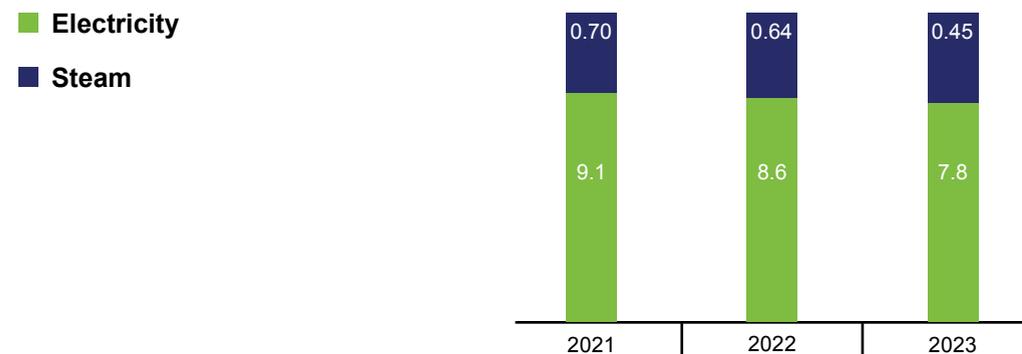
DIRECT ENERGY CONSUMPTION (millions of gigajoules)



ENERGY INTENSITY (gigajoules/metric ton produced)



INDIRECT ENERGY CONSUMPTION (millions of gigajoules)



2023 NON-RENEWABLE FUEL SOURCES

- Natural Gas | 53.9%
- Cokes/Coal Reductant | 35.5%
- Diesel | 5.5%
- Sulfur | 2.4%
- Other | 2.7%

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Waste Approach

Waste management is an opportunity for Tronox to reduce our environmental impact, gain operational efficiencies and explore byproduct revenue streams. We have set clear goals to reduce the amount of absolute waste we send to external dedicated landfills, ultimately aiming for zero by 2050. At our global and regional Centers of Excellence, we are exploring opportunities to create new markets for waste byproducts or reuse waste streams as raw material at our operations.

In 2023, we reduced absolute waste to external landfills by 18% when compared against our 2019 baseline. In addition, we reduced our overall waste intensity by 7%, and the intensity of waste to landfill decreased by 8% compared to 2022. The overall reduction in absolute waste quantities was partially influenced by lower production rates in 2023. The intensity values are a better reflection of the progress we have made to achieve our reduction goals.

Thanks largely to our significant reductions in sulfate waste at our pigment plants and the planned transition to on-site waste storage at our Bunbury pigment operations, we are on track to achieve our target of a 15% reduction in absolute waste to external landfills by 2025 and ahead of schedule to achieve a 25% reduction by 2030.



SUPPORTING A CIRCULAR ECONOMY

We continue to support a transition to a circular economy by finding ways to recover valuable materials from our waste streams and transform them into new products and revenue opportunities.

In 2023, we began exploring sales opportunities for waste sulfuric acid and other byproducts. The quantity of the sold material is dependent on the market conditions and the prices of other alternatives.

We have been increasing our focus on recovering monazite – a co-product rich in rare earth minerals – from our production processes and tailings. The demand for the light rare earth elements found in monazite is increasing dramatically given their use in many facets of the emerging green economy. Read more on [page 21](#).

YANBU PIGMENT PLANT is working with local partners in the area to explore potential uses of the treated solid residues from our pigment manufacturing process. As we continue pilot trials, we are sending 700 tons of waste to the manufacturer for further processing.

BAHÍA PIGMENT PLANT gained regulatory approvals to sell unreacted ore, previously disposed of to external landfills, as a product for us in the construction industry. In 2023, an average of 90 tons of unreacted ore per month were sold to our customers. By early 2024, the quantities increased to an average of 300 tons per month.

NAMAKWA and KWAZULU-NATAL SITES secured the reclassification of desulfurization slag to be used in a variety of concrete products.

KWINANA PIGMENT PLANT has commenced several circular economy investigations aimed at improving efficiencies, waste diversion, volume reduction, reuse and value extraction. In 2024, we will analyze industrial market opportunities within Western Australia to determine a plan forward.

TRAINING THE NEXT GENERATION IN WASTE OPTIMIZATION IN AUSTRALIA

In 2024, Tronox will partner with Murdoch University to host a Commonwealth Scientific and Industrial Research Organization (CSIRO) Industry Ph.D. Program student to research critical minerals recovery from our mining and manufacturing waste streams. The findings from this research will advance our circular economy approach, while also enabling the student to earn a doctorate complemented with real-world industry experience.



AWARD-WINNING CIRCULAR ECONOMY PROJECT IN BAHÍA

The Federation of Industries of the State of Bahia (FIEB) recognized Tronox with a second-place Sustainability Award for our work to convert unreacted ore into a byproduct for use in concrete. In addition, our project earned second place out of 94 entries in the Federal University of Bahia’s sustainable technologies awards.

MANAGING HAZARDOUS WASTE

While our operations produce minimal hazardous waste, it is still critical that we manage it properly as part of our Environmental Management Policy. Several of our sites have set targets and implemented projects to reduce hazardous waste.

In South Africa, desulfurization slag – a fine dust byproduct generated from smelting activities – was classified as hazardous waste. In 2023, Tronox secured a reclassification of desulfurization slag so it can be used in a variety of products, like road base materials, construction materials and bricks.

This effort reduced our hazardous waste to landfills by nearly 3,000 tons in 2023 and yielded significant cost savings by avoiding transportation and disposal at a landfill more than 100 kilometers away.

Optimizing Processes to Reduce Waste

One of our key strategies for reducing waste to landfills is making the most of the materials we use. Over the past year, several Tronox facilities have made strides with operational efficiencies that have reduced our environmental footprint, as well as material costs.



Sulfuric Acid Recycling at Thann

Thann Specialty Plant recycled 420 tons of sulfuric acid in 2023. This recycling effort, in conjunction with an improved market for white gypsum and sales of red gypsum, reduced waste to landfill per ton of product by 2% in 2023 compared to 2022.

We also improved the reliability of our acid reuse and acid reconcentration processes, which increased onstream time.



Waste Acid Reduction and Reuse at Fuzhou

The Fuzhou Pigment Plant plans to reach over 60% reduction in waste generated and sent to landfill by 2025. In 2023, the polymeric ferric sulfate (PFS) production facility at the site reduced total solid waste by 18,000 tons. The facility converts concentrated waste acid, copperas and ferrous sulphate monohydrate from our processes into a PFS solution used for wastewater treatment. A project is underway to increase the concentration of recycled waste acid from 19% to 22% to reduce waste even further, with a target of 42,000 tons of 22% waste acid in 2024. We also are planning a trial for calcium carbonate neutralization of waste acid to produce white gypsum, which can be sold as a byproduct to reduce red mud waste.

Other waste management efforts at Fuzhou include process optimizations that reduce iron waste and the lime consumption needed to neutralize it, as well as the sale of ferrous sulphate monohydrate byproducts to external customers.

MINE TAILINGS MANAGEMENT

Waste management at our mining sites centers around safely containing tailings – the non-valuable streams from the mining process. All Tronox facilities are designed by qualified engineering experts, and we conduct stability monitoring in accordance with local regulatory requirements. We are currently in compliance with all relevant local standards. In areas where there is a gap in regulatory requirements, we use more stringent regulatory standards from other regions in which we operate.

Tronox continues to align with Global Industry Standards on Tailings Management (GISTM). In 2023, a third party audited Tronox's performance against GISTM. The audit identified a short list of remedial actions, primarily from an administrative standpoint, to be in full compliance. We are working on action plans for our sites and expect to be in compliance by the 2025 deadline for our facilities that are classified as lower risk.

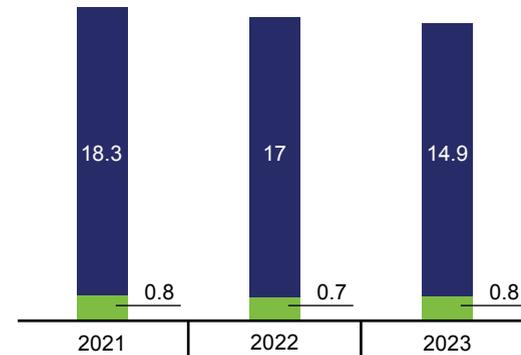
A list of Tronox's tailing storage facilities can be found on [p. 101](#).

Waste Metrics

Our total amount of hazardous and non-hazardous waste generated decreased in 2023, as did waste intensity. We are on track to achieve the 15% waste reduction target by 2025.

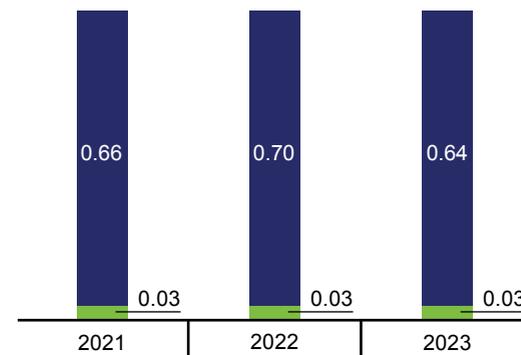
WASTE BY TYPE AND DISPOSAL METHOD
(metric tons x100,000)

■ Hazardous Waste
■ Non-Hazardous Waste



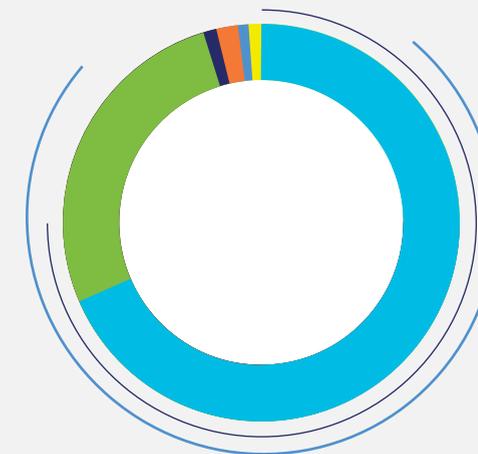
WASTE INTENSITY
(metric tons/metric tons produced)

■ Hazardous Waste
■ Non-Hazardous Waste



2023 HAZARDOUS WASTE

- On-Site Storage | 70.6%
- Reuse | 9.0%
- Landfill (off-site) | 15.1%
- Recycling | 5.0%
- Incineration | 0.4%



2023 NON-HAZARDOUS WASTE

- On-Site Storage | 33.1%
- Reuse | 0.5%
- Landfill (off-site) | 65.4%
- Recycling | 1.0%
- Incineration | 0.03%
- Composting | 0.02%

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Water Approach

Water is essential to our ability to mine and process TiO₂, but it also is a finite resource that we must share with our communities and ecosystems. As climate change impacts put the world's water supply at increased risk, it is more important than ever to consider our water stewardship practices.

We measure our water withdrawal at each of our operating sites to understand our use of first-time water. Our performance is discussed quarterly with company leadership and all site and regional directors. The review includes year-to-year performance, analysis of the results, and review of short-, medium- and long-term goals. Tronox generally met discharge limits, and permits at all our locations in 2023. We had four incidents related to discharge limits, and corrective actions were immediately taken to return to compliance.

Our fit-for-purpose approach matches the quality of water to the operational process, such as using seawater or recycled industrial wastewater instead of fresh water, which reduces our reliance on municipal water around the world. Tronox leverages water reuse and recycling systems at several operations. In addition, we collect and use rainwater at KwaZulu-Natal Sands, and at Broken Hill Mineral Processing Plant.

In areas with high water-stress, Tronox has worked to both reduce consumption and use non-freshwater resources when possible. We have been able to adjust our operations in high water-stress areas, such as increasing the reuse of wastewater in process activities that can handle lower-quality water, reducing evaporation losses of cooling water in the utilities cooling towers, and improving water efficiency at the Yanbu finishing plant. Now, fresh water contributes to 53% of water used at those sites, compared to 80% in areas with low water-stress. Sites operating in high-stress areas, per the Aqueduct Water Risk Atlas by the World Resources Institute, are:

- **EASTERN** Operations Mining Site in Australia
- **SOUTHERN** Operations Mining Site in Australia
- **COOLJARLOO** Mining Site in Australia
- **BUNBURY** Pigment Plant in Australia
- **YANBU** Pigment Plant in Saudi Arabia

For the upcoming year, we are working to put a system in place that will provide more visibility into water use at a site level. This will enable us to improve our water accounting and set targets for our global water management, using the ICMM- and CDP-aligned water analysis framework developed by Waterplan. All sites will examine physical, regulatory, infrastructure and reputational risks, and we will conduct deeper assessments at two higher-risk sites, one mining site and one pigment plant. Another focus in 2024 will be improving the classification of water streams to include more parameters related to water quality to better enhance our water management practices.



CASE STUDY

Securing Access to Water in South Africa

Tronox's Namakwa Sands operations are located in a region of South Africa where water scarcity is becoming an increasing concern. Anticipating depleted freshwater supply, we completed a three-year water security study to understand how we can access the water we need to continue to grow our operations.



Namakwa Sands' mining operations receive a set allocation of water from a provincial dam. Our water allocation was reduced by 15% in 2022, reinforcing the need to consider our long-term water requirements."

MARIUS VLOK

Safety, Health and Environmental Manager at Namakwa Sands



Through this study, we calculated how much water will be needed to process future mineral concentrates at increased production levels based on our expansion plans for the future. While the provincial dam is being heightened to create more water for the region, we also are exploring opportunities to reduce water withdrawal by leveraging improvements at other operations so less water is needed for our processes.

In 2024, we also plan to complete a water scarcity assessment of the Namakwa Sands smelter, which receives its water from a different municipality.

CASE STUDY

Maintaining Production Amidst Water Scarcity in France

The Thann industrial site is home to Tronox's Thann Specialty Plant and Vynova PPC, which manufactures potassium and bromide-based chemicals. Both companies require access to water from the Thur River for chemical processing, but repairs to the dam over several years resulted in water shortages, especially during the drier summer months.

"Many of our processes are time-consuming to shut down and restart, so it is important that our companies have reliable access to water all year long," said Jean-Michel Colin, Environmental Leader at the Thann Specialty Plant.



While the dam was being repaired over the course of several years, we partnered with Vynova to gain regulatory authorization to continue to access water when the dam was below regulatory levels. We also implemented a reinforced monitoring program to ensure that all water discharge remained safe for aquatic life, even during times of low river levels."

JEAN-MICHEL COLIN

Environmental Leader at the Thann Specialty Plant

During the repairs, the Thann Specialty Plant also modified its processes to use water more efficiently, including:

- **RENTING** cold and TAR units during summer to offset cooling needs that previously relied on the river.
- **ADAPTING** production schedules and maintenance stops so those that require the most water occur outside the summer period when river levels are lowest.

The plant intends to continue with many of these changes to be good stewards of water resources.



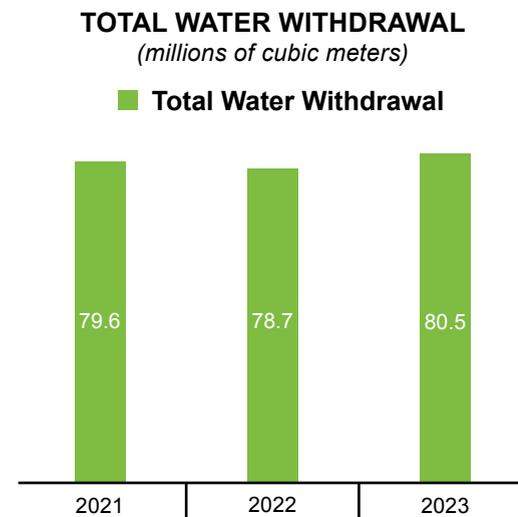
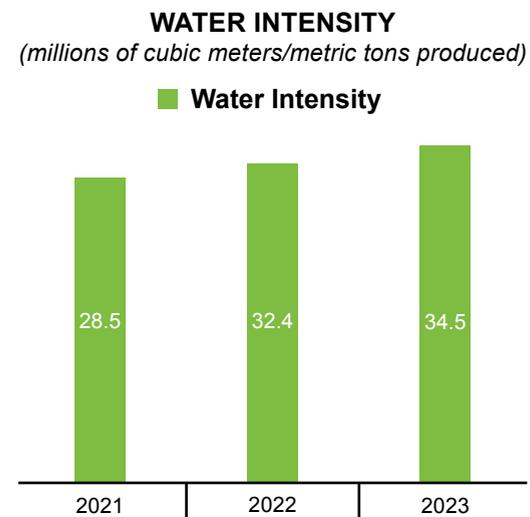
Tronox's Kwinana Pigment Plant once again earned recognition as a Highly Commended Gold Waterwise Business from Water Corporation in 2023. Efforts included continued reductions in total water consumption, as well as decreased reliance on fresh water by using recycled process water when possible.

Water Metrics

Tronox's total water withdrawal and water intensity increased in 2023 compared to 2022. These increases were driven primarily by rehabilitation programs at our mining sites.

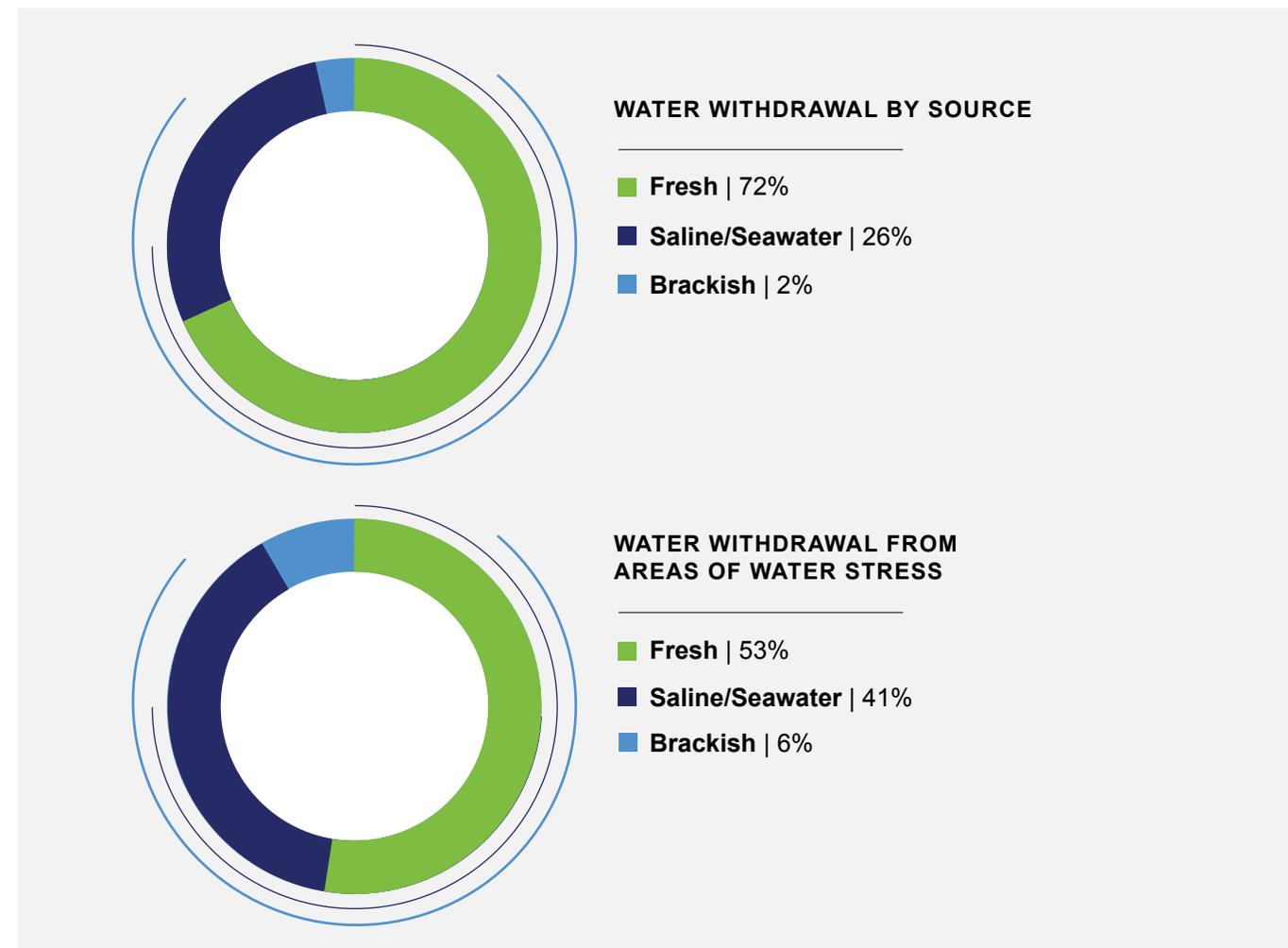
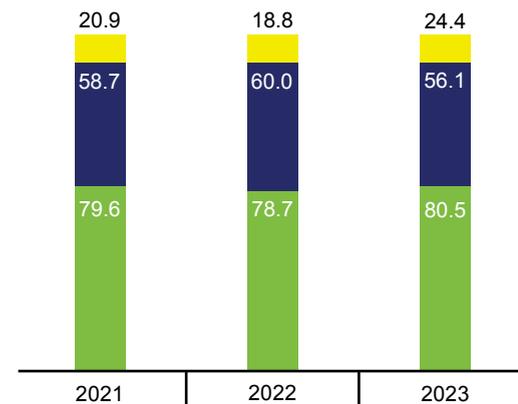
We reduced our withdrawal from freshwater sources by 5% across our whole operations compared to 2022. More importantly, we reduced freshwater withdrawal in high water-stress areas by 8%.

We were also able to reduce water withdrawal intensity by 2% in pigment plants operating in high water-stress areas.



WATER PERFORMANCE (ABSOLUTE) *(millions of cubic meters)*

- Withdrawal
- Discharge
- Consumption



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Biodiversity Approach

Our business is grounded in the value of our world's natural resources through the minerals we mine and transform into essential products. We realize that the extraction of these minerals and the manufacturing of essential products leave behind a mark. We understand our responsibility to protect natural habitats while operating in the area and return them to their natural state to maintain local and global biodiversity.

Our first step is to manage and minimize impacts as we operate. From a biodiversity perspective, we have proactive measures in place to protect animal and flora species, land, and water near our sites. We consider the nature-related impacts, opportunities and dependencies when we determine which areas to mine, and the mining approach. We conduct studies as part of our environmental management programs (EMPs) and environmental impact assessments. All Tronox mines have EMPs in compliance with local regulatory requirements. The plans are managed by site and regional leaders.

Nature-related dependencies were considered as part of our decarbonization planning. Our assessment of the physical risks associated with climate change considered the increased risk to rehabilitation activities, such as revegetation, as a result of a hotter climate. Tronox also conducted drought analysis at different mines under different climate change scenarios. The assessment identified steps we could take to address these risks, including increased investment in closure, continued research into climate-tolerant revegetation, and additional protection measures to avoid failure of tailings storage facilities.



TNFD AND SBTN

It is important to Tronox that we continue to improve our management of our environmental risks, impacts and dependencies in our efforts to maintain safe, reliable and responsible facilities. This includes how we communicate those to our stakeholders to ensure transparency. Tronox aims to reach full alignment with the Taskforce on Nature-related Financial Disclosures (TNFD) and setting Science-Based Nature Targets (SBTN) in the next two years.

REHABILITATION

Rehabilitation measures are integrated into our way of doing business from early in a mine's life and are included in the EMPs, Rehabilitation Guidelines and Procedures, and Mine Closure Plans. In addition, 100% of Tronox mines and operating sites have plans and provisions for closure under Retirement Obligations, and our finance team has oversight of the budgets for these. Rehabilitation and closure measures are monitored and reported on a consistent basis to certify that closure objectives are met.

Our world-class rehabilitation management programs are specifically designed to protect, preserve and restore local ecosystems. Because our active mining area shifts frequently, we immediately implement rehabilitation efforts as these shifts happen, with a focus on cultivating native ecosystems that allow diverse wildlife and plants to flourish. This approach enables us to disturb the land for a shorter period of time, facilitating the earlier return of wildlife and reconnection of habitats.

AUSTRALIA

Ongoing, progressive rehabilitation continues at our Cooljarloo mine site, which is comprised of woodlands, heath and wetland vegetation. As of December 2023, over 2,500 hectares (ha) have been rehabilitated (2,069 ha of native and 502 ha of pasture/farmland) to date at the Cooljarloo site. Rehabilitation also continues at our Gingko and Snapper Mines, and we plan to begin rehabilitation at the Crayfish Mine in 2025.



CASE STUDY

Preparing for Climate Change's Impact

Site restoration is a significant part of how we manage our footprint. We want the rehabilitation work we do today to withstand the future, so we are already thinking about the potential impacts of climate change.

We are five years into a research project to optimize our seed sourcing for the most effective ecological restoration, now and in the face of the future impacts of climate change. Results of the research to date have found that the original location of the seed, or provenance, does not have an effect on the success of the plants. This gives us the ability to source seeds and plants from a broader geographic range. Instead, the study indicates a greater importance of the soil profile and we'll use those learnings to inform our soil preparation before planting.

The research project continues, but already we have gained important learnings to guide additional research, confirm some of our hypotheses and prepare our restoration projects to withstand climate change.

The trials are being conducted on former Tronox mining sites, which enables long-term monitoring. Research partners include the Kings Park Science, part of Western Australia's Department of Biodiversity, Conservation and Attractions; the University of Western Australia; the Flinders University; Commonwealth Scientific and Industrial Research Organization (CSIRO); Australian Genome Research Facility (AGRF); Hanson, a construction materials producer; and Iluka (Eneabba site).



BRAZIL

Rehabilitation has taken place at our Paraíba Mine since it began operations in 1988 and continues as we conclude mining operations there. Of the 722.31 hectares of land impacted by our operations, 705.86 hectares have been or are currently in the process of being rehabilitated. As part of these efforts, we have planted more than 2.2 million seedlings, representing 245 native species. Our recovery protocol for the area includes three years of ongoing maintenance after planting vegetation, including fertilization, pest control and eradicating exotic species. All rehabilitation is expected to be completed by 2028.

Research carried out by several educational institutions shows that the ecological function of the Paraíba site is now thriving. A population of critically endangered blonde capuchin monkeys is flourishing, and the presence of a howler monkey was recorded for the first time in 2022. We are proud that Ibama, the Brazilian Environment Regulatory Agency, continues to point to Paraíba as the standard for mine rehabilitation programs.

SOUTH AFRICA

As part of our impact mitigation measures at the Fairbreeze Mine, the company has secured more than 1,500 hectares of land in the Siyaya Biodiversity Offset to serve as protected areas. A plan has been developed for the long-term management of these areas post-mining. We also participate in the uMhlathuze Catchment Management Agency and share monitoring data with government authorities to demonstrate that our operations are conducted in an environmentally friendly manner. In addition, we have partnered with the neighboring Mtunzini community to form an Environmental Oversight Committee.



At the rehabilitated Hillendale Mine, we continued with care and maintenance plans to control soil erosion and identified hotspots with slightly elevated radioactive levels. These areas will be addressed in 2024. Tronox has identified some buildings and land that will be donated to the government when work at the site is complete. We will also return leased plots to their owners and sell any remaining plots.

In 2023, we completed the rehabilitation of the C-Ore Body in KwaZulu-Natal and vegetation cover has been established successfully. We also started backfilling the pit at C-Extension in 2023, and expect to complete this rehabilitation in 2026. Additionally, an area has been identified for a pilot project to plant various types of Eucalyptus trees at the C-Ore Body.

At Namakwa Sands, we are rescuing specific plant species and replanting them in rehabilitation areas or undisturbed areas, ensuring that these diverse species can flourish. As part of the rehabilitation process, we sow locally sourced seeds to improve species diversity and to aid in rehabilitation success. We also are conducting studies to increase the number of species that can be propagated within our nursery and transplanted to rehabilitation areas.

An offset management plan was also developed in 2023 for future mining areas, which has been submitted for regulatory approval.



TRANSFORMING A QUARRY TO A PARK

The Cailai Quarry for Tronox's Fuzhou pigment plant was retired in 2022. The plant team wanted to go beyond the regulatory requirements for closure and bring the land back to life in a way that benefits the community. Tronox brought in specialized consultants and consulted external stakeholders. The 5 million RMB (US\$725,990) investment transformed the quarry into an open green space. Tronox will continue to conduct post-closure groundwater monitoring through 2024.

The site is currently under the jurisdiction of the Fuzhou Hi-Tech Industrial Development Zone Management Committee with plans to potentially develop it into a park. "We started with a deserted quarry, and now, we can give a green park to the public," said Tim Hu, SHE manager.



Promoting Biodiversity at Home

Employees of our Thann Specialty Plant and their families shared a day of learning and supporting biodiversity together. The site’s InTouch Committee partnered with a third-party sustainable development consultancy based in Thann to provide workshops on beekeeping, natural composting, making apple juice, recognizing animal footprints and local geology. The families went home with a better understanding of what biodiversity is and how to take action to preserve it in the community and at home. The afternoon ended with the planting of a honey tree – a species that supports local pollinators and honey production.



Members of Tronox’s Women in Mining group plant a tree at the school.

TREES ARE TERRIFIC

In South Africa, Tronox kicked off Arbor Month with a presentation at Amabuye Secondary School. The theme “Trees are Terrific, in all Shapes and Sizes!” helped students learn the importance of tree diversity in producing an array of fruits, flowers, leaves and seeds, and attracting a variety of wildlife. Other participants included the National Department of Forestry, Fisheries and Environment, KwaZulu-Natal Provincial Department of Economic Development, Tourism and Environmental Affairs and other regional employers.

Land Use and Rehabilitation Metrics

At all our sites, we measure the amount of land disturbed by our operations, as well as rehabilitated or restored. The data represents a snapshot at year-end (December 31 of that year). The land use footprint includes all Tronox operations; however, 89% of total land use can be attributed to our six titanium feedstock mines in Australia, Brazil and South Africa.

	2021 Global Hectares	2022 Global Hectares	2023 Global Hectares
Area disturbed	9,607	10,941	11,268
Area in rehabilitation	3,110	4,109	3,275
Area restored	7,553	7,188	8,119

Restored habitats at our mines	Area opened during fiscal year [hectares]	Area restored during fiscal year [hectares]	Expenditures on rehabilitation during fiscal year [USD]
Eastern Operations	223	83	\$3,210,925
Southern Operations	91	0	\$2,068,817
KwaZulu-Natal Sands	12	20	\$4,501,470
Namakwa Sands	213	0	\$2,839,576
Northern Operations	81	43	\$626,534
Paraíba	0	32	\$242,398
Total	620	178	\$13,489,720



Investing in Our People

We believe our people make the difference and that living our core values unleashes our full potential.

IN THIS SECTION

DEI • Workforce Metrics • Learning and Development



GOALS

IMPROVE gender balance and diversity of our workforce, leadership and succession planning

INVEST in the success of our people



2023-2024 TARGETS

CONTINUE annual Women in Leadership training through 2025, then refresh program as needed

ESTABLISH paid parental leave policy in United States and review regional policies

PROVIDE Diversity & Inclusion training to 100% of employees

CONDUCT employee culture survey and develop employee engagement plan

5 GENDER EQUALITY



8 DECENT WORK AND ECONOMIC GROWTH



10 REDUCED INEQUALITIES



High-Performance Culture

We have an important responsibility to be the employer of choice in each of our communities by providing fulfilling work, fair compensation, a safe work environment, respect for and inclusion of people of all backgrounds, and opportunities for skills development and career advancement.

Engaging Our Global Workforce

To support a high-performing culture, every employee must feel like part of the larger global team. One way we do this is by sharing best practices globally by relocating skilled leaders across countries and operations, by staffing high-potential employees in regions on global projects and by enabling collaboration in global Centers of Excellence. This ensures that our employees have the special skills needed for mining and manufacturing, and it creates opportunities for people to connect across regions.

In 2023, we conducted an employee culture survey to understand how we can continue to foster our performance culture while shoring up places where we may be falling short. This survey was translated into 11 languages and made available to every Tronox employee in every country where we operate. Sixty percent of employees responded, and we were pleased to see from their feedback that we have a strong culture and employees feel aligned with our mission. We also have opportunities to improve, and have identified the following priorities for the coming year:



HOLD leaders and employees to high expectations and model the ways of work done well.



HELP employees see how their work aligns with our goals and strategy, and foster shared aspirations, accountability and commitment.



SUPPORT career development and build a broader view of career progression possibilities.

We will be using this feedback to guide our employee engagement strategy going into 2024.

CERTIFIED AS A TOP EMPLOYER IN EUROPE

Our Botlek Pigment Plant earned certification from the Top Employers Institute in 2023. Botlek was recognized for its excellence in “people practices,” including employee engagement, career development, rewards and recognition, diversity and inclusion, and sustainability. In early 2024, our remaining European facilities in Thann and Stallingborough also completed Top Employer certification, making Tronox an official Top Employer in the region.



Providing an opportunity to share feedback opens the conversation on topics that actually matter to employees, and creates self-reflection opportunities for leaders about how we can engage with employees more frequently. We believe this survey was an important first step to starting honest conversations that will lead to thoughtful actions that will result in greater clarity and higher performance.”

CARRIE PAGE
Director, Human Resources



Diversity, Equity and Inclusion (DEI) Approach

Tronox is a truly global company. We serve customers around the world, and our work regularly connects colleagues across many countries.

Tronox’s DEI strategy focuses on three key pillars.



These strategic pillars, and the actions taken to support them, were determined based on input from our employees and the Board of Directors. An executive-sponsored Diversity & Inclusion Steering Committee is responsible for driving efforts supporting Tronox’s DEI strategic pillars.

Core to our DEI strategy is the belief that varying backgrounds and perspectives help us improve and find new ideas or ways of working. We expect our leaders, employees and business partners to respect one another; listen to others with diverse perspectives; support new and different approaches; promote fairness and equality in the workplace; encourage others to be open-minded and to appreciate alternative cultural perspectives; and not tolerate discrimination. Policies related to our DEI commitments and human and labor rights are available in our [online policy library](#).

Building Inclusivity

Our primary focus in 2023 has been to foster greater inclusivity across our workplaces. We understand that we must build a welcoming workplace where people can bring their best selves if we want to attract and retain the best employees and teams. For example, as worker shortages loom for manufacturing and mining, we have been intentional about expanding our pool of potential workers by recruiting and developing female employees, who currently make up only 30% of chemical manufacturing employees and 14% of mining employees across these industries globally. But to ensure that these women feel included, we have improved the female change houses across all our regions and modified uniforms to be more accommodating of a variety of body shapes and traditional clothing customs. These seemingly minor changes have a significant impact on an employee’s work experience.

Additionally, we reviewed our succession planning process to identify opportunities to develop more female leaders. As part of the Women in Leadership program, we have trained 12% of our female leaders. We are also growing our pipeline of female employees through intentional recruiting and partnerships with various women’s associations in the countries where we operate.

Similarly, Tronox is creating more inclusivity around neurodiversity. This initiative stemmed from an inquiry from an employee and has expanded to an education program that will be introduced to HR teams and, eventually, employees. This program will help encourage open dialogue to support neurodiverse employees, as well as identify ways to leverage their specific strengths to improve productivity and problem-solving. Tronox also joined Neurodiversity in Business, an international association designed to foster work environments where neurodivergent people are understood and form an invaluable part of the work culture.



CASE STUDY

Representation Matters

The manufacturing industry is facing a workforce shortage. Tronox has been proactive in our efforts to appeal to young people of all backgrounds to build a sustainable future workforce. One way we are doing this is by introducing more young women interested in STEM to the opportunities within manufacturing, specifically the Tronox apprenticeship programs.

“Representation matters, so to attract more female apprentices, we turned to our own female employees,” Steven Gabbitas, Learning & Development lead at Stallingborough.

In 2023, 50% of apprentices at Stallingborough were women – compared to an average of 12% in the previous two years.



Seeing equal representation of male and female employees staffing our career booths and giving presentations about their experience in manufacturing was a visual reminder that if these women can be successful in this industry, they can too.”

STEVEN GABBITAS

Learning and Development lead at Stallingborough

For example, at one career event, Tronox was the only employer booth with female employees. Attendees were much more inclined to approach Tronox’s booth to talk with our three female employees about their experience at the company, and as a result, we received more applications from female apprentices than any competing employers did. In interviews, every applicant met with a male and female employee, which again reinforced equal representation.



The apprentice program is an important pipeline into employment, so these conscious efforts to increase our diversity at this level means we will have more opportunities in the future to hire the right people from a larger pool of candidates. And these young women will serve as an example to others that women absolutely belong in manufacturing.”

MEGAN FLETCHER

Plater on Stallingborough’s Fabrication Team

Tronox will continue to build on the success of the apprentice recruiting program by attending additional events in 2024, such as Women in Manufacturing and Engineering, and modeling hiring programs in other regions after Stallingborough’s success.

TRONOX DIVERSITY AND INCLUSION NETWORK (TDIN)

The Tronox Diversity and Inclusion Network (TDIN) carries out many DEI initiatives regionally and on a global scale. Employee-driven TDIN chapters work to promote DEI within our workplace and the broader community. For example, these groups organize celebrations for cultural events, like Ramadan and International Women's Day. They also serve as Tronox ambassadors to help build diversity in our employee pipeline – and the industry as a whole – by participating in events such as the Chamber of Minerals and Energy Western Australia's Inspiring Girls Forum.

In 2023, the TDIN chapters launched a cultural awareness series to introduce the countries in which they work to colleagues around the world. Explaining the country's geography, history, food, values and customs demonstrates how local culture shapes the employees at that site. They also taught their colleagues how to say key phrases, such as greetings, thank you and "safety first" in their native languages.

As part of our responsible operations in South Africa, Tronox also followed objectives for employment equity and human resources development, outlined in the [South Africa Mining Charter](#).



LABOR/MANAGEMENT RELATIONS

Tronox respects our employees' rights to collectively bargain. Approximately 41% of Tronox employees worldwide are represented by a union or collective bargaining agreement. There have been no records of strikes or lockouts at any Tronox location in the last 10 years.

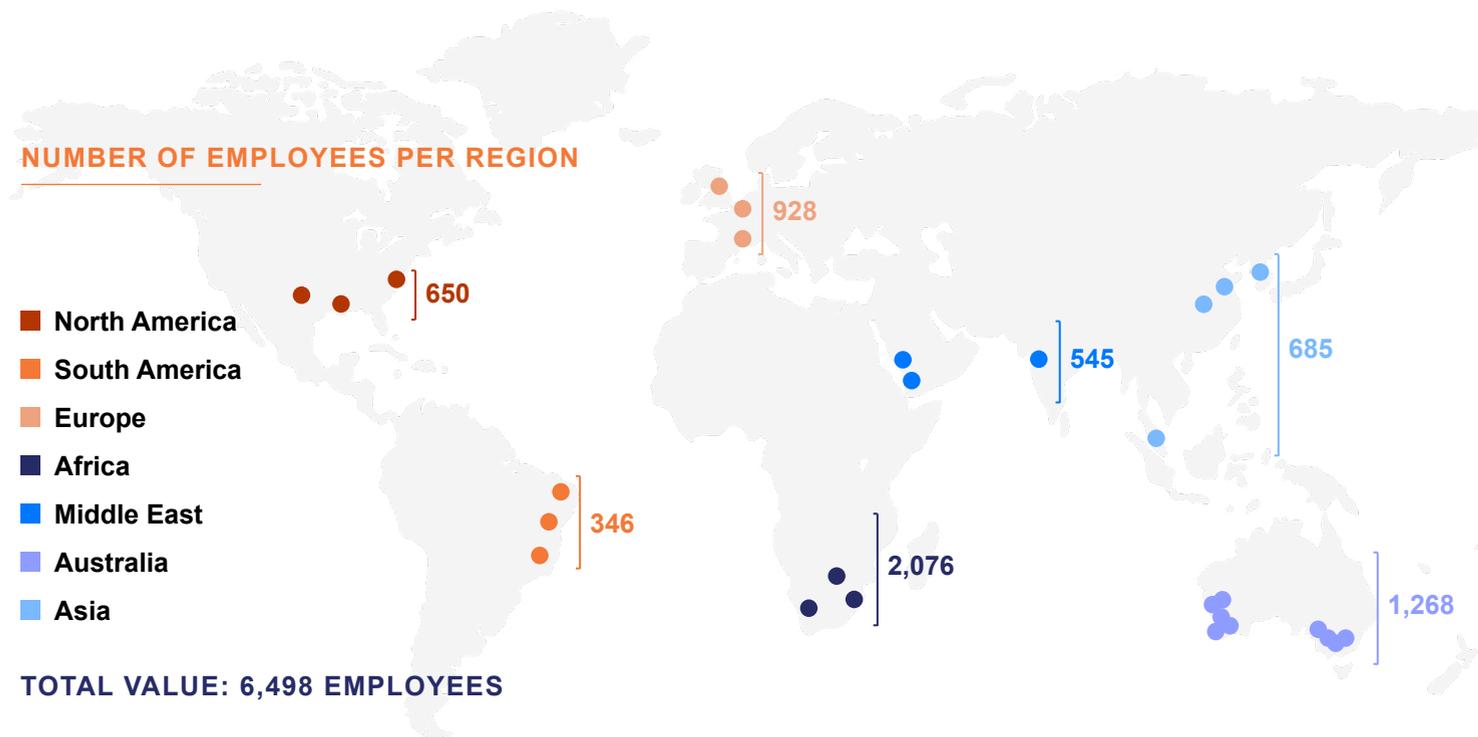


Workforce Metrics

Sustainability Report | Count of Employees at December 31, 2023

BY EMPLOYMENT CONTRACT

	NON-GUARANTEED HOURS			FIXED TERM EMPLOYEES			INDEFINITE OR PERMANENT			TOTAL EMPLOYEES
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
North America	-	-	-	9	4	13	482	153	635	648
South America	-	-	-	18	9	27	271	48	319	346
Europe	-	-	-	32	17	49	746	133	879	928
Africa	-	-	-	141	84	225	1,485	366	1,851	2,076
Middle East	-	-	-	-	-	-	529	16	545	545
Australia	1	2	3	38	17	55	944	266	1,210	1,268
Asia	-	-	-	31	22	53	439	192	631	684
Total Value	1	2	3	269	153	422	4,896	1,174	6,070	6,495*
Total %	33%	67%	100%	64%	36%	100%	81%	19%	100%	100%



BY EMPLOYMENT TYPE

	PART TIME EMPLOYEES			FULL TIME EMPLOYEES			TOTAL EMPLOYEES
	Male	Female	Total	Male	Female	Total	
North America	8	4	12	483	153	636	648
South America	-	-	-	289	57	346	346
Europe	10	28	38	768	122	890	928
Africa	-	-	-	1,626	450	2,076	2,076
Middle East	-	-	-	529	16	545	545
Australia	8	44	52	975	241	1,216	1,268
Asia	-	-	-	470	214	684	684
Total Value	26	76	102	5,140	1,253	6,393	6,495*
Total %	25%	75%	100%	80%	20%	100%	100%

* Tables may not align with total reported employee figure as a result of undisclosed data from some employees.

Workforce Metrics (Continued)

Sustainability Report | Count of Employees at December 31, 2023

BY GENDER

	HOURLY/ MODERATELY SKILLED			SKILLED/ JUNIOR MANAGEMENT			PROFESSIONAL/ MID-MANAGEMENT			SENIOR MANAGEMENT/ EXECUTIVE			GOVERNANCE BODY		ALL EMPLOYEES		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Male	Female	Total
North America	120	34	154	218	50	268	120	61	181	33	12	45	4	1	491	157	648
South America	129	13	142	118	22	140	40	22	62	2	-	2	-	-	289	57	346
Europe	365	56	421	256	48	304	139	41	180	18	5	23	-	1	778	150	928
Africa	1,198	274	1,472	269	113	382	147	61	208	12	2	14	1	-	1,626	450	2,076
Middle East	234	4	238	207	8	215	85	4	89	3	-	3	1	-	529	16	545
Australia	342	105	447	423	96	519	201	79	280	17	5	22	1	-	983	285	1,268
Asia	278	168	446	115	35	150	75	10	85	2	1	3	-	-	470	214	684
Total Value	2,666	654	3,320	1,606	372	1,978	807	278	1,085	87	25	112	7	2	5,166	1,329	6,495*
Total %	80%	20%	100%	81%	19%	100%	74%	26%	100%	78%	22%	100%	78%	22%	80%	20%	100%

* Tables may not align with total reported employee figure as a result of undisclosed data from some employees.

Workforce Metrics (Continued)

Sustainability Report | Count of Employees at December 31, 2023

BY AGE

	HOURLY/ MODERATELY SKILLED			SKILLED/ JUNIOR MANAGEMENT			PROFESSIONAL/ MID-MANAGEMENT			SENIOR MANAGEMENT/ EXECUTIVE			GOVERNANCE BODY			ALL EMPLOYEES			
	≥ 51	30-50	≤ 29	≥ 51	30-50	≤ 29	≥ 51	30-50	≤ 29	≥ 51	30-50	≤ 29	≥ 51	30-50	≤ 29	≥ 51	30-50	≤ 29	Total
North America	43	74	37	134	109	26	94	84	4	23	22	-	5	-	-	294	289	67	650
South America	37	73	32	54	73	13	27	35	-	2	-	-	-	-	-	120	181	45	346
Europe	144	179	98	123	150	31	88	91	1	13	10	-	1	-	-	368	430	130	928
Africa	243	1,061	168	121	228	33	92	113	3	7	7	-	1	-	-	463	1,409	204	2,076
Middle East	57	170	11	71	139	5	33	55	1	1	2	-	1	-	-	162	366	17	545
Australia	150	223	74	200	266	53	115	161	4	13	9	-	1	-	-	478	659	131	1,268
Asia	171	268	8	53	89	8	32	52	1	2	1	-	-	-	-	258	410	17	685
Total Value	845	2,048	428	756	1,054	169	481	591	14	61	51	-	9	-	-	2,143	3,744	611	6,498
Total %	25%	62%	13%	38%	53%	9%	44%	54%	1%	54%	46%	0%	100%	0%	0%	33%	58%	9%	100%

Workforce Metrics (Continued)

Sustainability Report | Count of Employees at December 31, 2023

BY RACE

	HOURLY/ MODERATELY SKILLED			SKILLED/ JUNIOR MANAGEMENT			PROFESSIONAL/ MID-MANAGEMENT			SENIOR MANAGEMENT/ EXECUTIVE			GOVERNANCE BODY			ALL EMPLOYEES			
	Not Tracked	Black & Minorities	White	Not Tracked	Black & Minorities	White	Not Tracked	Black & Minorities	White	Not Tracked	Black & Minorities	White	Not Tracked	Black & Minorities	White	Not Tracked	Black & Minorities	White	Total
North America	9	55	90	5	67	197	8	37	137	2	7	36	1	-	4	24	166	460	650
South America	142	-	-	140	-	-	62	-	-	2	-	-	-	-	-	346	-	-	346
Europe	421	-	-	304	-	-	179	-	1	21	-	2	-	-	1	925	-	3	928
Africa	-	1,366	106	-	296	86	1	105	102	-	8	6	-	1	-	1	1,775	300	2,076
Middle East	238	-	-	215	-	-	87	2	-	3	-	-	1	-	-	543	2	-	545
Australia	447	-	-	519	-	-	279	-	1	22	-	-	-	-	1	1,267	-	1	1,268
Asia	441	3	3	147	3	-	83	2	-	3	-	-	-	-	-	674	8	3	685
Total Value	1,698	1,424	199	1,330	366	283	699	146	241	53	15	44	2	1	6	3,780	1,951	767	6,498
Total %	51%	43%	6%	67%	18%	14%	64%	13%	22%	47%	13%	39%	22%	11%	67%	58%	30%	12%	100%

Learning and Development

As we face increased competition for talent in some of our regions, it is more important than ever to ensure that we are creating opportunities for our existing employees to grow at Tronox.

Our global Learning and Development (L&D) team provides training and resources that empower people at all levels to foster a culture that both attracts and nurtures talent. We track a range of metrics to ensure we are making progress on career management and training goals.

Our learning management system (LMS) provides detailed data about the hours our employees devoted to learning, the types of trainings they participated in and other recommended training for each based on their needs. In 2023, Tronox invested over \$9.2 million in employee training. Employees completed more than 255,000 total hours of training to further their careers.

In addition, 5,800 employees worked on a learning journey through our online education platform, including a 20% increase in the completion of courses related to personal development. Some of the most popular topic areas were respect at work, cyber security awareness and building resilience.

The L&D Center of Excellence is made up of professional learning and development leaders representing Tronox's diverse operations, countries and cultures. The group meets eight times per year to create a future-focused learning culture that empowers our people to grow while also preparing for the future of the business. Initiatives advanced in 2023 include creating a framework for a global leadership development project and aligning the key professional skills required across Tronox's global and regional L&D teams to assess current skills and identify opportunities for common training and collaboration.



Learning and Development

One area that received extra focus this year was ensuring that site operators are adequately trained for their roles. As the job market for these roles becomes increasingly more competitive, particularly in Australia, Tronox has experienced some turnover of site operators. Hiring new workers comes with a learning curve, so we are developing training programs to shore up these gaps. Some of our other initiatives include:



Career Pathways

All Tronox employees have been organized into workforce bands, and we have outlined clear pathways to advancement available within those job areas. In 2023, we identified a focus on supporting engineering and safety employees with a process to self-assess their skills gaps and work with their leaders to create plans for advancement. We expect to create a more formal process in 2024, as well as determine the next employee groups to onboard.



Leadership Training

Preparing the next generation of leaders is critical to our sustainability as a company. In 2023, we developed a leadership framework to more clearly articulate expectations and training needs for leaders at every level of the organization. We will begin executing against this framework in 2024.

Meanwhile, Tronox continues to cultivate future leaders through a number of existing company-run trainings that prepare new supervisors, further develop existing supervisors and prepare senior leaders to guide business strategy. Local universities and online learning platforms help facilitate many of these programs. The Women in Leadership program, which began in 2022, continued to foster leadership development and networks for high-potential female leaders, with the goal of growing the number of women in Tronox's leadership roles and succession plans. As of 2023, 12% of eligible female employees have now completed the program.



Internal Skill-Building Programs

We offer programs at our operations around the world for current employees to build new skills. We also partner with local community colleges to provide classes that empower current employees to close skill gaps.



Cross-Departmental Learning Experiences

Small, cross-departmental cohorts are an important way for employees to share the perspectives of their roles. For example, in 2023, we kicked off an Innovation Forum with Tronox's Research & Development facilities in Stallingborough, Thann and Oklahoma City. In addition to the group connections, each member has been paired with someone at another facility to present a topic. Already this collaboration has created better awareness of the projects underway at each facility and the shared challenges they are facing. Other functions have similar programs to enable employees to connect across regions and levels to share best practices.



Training the Next Generation of Employees

We provide apprentice programs for mechanical and electrical technicians, lab technicians, research and development, engineering, and IT. University students intern in both operational and administrative roles at many of our global facilities. In 2023, 155 apprentices and interns gained valuable experience working at Tronox.



In 2023, Tronox spent over **US\$9.2 million** on employee training across our sites, functions and employee levels.



Employees and contractors completed more than **292,000** training hours.

CASE STUDY

Expanding Operator Skills at Hamilton Pigment Plant

Nearly 200 operators at the Hamilton Pigment Plant are responsible for monitoring and maintaining equipment used in a specific part of the production process. These employees range from entry level to many decades on the job, and their line-of-sight into other functions of the plant is often limited. Through in-person meetings, site observations and focus groups, HR and leadership teams discovered a need to provide operators with more wholistic training that advances their task-specific skills while also fostering problem-solving.

“Each stage of our process relies on the one before, and when part of the plant goes down, the financial and environmental impacts can be substantial,” said Brad Skelton, L&D lead at Hamilton Pigment Plant. “Creating more efficient, skill-based operators with wider knowledge of the overall process will help us better troubleshoot issues and improve operational effectiveness and safety.”

The new operator training program combines task- and competency-based approaches. It will focus on scaffolding skills, beginning with building proficiency through the application and repetition of tasks, then progressing to understanding the dynamics of how individual parts of the process impact the facility as a whole.

Additionally, we are adding leadership development training to establish clearer expectations for current leaders, prepare future leaders, and improve culture and overall team performance. Beginning in 2024, current plant leaders and those aspiring to these roles will spend more than 50 hours in face-to-face and computer training courses focused on topics such as managing team conflict, providing feedback, budgeting, diversity and inclusion, and driving team performance.



“Tronox is only as good as our team. As we grapple with competition, technological advancements, and an aging workforce, we must provide opportunities for both professional and personal growth, so we attract and retain the best employees and operate safely and effectively to deliver quality products to our customers.”

BRAD SKELTON
L&D Lead at Hamilton Pigment Plant

DEVELOPING LEADERSHIP POTENTIAL

Future Leader programs foster rising stars and help Tronox lay the foundation for succession planning at our sites. In Fuzhou, 26 employees were selected to participate in a year-long program that includes lean management and project management, cross-functional collaboration, conflict management, effective communication, and other key leadership skills.

In Thann, 40 team and project managers, senior managers and high-potential employees joined our “Passerelle Leaders 2025” (The Leaders’ Bridge 2025) program. The three-year program is designed to focus on developing employees’ management skills in the first year, then expand to developing team members in year two. The final year will be spent honing more advanced leadership skills, such as managing change, thinking strategically and being agile.



UPHOLDING ETHICAL STANDARDS

Sustaining a high-performing culture also means that we hold each and every employee to high ethical standards. The Tronox [Code of Ethics and Business Conduct](#) describes how we treat each other and the stakeholders of our business with integrity and respect, and strive to conduct our activities in a responsible and ethical manner. All new employees formally commit to abide by Tronox's Code and are made aware of our employee handbook and our expectations for ethical business conduct. We also require all employees and many contractors to take annual online refresher training on our Code. This training is supplemented with frequent targeted training on relevant compliance and ethics topics. We actively promote awareness of our confidential ethics hotline to ensure employees feel empowered to raise concerns if they believe our standards have been violated.

Contractor Management

Contractors are an extension of Tronox's team that must integrate seamlessly into each site's operations. To achieve this, we provide specific training to our Tronox team members who coordinate tasks and supervise work performed by contractors. We also rolled out a global vendor management platform that facilitates a common understanding of Tronox expectations and site requirements to strengthen and improve the way that we onboard and communicate with our contractors.

Tronox has continued our relationship with ISNetwork to manage our contractor base in each of our regions. We have moved more slowly than expected in optimizing this tool, due to financial and resource strains in 2023. So far, each region has defined the training and diversity requirements relevant to contractors for their sites and is exploring opportunities to source new contractors through the ISN network.





Respecting Our Communities

Tronox is honored to be trusted with the privilege to operate in our communities around the world and works closely with partners within each community to provide mutual benefit.

IN THIS SECTION

Indigenous Rights • Local Communities



GOAL

BE valued contributors to local economies and the quality of life in our shared communities



2023-2024 TARGETS

PARTNER with local communities on 2023-2027 Social & Labor Plan for South Africa Operations

ADVANCE Cultural Heritage Management and Reconciliation Plans

EXPAND community engagement plans

INCREASE spend with Indigenous suppliers

EXPAND “Cultural Conversations” trainings from Traditional Landowners

3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



8 DECENT WORK AND ECONOMIC GROWTH



15 LIFE ON LAND



Indigenous Rights Approach

Tronox acknowledges and pays respect to the Traditional Owners of the land where we live, work and operate our business. We partner respectfully with Indigenous communities in Australia and South Africa to protect their heritage and cultural values. We also seek opportunities to contribute to the local economy by supporting Indigenous-owned businesses and protecting the native lands these communities call home.

We engage in long-term relationships with Traditional Owner groups across all our operations to determine the best ways to preserve and protect cultural heritage values and bring respectful economic development to their communities. In 2023, we contributed to this work by:

- **ESTABLISHING** our first Reconciliation Action Plan to provide a structured approach to reconciliation in Australia.
- **GAINING** approval of KZN Sands 2023-2027 Social and Labor Plan (SLP) in South Africa, which includes a number of community projects to support the host communities.
- **INCREASING** education and cultural awareness among our employees.
- **WORKING** with our major contractors to develop their own Indigenous engagement plans.

Our interactions with Indigenous communities are guided by our company's policies on human and labor rights, which can be found in our [online policy library](#). Our suppliers and customers are held to these same standards when it comes to respecting human rights, including those related to conflict minerals and the preservation of Indigenous communities. We are committed to collaborating with our major contractors to develop their Indigenous engagement plans in the coming year.



EMPLOYEE TRAINING AND EDUCATION

It is important for Tronox employees to learn how our work impacts the Indigenous communities near our operations. We have collaborated with those communities to create employee trainings that address the unique needs and concerns of Indigenous people. For example, all Australian mining employees receive training and education on cultural heritage management. In 2023, our Australian Senior Leadership team also participated in a two-day cultural immersion to further their understanding of Indigenous history, culture and customs.

EASTERN OPERATIONS, AUSTRALIA

We work with and consult Traditional Owners and Indigenous communities about our operations. In addition, we work with major contractors to actively recruit, train and employ local and Indigenous peoples.

Tronox continues to uphold a 2001 agreement with the Barkandji people in relation to our Ginkgo Mineral Sands Mine. This agreement allows for regular consultation meetings with the Barkandji people and enables sponsorships for various educational, sporting and cultural endeavors, including tertiary education scholarships.

Tronox adheres to Heritage Management Plans for our Snapper, Ginkgo and Atlas-Campaspe Mines and the Broken Hill Mineral Separation Plant. These plans were developed in consultation with Traditional Owners and Indigenous groups and provide for ongoing consultations, communications, and the identification and protection of cultural and archaeological heritage.

To ensure our employees understand our responsibilities to manage cultural heritage onsite, we provide cultural awareness information in our inductions. This is a crucial part of our operations, and we take great pride in our commitment to respecting and preserving cultural heritage.

NORTHERN OPERATIONS, AUSTRALIA

Northern Operations expanded its “Cultural Conversations” training course with Yued Traditional Owners in 2023. In this mandatory training, employees learn about traditional cultural practices, historical and contemporary social context, and how to better engage with Aboriginal people in the workplace. New employees are encouraged to complete the training in their first six months.

Tronox has formal land access agreements with the Yued people and the Amangu people (part of the Yamatji Nation native title claim group) regarding our prospective operations at Dongara and Cooljarloo West in Western Australia. These important agreements enable us to continue operations while providing meaningful benefits to the native title groups and the preservation of cultural heritage. Each agreement is specific to the project and Traditional Owner group, but generally includes provisions, such as:

- **WORK-READY** training and mentoring programs, scholarships, apprenticeships and traineeships.
- **CROSS-CULTURAL** awareness.
- **BUSINESS** and employment opportunities.
- **INDIGENOUS** community support programs and funding.
- **PROTECTION** and management of cultural heritage values.

We developed our Heritage Agreement for the Chandala Mineral Processing Plant with the Yued people. It acknowledges the importance of acting in a manner that respects and protects Aboriginal cultural heritage values and provides a process for undertaking activities and conducting heritage surveys in consultation with the Yued people.



SOUTHERN OPERATIONS, AUSTRALIA

Our Wonnerup Mine is located within the South West Native Title Settlement Area in Western Australia. Tronox is party to two Heritage Agreements with the South West Bojjarah people and Harris Family, covering some of our tenements. The Heritage Agreements preserve and protect Aboriginal-significant sites while enabling the grant of certain exploration tenements to Tronox and the ability to undertake specified activities within the relevant area.

The two Heritage Agreements also lay out a process to conduct heritage surveys in consultation with the Traditional Owners of the land. Tronox has also developed an Aboriginal Heritage Management Plan in partnership with Traditional Owners, including the South West Bojjarah people and Harris Family native title claimants. The plan outlines procedures to be followed in the event any Aboriginal cultural and historical artifacts are discovered during the development and operation of the Wonnerup Mine.



CELEBRATING NAIDOC WEEK

Observed during the first full week of July, National Aborigines' and Islanders' Day Observance Committee (NAIDOC) Week celebrates the history, culture and achievements of Aboriginal and Torres Strait Islander peoples across Australia. Tronox recognized NAIDOC Week with a variety of activities that support these communities and educate our employees, including hosting a morning tea and Quandong keychain workshop and collecting more than 1,000 personal hygiene products for the Waalitj Foundation.



In 2023, we submitted our first 12-month Reconciliation Action Plan to Reconciliation Australia to begin Tronox's formal journey of reconciliation with Aboriginal and Torres Strait Islander People. These efforts include building relationships with stakeholders, developing career opportunities, identifying governance changes and more.

We featured this artwork, designed by contemporary Aboriginal artist Arizona Galbraith, on the plan's cover. The piece is called "Boodja to Maambakoort" (which translates to "country to coast" in Noongar) and illustrates key landmarks, as well as flora and fauna in the Yuat Country.

SOUTH AFRICA

Our South African operations are situated alongside many host communities. We commit ourselves to the objectives set out in the National Development Plan and aim to eliminate poverty and reduce inequality by 2030. Through our Social and Labor Plan (SLP), we have made valuable contributions towards supporting local Black-owned, Black youth-owned, and Black women-owned businesses in these communities. Read more about the SLP process and our commitments for the next five years on [p.72](#).

In 2023, our South African procurement teams spent R221 million (US\$12,277,000) procuring goods and services from the local communities in and around our mines and smelters, which included nine Black women-owned businesses.

Our focus in 2022 and 2023 was to prepare the groundwork for the 2023-2027 SLP, where we engaged with traditional leaders and local municipalities to determine how we can support them and provide assistance that will outlive our five-year commitment. Our investment in local business beneficiaries came in at R500,000 and was distributed to five startup companies owned by Black women – two of which are youth-owned.

NAMAKWA SANDS (TRONOX MINERAL SANDS)

Namakwa Sands has operations located within the Saldanha and Matzikama municipalities. Namakwa Sands has developed a close working relationship with the Matzikama Municipality where the Namakwa Mine in Brand se Baai is located. In line with regulations from the Department of Mineral Resources and Energy (DMRE), we have reviewed our Local Economic Development (LED) projects in conjunction with the Matzikama municipality Integrated Development Plan (IDP) to gain approval of the community development projects for Tronox's 2023-2027 SLP, continuing efforts of our four previous SLP cycles.

The new SLP identifies ways we can continue supporting local education efforts, as well as improving access to information and technology. To achieve these improvements, we are partnering with the Western Cape Education Department and Cape Access to implement our LED projects that aim to improve the quality of early childhood education, as well as provide communities with access to computer centers.

KWAZULU-NATAL SANDS, SOUTH AFRICA

We have formal relationships with seven Traditional Authorities in KwaZulu-Natal. These engagements and communities form part of the KwaZulu-Natal Sands LED projects, which align with the KwaZulu-Natal Sands SLP. We submit the SLP to the DMRE every five years to outline community projects that the company will embark on during that period. These must be in line with the Municipalities' IDP and we report annually on our SLP progress.

The Indigenous territories adjacent to KwaZulu-Natal Sands are:

- **DUBE** Traditional Authority
- **MACAMBINI** Traditional Authority
- **MADLEBE** Traditional Authority
- **MKHWANAZI** Traditional Authority
- **NZUZA** Traditional Authority
- **OGAGWINI** Traditional Authority
- **SOMOPHO** Traditional Authority

Our South African operations annually measure and report on their progress against the Broad-Based Black Economic Empowerment criteria enacted by the DMRE in South Africa. [View the South African Mining Charter Scorecard.](#)



CASE STUDY

Co-Creating Solutions With Our Communities

We have a duty to protect the people and communities who live near our operations, many of whom are from historically disadvantaged or Indigenous populations. While we have committed to improving the quality of life in every region where we work, in places like South Africa, this outreach is part of a more formal, regulated process. In 2023, we worked with the local communities to set the next five-year iteration of our SLP.

One primary element of every SLP is to propose LED projects to benefit the communities and people living near our facilities. Past LED projects have included building schools and homes, establishing STEM programs, improving access to clean water and indoor plumbing, and bringing a community its first veterinary clinic. All of these needs were identified through engagement with community members.

Throughout 2023, we followed a structured process to again engage the community to identify the LED projects that will be most beneficial:

- **REVIEWED** community data, including employment rates, education levels, housing availability, and even municipal data, like water sanitation, roads and the number of schools in the region. This gives us insight into what gaps exist and how Tronox could help close them.
- **HOSTED** open meetings to hear suggestions directly from community members. Public participation is crucial, so we placed ads on Facebook and in local newspapers and tapped community representatives to spread the word to their neighbors.
- **COLLABORATED** with municipalities to determine how we can partner on projects that address the needs raised by the community.
- **DEVELOPED** Tronox's plan for making a positive impact during the next SLP cycle.

Our proposed SLP was approved by South Africa's DMRE in October 2023 and is available [online](#).

Tronox's SLP includes the following projects:



Refurbishing a satellite police station



Establishing a fuel station and public bus shelters



Constructing day care centers and expanding local school facilities



Rebuilding Traditional chambers



Renovating a local marketplace



Providing goats to establish a community goat farm



Hiring an expert to instruct residents on best practices in macadamia nut farming



Purchasing sewing equipment for local women to support job opportunities

Tronox then manages the projects, often hiring contractors from the community or historically disadvantaged populations to complete the work. In total, we expect to invest more than R67 million (nearly US\$3.6 million) in SLP projects for the 2023-2027 cycle.



In line with our values and our community engagement framework, the LED projects are executed by Tronox in partnership with local contractors, relevant Traditional Authorities and municipalities. We believe this creates a real development as we also assist local contractors while creating employment for the community members."

MPHO MOTHOA
Managing Director-South Africa and KSA

Tronox also contributes 1% of net profits from our South Africa operations to the communities near Namakwa Sands and KwaZulu-Natal Sands facilities, as required by law.

EMPLOYEE PROFILE

GABBY MAYNARD

AUSTRALIA

At Tronox, we deeply respect the Traditional Custodians of the lands where we operate. To better support our relationships with Australia's Indigenous communities, Gabby Maynard, Senior Community and Stakeholder Relations Specialist, proactively pursued a post-graduate program that would help her learn more about these cultures and how Tronox could become a better partner.

"This graduate program is delivered by Aboriginal educators who have connections to the land where we operate," said Gabby.

In 2023, Gabby earned a certificate in Indigenous Australian Cultural Studies from Curtin University. The program focused on understanding issues of cultural significance and how to build and nurture relationships that acknowledge and empower Aboriginal and Torres Strait Islander peoples.

Gabby immediately put her learnings into practice by advising the Tronox team on cultural safety and best practices, influencing the content for our leaders' cultural immersion, and supporting our leaders on their journey toward cultural competence.



Besides the value this brings to my team at Tronox, I'm passionate about becoming more culturally aware so I can do my part for reconciliation more broadly in Australia."

As part of Gabby Maynard's Indigenous Australian Cultural Studies coursework, she completed a five-day intensive where she connected and learned from Aboriginal educators, experiencing cultural practices, like traditional fishing methods and smoking ceremonies.

Pictured: Uncle Simon Forrest (left) performs a smoking ceremony with Gabby (right). Photo by Belinda Gibson.

Local Communities Approach

We operate in diverse communities around the globe, where we often are one of the primary employers of that region. We have a responsibility to enhance the wellbeing of these communities, and it's a responsibility we take very seriously. We strive to elevate the quality of life for the people of our communities by providing jobs and economic support, strengthening local education, promoting equal rights and diversity, and supporting the health, sustainability and environment of our regions.

We are proud of the relationships we have built with our communities, and we continue to seek new ways to support and empower our employees and their families, our neighbors, and the whole region. One way we aim to accomplish this is by hiring from the communities where we operate. For example, our South Africa operations have developed a hiring framework to increase employment from our host communities and set a policy for our contractors to hire 100% of their unskilled labor locally.

Local workforce development has become especially important in regions of Australia, where booming growth in the mining industry has revealed there is a shortage of skilled workers. Creating a local talent pipeline starts by supporting local education. We partner with local schools to provide career advice and funding for STEM-related programs and equipment to enrich learning experiences, inspire the next generation and build our own future workforce. We also award numerous scholarships for students in the local community to attend universities. In addition, Tronox sites hosted 155 interns, apprentices and co-op students, many of them from nearby communities.

As members of the community ourselves, we believe it is important to be visibly present and available to our neighbors. We celebrate alongside our communities by supporting local events and initiatives through volunteering and sponsorships. In addition to these interactions, we provide various communication mechanisms so community members may openly share questions or concerns with our team. We meet frequently with stakeholders in our operating regions – including government officials, local leadership and our neighbors – to share information about our operations, provide insight to guide regulation and policy, and identify relevant issues and community needs. This provides us with opportunities to understand how we may best support the vibrance of our communities, such as investing in infrastructure improvements and education.



Tronox contributed more than \$926,000 to its communities in 2023.

CASE STUDY

Developing Australia's Future Mining Workforce

Despite projected growth in the Australian mining industry, enrollment in mining engineering specializations across the country have decreased by nearly 63% in the last 10 years – leading to an industrywide shortage of skilled workers. To ensure we have a strong workforce in place, we are focusing on attracting and retaining employees now, as well as investing in the next generation of miners. In 2023, Tronox took the following steps to introduce local students to mining careers and the STEM skills needed to support this critical industry:

- Partnered again with the Chamber of Minerals and Energy of Western Australia to hold the Inspiring Girls Career Forum, which teaches secondary school girls about career opportunities in the resources industry.
- Hosted graduate and university students for presentations, networking and site visits, and offered tours of Bunbury Pigment Plant, Wonnerup Mine and Kwinana Pigment Plant.
- Provided a scholarship and work opportunity for a Curtin University student and participated in the university's chemistry industry networking night.
- Provided a scholarship for a Federation University student.
- Created an interactive archeology activity to teach secondary school students at CUC Far West about mineral deposits and geology at the annual Roads to Discovery event in Broken Hill.
- Continued our partnerships with 20 schools in all our operating areas across Australia, which provided unique learning experiences to students, such as LEGOS and magnetic kits, 3D printers, robotic kits, and even aquifer systems for those in farming areas.
- Supported dozens of school and university events and conferences designed to help students explore the career pathways available in different STEM fields.
- Expanded our partnership with the Clontarf Foundation to support the education and advancement of young Aboriginal and Torres Strait Islander men by attending career workshops, mock interviews and presentations throughout the year, along with our original commitment to fund some students' attendance at nearby academies.



There are so many exciting, dynamic and high-growth jobs in STEM fields. Introducing students to these opportunities at a young age can help them start building skills, get training and plan their future early, so they can move into these jobs and make an impact as soon as possible. Everyone benefits.”

AMY WEBB

Chief Human Resources Officer



Tronox collaborated with the Yanbu Royal Commission Medical Center to create a playroom designed specifically to support the neurodiverse traits of children with autism. Previously, families had to travel more than 200 km to have their children evaluated. This is just one of the ways we have partnered with the Yanbu Royal Commission for over 35 years to complete projects that enrich the lives of the people of Yanbu – including establishing volunteer networks, developing resources for STEM education, and providing food and supplies to the elderly during Ramadan.



Tony and Tess make TiO₂ is a new children's book created by Hamilton Pigment Plant employees to explain how TiO₂ is made and to introduce kids to STEM careers that exist within their own community. Written by Senior FP&A Analyst Nikki Harper and Executive Assistant Jennifer May, and illustrated by Engineering Leader Maggie Wright, the book has been read to third- and fifth-grade students at Hamilton Elementary School and is helping them connect their lessons with real-world applications, so they can see themselves in similar careers when they grow up.

CASE STUDY

Making a Positive Impact in Local Communities

Every community has different needs, and Tronox works in concert with people living in the regions where we operate to identify how we can best support them. Here's a look at some of the ways we provided resources and funding across our regions in 2023.

Heat Relief in **Hamilton**

When a record heat wave struck Hamilton, Mississippi, Tronox stepped up to donate two pallets of water to local school districts so both students and bus drivers could stay safe amid the dangerous temperatures.

Tronox Reading Club Grows in **Bahía**

In 2023, the Tronox Reading Club hosted more than 275 storytelling and reading activities for nearly 16,000 people in communities surrounding Bahía. Tronox employees donated books to the program, and Reading Club participants read almost 5,000 books over the course of the year.

Improving Sportsgrounds in **South Africa**

Tronox upgraded the sports fields for two secondary schools located north of Namakwa Sands, which included laying new turf, running irrigation lines and fencing, and installing floodlights for safety.

Botlek Employees Meet Students for STEM Career Days

Employees from Botlek represented Tronox at STEM career events at the Technical University in Delft and STC Group in Rotterdam, which provide opportunities for students to learn more about in-demand jobs in maintenance, process operations and other technical roles.

Building a New Food Bank Near **Stallingborough**

When the new Rock Foundation food bank had been vandalized and stripped of electrical wiring, Tronox donated £10,000 (nearly US\$13,000 at a \$1.29 exchange rate) to help with the repair. Tronox employees and contractors also volunteered to rebuild the food bank within two weeks.

Increasing Food Aid in **Thann**

When Thann residents were facing higher energy costs and rising inflation, our employees donated 230 kg of food and hygiene products for the Epicerie Sociale – which supports families in need. Tronox also made a financial contribution to the organization.

Preparing **Yanbu** Students for Employment

We partnered with The Royal Commission and Yanbu Industrial College to mentor students in their co-op program, which helps them prepare for their careers while connecting us with potential employees.

Sports and Recreation Grants for the **Cooljarloo Community**

In 2023, Tronox provided matching funds to the Shire of Dandaragan – the local government entity where Cooljarloo Mine is located – to fund the installation of an HVAC system for the community center, photography equipment for the historical society and furniture for the sports facilities.



Operating a Sustainable Business

Sustainability is integral to our ability to meet the expectations and needs of our employees, customers, investors and communities.

IN THIS SECTION

Financial Performance • Product Stewardship • Sustainable Procurement



GOAL

CONTRIBUTE to a circular economy through more sustainable products and supplier relationships



2023-2024 TARGETS

EMBED Safe & Sustainable by Design (SSbD) criteria in all new product risk assessments

COMPLETE a horizon scan of long-term regulatory risks for all existing products

IMPROVE cyber security in our supply chain

UNDERSTAND our product environmental footprint

TRAIN 100% of supply chain team members in sustainable procurement

8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Financial Performance

Operating a responsible business means advancing our sustainability while simultaneously ensuring that we continue to provide value to our stakeholders. This includes providing essential products that support a variety of industries and generating economic impact for our employees and communities through wages, taxes, spending with local suppliers and community investments.

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 direct pigment Western 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. Total revenue for 2023 was US\$2.9 billion. We achieved an adjusted EBITDA of US\$524 million and an adjusted EBITDA margin of 18.4%. Free cash flow was a use of US\$77 million, after investing US\$261 million in capital projects.

In 2023, we commissioned our Atlas mine, a significant new mine in Eastern Australia. Atlas has replaced the feedstock supply from our Snapper/Ginkgo Mines, 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.

In August 2023, we secured an incremental term loan of US\$350 million as a proactive measure to ensure we had adequate liquidity to continue to invest in our business, primarily for the 2024 mining extension projects we are investing in for mines in South Africa reaching their end of life. 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 feedstock vertical integration.

While we slowed the advancement of our business transformation project to adapt to a challenging economic year, we were successful in continuing to drive progress. For example, our Australian sites will all be on the same enterprise resource planning (ERP) system by the end of 2024. We will continue with the roll out of our 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 and remaining the leading vertically integrated producer of TiO₂.

More information is available in our [Annual Report and Proxy Statement](#).

MODERNIZING PROCESS CONTROLS

Tronox has been working to modernize our process control systems as part of our larger business transformation. Process control engineers gathered in South Africa to provide input on design, standardization and implementation. The new system will roll out at KwaZulu-Natal in 2024 and be in place at Namakwa Sands, Bunbury and Botlek by 2027.



PARTNERING TO ADVANCE OUR INDUSTRY

From local suppliers to regional government officials, our business' sustainability depends on strong relationships with other companies and industry associations.

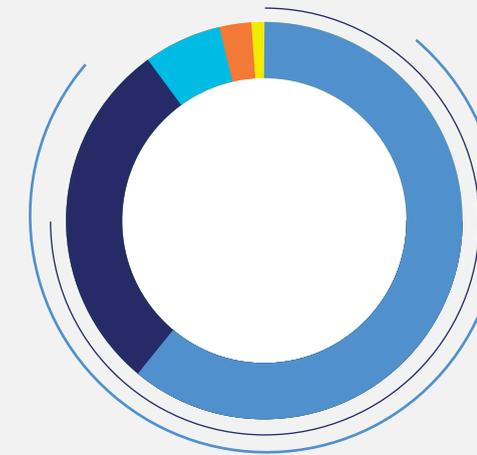
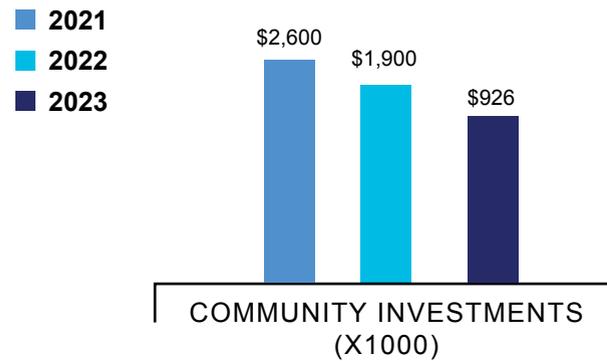
- Our Yanbu operations joined The Ministry of Industry and Mining's Future Factories program, designed to build a robust digital infrastructure, skilled workforce and supportive regulatory environment to promote growth in the Kingdom of Saudi Arabia's manufacturing industry. The program supports Saudi Vision 2030, a comprehensive plan launched by the government of Saudi Arabia to diversify the economy, reduce dependence on oil revenue and develop non-oil sectors.
- The Thann Pigment Plant welcomed members of France Chimie, the professional organization representing French chemical companies with regulatory and international bodies. We also hosted the subprefect of the Thann-Guebwiller district and the mayor of Thann to showcase our operations and create stronger partnerships with local government officials.
- At the Kwinana Pigment Plant, we facilitated a leadership training session and site tour for the Strategic Industry Research Foundation (SIRF), a collaborative network designed to promote progress across industry sectors.



Business Metrics (data)

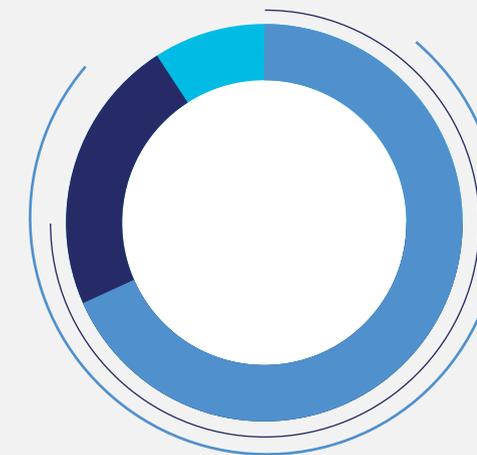
(MILLIONS OF U.S. DOLLARS, EXCEPT SHARE AND PER SHARE AMOUNTS ¹)	2021	2022	2023
Sales	\$3,572	\$3,454	\$2,850
Net (loss) income	\$303	\$500	\$(314)
Diluted (loss) income per share	\$1.81	\$3.16	\$(2.02)
Dividend paid per share	\$0.36	\$0.50	\$(0.50)
Total assets	\$5,987	\$6,306	\$6,134
Shares outstanding (as of December 31)	153,934,677	154,496,923	156,793,755

COMMUNITY INVESTMENTS



COMPONENTS OF ECONOMIC VALUE DISTRIBUTED

- Operating Costs | 65.9%
- Employee Wages and Benefits | 22.9%
- Payments to Capital Providers | 8.8%
- Payments to Government | 2.4%
- Community Investments | 0.03%



REVENUE FROM PRODUCT SALES

- TiO₂ | 79%
- Other Products | 12%
- Zircon | 9%

\$2.85 Billion

¹The 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.

Product Stewardship Approach

Operating a responsible business extends beyond our operations, which is why our sustainability strategy includes ensuring the responsible use and stewardship of our products throughout the world. This includes achieving full compliance with product legislation and helping to protect people and the environment from potential misuse of our products.

In 2023, Tronox's product stewardship highlights included:

- Continuing to understand the impact of the EU Green Deal, the Chemicals Strategy for Sustainability (CSS), including the revision of the REACH Regulation, the Generic Risk Assessment (GRA), the concept of 'essential uses,' and changes to the Classification, Labelling and Packaging (CLP) Regulation.
- Reviewing our EEA REACH dossiers to ensure that they are up-to-date and contain the latest advice on using our substances safely.
- Sharing our perspective on potential regulations as speakers at the UK Chemical Industries Association's Current Landscape and Emerging Issues Conference, the REACHLaw Chemicals Regulations and Sustainability Symposium, and the TiO₂ World Summit.
- Providing amendments to the evolving EU Critical Raw Materials (CRM) Act regarding the role of titanium as a future strategic raw material and the contribution of Tronox's operations to the titanium metal value chain.
- Strengthening our engagement with policymakers to support the United Kingdom's ambition towards net zero and green policy objectives.
- Supporting the stewardship requirements for new projects and innovative technology, and incorporating Safe and Sustainable by Design (SSbD) principles in support of new product development activities.
- Serving in leadership roles in the Titanium Dioxide Manufacturers Association (TDMA) and Titanium Dioxide Industry Consortium (TDIC) to continue to demonstrate the safety and benefits of TiO₂. Through these industry associations, we engage with regulators, such as the French Agency for Food, Environmental and Occupational Health & Safety (ANSES), the European Commission, the European Chemicals Agency, and the South Korean National Institute for Environmental Research (NIER).



Tronox won the TiO₂ supplier category for Brazil's North and Northeast region's paint market from Paint & Pintura Magazine Awards for third consecutive year. Tronox was also named Dulux's Supplier of the Year for their New Zealand business for the second consecutive year.

We are preparing for the transition to REACH-like regulations in other parts of the world by strengthening Tronox's product stewardship presence in the Asia-Pacific region, and continuing to meet the requirements for K-REACH in South Korea, Turkey REACH (KKDIK) and requirements elsewhere in the region. These stewardship efforts are important steps to ensure business continuity and secure our license to operate in Asia-Pacific.

The scientific understanding of the safety of TiO₂ has evolved since the European Food Safety Authority (EFSA) opinion in May 2021 identified uncertainty about genotoxicity. This has included several independent scientific reviews across different jurisdictions (e.g. Health Canada and the World Health Organization) and new studies from Japan and China which have shown no adverse effects. The TMDA's scientific program to demonstrate the safety of TiO₂ in various applications is ongoing, working in close collaboration with EU regulators. In parallel, the industry is working towards demonstrating the essential uses of TiO₂ and its overall contribution towards the EU Green Deal objectives as part of its advocacy efforts.

In February 2023, both the European Commission and France appealed the judgment on the classification of TiO₂ as a category 2 carcinogen. The classification will remain in place until the end of the appeal process.

This year, Tronox has applied safe and sustainable by design (SSbD) principles into the R&D and stage gate processes. These changes will future-proof our product portfolio and deliver sustainable chemistries to our customers.



ENGAGING CUSTOMERS IN PRODUCT STEWARDSHIP

Tronox promotes responsible product stewardship with our customers. In 2023, we held a customer event at our Stallingborough Pigment Plant to highlight regulatory issues facing the TiO₂ industry and address customer questions regarding safe use and handling. Eighteen of Tronox's key customer accounts attended, and we plan to replicate this event to reach customers in other regions in 2024.

TESTING TMP ALTERNATIVES

Trimethylolpropane (TMP), an organic additive frequently used as a conditioning agent in coatings formulas, has recently been self-regulated by its industry as a possible reproductive toxicant. With additional regulations on the horizon, Tronox is actively exploring alternative organics to function as drop-in replacements for TMP in our products. We have identified options for different applications and are testing the new formulas with customers now.



Sustainable Procurement Approach

We cannot achieve our sustainability goals alone. Our suppliers are an important part of the equation. We prioritize suppliers with responsible operations, as well as local and diverse business partners that contribute to socioeconomic advancements in the communities in which we operate.

Our Sustainable Procurement policy applies to all suppliers considered high-risk from a sustainability and environmental standpoint – with a specific focus on goods with a high carbon impact.

Tronox has set a goal to achieve a 16% reduction in Scope 3 emissions by 2030. Our first priority is suppliers with the highest energy use and, therefore, the highest contributors to GHG emissions in our supply chain. Our first Supplier Sustainability Performance Survey was conducted in late 2022 with suppliers in these high carbon impact goods categories. Based on these responses, we held one-on-one discussions with the top 20 emitters in late 2023 to understand their decarbonization plans and help them start or accelerate efforts. In 2024, the survey will be extended to include our packaging suppliers.



Tronox is proud to be named in the top 1% of companies by EcoVadis for our sustainable procurement activities.

In addition, the survey responses have helped Tronox build a baseline in understanding our suppliers' own sustainability maturity in areas, such as:



SUSTAINABILITY strategies, goals and performance data for GHG emissions, energy consumption, waste management, employee health and safety, working conditions, DEI, employee training and development, anti-corruption and anti-bribery, and/or information security.



CODE of Conduct and Ethics policies that apply to employees and business partners.



HEALTH and safety policies that apply to employees and business partners.



ANTI-CORRUPTION and anti-bribery policies, procedures and training.



TAKEN actions to address child labor, modern slavery and human trafficking.



SET a process for accessing suppliers based on sustainability performance.

Also new in 2023 was the launch of our “supplier day” program. During these events, we invite suppliers to our sites to reinforce our sustainability vision and expectations and brainstorm together on how to improve costs, innovation, safety and sustainability. The Stallingborough and Bahia facilities held supplier day events in 2023, and the model will be rolled out to other locations in 2024.

We believe these activities will enable Tronox to reach our goals of a 9% and 16% reduction in upstream Scope 3 GHG emissions intensity by 2025 and 2030, respectively.

SUPPLIER COMPLIANCE AND AUDITS

All Tronox vendors must adhere to our Supplier Code of Conduct, which outlines our expectations that our suppliers exhibit a shared commitment to the environment, employees, business ethics, human rights and quality. Suppliers also are expected to maintain management systems and controls to facilitate compliance with applicable laws. We segment our global suppliers by risk, industry and carbon impact to understand how they impact our own goals. All suppliers also must view a video and accept Tronox’s ESG standards during the onboarding step.

All new suppliers must complete a self-audit when we begin working together, and all suppliers must re-submit the self-audit every two years. We also conduct onsite audits on a targeted basis focusing on new critical suppliers or underperforming suppliers. Each Tronox site defines its annual audit plan based on needs and resources.

As part of our sustainability journey, we are working to introduce sustainability performance into these onsite audits and in supplier contracts. Audits result in an audit report and, if needed, corrective actions or an improvement plan. In the instance a supplier fails to meet our standards and does not take corrective actions, Tronox will source alternative options.



Identifying and selecting sustainable suppliers is only the first step. Our vision is to help our suppliers continue to progress by working together on ESG performance plans throughout the duration of the contract.”

ALEXANDRE MATHIEU
Supply Chain Europe and Global Sustainable Procurement

% OF SPEND ON LOCAL SUPPLIERS

Austailia	Brazil	China	Europe	Gulf Cooperation Council Region	South Africa	United States
92%	80%	90%	88%	87%	92%	94%

SUPPORTING OUR PROCUREMENT TEAM

Aligning our procurement team around their role in contributing to a more sustainable business has been a primary training focus over the past two years. Accomplishments include creating a core team dedicated to sustainable procurement practice and defining our sustainable procurement strategy, goals and targets, including setting performance goals for our buyers related to sustainability. We also have provided regular updates about our journey to keep this effort top of mind across the global procurement team.

Now, we are building upon this foundation of awareness by introducing employees to the ISO 20400 Guidelines for Sustainable Procurement standard. This robust program will better prepare procurement teams to analyze opportunities to reduce the impact of our supply chain and to engage our suppliers in dialogue about their own sustainability progress. Procurement employees in Brazil and the United Kingdom began internal training on ISO 20400 in 2023. This training will continue to roll out to all Tronox regions in 2024.

In addition, we held specific trainings for our raw material buyers about GHG emission calculation to help them when challenging our suppliers about their emissions and improvement plans. We also plan to identify a sustainable procurement tool in 2024, which will provide better data management, decision-making and training around procurement decisions.

CONFLICT MINERALS

Tronox is a member of the [Responsible Minerals Initiative \(RMI\)](#) as part of our efforts to ensure responsible mineral sourcing. Tronox is committed to responsible sourcing of 3TGs (tantalum, tin, tungsten and gold) using the Organization for Economic Co-operation and Development (OECD) due diligence framework. Risk within our supply chain relates to the sourcing of tungsten. We have taken steps to ensure our suppliers file an RMI Conflict Minerals Reporting Template and are approved by the Conflict-Free Sourcing Initiative’s Conflict-Free Smelter Program. Tronox’s [Conflict Minerals Policy](#) applies to all employees and suppliers.



THE VALUE OF VERTICAL INTEGRATION

As a vertically integrated mining and manufacturing company, Tronox is able to produce and supply most of the necessary feedstock and raw materials needed for our business operations. This reduces our reliance on suppliers and also helps ensure that these materials are being managed in line with our sustainability values.

Governance

Creating a strong governance structure and policies to support that structure reflects our belief that management control is the first line of defense to identify and mitigate not only commercial and financial risks but also environmental and sustainability risks that can derail a company. In addition to core business risks, such as human capital management, the viability of our business model and supply chain resilience, Tronox's Board of Directors is actively engaged in monitoring sustainability-related risks, like progress on our decarbonization roadmap to achieve net zero by 2050.

Our Board of Directors represents the diversity of our global operations, with members from South Africa, Saudi Arabia, Australia and the United States. Six of our 10 Board members are independent under the rules established by the New York Stock Exchange. The four non-independent directors include our current CEO, a former co-CEO and two individuals appointed by our largest shareholder, Tasnee, as outlined in a shareholder's agreement.

We continually assess whether our Board of Directors maintains the right balance of skills, experience, diversity and business acumen to provide effective oversight of management and drive our strategy forward. For the first time, we published a formal skills matrix, which the Board reviewed and finalized at its October 2023 meeting. The Board believes that the skills matrix represents a realistic assessment of the strengths and weaknesses of its members' skills and experiences in the key areas related to Tronox's business.

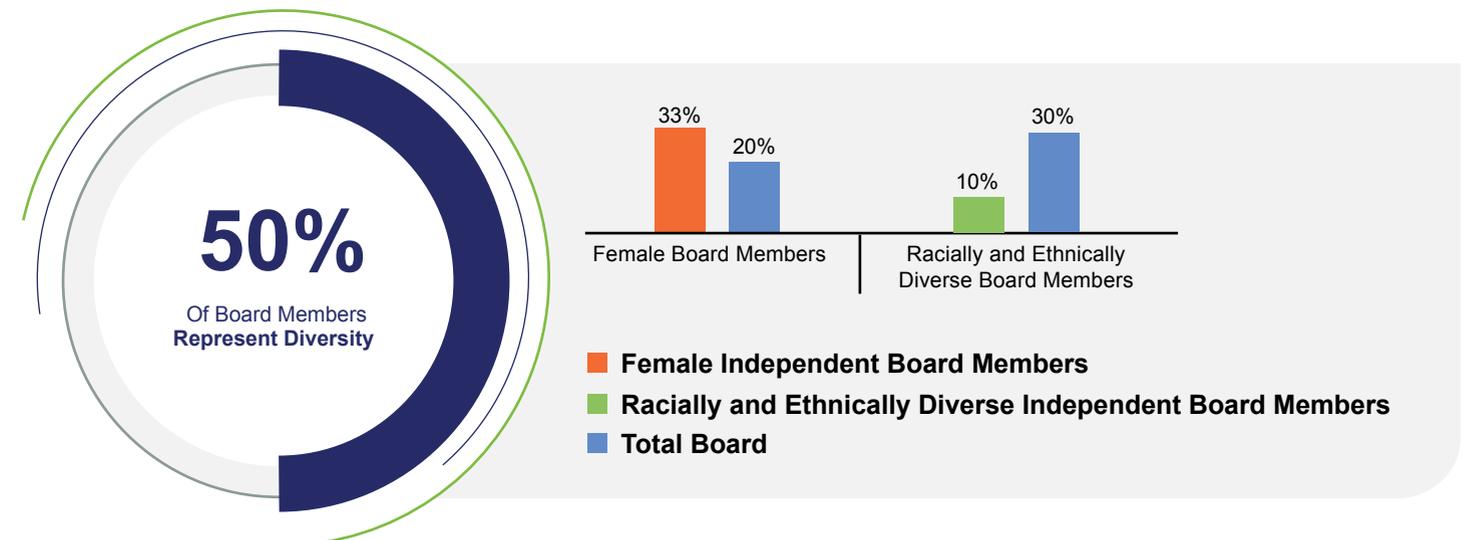
The Board of Directors continues to undergo significant refreshment. In February 2024, Tronox announced that Dr. Vanessa Guthrie decided not to seek re-election as a member of the Board at the May 2024 Annual Meeting of Stockholders. Dr. Guthrie also serves on the Board of Directors of Lynas Rare Earths Ltd. ("Lynas"), an Australian producer of rare earth materials. Her decision to not stand for re-election at Tronox was solely related to the growing importance of rare earth mineral mining and processing for Tronox and the foreseeable conflict of interest that might arise as Tronox and Lynas begin competing in this fast-growing sector of green energy transformation.

Subsequently, in May 2024, we announced the election of Lucrèce Foufopoulos-De Ridder to the Board. Mrs. Foufopoulos-De Ridder has significant executive leadership experience in the chemicals industry, with a focus on technology and innovation. She also has extensive experience in the field of sustainability and will serve on our Corporate Governance and Sustainability Committee.

The Board is committed to achieving 30% female representation by the 2025 annual general meeting of shareholders. In that regard, the Board has retained an international search firm to identify and recruit new Board members with the appropriate skills, experience and perspective to enhance its ability to create long-term shareholder value.

The Board of Directors undertakes a self-evaluation at least annually coordinated by the Corporate Governance and Sustainability Committee.

GENDER AND ETHNIC DIVERSITY



SKILLS MATRIX

	Kaufthal	Al-Morished	Johnston	G. Jones	S. Jones	Khan	Nkosi	Romano	Turgeon	Total
Core Skills and Experience										
Senior Leadership	●	●	●	●	●	●	●	●	●	9
Public Company Board	●	●	●	●	●		●			6
Strategic Planning and M&A	●	●	●	●	●	●	●	●	●	9
Mining Experience			●				●	●	●	4
Chemicals Experience	●	●			●	●	●	●	●	7
Global Business Experience	●	●	●	●	●	●	●	●	●	9
Environmental and Sustainability	●		●	●	●		●	●	●	7
Finance and Accounting	●	●	●	●	●	●	●	●	●	9
Risk Management	●	●	●	●	●	●	●	●	●	9
Additional Skills and Experience										
Logistics and Supply Chain	●	●	●	●	●	●	●	●	●	9
Technology and Cyber Security	●					●				2
Emerging Green Industries					●					1
Relevant End-Market Expertise	●	●					●	●	●	5

This skills matrix comes from the proxy published in March 2024 and excludes Foufopoulos-De Ridder, who was elected to the Board in May 2024.

Sustainability Governance

CORPORATE GOVERNANCE AND SUSTAINABILITY COMMITTEE

The Corporate Governance and Sustainability Committee is responsible for promoting, supporting, monitoring and assessing Tronox’s corporate social responsibility and sustainability programs and environmental, health and safety initiatives. The committee also ensures the company’s strategic plan and business goals adequately consider corporate social responsibility and sustainability policies, priorities, and plans, as well as oversees target setting and program metrics. The committee also reviews the annual sustainability and TCFD reports. Additionally, this year, the committee reviewed the Australian Safeguard Mechanism requirements and its impact to sites in Tronox’s portfolio.

Throughout 2023, the Corporate Governance and Sustainability Committee met regularly with senior management, including the Chief Sustainability Officer and Head of Investor Relations, to review and discuss ESG-related issues. The Chairman of the Committee, who is also the non-executive Chairman of the Board, met with a number of our largest shareholders to hear directly from them about what ESG-related risks are top of mind in the investment community. We continue to receive investor feedback that Tronox ranks favorably in terms of our progress on sustainability efforts relative to our industry.

The entire Tronox Board of Directors understands the importance of sustainability to our business and takes responsibility for oversight of ESG-related risks. As such, a number of important topics were also covered by the Audit Committee, particularly related to our plans to gain external assurance of Scope 1 and 2 absolute emissions data and prepare for likely new disclosure rules being proposed by the U.S. Securities and Exchange Commission. The Human Resources and Compensation Governance Committee also provides direction that guides ESG-related risks related to our people, human rights and labor rights.

CHIEF SUSTAINABILITY OFFICER

This role is charged with maintaining our focus on intentional and purposeful progress toward our sustainability goals.

VP – SUSTAINABILITY

The Vice President – Sustainability supports the Chief Sustainability Officer in embedding our sustainability strategy throughout our business operations and driving projects that support our sustainability goals and targets.

GLOBAL SUSTAINABILITY COUNCIL

Executives covering the key areas of Operations, Finance, Commercial, Supply Chain, Investor Relations, Legal and Human Resources form the Sustainability Council, which is chaired by the Chief Sustainability Officer. The Council meets periodically and drives progress on our sustainability strategy. In 2023, these efforts centered on decarbonization, particularly understanding sources of Scope 3 emissions and Tronox’s ability to reduce those emissions in the short, medium and long term. The Council also reviewed several initiatives for the beneficial reuse of the solid waste generated by our chloride TiO₂ production technology as part of our waste reduction goals.

CENTERS OF EXCELLENCE

Internal Centers of Excellence bring together formal, cross-functional teams to leverage the cumulative experience within Tronox to address common issues and share best practices and technologies on sustainability matters, such as net zero carbon emissions, waste, and diversity, equity and inclusion.

Code of Conduct and Initiatives to Create a Culture of Compliance

Conducting business ethically, honestly and in full compliance with applicable laws and regulations is a core Tronox value. We recognize, however, that a culture of compliance and ethical conduct does not just happen. It must be cultivated. Setting the right “tone at the top,” supported by consistent, widespread and meaningful training and empowering all employees and vendors to feel comfortable raising concerns is how Tronox strives to create a culture of ethical conduct.

We conduct Code of Conduct training with our employees and contractors at least annually through a variety of methods, including in-person and online. New employees receive and sign a copy of the Code at hiring.

Tronox encourages its employees and other stakeholders to speak up about any violations of its Code and makes an anonymous hotline available to all our employees, suppliers, customers and other stakeholders. Allegations can be reported 24/7 online or through telephone operators who speak all of the languages in which we do business (tronox.com/speakup). Each and every allegation is thoroughly investigated, and for substantiated allegations, we promptly take corrective action consistent with our Code, as well as local laws and regulations. When possible, we inform the person making the allegation about the outcome of our investigation.

Oversight of our business ethics and compliance is vested in both our Audit Committee and Corporate Governance and Sustainability Committee. Quarterly, the Audit Committee receives a report from the Director of Compliance on compliance-related activities that occurred in the prior quarter, as well as a detailed report on any allegations that our Code was violated. Our Corporate Governance and Sustainability Committee reviews the Code periodically to ensure that it addresses topics and matters of relevance to Tronox, including anti-corruption, conflicts of interest and antitrust.

Tronox operates in compliance with all applicable anti-bribery and anti-corruption laws, including the Foreign Corrupt Practices Act and the UK Bribery Act. Our anti-corruption policy and risk management cover all Tronox employees worldwide. Tronox has developed policies, procedures and internal controls for complying with anti-bribery and anti-corruption laws, including conducting third-party due diligence on customers, vendors and agents to mitigate the risk of becoming involved in corruption via third parties.

MEMBERSHIPS

Tronox maintains memberships in a number of organizations that keep us connected to the mining and chemical industries, as well as the regions and communities where we operate. [View a full list of our memberships online.](#)

POLICIES

Tronox’s Code of Conduct is underpinned by a series of written policies that guide our behavior and business practices. Every year, we seek to refresh and update our policies to ensure they are relevant and address the evolving risk landscape. In 2023, we issued new policies related to the presence and use of firearms on company property and the authority of the Board of Directors to “clawback” compensation from our most senior executives in the event of a restatement of our financial results. We also published a revised and updated Human Rights Report. [View our policies](#) on a range of topics, including Safety, Health and the Environment, Human and Labor Rights, Compliance, and Supplier Standards, as well as our updated Human Rights Report.



Data Privacy and Cyber Security

Tronox is committed to protecting the privacy and personal data of our employees, customers, vendors and others with whom it interacts. That commitment is described in our Privacy Notice and Data Processing Protocol and Data Privacy Policy.

The IT Security Council, chaired by our Senior Vice President and General Counsel, continues to actively oversee and improve Tronox's cyber security defense posture. In 2023, members of the Council participated in a desktop exercise intended to simulate a ransomware attack. In addition, we strengthened our policies, programs and procedures to ensure that all employees and contractors who are issued a Tronox user account for our IT system complete and pass cyber security training before being provided full system access. Finally, we identified significant portions of our employee population who do not require access to external emails and blocked their accounts. As phishing is the most common means for hackers to access a company's IT systems, dramatically shrinking the number of employees with access to external emails is intended to reduce Tronox's cyber security vulnerability.

At least annually, our Chief Information Officer and Director, IT Security reports to the entire Board and more frequently to the Audit Committee. Our General Counsel periodically updates the Board on best practices related to oversight of cyber security and disclosure. In addition, Tronox has an IT Security Council that meets quarterly to help set corporate risk tolerance and related policies. Our multi-year operational and business transformation program will continue to advance our cyber security protection and IT capabilities. Our cyber security systems, procedures, policies and documentation have been robustly designed and implemented by Tronox's Vice President, Cyber Security, based on ISO 27001: 2013 standards. [Tronox's 2023 annual report](#) contains significant new disclosures and information on our cyber security policies, procedures and practices.





Appendices



GRI Standards Index

Tronox has reported in accordance with the GRI Standards for the period of 2023 calendar year. This report also includes disclosures from GRI's Mining and Metals Sector Disclosure Supplement.

General Disclosures		
2-1	Organizational details	Tronox Holdings plc (Tronox, the company, or we) is headquartered in Stamford, Connecticut, USA. Tronox Holdings plc is a public limited company listed on the New York Stock Exchange (NYSE:TROX) and is incorporated under the laws of England and Wales. For countries of operation, see page 106.
2-2	Entities included in the organization's sustainability reporting	All sites under Tronox's operational control – consistent with our Annual Report.
2-3	Reporting period, frequency and contact point	Period: Fiscal Year 2023 (Jan 1-Dec. 31, 2023) Publication Date: July 2024 Frequency: Annual Contact: Jennifer Guenther, Chief Sustainability Officer and Head of Investor Relations and Financial Planning, sustainability@tronox.com
2-4	Restatements of information	None
2-5	External assurance	Page 107
2-6	Activities, value chain and other business relationships	Page 6, Tronox.com and 2023 Annual Report
2-7	Employees	Pages 59-62
2-8	Workers who are not employees	Page 59
2-9	Governance structure	Page 84-86, Tronox.com and March 2024 Proxy Statement
2-10	Nomination and selection of the highest governance body	March 2024 Proxy Statement
2-11	Chair of the highest governance body	Ilan Kaufthal, Chair of the Board
2-12	Role of the highest governance body in overseeing the management of impacts	Pages 15-17 and 84-86
2-13	Delegation of responsibility for managing impacts	Page 86
2-14	Role of the highest governance body in sustainability reporting	Content of this report is subject to approval by the CEO and the Chief Sustainability Officer and Head of Investor Relations and Financial Planning.
2-15	Conflicts of interest	March 2024 Proxy Statement
2-16	Communication of critical concerns	March 2024 Proxy Statement
2-17	Collective knowledge of the highest governance body	Page 84-85
2-18	Evaluation of the performance of the highest governance body	March 2024 Proxy Statement
2-19	Remuneration policies	March 2024 Proxy Statement
2-20	Process to determine remuneration	March 2024 Proxy Statement
2-21	Annual total compensation ratio	March 2024 Proxy Statement
2-22	Statement on sustainable development strategy	Page 4

2-23	Policy commitments	Compliance Policy Library
2-24	Embedding policy commitments	Compliance Policy Library
2-25	Process to remediate negative impacts	March 2024 Proxy Statement
2-26	Mechanisms for seeking advice and raising concerns	Page 87
2-27	Compliance with laws and regulations	Tronox experienced no fines related to incidents of non-compliance in 2023; however, in 2023, the company paid a portion of one fine related to an incident that occurred in 2021. The fine amount paid was 103,840.50 GBP.
2-28	Membership associations	Memberships and Trade Associations
2-29	Approach to stakeholder engagement	Page 15-17
2-30	Collective bargaining agreements	Tronox respects our employees' rights to collectively bargain. Approximately 41% of Tronox employees worldwide are represented by a union or collective bargaining agreement. There are no records of strikes or lockouts at any Tronox location in the last 10 years. Employees experience the same working conditions, regardless of whether they are covered under a collective bargaining agreement.
Material Topics		
3-1	Process to determine material topics	Page 14
3-2	List of material topics	Page 14
3-3	Management of material topics	Tronox supports the precautionary approach to evaluate and address potential environmental impacts. We are committed to doing business with suppliers and customers that uphold our same sustainability values, including those related to human rights, environmental stewardship, product stewardship and ethical leadership. Information about how we are managing each of our materials topics is available on the following pages: 24-29, 33-38, 41-43, 45, 49-51, 55-58, 63-64, 68-71, 74, 78, 80-81, 82-83
Economic Topics		
3-3	Economic management approach	Page 78
201-1	Direct economic value generated and distributed	Page 79
204-1	Procurement practices	Page 82-83
Environmental Topics		
Energy		
302-1	Energy consumption within the organization	Page 40
302-3	Energy intensity	Page 40
Water		
303-3	Total water withdrawal by source	Page 48
Biodiversity		
G4-MM1	Amount of land disturbed or rehabilitated	Page 53
304-3	Habitats protected or restored	Page 53

Emissions		
305-1	Direct GHG Emissions (Scope 1)	Page 39
305-2	Energy indirect GHG emissions (Scope 2)	Page 39
305-4	GHG emissions intensity	Page 39
Effluents and Waste		
306-2	Total weight of waste by type and disposal method	Page 44
Social Topics		
Labor Practices and Decent Work		
G4-MM4	Number of strikes and lockouts exceeding one week's duration	Page 58
Occupational Health and Safety Management		
403-9	Work-related injuries	Page 26
Diversity and Equal Opportunity		
405-1	Diversity of governance bodies and employees	Page 60-62
Human Rights		
G4-MM5	Total number of operations taking place in or adjacent to Indigenous Peoples' territories, and number and percentage of operations or sites where there are formal agreements with Indigenous Peoples' communities	61% of proved and probable reserves are in or near Indigenous land. Pages 68-72
Local Communities		
413-1	Operations with local community engagement, impact assessments, and development programs	100% of our operations have community engagement and development programs based on local communities' needs.

SASB Disclosure Matrix

Tronox's reporting is aligned with the SASB Chemicals and Metals & Mining industry standards.

Topic	Accounting Metric	Code	Unit of Measure	Disclosure	Scope
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	RT-CH-110a.1 EM-MM-110a.1	t CO2e	2,019,715	All global sites
			tCO2e/t product	0.87	All global sites
	Scope 2 emissions		t CO2e	1,727,334	All global sites
			tCO2e/t product	0.74	All global sites
	Scope 3 emissions		tCO2e/ year	1,634,889	All global sites
	Strategy, targets and performance	RT-CH-110a.2 EM-MM-110a.2		Pg. 33-38	
Air Quality	Air emissions of the following pollutants:				
	CO	EM-MM-120a.1	t	851.23	All mining sites
	NOx (excluding N2O)	RT-CH-120a.1 EM-MM-120a.1	t	1,228.69	All global sites
	SOx	RT-CH-120a.1 EM-MM-120a.1	t	863.67	All global sites
	Hg	EM-MM-120a.1	t	0.0006	All mining sites
	Pb	EM-MM-120a.1	t	0.90	All mining sites
	PM10	RT-CH-120a.1 EM-MM-120a.1	t	5,905.94	All global sites
	Ozone depleting, VOC, HAPS and POPs	RT-CH-120a.1 EM-MM-120a.1	t	Not material to our business or products.	
Energy Management	Total energy consumed Energy intensity	RT-CH-130a.1 EM-MM-130a.1	GJ GJ/t product	34,744,026 14.90 Pg. 40	All global sites
	Percentage renewable	RT-CH-130a.1 EM-MM-130a.1	%	2.27%	All global sites
	Percentage grid energy	RT-CH-130a.1 EM-MM-130a.1	%	22.43%	All global sites
	Total self-generated	RT-CH-130a.1	GJ	3,043,193.33	

Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	RT-CH-140a.1	Cubic meters, %	Water withdrawn: 80,499,666 Water consumed: 24,361,545 Percentages: Pg. 48	All global sites
	(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	EM-MM-140a.1	Cubic meters, %	Pg. 48	All global sites
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	RT-CH-140a.2 EM-MM-140a.2	Annual #	5	All global sites
	Water management risks, and strategies and practices to mitigate those risks	RT-CH-140a.3	Discussion and Analysis	Pg. 45-47	All global sites
Hazardous Waste Management	Amount of hazardous waste generated, % recycled	RT-CH-150a.1	t, %	76,828 14.0%	All global sites
Waste & Hazardous Materials Management	Waste generated		t	1,564,512	All global sites
	Waste diverted from disposal		t	580,185	All global sites
	Waste directed to disposal		t	984,326	All global sites
	Total weight of non-mineral waste generated	EM-MM-150a.4	t	Not reported. Cover under other categories.	All mining sites
	Total weight of tailings produced, % recycled	EM-MM-150a.5	t, %	27,933,723 93.93%	All mining sites
	Total weight of waste rock generated	EM-MM-150a.6	t	Not reported. Cover under other categories.	All mining sites
	Total weight of hazardous waste generated	EM-MM-150a.7	t	76,828	All mining sites
	Total weight of hazardous waste recycled	EM-MM-150a.8	t	Not reported. Cover under other categories.	All mining sites
	Number of significant incidents associated with hazardous materials and waste management	EM-MM-150a.9		No significant incidents reported.	All mining sites
	Description of waste and hazardous materials management policies and procedures for active and inactive operations	EM-MM150a.10	Discussion and Analysis	Pg. 41-43	All mining sites

Tailings Storage Facilities Management	Tailings storage facility inventory table: (1) facility name, (2) location, (3) ownership status, (4) operational status, (5) construction method, (6) maximum permitted storage capacity, (7) current amount of tailings stored, (8) consequence classification, (9) date of most recent independent technical review, (10) material findings, (11) mitigation measures, (12) site-specific EPRP	EM-MM-540a.1	Various	Pg. 101-105	All mining sites
	Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailings storage facilities	EM-MM-540a.2		Pg. 43	All mining sites
	Approach to development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities	EM-MM-540a.3		Pg. 43	All mining sites
	Tailing impoundments broken down by MSHA hazard potential		Number - Low Hazard	26	All mining sites
		Significant Hazard	2	All mining sites	
		High Hazard	11	All mining sites	
Biodiversity Impacts	Description of environmental management policies and practices for active sites	EM-MM-160a.1		Pg. 49-51	
	Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation	EM-MM-160a.2	%	33%	All mining sites
	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	EM-MM-160a.3	%	67%	All mining sites
Security, Human Rights and Rights of Indigenous Peoples	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	EM-MM-210a.1	%	None of our facilities operate near areas of conflict.	All mining sites
	Percentage of (1) proved and (2) probable reserves in or near indigenous land	EM-MM-210a.2	%	61%	All mining sites
	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	EM-MM-210a.3	Discussion and Analysis	Pg. 68-72	
Community Relations	Discussion of engagement processes to manage risks and opportunities associated with community rights and interests	RT-CH-210a.1 EM-MM-210a.3	Discussion and Analysis	Pg. 74	
	Number and duration of non-technical delays	EM-MM-210b.2	#, duration	No delays	All mining sites

Labor Relations	Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees	EM-MM-310a.1	%	Tronox respects our employees' rights to collectively bargain. Approximately 41% of Tronox employees worldwide (0% in U.S.) are represented by a union or collective bargaining agreement.	All global sites
	Number and duration of strikes and lockouts	EM-MM-310a.2	Number, Days	0	All global sites
Workforce Health and Safety	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	RT-CH-320a.1	Rate	2023 TRIFR (Chemicals): Employees: 0.59 Contractors: 0.40 Fatality rate for all sites: 0.00	All chemical sites
	1) MSHA all-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees	EM-MM-320a.1	Rate	2023 NMFR (Mining): 8 LIFE near hits for employees (rate is 0.32) 10 LIFE near hits for contractors (rate is 0.31) 2023 TRIFR (Mining): Employees: 0.36 Contractors: 0.37 Fatality rate for all sites: 0.02 We do not operate mines in the U.S. so the MSHA all-incidence rate is not reported. 71,208 total training hours	All mining sites
	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	RT-CH-320a.2	Discussion and Analysis	Pg. 29	

Operational Safety	Process safety Incident Count (PSIC), Process Safety Incident Rate (PSIR), Process Safety Incident Severity Rate (PSISR)	RT-CH-540a.1	Number, Rate	PSIC (Tier 1): 6 PSIR (Tier 1): 0.056 PSISR (Tier 1): 0.047	All chemical sites
	Number of Transport Incidents	RT-CH-540a.2	Number	0	All global sites
Product Design for Use-phase Efficiency	Revenue from products designed for use phase resource efficiency	RT-CH-410a.1	%	Approximately 71%	
Safety & Environmental Stewardship of Chemicals	(1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, (2) percentage of such products that have undergone a hazard assessment	RT-CH-410b.1	Percentage (%) by revenue, Percentage (%)	Pg. 80-81	All chemical sites
	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	RT-CH-410b.2	Discussion and Analysis	Pg. 80-81	
Genetically Modified Organisms	Percentage of products by revenue that contain GMOs	RT-CH-410c.1	Percentage (%) by revenue	None of our products contain GMOs.	All chemical sites
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	RT-CH-530a.1	Discussion and Analysis	Pg. 80, 81, 87 and Tronox.com	All global sites
Business Ethics & Transparency	Description of the management system for prevention of corruption and bribery throughout the value chain	EM-MM-510a.1	Discussion and Analysis	Pg. 87	All global sites
	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	EM-MM-510a.2	t saleable	None	All mining sites

Activity Metrics

Production by reportable segment	RT-CH-000.A	Pg. 6
Total number of employees, percentage contractors	EM-MM-000.B	Pg. 59

TCFD Framework

Below are key updates to Tronox’s climate strategy and progress, based on the TCFD reporting model. Read Tronox’s full TCFD report [here](#).

Focus Area	Disclosure
Governance	
<p><i>Disclose the organization’s governance around climate-related risks and opportunities.</i></p>	<p>Tronox’s sustainability-related governance structure starts at the highest level of the enterprise: a dedicated committee of the Board of Directors, the Governance and Sustainability Committee, comprised of independent members of the Board of Directors and the non-executive chairman. Throughout 2023, the Corporate Governance and Sustainability Committee met regularly with senior management, including the Chief Sustainability Officer and Head of Investor Relations, to review and discuss ESG-related issues.</p> <p>Underneath the board is a governance structure comprised of multiple layers, starting with Tronox’s senior executives and cascading down to each local site. Climate change is a core focus: reducing emissions, mitigating risk and optimizing opportunities.</p> <ul style="list-style-type: none"> • The Sustainability Council (Council) is the most senior level executive body charged with managing sustainability-related matters at Tronox and meets on a periodic basis. In 2022, to reflect the importance of sustainability to our investors, customers and employees, we consolidated membership in the council to a smaller number of senior leaders to foster greater ownership. The Council is now comprised of Tronox’s most senior executives responsible for operations, finance, commercial, supply chain, legal and investor relations. It is chaired by the Chief Sustainability Officer and Head of Investor Relations. The Council reviews and provides the direction on management of climate related risks and opportunities following the identification and update provided by the sustainability team. • The sustainability team lead by the Vice President of Sustainability is responsible for the identification of climate-related risks and opportunities. The team is also responsible for updating these risks and opportunities on a regular basis to ensure the fast changes in the regulatory and macro-economic environment are proactively monitored. The Vice President of Sustainability is also responsible for providing input and updates as to the risks and opportunities in the annual Enterprise Risk Management review. • The GHG Center of Excellence (CoE) is charged with preparing GHG reduction strategic objectives and priority projects, as well as aligning technical projects needed with other CoEs. • Regional GHG Leadership supports efforts to align regional and global strategies and develop regional GHG roadmaps, and then take responsibility for integration into business planning and project execution. • Tronox has over 20 sustainability workstreams to manage specific projects and initiatives. Each workstream has a senior leader as a portfolio owner, supported by a cross functional team to deliver on project milestones.

Strategy	
<p><i>Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning where such information is material.</i></p>	<p>Our strategy on climate change is three-fold:</p> <ul style="list-style-type: none"> • Achieve net zero carbon emissions by 2050. • Ensure the resilience of our communities and operations against the physical impacts of climate change. • Offer our customers products with the lowest carbon content that is reasonably achievable to help them transition to a low carbon economy. <p>View our Targets and Five-Year Action Plan on pg. 35-36.</p> <p>Our global decarbonization roadmap stems from extensive analysis using a TCFD-compliant methodology and involving all our internal climate governance teams as well as representatives of each business unit and operational function. This work was two-fold:</p> <ul style="list-style-type: none"> • Detailed climate-related transition risk assessment based on various scenarios (see Climate Risks and Opportunities and Scenario Analysis) to identify the key transition risks to the business. • Identification of key mitigation opportunities and a techno-economic performance assessment to model their potential future impact on GHG emissions, energy consumption and mix, and economic performance. <p>Our roadmap covers three key focus areas to achieve our long-term emissions reductions goals: sourcing of 100% renewable electricity, switch to low-carbon reductants, and complete phaseout of fossil fuel energy for thermal needs (natural gas in particular).</p> <p>View more details on the overall strategy in our Tronox TCFD Report.</p>
Risk Management	
<p><i>Disclose how the organization identifies, assesses, and manages climate-related risks.</i></p>	<p>Tronox's primary tool for managing risk is the Enterprise Risk Management (ERM) process. This annual process is overseen by the entire Board of Directors and managed on a day-to-day basis by the Vice President, Internal Audit and Deputy General Counsel. At the management level, a Global Risk Committee (GRC) of senior leaders representing all functions and business units is charged with assisting Tronox's Board to identify significant enterprise risks, assess its risk mitigation strategies and, where appropriate, help implement those strategies. The GRC also reviews and suggests specific risk tolerances and risk appetite.</p> <p>Tronox has analyzed how the relevant climate change "transition scenarios" would impact the company. These transition scenarios were based on the global community's ability to act against climate change, ranging from inaction to sustainable development. We discussed with our internal and external stakeholders how these transition scenarios would impact Tronox and ways Tronox could adjust under each scenario. Next, we conducted a quantitative evaluation of how each scenario would likely impact Tronox's commercial activity. The outcomes of the quantitative risk assessment were reviewed by a cross-functional team to prioritize risks and explore opportunities with the aim of developing a climate change roadmap that is integrated into the company strategy.</p> <p>For more information on the transitional risk assessment methodology and outcomes, view the Tronox TCFD Report.</p>

Metrics and Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

Tronox GHG reduction targets are set against a 2019 baseline and include:

- 25% reduction in Scope 1 and 2 emissions intensity by 2025.
- 50% reduction in Scope 1 and 2 emissions intensity by 2030.
- 100% net zero in Scope 1 and 2 emissions intensity by 2050.

We are focused on cradle-to-gate GHG emissions, so in 2022, Tronox management approved the following Scope 3 GHG emissions intensity targets against our revised 2021 baseline:

- 9% reduction in upstream Scope 3 emissions intensity by 2025.
- 16% reduction in upstream Scope 3 emissions intensity by 2030.

Tronox links 5% of our global incentive program to GHG intensity reduction targets. We measure and report Scope 1, Scope 2 and Scope 3 GHG emissions. View performance data on [pg. 39](#).

Mine Tailings Disclosures

Name	Location	Owner	Status	Current Impoundment Volume (M3)	Last Independent Expert Review	Engineering Records on File	Hazard Category	Stability Concerns Confirmed or Certified by an Independent Engineer	Internal or External Engineering Oversight	Completed Formal Analysis of Downstream Impact
Australia										
Pond 1	Chandala	Tronox Holdings plc	Inactive	N/A	N/A	Original drawings and reports on file	Low hazard	No	Yes	No
Pond 2A	Chandala	Tronox Holdings plc	Active	1046 m3 capacity below freeboard (500mm)	2009	Original drawings and reports on file	Low hazard	No	Yes	No
Pond 2B	Chandala	Tronox Holdings plc	Active	1046 m3 capacity below freeboard (500mm)	2009	Original drawings and reports on file	Low hazard	No	Yes	No
Pond 2C	Chandala	Tronox Holdings plc	Active	5931 m3 capacity below freeboard (500mm)	2012	Drawings and reports on file	Low hazard	No	Yes	No
Pond 3	Chandala	Tronox Holdings plc	Inactive	"Not in use as a process pond 8422 m3 capacity below freeboard (500mm)"	2011	Drawings and reports on file	Low hazard	No	Yes	No
Pond 4A	Chandala	Tronox Holdings plc	Active	2586 m3 capacity below freeboard (500mm)	2017	Pond 004 earthworks construction report (Soil & Rock Engineering, 2001) & drawings	Low hazard	No	Yes	No

Pond 4B	Chandala	Tronox Holdings plc	Active- however not currently holding liquor	1768 m3 capacity below freeboard (500mm)	2009	Pond 004 earthworks construction report (Soil & Rock Engineering, 2001) & drawings	Low hazard	No	Yes	No
Pond 4C	Chandala	Tronox Holdings plc	Active	10487 m3 capacity below freeboard (500mm)	2013	Pond 004 earthworks construction report (Soil & Rock Engineering, 2001) & drawings	Low hazard	No	Yes	No
POND-5	30° 38' 55.5901" S 115° 25' 04.0059" E	Tronox Holdings plc	Active	3,000,000	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
27E Pond	30° 38' 41.2436" S 115° 26' 03.5335" E	Tronox Holdings plc	Active	840,000	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
Pond6A and 6B	30° 37' 47.5739" S 115° 24' 04.5876" E	Tronox Holdings plc	Active	5,070,000	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
Pond7	30° 37' 31.8424" S 115° 24' 19.2417" E	Tronox Holdings plc	Active	4,500,000	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
S19_Pond	30° 35' 57.4311" S 115° 22' 10.1434" E	Tronox Holdings plc	Active	726,000	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
Slime Cell-GR6_1	30° 39' 04.5758" S 115° 26' 06.4871" E	Tronox Holdings plc	Active	163,916	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit

Slime Cell-GR6_2	30° 39' 14.9328" S 115° 25' 50.1170" E	Tronox Holdings plc	Active	505,683	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
Slime Cell-GR6_3	30° 38' 59.7562" S 115° 25' 47.5350" E	Tronox Holdings plc	Active	1,015,158	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
Slime Cell-GR6_4	30° 38' 43.7132" S 115° 25' 39.4191" E	Tronox Holdings plc	Active	55,803	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
Slime Cell-GR6_5	30° 38' 54.5224" S 115° 25' 29.1271" E	Tronox Holdings plc	Active	223,716	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
Slime Cell-GR6_6	30° 38' 32.4248" S 115° 25' 19.8324" E	Tronox Holdings plc	Active	292,266	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
Slime Cell-GR6_7	30° 38' 41.7712" S 115° 25' 11.1989" E	Tronox Holdings plc	Active	468,069	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
Slime Cell-S19E	30° 35' 34.7207" S 115° 21' 53.2433" E	Tronox Holdings plc	Inactive	73,500	N/A	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
Slime Cell-S19F	30° 35' 33.9833" S 115° 21' 46.4967" E	Tronox Holdings plc	Inactive	63,450	N/A	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
Slime Cell-S19G	30° 35' 41.7862" S 115° 21' 39.2501" E	Tronox Holdings plc	Inactive	85,500	N/A	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
MRF- Pit7	30° 39' 43.1106" S 115° 26' 00.8247" E	Tronox Holdings plc	Active	5,220,000	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit

MRF- Pit7 Ext	30° 39' 43.1106" S 115° 26' 00.8247" E	Tronox Holdings plc	Active	1,800,000	2021	Yes. All relevant engineering documents available	Low hazard	No	Yes	N/A In-Pit
South Africa										
BSB Mine Site West RSF 1	"31°16'11.3""S 17°54'02.0""E "	Tronox Mineral Sands (Pty) Ltd - Namakwa Sands	Inactive - but currently mining material	3,036,000	Jul-23	Yes. All relevant engineering documents available	High hazard	No	Yes, External Specialist Engineering Firm	Yes, April 2022
BSB Mine Site West RSF 2	"31°16'38.1""S 17°53'30.3""E "	Tronox Mineral Sands (Pty) Ltd - Namakwa Sands	Inactive - Being Capped for rehabilitation purposes	4,560,000	Jul-23	Yes. All relevant engineering documents available	High hazard	No	Yes, External Specialist Engineering Firm	Yes, April 2022
BSB Mine Site West RSF 3	"31° 1639.4""S 17°53'28.6""E "	Tronox Mineral Sands (Pty) Ltd - Namakwa Sands	Active	8,791,200	Jul-23	Yes. All relevant engineering documents available	High hazard	No	Yes, External Specialist Engineering Firm	Yes, April 2022
BSB Mine Site West RSF 4	"31°17'12.6""S 17°53'23.4"E "	Tronox Mineral Sands (Pty) Ltd - Namakwa Sands	Inactive	23,297,400	Jul-23	Yes. All relevant engineering documents available	High hazard	No	Yes, External Specialist Engineering Firm	Yes, April 2022
BSB Mine Site West RSF 5	"31°17'16.1""S 17°53'23.0""E "	Tronox Mineral Sands (Pty) Ltd - Namakwa Sands	Active	62,920,000	Jul-23	Yes. All relevant engineering documents available	High hazard	No	Yes, External Specialist Engineering Firm	Yes, April 2022
BSB Mine Site West RSF 6	"31°17'51.7""S 17°53'46.2""E "	Tronox Mineral Sands (Pty) Ltd - Namakwa Sands	Active	26,700,000	Jul-23	Yes. All relevant engineering documents available	High hazard	No	Yes, External Specialist Engineering Firm	Yes, April 2022
BSB Mine Site East RSF 1	"31°15'47.1"" S 17°55'15.0"" E "	Tronox Mineral Sands (Pty) Ltd - Namakwa Sands	Inactive - Rehabilitated	130,000	Jul-23	Yes. All relevant engineering documents available	High hazard	No	Yes, External Specialist Engineering Firm	Yes, April 2022
BSB Mine Site East RSF 2	"310 15'47.1""S 17°55'15.8"" E "	Tronox Mineral Sands (Pty) Ltd - Namakwa Sands	Inactive - Rehabilitated	110,000	Jul-23	Yes. All relevant engineering documents available	High hazard	No	Yes, External Specialist Engineering Firm	Yes, April 2022

BSB Mine Site East RSF 3	"31°15'57.5"" S 17° 55'19.8""E"	Tronox Mineral Sands (Pty) Ltd - Namakwa Sands	Active - Emergency water collection	110,000	Jul-23	Yes. All relevant engineering documents available	High hazard	No	Yes, External Specialist Engineering Firm	Yes, April 2022
BSB Mine Site East RSF 4	"31°16'07.1"" S 17°55'05.5"" E "	Tronox Mineral Sands (Pty) Ltd - Namakwa Sands	Active - Emergency water collection	6,160,000	Jul-23	Yes. All relevant engineering documents available	High hazard	No	Yes, External Specialist Engineering Firm	Yes, April 2022
BSB Mine Site East RSF 5	"31°16'07.1"" S 17°55'05.5"" E "	Tronox Mineral Sands (Pty) Ltd - Namakwa Sands	Active	13,585,000	Jul-23	Yes. All relevant engineering documents available	High hazard	No	Yes, External Specialist Engineering Firm	Yes, April 2022
Fairbreeze Mine Site	"X: -3209000 Y: 68000"	Tronox KZN Sands (Pty) Ltd	Active	55,000,000	Mar-23	Yes. All relevant engineering documents available	Significant	Yes. Capital project to enhance stability of western wall. Currently in progress	Yes, External Specialist Engineering Firm	Yes, June 2020
Fairbreeze Mine Site	"X: -3192000 Y: 89000"	Tronox KZN Sands (Pty) Ltd	Inactive	11,140,000	Apr-24	Yes. All relevant engineering documents available	Significant	No	Yes, External Specialist Engineering Firm	Yes, September 2020

Global Locations

NORTH AMERICA

- Hamilton Pigment Plant (United States)
- Oklahoma City Office (United States)
- Stamford Office (United States)

SOUTH AMERICA

- Bahía Pigment Plant (Brazil)
- Paraíba Mine (Brazil)
- São Paulo Office (Brazil)

EUROPE

- Botlek Pigment Plant (The Netherlands)
- Stallingborough Pigment Plant (United Kingdom)
- Thann Specialty Plant (France)

AFRICA

- Centurion Office (South Africa)
- KwaZulu-Natal Central Processing Complex/Smelter (South Africa)
- KwaZulu-Natal Sands Fairbreeze Mine (South Africa)
- Namakwa Sands Northern Operations (South Africa)
- Namakwa Sands Smelter (South Africa)

MIDDLE EAST

- Jeddah Office (Kingdom of Saudi Arabia)
- Mumbai Office (India)
- Yanbu Pigment Plant (Kingdom of Saudi Arabia)

ASIA PACIFIC

- Atlas/Campaspe Mine (Australia)
- Broken Hill Mineral Separation Plant (Australia)
- Bunbury Pigment Plant (Australia)
- Chandala Processing Plant (Australia)
- Cooljarloo Mine (Australia)
- Fuzhou Plant (China)
- Ginkgo Mine (Australia)
- Kwinana Pigment Plant (Australia)
- Seoul Office (South Korea)
- Shanghai Office (China)
- Singapore Office (Singapore)
- Sydney Office (Australia)
- Wonnerup/Northshore Mine (Australia)



DNV

WHEN TRUST MATTERS

Independent Limited Assurance Report

to the Directors of Tronox Holdings plc

DNV Business Assurance Germany GmbH (“DNV”, “us” or “we”) were commissioned by Tronox Holdings plc (“Company”) to provide limited assurance over Selected Information presented in the “2023 Sustainability Report” (the “Report”) for the reporting year ended 31 December 2023.



Our Conclusion: Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information is not fairly stated and has not been prepared, in all material respects, in accordance with the Criteria.

This conclusion relates only to the Selected Information and is to be read in the context of this Independent Limited Assurance Report, in particular the inherent limitations explained overleaf.

Our observations and areas for improvement will be raised in a separate report to Company’s Management. Selected observations are provided below. These observations do not affect our conclusion set out above.

- Overall, the processes and systems for collecting and reporting performance data are robust and well-integrated at various levels within the Company. This is a noteworthy strength, underscoring the Company’s commitment to effective data management. However, we have identified several areas for improvement. There have been instances of data discrepancies due to inconsistencies between internally distributed data and financial records, such as invoices. These discrepancies are primarily caused by entering monthly data before the relevant invoices are received, which has been the main observed source of deviation.
- To address this issue, we recommend establishing a specific timeframe for consolidating final data that aligns with the availability of final numbers from financial documents. Additionally, we suggest implementing a consolidated automated tool. This tool should initially be used by site-level units and subsequently consolidated at the group level before the final data is entered into the GPI system. This approach will enhance data accuracy, reduce manual errors, and ensure consistency across all reporting levels.

Selected information*

The scope and boundary of our work is restricted to the 2023 performance data included within the Report (the “Selected Information”), listed below:

- Direct GHG Emissions (Scope 1) in t CO₂e
- Indirect GHG Emissions (Scope 2) in t CO₂e
- Energy Consumption in millions of Gigajoules
- Waste Generation in tons
- Water withdrawal, discharge and consumption in m³
- Land Use in hectares
- Injury rates per 200,000 hours worked
- Percentage of gender and ethnicity in Management and Governance positions
- Percentage of females and ethnically diversity among Independent board members

*The list above reflects different categories of KPIs. The complete detailed list of KPIs and verified performance data are found in the Appendix.

Criteria

To assess the Selected Information, we have referred to the Company’s emissions reporting criteria found in the following documents from Tronox policy library:

- [50.09 Safety, Health and Environment Reporting Guidelines](#)
- [50.18 Global Environmental Calculation Standard](#)
- [50.19 Global GHG Recalculation Standard](#)

We have not performed any work, and do not express any conclusion, on any other information that may be published in the Report or on the Company’s website for the current reporting period or for previous periods.

Our competence, independence and quality control

DNV’s established policies and procedures are designed to ensure that DNV, its personnel and, where applicable, others are subject to independence requirements (including personnel of other entities of DNV) and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. Our multi-disciplinary team consisted of professionals with a combination of environmental and sustainability assurance experience.

Standard and level of Assurance

We performed our work using DNV's assurance methodology VeriSustain™, which is based on our professional experience and international assurance best practice including the International Standard on Assurance Engagements 3000 ("ISAE 3000"). We planned and performed our work to obtain the evidence we considered necessary to provide a basis for our Assurance Opinion. We are providing a 'limited level' of assurance.

DNV applies its own management standards and compliance policies for quality control, which are based on the principles enclosed within ISO IEC 17029:2019 – Conformity Assessment – General principles and requirements for validation and verification bodies, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement; and the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. We planned and performed our work to obtain the evidence we considered sufficient to provide a basis for our opinion, so that the risk of this conclusion being in error is reduced but not reduced completely.

Basis of our conclusion

We are required to plan and perform our work in order to consider the risk of material misstatement of the Selected Information; our work included, but was not restricted to:

- Conducting interviews with the Company's management, to obtain an understanding of the key processes, systems and controls in place to generate, aggregate and report the Selected Information;
- Conducting an on-site visit to Botlek (The Netherlands) and remote site visits to KZN (South Africa) and Bunburry (Australia), and teleconferences with the headquarter to review processes and systems for preparing site level data consolidated at Group level. We were free to choose the sites on the basis of their material contribution to Tronox's data;
- Performing limited substantive testing on the most significant contributors, to check that their data had been appropriately measured, recorded, collated and reported;
- Reviewing that the evidence, measurements and the context provided to us by Tronox for the Selected Information is prepared in line with the Criteria;
- Assessing the appropriateness of the Criteria for the Selected Information; and
- Reviewing the Report and accompanying narrative to the Selected Information in regard to the Criteria.

For and on behalf of DNV Business Assurance Germany GmbH



Oliver Bley, Reviewer



Timothy Bankroff, Lead Auditor

Essen, Germany
26 July 2024

Inherent limitations

All assurance engagements are subject to inherent limitations as selective testing (sampling) may not detect errors, fraud or other irregularities. Non-financial data may be subject to greater inherent uncertainty than financial data, given the nature and methods used for calculating, estimating and determining such data. The selection of different, but acceptable, measurement techniques may result in different quantifications between different entities. Our assurance relies on the premise that the data and information provided to us by Tronox Holdings plc have been provided in good faith. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Independent Limited Assurance Report.

Responsibilities of the Directors of Tronox Holdings plc and DNV

The Directors of the Company have sole responsibility for:

- Preparing and presenting the Selected information in accordance with the Criteria;
- Designing, implementing and maintaining effective internal controls over the information and data, resulting in the preparation of the Selected Information that is free from material misstatements;
- Measuring and reporting the Selected Information based on their established Criteria; and
- Contents and statements contained within the Reports and the Criteria.

Our responsibility is to plan and perform our work to obtain limited assurance about whether the Selected Information has been prepared in accordance with the Criteria and to report to Tronox Holdings plc in the form of an independent limited assurance conclusion, based on the work performed and the evidence obtained. We have not been responsible for the preparation of the Reports.

DNV Business Assurance

DNV Business Assurance Germany GmbH is part of DNV – Business Assurance, a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance. <https://www.dnv.com>

- Appendix: Tronox sustainability report 2023 KPIs covered in this assurance engagement and where they are located in the report

Environmental KPIs

KPI	Units	Reported Figures	Report Page
Direct GHG Emissions (Scope 1)	t CO2e	2.019.714,67	Page 39
Indirect GHG Emissions (Scope 2)	t CO2e	1.766.509,06	Page 39
Biogenic Emissions	t CO2e	39.175,00	Page 39
Direct GHG Emissions Intensity	t CO2e/product unit	0,87	Page 39
Indirect GHG Emissions Intensity	t CO2e/product unit	0,74	Page 39
Renewable Fuel Sources (direct)	millions of gigajoules	0,79	Page 40
Electricity and Steam Sold (direct)	millions of gigajoules	-1,93	Page 40
Electricity (Indirect)	millions of gigajoules	7,80	Page 40
Steam (Indirect)	millions of gigajoules	0,45	Page 40
Direct Energy Intensity	gigajoules/metric ton produced	11,36	Page 40
Indirect Energy Intensity	gigajoules/metric ton produced	3,53	Page 40
Hazardous Waste (tons)	metric tons x100,000	0,77	Page 44
Non-Hazardous Waste (tons)	metric tons x100,000	14,88	Page 44
Hazardous Waste Intensity	metric tons/metric tons produced	0,03	Page 44
Non-Hazardous Waste Intensity	metric tons/metric tons produced	0,64	Page 44
Water Intensity	millions of cubic meters/metric tons produced	34,50	Page 48
Water Withdrawal	millions of cubic meters	80,55	Page 48
Water discharge	millions of cubic meters	- 56,14	Page 48
Water consumption	millions of cubic meters	24,41	Page 48
Area disturbed	Hectares (at year end)	11.268	Page 53
Area in rehabilitation	Hectares (at year end)	3.275,00	Page 53
Area restored	Hectares (over the years, at year end)	8119,17	Page 53

- Appendix: Tronox sustainability report 2023 KPIs covered in this assurance engagement

Social / Safety KPIs

KPI	Units	Reported Figures	Report Page
Disabling Injury Frequency Rate	disabling injuries per 200,000 hours worked	0,23	Page 26
Total Recordable Injury Frequency Rate	recordable injuries per 200,000 hours worked	0,43	Page 26
Senior Management Executive	Percentage distribution by gender, ethnic background	Male 78% Female 22% Black & Minorities 13% white 39% Not Tracked 47%	Page 60 and Page 62
Governance Body	Percentage distribution by gender, ethnic background	Male 78% Female 22% Black & Minorities 11% white 67% Not Tracked 22%	Page 60 and Page 62

Governance KPIs

KPI	Units	Reported Figures	Report Page
Female Independent Board Members	Percentage	33%	Page 84
Racially and Ethnically Diverse Independent Board Members	Percentage	10%	Page 84



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

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