

Brilliant transformation.

TRONOX HOLDINGS PLC | 2021 SUSTAINABILITY REPORT

TRONOX 

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Namakwa Sands Northern Operations, South Africa

2021 Highlights



\$3.572 billion
in revenue

TCFD + SASB
alignment

ESG oversight
at Board level



13% reduction
200 MW solar energy project will reduce global Scope 1 and 2 GHG emissions intensity by 13% against 2019 baseline

10,000 trees
planted in Australia

Platinum rating
by EcoVadis, awarded to the top 1% of the 85,000 companies evaluated



\$10.9 million
for employee development

440,000+
training hours completed by employees and contractors



\$2.6 million
in community investments

270
interns, apprentices and co-op students

Letter from the Co-CEOs

Intentional investments in sustainability are delivering results.

Tronox proudly steps into the role of leading the industry in sustainability and protection of the environment. We have taken a number of significant steps over the last year to advance that leadership:

- ➊ **Announced an initial roadmap** to reach our goal of carbon neutrality by 2050.
- ➋ **Entered an agreement for renewable solar energy** in South Africa, which will reduce our global GHG emissions intensity approximately 13 percent from our 2019 baseline.
- ➌ **Restructured our Board** to designate a committee with specific responsibility for sustainability oversight.
- ➍ **Aligned with the Task Force on Climate-Related Financial Disclosures** (TCFD) and Sustainability Accounting Standards Board (SASB) reporting.

We are honored to share that Tronox was awarded a Platinum rating from EcoVadis, an independent sustainability assessment organization. It also puts us in the top 1 percent of the 85,000 evaluated companies.

PEOPLE

Keeping our people safe and ensuring they feel valued is how we define success, and how we unleash our full potential. We are implementing our safety, health and environment strategy across Tronox, designed to empower our employees and contractors to further improve our safety performance and culture to enhance safety in our workplace.

In addition to safety, we are enriching our diversity. In 2021, we benchmarked our employee development programs and used the insights to help our leaders to build a strong talent base, which contributes to a robust learning culture. We also solidified our commitment to Diversity, Equity and Inclusion (DEI), including signing the CEO Action for Diversity & Inclusion™ pledge. We strive to be an organization where our leaders foster and encourage a diverse workforce and where all people feel valued, represented and respected.

RESILIENCY

Despite COVID and the upheaval in the global supply chain, Tronox achieved record production to meet the demand of our customers. Our vertical integration and geographical advantage enabled us to navigate various raw material, shipping and other supply challenges that besieged our competitors.

We are making significant capital investments in mine development and newTRON, our business transformation program, to help achieve our long-term strategy of being the world's leading vertically integrated manufacturer of titanium dioxide (TiO₂).

RESPONSIBILITY

We strive to be responsible stewards of the environment, respectful neighbors to the communities in which we operate, and a reliable manufacturer of products that contribute to a cleaner, more brilliant planet.

Our most tangible demonstration of environmental stewardship are our goals and actions to reduce GHG emissions and solid waste. We also maintain a strong commitment to biodiversity and protecting the environment for our communities. In 2021, we laid the groundwork to expand our community and stakeholder engagement that will allow us to further enhance community engagement and honor cultural heritage. We also continue our commitment to the 10 principles of the United Nations Global Compact.

Our commitment to sustainability goes beyond our operations to how our products are used. Tronox is proud to offer products that harness the unique properties of TiO₂ to help our customers and the world meet the demands of climate change.

Our people continue to demonstrate resiliency in the face of unprecedented challenges while maintaining a commitment to safe, reliable and responsible operations. Their dedication and achievements allow us to invest in the future for a **brilliant transformation and sustainable success.**

Sincerely,



John D. Romano
co-Chief Executive Officer



Jean-François Turgeon
co-Chief Executive Officer

About Tronox

Tronox is the world's leading vertically integrated manufacturer of titanium dioxide pigment. Our global operations are positioned to meet the needs of our customers around the world.

We mine and process titanium ore, zircon and other materials. The titanium ore is then used to manufacture a range of titanium dioxide pigment products primarily sold to paint and coatings customers. In addition, we produce a variety of specialty-grade pigments and high-purity titanium chemicals, used in certain specialty applications.

With an uncompromising focus on operating safe, reliable and responsible facilities, Tronox continues to invest in sustainability and our people, as well as strengthening our vertical integration to improve our position among the industry's lowest-cost producers.



6,500 full-time employees

9 TiO₂ pigment facilities

6 mines

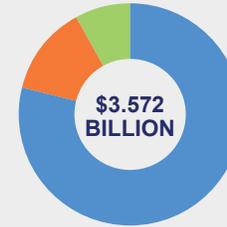
5 upgrading facilities

Kwinana Pigment Plant, Western Australia



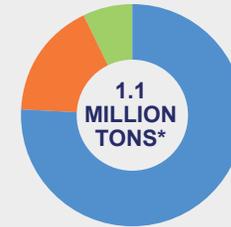
SUSTAINABLE GROWTH

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. Learn about Tronox's essential products that benefit the world on pg. 58-60.



REVENUE FROM PRODUCT SALES

- 79% TiO₂
- 13% Zircon
- 8% Feedstock & Other Products



SALES VOLUME DISTRIBUTION BY END USE

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

* Nameplate capacity

Industries across the globe are facing unprecedented supply chain challenges. Tronox's vertical integration model and geographical advantage enable us to best navigate these challenges relative to our peers.

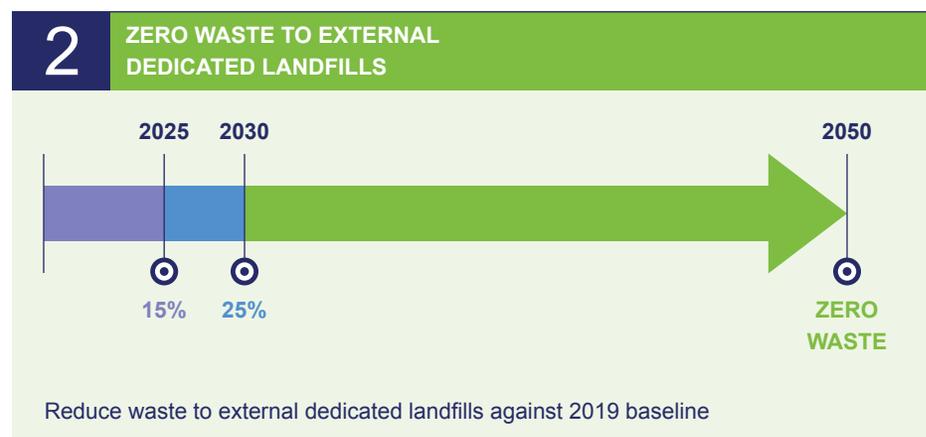
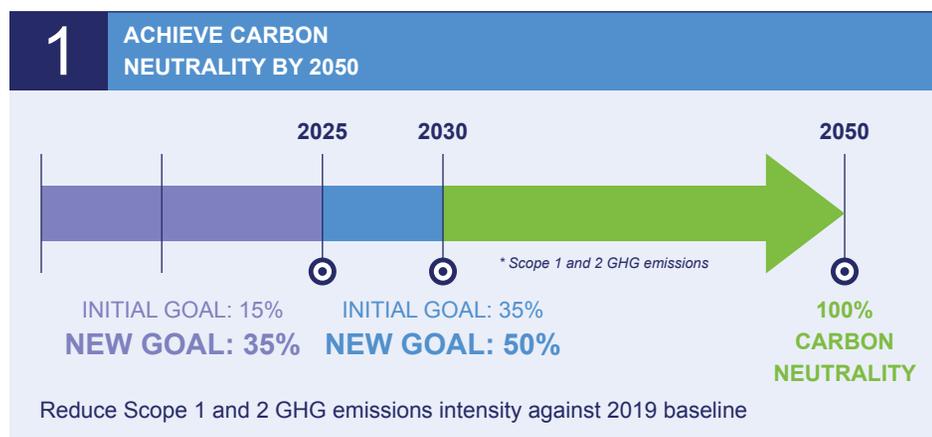
DRIVEN BY OUR VALUES

Living our values unleashes our ability to achieve our full potential.

- ① We have an uncompromising focus on operating **safe, reliable and responsible facilities**.
- ① We honor our responsibility to **create value** for stakeholders.
- ① We treat others with respect and act with **personal and organizational integrity**.
- ① We build our organization with **diverse, talented people** who make a positive difference and we invest in their success.
- ① We are **adaptable, decisive and effective**.
- ① We are **trustworthy and reliable**, and we build mutually rewarding relationships.
- ① We share **accountability** and have **high expectations** for ourselves and one another.
- ① We do **the right work the right way** in every aspect of our business.
- ① We **celebrate the joy of working together** to accomplish great things.

Sustainability Goals

In 2021, we set new goals and commitments to address our impact across all our operations to achieve a *brilliant transformation*. We empowered our people to seek opportunities to deliver on those goals.



Everyone at Tronox is part of our vision for a sustainable future — *from our Board of Directors to each employee at every site.*

Improved Reporting

We consider the United Nations Sustainable Development Goals (UN SDGs) when setting goals for our own business. We believe Tronox can most impact these UN SDGs:



UNITED NATIONS GLOBAL COMPACT

Tronox became a signatory to the UN Global Compact (UNGC) in 2021. This report includes our first Communications on Progress on pg. 78-79.

It is important to improve how we report our sustainability efforts and successes to ensure transparency. We follow guidance from a range of global initiatives to more thoroughly report to our stakeholders, including: **TCFD, SASB and GRI.**

KEY ENHANCEMENTS TO TRONOX REPORTING

In the spirit of continuous improvement, we look for ways to improve our reporting each year. Enhancements this year include:

- ▶ Accelerated Scope 1 and 2 GHG reduction targets
- ▶ Addition of upstream Scope 3 emissions data
- ▶ Initial TCFD Report
- ▶ SASB Index for both Chemicals and Mining & Metals industry standards
- ▶ Supplier Sustainability Policy



We are proud to have been awarded a Platinum rating from EcoVadis, one of the world's most trusted providers of business sustainability ratings.

Setting Priorities

Engaging with and understanding the goals of our stakeholders guides our sustainability strategy. In 2021, we took steps to ensure that our sustainability initiatives and priorities were aligned with the expectations of our stakeholders.

Like much of the global investment community, our shareholders are very interested in how we plan to address and prepare for climate change. We received positive feedback for setting public targets related to emissions reduction for the near-, medium- and long-term, and our path toward achieving those goals.

To add transparency for shareholders and other stakeholders, Tronox is now aligned to TCFD, which helps us to formally assess our ability to navigate the business impacts and the physical risks associated with climate change, then develop plans to enable our business to successfully adapt.

Our customers are interested in what we are doing to reduce our product’s environmental footprint, particularly as industries prepare for Scope 3 reporting. The clarity of our emission reduction targets, and the specificity of our plans for achieving these reductions, again provide confidence in our ability to meet our goals. Also, we continue to advance customer partnerships and share information that supports the safe intended use of our products.

We have increased our focus on supporting the communities in which we operate, and preserving cultural heritage, particularly in Australia and South Africa where we operate alongside Indigenous communities.

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 questions or comments to sustainability@tronox.com.

PERFORMANCE IMPROVEMENT TARGETS

We have set and achieved short-term performance improvement targets as part of our intentional steps forward to our sustainability goals. View our companywide targets in the [Executive Summary](#).

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

SOCIAL
• Health and Safety
• Community and Rights of Indigenous People
• Fair Employment Practices
• Diversity and Inclusion

RESPONSIBLE BUSINESS
• Economic Performance
• Financial Disclosure of Climate-Related Risks
• Climate-Related Risks
• Market Presence
• Procurement Practices
• Fair Business Practices

GOVERNANCE
• Board Governance
• Sustainability Governance
• Sustainability Grievance Mechanisms
• Compliance

Stakeholder Engagement

We engage with many external and internal stakeholder groups to understand their expectations of Tronox, and make adjustments in our behaviors and actions accordingly. Our approach to stakeholder engagement is determined at the local, regional and corporate levels, as appropriate. By operating under our Code of Ethics and Business Conduct (the Code) and adhering to our corporate values, and in collaboration with the External Affairs and Investors Relations teams, each of our locations around the world sets the frequency and level of engagement with its respective stakeholders.

STAKEHOLDER GROUP	TRONOX REPRESENTATIVE	CHANNELS OF ENGAGEMENT	FREQUENCY	KEY TOPICS COVERED
EMPLOYEES	<ul style="list-style-type: none"> • Senior Leaders • Managing Directors • Site Directors • HR Managers • Communications Liaisons 	<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"> • Annually • Quarterly • Monthly • Weekly • As needed 	<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 recognitions • Sustainability approach • Environmental stewardship • Community engagement
COMMUNITIES	<ul style="list-style-type: none"> • Managing Directors • General Managers and Site Directors • SVP Chief Sustainability and Human Resources Officer • VP of SHEQ • Site SHEQ Managers • Communications Liaisons 	<ul style="list-style-type: none"> • Face-to-face meetings • Site tours • Community forums • External events • Community sponsorships 	<ul style="list-style-type: none"> • As needed 	<ul style="list-style-type: none"> • Community investments and rights of Indigenous People • Fair employment practices • Diversity, equity and inclusion • Environmental stewardship procurement practices • Company updates • Job opportunities • Safety performance

STAKEHOLDER GROUP	TRONOX REPRESENTATIVE	CHANNELS OF ENGAGEMENT	FREQUENCY	KEY TOPICS COVERED
INVESTORS AND LENDERS	<ul style="list-style-type: none"> • Board Members • Co-CEOs • CFO • SVP Chief Sustainability and Human Resources Officer • SVP General Counsel and Corporate Secretary • SVP Commercial and Strategy • SVP Operations • VP Treasurer • VP Investor Relations 	<ul style="list-style-type: none"> • Sell-side hosted conferences • Externally hosted events including non-deal roadshows • Company hosted events including investor days • Face-to-face meetings • Calls • Email newsletters • Investor relations website • Press releases 	<ul style="list-style-type: none"> • Annually • Quarterly • Monthly • As needed 	<ul style="list-style-type: none"> • Economic performance and investment • Financial disclosure of risks including climate-related • Board governance • Sustainability governance • Compliance • Market presence • Circular economy • Sustainability approach • Environmental stewardship • Community engagement • Labor relations
CUSTOMERS	<ul style="list-style-type: none"> • Co-CEOs • SVP Commercial and Strategy • SVP Operations • Sales Teams 	<ul style="list-style-type: none"> • Face-to-face meetings • Site tours 	<ul style="list-style-type: none"> • As needed 	<ul style="list-style-type: none"> • Product stewardship • Fair business practices • Market presence
SUPPLIERS	<ul style="list-style-type: none"> • Chief Procurement Officer • Supply Chain Team 	<ul style="list-style-type: none"> • Face-to-face meetings • Site tours • Letters • Contractor safety forums 	<ul style="list-style-type: none"> • As needed 	<ul style="list-style-type: none"> • Market presence • Procurement practices • Safety, health and environmental practices

STAKEHOLDER GROUP	TRONOX REPRESENTATIVE	CHANNELS OF ENGAGEMENT	FREQUENCY	KEY TOPICS COVERED
GOVERNMENT AND REGULATORS	<ul style="list-style-type: none"> • Co-CEOs • SVP General Counsel and Corporate Secretary • Deputy General Counsel • Assistant General Counsels • SVP Chief Sustainability and Human Resources Officer • Managing Directors, General Managers and Site Directors • VP of SHEQ • Site SHE Managers 	<ul style="list-style-type: none"> • Face-to-face meetings • Site tours • Letters 	<ul style="list-style-type: none"> • As needed 	<ul style="list-style-type: none"> • Environmental stewardship • Social responsibility • Financial disclosure of climate-related risks • Board governance • Sustainability governance • Economic performance and investment • Safety and environmental performance and controls • Market challenges • Procurement practices • Fair employment practices
NON-GOVERNMENTAL BODIES AND INDUSTRY INITIATIVES	<ul style="list-style-type: none"> • SVP Chief Sustainability and Human Resources Officer • Managing Directors • General Managers and Site Directors • VP of SHEQ • Site SHE Managers 	<ul style="list-style-type: none"> • Face-to-face meetings • Site tours • Community forums • Sponsorship agreements 	<ul style="list-style-type: none"> • As needed 	<ul style="list-style-type: none"> • Environmental stewardship • Fair employment practices • Sustainability grievance mechanisms • Board governance • Sustainability governance • Economic performance and investment • Safety and environmental performance and controls

EDUCATING THE TRONOX TEAM ON SUSTAINABILITY

To achieve our sustainability goals, it is essential for employees to understand how we define and value sustainability at Tronox, why it matters to the business, and their role in helping us meet our goals. Our Brazil team implemented a new Sustainability Culture Program where more than 360 employees received training to understand how they are active contributors to sustainability and how to identify opportunities for improving our ways of work. Topics included environmental impact and climate action, human rights, ethics and sustainable business management. Site leaders participated in a more robust series of expert-led workshops that aid us to better benchmark our sustainability performance. In appreciation of Brazil's efforts to spearhead internal sustainability education in 2021, Tronox awarded the team with a Silver CEO Award.

Also in 2021, we introduced a companywide educational video series focused on what sustainability means to Tronox, why it is elemental to our business and how each employee has an active role in our sustainability success.



Sustainability is not something that we do — it is everything that all of us do in our daily routine. In Brazil, we are doing our homework by training 100% of our employees to engage them fully in our sustainability culture.

Mario André Bernardo, SHEQ manager



Bahia Plant, Brazil

Leading with Safety



We inspire world-class safety for employees and contractors across all our operations.

GOALS

- 🎯 Zero accidents
- 🎯 Zero incidents
- 🎯 Zero harm
- 🎯 Zero fatalities across the company



Wonnerup, Southern Operations, Western Australia



Northshore, Southern Operations, Western Australia

Occupational Safety Approach

Our leading core value is that we have an unwavering focus on operating safe, reliable and responsible operations. This core value set the foundation of our new global Safety, Health and Environment (SHE) strategy, and our achievement of our two safest years on record.

In order to do work safely, we must start by fully understanding our work. Through this principle of understanding, we aim to elevate how we guide, enable and execute work by building capacity — including time, resources and skills — and empowering our employees to lead with safety. Through the better understanding of the challenges of our daily work, and honoring our values, we foster safe outcomes.

Our 2021 efforts concentrated on skill-building and redefining what safety leadership is for our supervisors and managers, site leadership, and the global SHE team. Training programs focused on:

- **Exploring** human and organizational performance philosophies with safety experts.
- **Enabling** effective conversation and hazard management skills for our frontline supervisors and managers to drive sustainable safety and operational improvement.
- **Encouraging** proactive action before any harm occurs.

Virtual training and one-on-one coaching was piloted with global safety leadership and teams in Australia and South Africa, and involved real-time applications and improvements that enhanced safety outcomes. We plan to expand the successes of the programs to all regions in the coming months.

In 2022, we are developing leading safety indicators specifically designed to engage employees in the safety of work — culture, hazards identifications, sharing, and more — to supplement our current monitoring of traditional, lagging metrics.

PUTTING TRAINING TO WORK

Each week throughout the safety leadership training course, the participating supervisors and managers were asked to practice what they learned with their teams. This helped the participants to swiftly exercise new concepts in real-world applications then report what they experienced to further build the entire group's education.

Examples of the training at work include:

- **Taking a “safe hold”** to pause while executing a task to ensure all is in order.
- **Hosting “hazard hunts”** to find hazards and take steps to reduce them and help the task go more smoothly.

WORKFORCE SAFETY

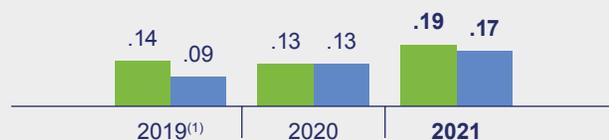
Disabling injuries are defined as fatalities, lost-time injuries and restricted work cases.

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.

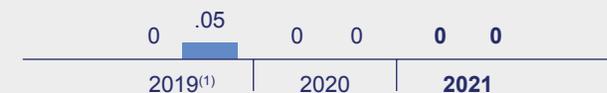
DISABLING INJURY FREQUENCY RATE



TOTAL RECORDABLE INJURY FREQUENCY RATE



FATALITY RATE



● Employees and contractors ● Employees only ● Contractors only

	2019 ⁽¹⁾			2020			2021		
	E: Employees	C: Contractors	T: Total	E	C	T	E	C	T
Fatalities	0	2	2	0	0	0	0	0	0
Lost-Time Incidents	4	3	7	7	5	12	8	8	16
Restricted Work Cases	1	4	5	1	1	2	3	1	4
Disabling Injuries	5	9	14	8	6	14	11	9	20
Medical Treatment Cases	13	16	29	14	12	26	11	11	22
Recordable Injuries	18	25	43	22	18	40	22	20	42
Reversible Occupational Health Illnesses	0	0	0	0	0	0	0	0	0

(1) Tronox acquired the TiO₂ business of Cristal on April 10, 2019. 2019 data does not include the full calendar year for Cristal.

By operating safely, we assure our employees and their local communities that we provide safe and valuable work, and demonstrate to customers that we have reliable operations that can consistently fulfill their needs.



Fuzhou Plant, China

EMPLOYEES COMMIT TO SAFETY AT FUZHOU PLANT

More than 400 employees at the Fuzhou plant in China participated in an outdoor town hall to inaugurate a new safety initiative, which reminded everyone of their responsibility to keep their workplaces and each other safe. The event concluded with everyone promising to work safely by signing their commitment on a large poster.

Health Approach

Part of our commitment to safety is to reduce exposure to occupational health risks for our employees and contractors through:

- ➊ **Identifying** sources and extent of exposures in the workplace.
- ➋ **Using** exposure controls, such as material substitution, personal protective equipment (PPE), noise reduction measures and more.
- ➌ **Record keeping** and employee notification requirements.
- ➍ **A repository** of exposure results and work conditions for management, medical, and legal users, and that serves as the baseline for future assessments and a resource for epidemiology.

Following recent changes in European Union regulations, Tronox completed detailed testing and analysis of our TiO₂ waste to confirm that it does not qualify as hazardous waste. Even so, we continue to implement control measures, such as introducing more protective PPE and increasing ventilation capacity at our plants, to minimize employee exposure to dust.

📌 CASE STUDY: PRIORITIZING MENTAL HEALTH

One aspect of maintaining a safety culture that is often overlooked is mental health, although globally, one in six adults faces mental health challenges, such as depression and anxiety. We are proud Tronox has expanded the mental health support provided to employees across the organization. Some examples include:

📌 The Stallingborough **Mental Health First Aiders program** continued to grow, training a second cohort of First Aiders who are available to talk with employees about any mental health concerns they may be facing.

📌 Brazil employees and their family members are invited to participate in **weekly mindfulness sessions**.

📌 Our South Africa operations launched a **Mindful Monday poster series** to point employees and their families to resources to help with mental health and wellbeing, particularly related to the added stress during the pandemic. They also hosted **virtual sessions with a psychologist** during Women's Month and Men's Month.

📌 We launched a similar **Mindful Monday** campaign in Saudi Arabia, as well as offered virtual mental health sessions with an outside provider. As part of Mental Health Awareness Month, the team shared the importance of mental wellbeing and ways of dealing with work stress.

📌 In Australia, we embraced the **Blue Tree Project**, an international initiative in which blue-painted trees remind people to speak up when experiencing mental health concerns. Tronox's blue trees are located at our Chandala and Wonnerup sites, with more coming. We also provided mental health training for all employees, including information about how they and their families can access resources through the Employee Assistance Program.



Wonnerup, Southern Operations,
Western Australia

Committed to Our Environment



Our environmental stewardship begins with the end in mind.

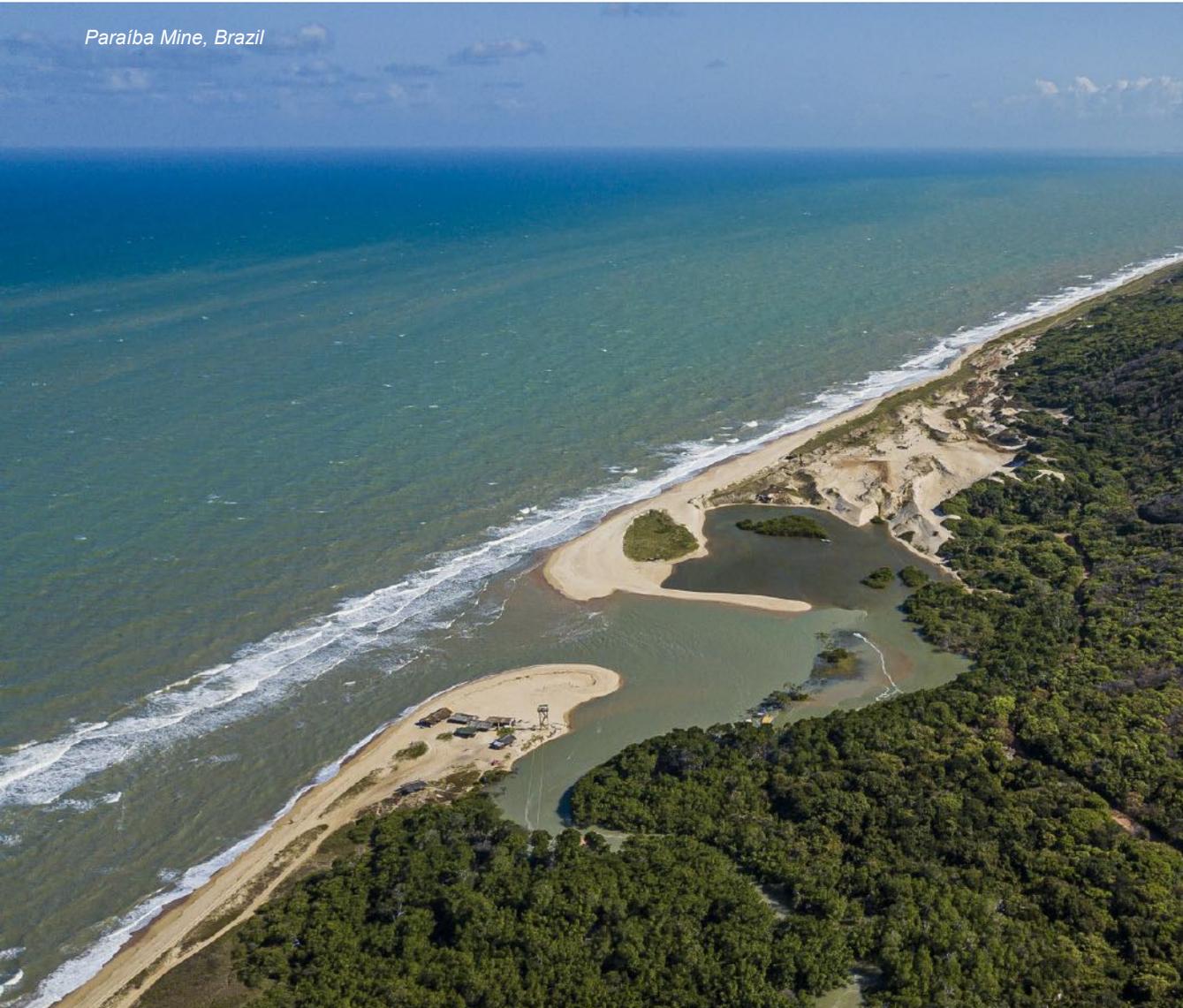
GOALS

- Carbon neutral by 2050
 - NEW 2030:** 50% reduction in Scope 1 and 2 GHG emissions intensity against 2019 baseline
 - NEW 2025:** 35% reduction
- Zero waste to external dedicated landfill by 2050
 - 2030:** 25% reduction
 - 2025:** 15% reduction



Tronox protects the endangered Carnaby's cockatoo near Cooljarloo Mine, Northern Operations, Western Australia.

Paraíba Mine, Brazil



A major accomplishment in 2021 was setting out a detailed roadmap to align our business to a 2° centigrade global warming scenario and meeting the global challenge of achieving net-zero emissions by 2050. We reinforced those efforts by including annual carbon emission reduction targets in our executive compensation plan.

We have also taken significant steps in our plans to reduce waste to external dedicated landfills.

As a mining and chemicals manufacturing company, our business requires an unwavering focus on protecting our environment. That is why we strive to set an example of accountability and proactive environmental stewardship as an essential component of our business.

We are continuously improving our environmental footprint through monitoring and data collection. In 2020, Tronox team members validated baseline environmental performance information and set environmental performance indicators to track at both individual sites and globally. These are tracked by site management and reported at a global level.

Climate Approach

Tronox has taken action to meet the global challenge of achieving carbon neutrality by 2050. While we have been analyzing how to reduce GHG emissions from our production cycle for quite some time, 2020 and 2021 were important years in setting our strategic path. In addition to announcing short-, medium- and long-term goals for reducing our GHG emissions against a 2019 baseline, we have taken the following steps as part of our plan to achieve carbon neutrality by 2050:

- **Aligned our approach with the TCFD reporting standard.** We completed the scenario analysis in 2021 and will incorporate findings into our enterprise risk management process and sustainability strategies in 2022. [Read more on pg. 22.](#)
- **Developed a plan** to track upstream Scope 3 emissions.
- **Signed an agreement to replace 200 MW of coal-based electricity** supply in South Africa with renewable solar energy to reduce our Scope 1 and Scope 2 GHG emissions intensity. [Read more on pg. 24.](#)
- **Linked 5 percent of our global incentive program** to GHG intensity reduction targets, and exceeded that target for 2021.
- **Reduced emissions intensity by 5 percent** compared to our 2019 baseline by operating more efficiently and optimizing our chloride pigment process.



Stallingborough Plant, United Kingdom

- **Identified additional efficiencies** for 2022 based on the use of automation technology that will make our operations less carbon intensive.
- **Participated in a study** to evaluate and benchmark our carbon reduction strategy sponsored by the Assessing low-Carbon Transition (ACT) initiative, a joint voluntary initiative of the UNFCCC secretariat Global Climate Agenda, and founded by CDP and ADEME.

Another key part of setting us on the right path to our carbon neutral goal was setting up a Carbon Center of Excellence to assist each Tronox site to develop a detailed roadmap of strategies and actions to reduce emissions and address climate change–related challenges specific to that site.

In addition to taking action to address our operational impact on climate change, we are proud to offer products that leverage the photocatalytic properties of TiO₂ to help clean the air. Read more about our products that benefit the world on pg. 58-60.

Building Climate Resiliency Through TCFD

When Tronox set the goal to reach carbon neutrality by 2050, we also set forth a detailed and substantive roadmap to achieve our target reductions. Incorporating the TCFD framework guides this planning process.

We began incorporating our TCFD approach by focusing on the following:

- **Governance:** Established a cross-functional governance structure to address climate change challenges and opportunities, and align our efforts across our global functions and regional sites.
- **Strategy:** Conducted scenario analyses and physical risk assessments to understand the potential impact of climate change on our operations. We now are in the process of finalizing the transitional risk assessments.
- **Risk Management:** Identified the greatest risks to Tronox’s resilience through different climate change scenarios.
- **Metrics:** Established metrics for measuring Tronox’s impact on climate change, including reductions in Scope 1 and 2 emissions and future reporting of Scope 3 emissions.

Our strategy on climate change is three-fold:

- **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.

We also spent the last year focused on quantifying and understanding our upstream Scope 3 emissions and cradle-to-gate environmental footprint of our main products. The main contributor to our Scope 3 emissions is the manufacturing and transportation of chemicals and other raw materials used in our production processes. To effectively reduce Scope 3 emissions, we must understand the potential risks associated with switching away from high-carbon raw materials and develop the necessary plans to either substitute or collaborate with our suppliers to reduce the carbon footprint of these materials.



TCFD requires organizations to be more forward-looking through setting carbon reduction plans and assessing our resiliency to navigate the uncertainties associated with moving toward low-carbon economies. This means we needed to closely study the business impacts and the physical risks associated with climate change, then develop plans to address these potential scenarios. These plans ultimately will be integrated into our business strategy and enterprise risk management.

Wael El Banna, Principal Environmental Advisor



➤ [VIEW TRONOX’S FIRST TCFD DISCLOSURE HERE.](#)

EMISSIONS METRICS

SCOPE 1 AND 2 GHG EMISSIONS

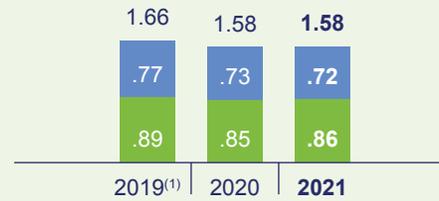
(millions of metric tons of CO₂ equivalents)



- Scope 1 Direct GHG Emissions
- Scope 2 Indirect GHG Emissions
- Biogenic GHG Emissions

GHG EMISSIONS INTENSITY

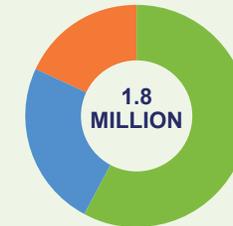
(metric tons of CO₂ equivalents)



- Scope 1 Direct GHG Emissions
- Scope 2 Indirect GHG Emissions

SCOPE 3 EMISSIONS

(millions of metric tons of CO₂ equivalents)



- 58% Process Chemicals
- 24% Energy
- 18% Ore Feedstock
- >0.01% Waste
- >0.01% Water
- >0.01% Wastewater

Most of Tronox's GHG emissions are generated by:

- ▶ Slag furnaces in South Africa.
- ▶ A synthetic rutile kiln in Australia.

- ▶ TiO₂ chemical plants in the United States, United Kingdom, France, Brazil, China, The Netherlands, Australia and Saudi Arabia.

We also use infrastructure, like baghouses, to control particulate matter emissions.

(1) Tronox acquired the TiO₂ business of Cristal on April 10, 2019. 2019 data does not include the full calendar year for Cristal.

📌 CASE STUDY: RENEWABLE ENERGY PROJECT REDUCES CARBON IMPACT

Tronox signed an agreement to replace a significant portion of its coal-intensive electricity supply in South Africa with renewable solar energy — an important step toward meeting our goal to achieve net-zero GHG emissions by 2050. We will achieve this through a long-term power purchase agreement with the independent power producer SOLA Group to deliver 200 MW of solar power to Tronox’s mines and smelters in South Africa.

We anticipate the solar project to be fully implemented by the end of 2023. In addition to the environmental benefits, the project will provide greater energy reliability and cost savings to Tronox.

This important renewable energy project also comes at a time when South Africa is in need of extra capacity to be added to its electricity network. “These types of projects are the fastest way to bring new generation capacity online and not only contribute to closing the electricity supply gap in our country, but also support the much needed transition to clean energy and modernization of our electricity grid,” says Chris Haw, Director and co-founder at the SOLA Group.

SOLA Group is a 100 percent South African–owned, vertically integrated, independent power producer offering renewable energy solutions to the private and public sector in southern Africa.

A South Africa Solar Farm



Once operational, this project will reduce Tronox’s global Scope 1 and Scope 2 emissions intensity by approximately 13%. And, it is just one way Tronox is managing its energy use and carbon impact. We are also investing in fundamental research and development to improve our feedstock upgrading and TiO₂ production technologies to reduce emissions.

Melissa Zona, Senior Vice President, Chief Sustainability and Human Resources Officer



Energy Approach

It takes considerable energy to produce high-quality mineral sands and TiO₂ products, particularly at our slag furnaces at the two smelter sites in Saldanha (Western Cape) and Empangeni (KwaZulu-Natal), South Africa. We work to manage our energy consumption to mitigate our impact on the local environment and on the climate.

Recent initiatives include:

- A renewable solar **energy agreement** in South Africa. [Read more on pg. 24.](#)
- **Programs to optimize the use of coke and chemical yield** that reduced the energy intensity from our chloride pigment plants by around 4 percent compared to the 2019 baseline.
- A multi-year business transformation project, **newTRON**, that will leverage technology to improve efficiency across all aspects of our global business with sustainable outcomes.

The availability of energy directly impacts our operational efficiency, so Tronox invests in efficient energy-generation options, the reuse of process emissions and renewable energy sources.

- Combined heat and power plants **generate electricity and steam** for the Kwinana and Stallingborough Pigment Plants.
- A CO gas facility **reuses CO gas** formed during our furnace smelting operations for various needs in KwaZulu-Natal.
- A cogeneration plant **utilizes previously flared furnace gases** to fuel gas-fired engines for electricity production at the Saldanha smelter.
- A neighboring waste incineration plant in Botlek, the Netherlands, **supplies renewable steam** to satisfy 100 percent of the plant's steam needs.
- A wind turbine farm in Paraíba, Brazil, **supplies renewable electricity** to satisfy approximately 100 percent of the mine's energy needs. Overall electricity consumption has decreased as the site prepares for closure.

We measure our energy consumption and energy intensity at each of our operating sites. Our year-to-year performance, analysis and summary review of short-, medium- and long-term goals are discussed on a quarterly basis with company leadership and all site and regional directors.

Paraíba Mine, Brazil



ENERGY CONSUMPTION METRICS

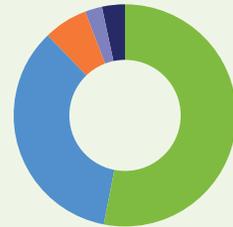
DIRECT ENERGY CONSUMPTION

(millions of gigajoules)



- Renewable fuel sources
- Non-renewable fuel sources
- Electricity and steam sold

2021 NON-RENEWABLE FUEL SOURCES



- 53.2% Natural gas
- 34.6% Cokes/coal reductant
- 6.6% Diesel
- 2.4% Sulfur
- 3.2% Other

INDIRECT ENERGY CONSUMPTION

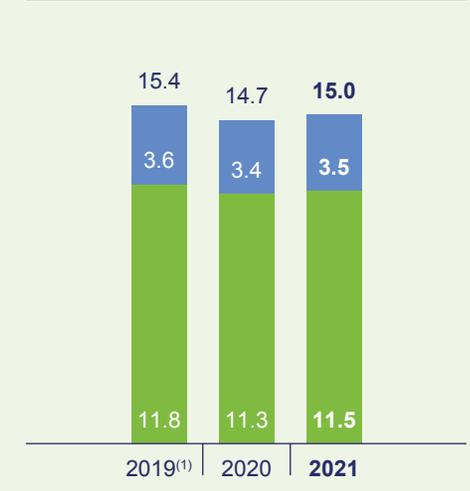
(millions of gigajoules)



- Steam
- Electricity

ENERGY INTENSITY

(gigajoules/metric ton produced)



- Indirect
- Direct

The energy intensity required to produce our products is influenced by multiple factors, such as:

- ▶ Transportation distances.
- ▶ The energy mix of the fuel sources used.

- ▶ The production load of the pigment plants.

In 2021, Tronox experienced an increase in production at our pigment plants and sites with higher energy intensities.

(1) Tronox acquired the TiO₂ business of Cristal on April 10, 2019. 2019 data does not include the full calendar year for Cristal.

(2) 2019 and 2020 data updated to an additional decimal point for more specific reporting.



Cooljarloo Mine, Northern Operations, Western Australia

Waste Management Approach

Tronox takes accountability for our waste, from when we extract resources from the ground until waste leaves our operations. We have set clear goals to reduce the amount of waste we send to external dedicated landfills, ultimately aiming for zero by 2050.

To achieve our goals, we are finding alternative uses and recovering more valuable materials from our waste — creating new revenue streams for Tronox while ultimately reducing our waste to landfill. Much of our efforts in 2021 involved investments in research and development to translate successful lab trials into commercially viable projects.

- **Polymeric Ferric Sulfate:** At our Fuzhou Pigment Plant in China, we are building a polymeric ferric sulfate production facility that will use the waste sulfuric acid, copperas, and ferrous sulfate monohydrate from our pigment process. The project is expected to reduce waste red gypsum by approximately 30 percent. The construction started in fall 2021, and the plant was commissioned in April 2022.
- **Sulfuric Acid:** Our Bahía team is working with fertilizer manufacturers to explore how they can utilize leftover sulfuric acid to make important ingredients for agricultural fertilizers. Efforts to recycle and reuse sulfuric acid in our own processes also are underway at the Fuzhou Pigment Plant in China and the Thann Pigment Plant in France. [Read more on pg. 29.](#)

- **TiO₂ byproducts:** The Bunbury Pigment Plant in Western Australia is exploring using our treated solid residue as an ingredient for road mix, construction materials and mine rehabilitation filler. We also are working with an industry partner on the feasibility of recovering multiple valuable metals from pigment wastes at their plant. Due diligence studies are in progress and could lead to a more detailed prefeasibility study.

All wastes leaving our sites are labeled, weighed and only handled by contracted and/or authorized service providers. However, some waste stays at our sites. For instance, waste rock is used to fill and contour mined-out areas while tailings are deposited in sedimentation lagoons. Other types of waste are placed in landfill pits specifically designed for either hazardous or non-hazardous waste. We monitor and report on our waste type and disposal method to help us manage our impact.

Mine Tailings Storage

Safely containing tailings, the leftover material from mining, is one of the most significant aspects of mine development. All Tronox facilities are designed by qualified engineering experts, and we conduct stability monitoring in accordance with local regulatory requirements.

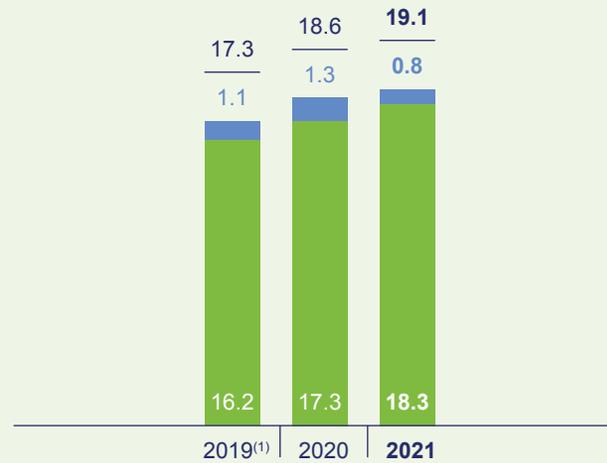
Our Tailings Storage Center of Excellence is working to find a breakthrough solution to eliminate the need to construct tailings storage facilities in the future, and ensure our tailings facilities are managed in accordance with the Global Industry Standards on Tailings Management (GISTM). Tronox has completed a gap analysis against the GISTM, and set a roadmap to close any gaps by August 2023. 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.

In 2021, we focused on tailings storage facilities with high and medium hazard classification. This included updating our breach analysis and risk assessment for our main tailings storage facility, and conducting an expert review to ensure the facility is aligned with GISTM and the Australian National Committee on Large Dams. The studies concluded that our facilities with high hazard classification are well engineered and there are no significant investments required. We also optimized the stability of one of our tailings storage facilities that is classified under the significant impact category. In 2022, we will address administrative aspects of GISTM and conduct an external audit of all tailings storage facilities.

WASTE METRICS

WASTE METRICS

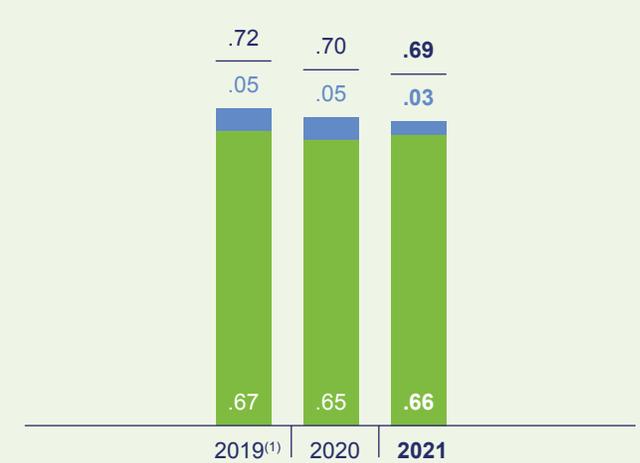
(metric tons x100,000)



● Non-Hazardous Waste ● Hazardous Waste

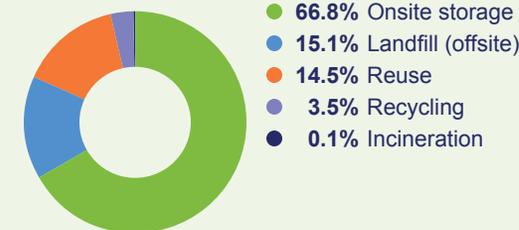
WASTE INTENSITY

(metric tons)

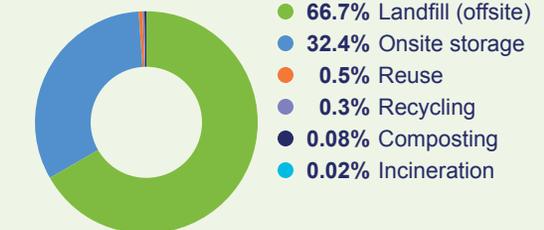


● Non-Hazardous Waste ● Hazardous Waste

HAZARDOUS WASTE



NON-HAZARDOUS WASTE



(1) Tronox acquired the TiO₂ business of Cristal on April 10, 2019. 2019 data does not include the full calendar year for Cristal.

📌 CASE STUDY: RECYCLING OUR SULFURIC ACID



Thann, France

Thann's sulfuric acid recycling project was awarded the Responsible Care® Energy Trophy from France Chimie, the professional association for French chemical companies.

Recycling sulfuric acid in our pigment manufacturing process is one way Tronox is reducing our overall waste to external landfills — one of our key sustainability goals. It also makes the most of the materials we already have — especially when raw materials like liquid sulfur have been difficult to access.

In 2021, the Thann Pigment Plant in France opened a new recycling unit for sulfuric acid. It can recycle about 6,500 tons of sulfuric acid each year (half the weight of the Eiffel Tower), which reduces red gypsum deposits by about 13,000 tons per year. The recovered sulfuric acid undergoes a purification process that uses membrane filtration to separate out any remaining metals. Then, the remaining acid is reused at our plant to process ore material to create TiO₂ pigment.

Not only does sulfuric acid recycling reduce our waste, but it will also enable Thann to reduce its carbon emissions by 3,000 tons per year, as well as provide a 10 percent savings on sulfur purchases.

Recognizing the importance of circular economy initiatives, the French Environment and Energy Management Agency provided €500,000 in grants to help fund the recycling unit at Thann.

We hope the sulfuric acid recovery and purification process can one day be incorporated at Tronox's other pigment plants around the world. It may also be possible for us to sell some of the surplus recovered acid to customers as a commercial product in the future.

Water Management Approach

Access to clean water and sanitation is a major priority for communities around the world and their health — underscored by the UN SDGs. Tronox is committed to doing our part in this effort by managing our water use to address water scarcity.

We measure our water withdrawal at each of our operating sites to understand our use of water for the first time (not reused or recycled water). The annual performance is discussed on a quarterly basis 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.

Our water management approach starts with matching the quality of water used to the operational process in a fit-for-purpose approach, 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. And, we collect and use rainwater at KwaZulu-Natal Sands in South Africa, and at Broken Hill Mineral Processing Plant in Australia.

In areas with high water stress, Tronox has focused efforts to both reduce consumption and to use non-freshwater resources when possible. We have been able to adjust our operations in high water stress areas so that fresh water contributes to less than 65 percent of water used at those sites; compared to 80 percent in areas with low water stress. Sites operating in high-stress areas, per the Aqueduct Water Risk Atlas by the World Resources Institute, are:

- ▶ Australia Eastern Operations
- ▶ Australia Southern Operations
- ▶ Cooljarloo Mining Site in Australia
- ▶ Bunbury Pigment Plant in Australia
- ▶ Yanbu Pigment Plant in Saudi Arabia

Namakwa Sands Northern Operations, South Africa

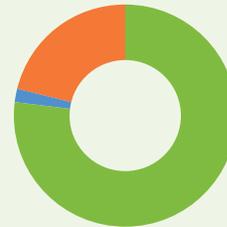


WATER METRICS

Tronox's Kwinana Pigment Plant was endorsed as a Gold Waterwise Business from Water Corporation in recognition of its commitment to the Waterwise Business Program, actions on water management and improvement in water use for the 2020-21 reporting year.

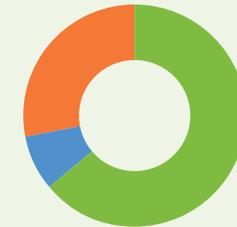
2021 efforts to further optimize our operations and increase efficiencies reduced Tronox's water withdrawal, both in terms of absolute figures and intensity, despite the fact that our production increased compared to 2020. We had an 18 percent reduction in water intensity at our pigments plants, with even greater success at plants operating in water stress areas in Australia and Saudi Arabia, which achieved 24 percent reduction.

TOTAL ACCOUNTED WITHDRAWAL BY WATER QUALITY



- 77% Fresh Water
- 2% Brackish
- 21% Saline/Seawater

TOTAL ACCOUNTED WITHDRAWAL BY WATER QUALITY AT LOCATIONS WITH HIGH WATER STRESS

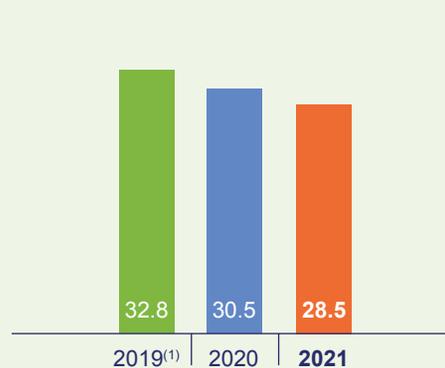


- 64% Fresh Water
- 8% Brackish
- 28% Saline/Seawater

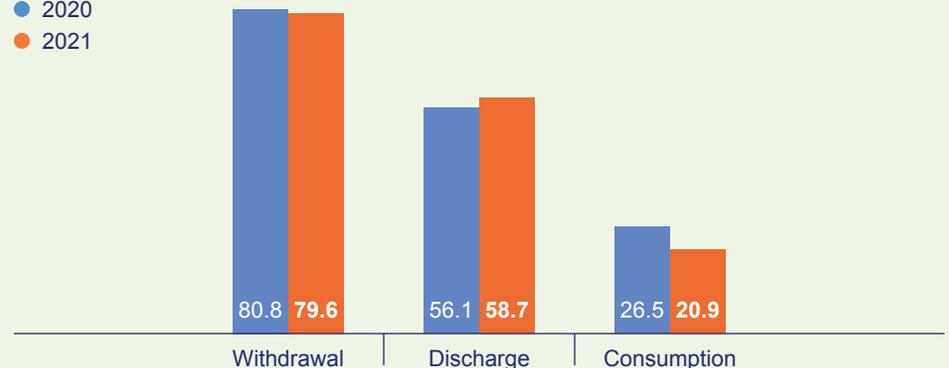
WATER WITHDRAWAL
(millions of cubic meters)



WATER INTENSITY
(millions of cubic meters/metric tons produced)



WATER PERFORMANCE (ABSOLUTE)
(millions of cubic meters)



(1) Tronox acquired the TiO₂ business of Cristal on April 10, 2019. 2019 data does not include the full calendar year for Cristal.

📌 CASE STUDY: IMPROVING WATER CONSUMPTION IN HIGH WATER STRESS AREA



33% reduction *in water withdrawal intensity at our pigment plant in Yanbu, Saudi Arabia, despite an increase in production.*

Our pigment plant in Yanbu, Saudi Arabia, was able to significantly reduce its water usage in 2021. The water withdrawal intensity was reduced by nearly 33 percent — despite an increase in production the previous year. Several projects contributed to this improvement:

- A **preventive maintenance plan** for dryer equipment, which improved performance.
- **Optimization** of dryer washing following the “Manufacturing to Target” philosophy to standardize improved processes.
- **Installation** of new equipment, such as a booster pump on cooling water circuit.
- Close **monitoring and measurement** of process water usage and improving multiple stages of the process.
- A **production plan** that avoids losing overflow of condensate water.

Yanbu, Kingdom of Saudi Arabia

Biodiversity Approach

Our business benefits from the land and often operates in areas that are home to unique animals, plants and wildlife, so it is imperative to us that we protect this biodiversity.

Our first step is to manage and minimize impacts as we operate. We have proactive measures in place to protect animal and flora species. We consider the environmental impact 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. Rehabilitation measures are integrated into our way of doing business from early in the mine's life, and included in the EMPs, Rehabilitation Guidelines and Procedures, and mine closure plans. These measures are monitored and reported on a consistent basis to certify that closure objectives are met.

Then, we rehabilitate these sites so they can thrive long term. 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, such as planting native vegetation. This approach enables us to disturb the land for only a short time and allows animals to move easily throughout the area without having the full habitat impacted.

- ▶ **Brazil:** The Paraíba Mine's environmental recovery program is recognized by the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA) as a model for the re-composition of dunes.
- ▶ **South Africa:** As part of our impact mitigation measures at the Fairbreeze Mine, the company has established protected areas, such as the Siyaya Biodiversity Offset (230 hectares). We also participate in the uMhlathuze Catchment Management Agency, where we play a critical role in ensuring catchment protection and efficient water utilization, and have partnered with the Mtunzini community to form an Environmental Oversight Committee comprising representatives of Tronox and the community.
- ▶ **Australia:** Rehabilitation efforts started at the Crayfish Mine site in 2021. Before beginning construction at the new Atlas-Campaspe Mine site, Tronox prepared a Biodiversity Management Plan, in accordance with Development Consent requirements. The Biodiversity Management Plan provides a description of the existing environment related to these areas, and outlines reporting, auditing and reviewing requirements.

At all our sites, we measure the amount of land disturbed by our operations, as well as rehabilitated or restored.



For the past four years, Tronox has funded research on the wedge-tailed eagle, or Waalitj (local Aboriginal Noongar name). The project involves collecting important data on Australia's largest bird of prey. [Learn more here.](#)

LAND USE AND REHABILITATION METRICS

Data represents a snapshot at year end (December 31 of that year). The land use footprint includes all Tronox operations; however, more than 95 percent of total land use can be attributed to our six titanium feedstock mines in Australia, Brazil and South Africa.

(hectares)	2019 ⁽¹⁾	2020	2021
Area disturbed	9,566	9,613	9,607
Area in rehabilitation	3,003	3,168	3,110
Area restored	6,549	7,006	7,553

(1) Tronox acquired the TiO₂ business of Cristal on April 10, 2019. 2019 data does not include the full calendar year for Cristal.

Cooljarloo Mine, Northern Operations,
Western Australia



RESTORED HABITATS AT OUR MINES

Our rehabilitation expenditures increased in 2021 as a result of increased rehab activities.

MINE	AREA OPENED DURING FISCAL YEAR (hectares)	AREA RESTORED DURING FISCAL YEAR (hectares)	EXPENDITURES ON REHABILITATION DURING YEAR ⁽¹⁾ (USD)
Australia Eastern Mining	259	197	\$ 2,445,978
Australia Western Mining	58	118	\$ 2,477,838
KwaZulu-Natal Sands	31	10	\$ 3,138,288
Namakwa	277	104	\$ 3,064,501
Northern Operations	129	82	\$ 1,086,955
Paraíba	0	36	\$ 368,605
Total	754	547	\$12,582,165

(1) Rehabilitation expenditures include only mine rehabilitation. For full rehabilitation spending on all operations, view our Form 10-K.



Chandala, Western Australia

NORTHERN OPERATIONS TREE PLANTING IN AUSTRALIA

Tronox employees and their families continued the long tradition of participating in the annual Tree Planting Day near our Chandala Processing Plant. Together, we planted 10,000 trees that will help restore the habitat for local native wildlife, including endangered species, like the Carnaby's Black Cockatoo. We are proud to have planted 150,000 trees since the program began 20 years ago. In addition, Tronox's Chandala plant has partnered with Chittering Landcare since 1998, turning a farmhouse on our property into an education center.

Small efforts like this play an important role in creating a more sustainable future for everyone, and we are proud that Tronox can help achieve it.

Ian Rennie, Northern Operations Site Director

Demonstrating a commitment to biodiversity conservation is an essential element of sustainable development for the mining industry.

Joji (Joe) Abraham, Environmental Advisor, Atlas-Campaspe Project



PROTECTING VULNERABLE FLORA

The Mossgiel Daisy (*Brachyscome papillosa*), a vulnerable plant species, grows along the mineral concentrate transport route for our new Atlas-Campaspe Mine. We have taken

several measures to minimize any direct and indirect impacts on the daisy species that could happen during construction works and future operations so we can help to ensure the flower's ongoing contribution to the biodiversity of the area.

These include:

- **Maintaining** a certain road width and enforcing traffic safety.
- **Sealing** this section of road to minimize erosion and dust, and the mineral concentrate transport truckloads will be covered to reduce dust in the area.
- **Adding** signage and temporary fencing to mark the daisy area during road works.
- **Educating** employees and contractors about all protected species onsite.
- **Monitoring** weekly to ensure compliance with approved protection measures.

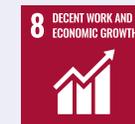
Committed to Our People



Building our organization with talented people, and investing in their success, will unleash the full potential of our business and our people.

GOALS

- 🎯 Improve gender balance and diversity of our workforce
- 🎯 Improve gender balance and diversity of leadership and succession planning



Namakwa Sands Northern Operations, South Africa

High-Performance Culture

Tronox has a global workforce with richly diverse perspectives and backgrounds. We strive to be the employer of choice in 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.

High ethical standards are expected of all employees. The Tronox [Code](#) ensures 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. In 2021, we endeavored to offer training on our Code to all employees. 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. We frequently conduct employee training on compliance and ethics topics through in-person and online training.

Because Tronox operates titanium ore mines and TiO₂ pigment plants around the world, it is important that our people have the specialty skills needed for both mining and manufacturing. We share our best practices globally by relocating skilled leaders across countries and operations, staffing high-potential employees in regions on global projects and enabling collaboration in global Centers of Excellence.



Cooljarloo Mine, Northern Operations, Western Australia



It is the people of any organization that make it resilient, flexible, and responsive to changes in the market; companies grow when people grow. That's why we focus on developing our people today, to empower them for the challenges and successes of tomorrow.

Amy Webb, Vice President, Global Talent, Diversity & Inclusion

Learning and Development

Tronox is committed to providing meaningful careers to our employees, ones where they can stay and grow with us for years. 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.

Our L&D Center of Excellence is in the midst of its five-year strategic plan to transform our talent pipeline for the future of the business. Some of our current initiatives include:

▶ LEARNING PLATFORMS

A new online platform provides educational modules, videos and resources covering a variety of workplace topics, such as having difficult conversations or earning Six Sigma certification. Two thirds of all employees have voluntarily participated in these trainings. Tronox also implemented a companywide Learning Management System in early 2022 to enable better tracking of completed training hours and more personalized learning recommendations for specific employees.

▶ 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 2022, we will implement detailed job profiles for each role so employees can self-assess skill gaps and work on plans to develop to the next level.

▶ LEADERSHIP TRAINING

We cultivate future leaders through in-person and virtual training that prepares new supervisors, further develops existing supervisors and prepares senior leaders to guide business strategy. Local universities and online learning platforms help facilitate many of these programs. In 2021, we created small learning groups, in which participants complete the trainings independently and then come together to reflect on what they learned and receive coaching.

▶ 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

A new series of programs brings together small, cross-departmental cohorts to share the perspectives of their roles. The result is a more rich and complete understanding of the different contributions made by people working to make Tronox successful.

▶ 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 professional roles at many of our global facilities.

Tronox supports the education of our employees and our surrounding communities. We track a range of metrics to ensure we are making progress on career management and training goals.

In 2021, we were able to assist numerous employees with continuing their education and spent over \$10.9 million on employee training across our sites, functions and employee levels. Employees and contractors completed more than 440,000 training hours.

\$10.9 million
*spent on employee training
across our sites, functions and
employee levels*

440,000+
*training hours completed by
employees and contractors*

▶ CASE STUDY: ADAPTING SKILLS AT HAMILTON PIGMENT PLANT

Two of the most significant trends transforming the manufacturing industry are a retiring workforce and the rise of automation. At our pigment plant in Hamilton, Mississippi, we are taking steps to train employees to prepare for the skill adaptations needed to keep our business competitive.

“The Hamilton plant has been operating in this relatively small, rural area for over 60 years. We are a strong employer and contributor to the community, and we want to ensure we remain for generations,” said Greg Caston, Maintenance Trainer at Hamilton. “The changing landscape of manufacturing means transforming our training focus so we can continue to meet our customers’ and communities’ needs.”

This past year, Hamilton focused on building basic mechanical maintenance skills among our equipment operators. A total of 82 operators completed the training in 2021. With this knowledge, the operators can be the first line of defense, directly addressing small malfunctions. This keeps our plant running more efficiently and enables employees with deeper mechanical expertise to focus on other projects.

Hamilton plans to expand the training to cover basic electrical and installation skills in 2022 and 2023. We also are evolving many of our plant jobs to be more process-oriented than task-oriented, particularly as we move to automating certain routine tasks to allow employees to focus on higher-value tasks. We plan to initiate this curriculum in 2022.

Hamilton Pigment Plant, United States





Cooljarloo Mine,
Northern Operations,
Western Australia

EMPLOYEE-LED IMPROVEMENTS

Our employees know best how to improve our processes. In 2021, Hamilton employees submitted over 40 ideas to make our work safer and more efficient as part of the site's Opportunity for Improvement program. One winning idea came from an electrical technician to install water-safe junction boxes on all our ore and coke pots, eliminating the need for operators to climb a catwalk for regular checks. This keeps our instrumentation protected and is a notable cost savings.

Employees and contractors at our Botlek site have submitted more than 100 ideas, and 12 have been executed through our Botlek B€\$T idea system. Some of the first ideas executed have improved lab testing efficiency, provided engaging safety content and automated record keeping.

TRAINING THE NEXT GENERATION OF WORKERS

Tronox has long believed in the power of quality education and decent work — in line with the UN SDGs. One way we do this is by building skills in students. Tronox's sites hosted more than 270 interns, apprentices and co-op students in 2021, providing them with hands-on experience for future roles in the mining and chemical manufacturing workforce. In many cases, they continue on as permanent members of the Tronox team.

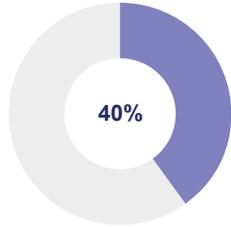
“

I began as an apprentice at Stallingborough, England, in 1976, and later mentored the apprentices who came through the workshop. It is a gift to be able to pay back those who trained me by training the next generation at Tronox. After all, they are our future.

Ron Ingoldby, Learning and Development Coordinator

”

Labor/Management Relations



Tronox respects our employees' rights to collectively bargain. Approximately 40 percent 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.

	% Participating
U.S.	0%
Rest of World	40%
TOTAL	40%

Contractor Management

Contractors are an extension of Tronox's team; therefore, we work in partnership to deliver safe results. The ultimate goal is that once onsite, all our contractors deliver work that is seamlessly integrated into the site operations, with any emerging risks managed collaboratively. To achieve this, we provide specific training to our Tronox team members who coordinate tasks and supervise work performed by contractors. The trainings were first held

in 2020 in Australia, South Africa and the United States, each tailored to align with the country's regulatory and local context. In 2021, the training programs continued to be delivered to our large workforces in Australia and South Africa, and expanded to include locations in Europe and Saudi Arabia. In addition, we are rolling 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.

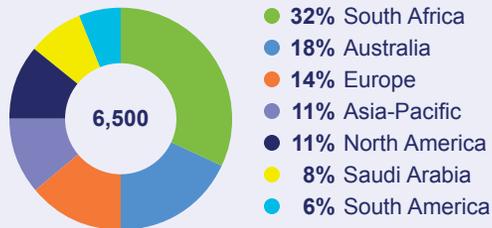


Namakwa Sands Northern Operations, South Africa

Namakwa Sands Smelter, South Africa



FULL-TIME EMPLOYEES BY REGION



Diversity, Equity & Inclusion (DEI)

Tronox operates on six continents. Our workforce includes people with varying backgrounds and perspectives, reflecting the communities in which we operate and the customers we serve. In line with our commitment to DEI and our core values, all are called upon to foster and encourage a diverse workforce where all people feel valued and respected. We expect our leaders and employees to listen to others with diverse perspectives; support new and different approaches; promote fairness and equality in the workplace; encourage others to be open-minded and to appreciate alternative cultural perspectives; and not tolerate discrimination.

One primary focus is to recruit and develop female employees, who are underrepresented in the mining and chemical industries. A focus on gender equality improves our business and enables us to support the global need to ensure women’s participation and equal opportunities recognized in the UN SDGs equality goal.

An executive-sponsored Diversity & Inclusion Steering Committee is responsible for driving Tronox’s three DEI strategic pillars:

- **Building** a workforce that is reflective of the community.
- **Fostering** an inclusive culture.
- **Developing** diverse talent.

CLOSING THE GENDER PAY GAP

As a step toward our goal of improving gender balance and diversity in our workforce, Tronox conducted a companywide gender equity pay analysis in 2021. Adjustments were made where needed to ensure that men and women receive equal pay for equal work.

We have made progress on putting into place the actions and tools that enable this mission, including systems and analytics, education, and a global and regional Tronox Diversity and Inclusion Network (TDIN). We have also:

- **Conducted** a gender equity pay analysis and made adjustments where needed.
- **Launched** a Women in Leadership program to create cohorts that develop and support rising female employees for future leadership roles.
- **Realigned** our Mentor Program to drive DEI efforts.
- **Piloted** software to better identify diverse candidates in our operating regions.
- **Followed** objectives for employment equity and human resources development outlined in our South Africa Mining Charter.
- **Emphasized** that the DEI strategy is core to Tronox by signing the [CEO Action for Diversity & Inclusion Pledge](#).

Future actions include additional DEI metrics to track our progress and expanded DEI curriculum. We also are closely analyzing our recruitment process through a DEI lens.

Kwinana Pigment Plant, Western Australia



TDIN

While Tronox leadership is driving DEI strategy, it is every employee's job to live our values each day. The TDIN engages all employees to bring DEI education to our sites through educational interactions, team sharing opportunities and social events. Examples of 2021 TDIN activities include:

- ▶ Our **Thann, France**, operations developed a partnership with a local rehabilitation center to help provide work experience for people who are living with disabilities due to an injury or illness.
- ▶ The **Stallingborough, United Kingdom**, plant renovated female facilities based on feedback from female employees.
- ▶ In **South Africa**, employees held a virtual run/walk to stand up against gender-based violence.
- ▶ **Australia** employees participated in several community events that foster young girls' interest in STEM careers.
- ▶ At our Yanbu plant in **Saudi Arabia**, we welcomed our second cohort of female interns and hired four female contractors.

Stallingborough Plant,
United Kingdom



OUTWARD MINDSET CENTER OF EXCELLENCE

Also, part of our DEI progress is the work of our Outward Mindset Center of Excellence, which focuses on recognizing and respecting the diverse perspectives of others. In 2021, the Outward Mindset Center of Excellence established processes and metrics so we could audit each of our sites on their journey to better understanding and supporting each other. We are also working on frameworks to help individual employees understand their own role in creating and maintaining Tronox's values-based culture, and will implement them in 2022.

📌 CASE STUDY: CREATING A WORKPLACE THAT WORKS FOR EVERYONE

In 2021, our Thann Pigment Plant in France helped employees learn how to seek recognition for a disability — and any needed support. This program helped us ensure more employees receive the support they need to have the best working experience.

Many different conditions can qualify, and employees often do not know they can receive accommodations for near-sightedness, dyslexia, hyperactivity, hepatitis, back problems, depression, and more. This is part of France's efforts to encourage inclusivity in the workplace, including a requirement that any organization with more than 20 employees must include at least 6 percent of employees with disabilities.

We developed the campaign with the help of HANDISolutions, an external agency that supports businesses in the development of disability policies and support. Posters displayed around the facility featured famous people with specific disabilities and how that condition can be an advantage instead of a weakness. We then set up a dedicated phone number and email for employees to reach out about potential accommodations they may need. As a result, 27 employees made inquiries to learn more, and four employees formally sought acknowledgement of their disability.

Tronox also partnered with the Mulhouse Réhabilitation Centre, a social service organization that helps people who are disabled due to accidents or illness to learn a new trade. The Thann site hosted a security intern from the program for the summer, and welcomed an engineering intern for a week in fall to learn more about the field. We hope to take on additional interns in security, IT, finance and HR in the future.

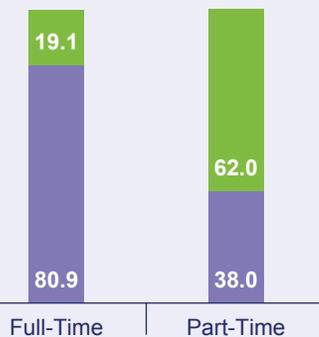
As part of France's efforts to encourage inclusivity in the workplace, any organization with more than 20 employees must include at least 6% of employees with disabilities.



WORKFORCE DATA

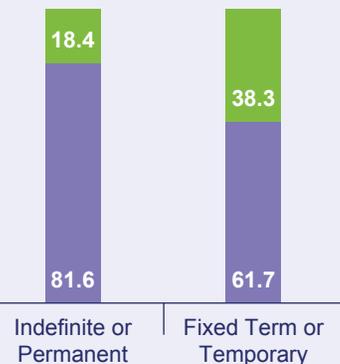
EMPLOYEES BY EMPLOYMENT TYPE AND GENDER (percent)

- Female Employees
- Male Employees



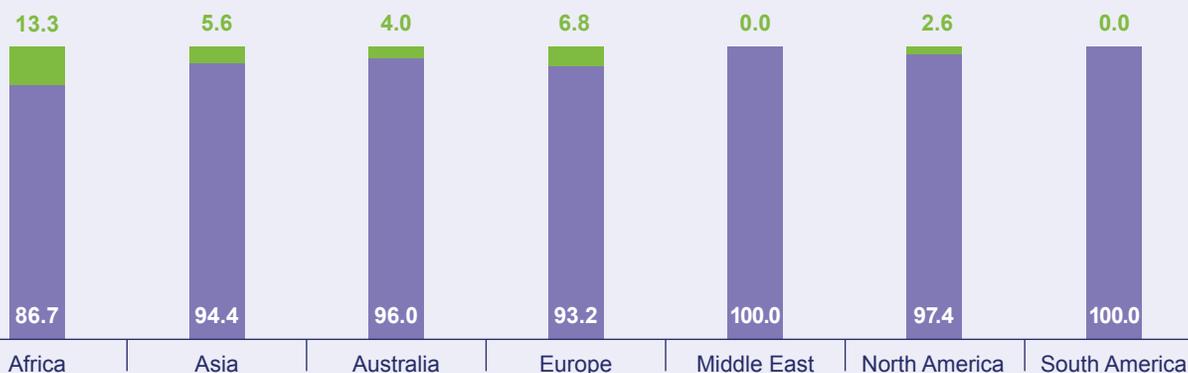
EMPLOYEES BY EMPLOYMENT CONTRACT AND GENDER (percent)

- Female Employees
- Male Employees



EMPLOYEES BY EMPLOYMENT CONTRACT AND REGION (percent)

- Fixed Term or Temporary Employment
- Indefinite or Permanent Employment



WORKFORCE DATA (continued)

WORKFORCE REPRESENTATION BY GENDER (percent)

- Female Employees
- Male Employees



WORKFORCE REPRESENTATION BY AGE (percent)

- <29
- 30-50
- >51



WORKFORCE REPRESENTATION BY MINORITIES (percent)

- Not Tracked
- Black and Minorities
- White



Committed to Our Communities



Tronox is honored to be trusted with the privilege to operate in our communities around the world.



Kwinana Pigment Plant, Western Australia



South West Multicultural Festival, Tronox Community Stage, Bunbury, Western Australia

Tronox strives to be valued contributors to local economies and the quality of life in our shared communities. We also acknowledge and respect the cultural heritage of those who lived in these communities long before we joined.

Indigenous Rights Approach

Some of our operations in South Africa and all our operations in Australia are located on Indigenous Peoples' land. Tronox promotes the entry into formal agreements with these communities so we can work together respectfully, which enables Tronox to manage its operations while protecting Indigenous heritage and cultural values.

We continue to expand our understanding of and efforts to support Indigenous communities. In the coming year, we plan to:

- ▶ **Increase our Indigenous suppliers** through membership in Supply Nation and the Indigenous Chamber of Commerce.
- ▶ **Encourage our major contractors** to develop their own Indigenous engagement plans.
- ▶ **Begin the process of establishing a Reconciliation Action Plan** to provide a structured approach to reconciliation in Australia.

EASTERN OPERATIONS, AUSTRALIA

Tronox entered into an agreement with the Barkandji people in 2001 in relation to our Ginkgo Mineral Sands Mine. Through this agreement and its 2018 amendments, we undertake regular consultation meetings with the Barkandji people and provide sponsorships for various educational, sporting and cultural endeavors, including tertiary education scholarships, a Memorial and Funeral Fund, and the establishment of a Cultural Camp Fund. In addition, Tronox offers informal employment opportunities to the Barkandji.

Tronox adheres to Heritage Management Plans for our Snapper and Ginkgo Mineral Sands Mines and Atlas-Campaspe Mine. The Heritage Management Plans were developed in consultation with local Indigenous groups and provide for ongoing consultation with the local Indigenous communities, and the identification, assessment, monitoring, protection and management of archaeological heritage. Management measures provided for under the Heritage Management Plans include:

- ▶ **Land management strategies**, such as minimizing disturbance areas and undertaking progressive rehabilitation.
- ▶ **An avoidance strategy** for specified cultural heritage objects.
- ▶ **Recording, collection and storage** of Aboriginal stone artifacts at a designated Keeping Place.
- ▶ **Protocol** for the management of any previously unrecorded Aboriginal cultural heritage values.

Tronox continues to work with and consult Indigenous communities in relation to its Eastern Operations to ensure relationships are maintained and identified Aboriginal cultural heritage values in the area are respected and protected.



In 2021, the **Northern Operations (NOPs)** leadership team undertook a “Cultural Conversations” training course with Yued member Steph Mippy. They learned about traditional cultural practices, historical and contemporary social context and how to better engage with Aboriginal people in the workplace. This training will be given to all NOPs employees by 2023.

In August 2021, a COVID-19 outbreak in the small Australian town of Wilcannia impacted one-third of the town’s Indigenous population. Tronox made a financial donation to the area’s **Aboriginal Medical Service** to assist with the recovery and provide additional health-protection services for the Aboriginal community.

NORTHERN OPERATIONS, AUSTRALIA

Tronox has formal land access agreements with the Yued people and the Amangu people (who have since become part of the Yamatji Nation native title claim group) in relation to our operations and prospective operations at Dongara and Cooljarloo in Western Australia. These agreements enable the continuation of Tronox’s operations while providing benefits to the native title groups and the preservation of cultural heritage values, in line with the respect Tronox has for the traditional owners in this region.

Each agreement is specific to the project and traditional owner group, but generally include provisions such as:

- Work-ready training and mentoring programs, scholarships, apprenticeships and traineeships.
- Cross-cultural awareness.
- Business opportunities.
- Indigenous community support programs and funding.
- Protection and management of cultural heritage values.

Tronox also has a Heritage Agreement with the Yued people for the Chandala Mineral Processing Plant. It acknowledges the importance of conducting activities in a manner that 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, and Tronox is party to two Heritage Agreements with the South West Boojarah people. The Heritage Agreements preserve and protect Aboriginal cultural heritage values, while enabling the grant of certain exploration tenements to Tronox and the ability to undertake specified activities within the relevant area. The agreements also provide for a process to conduct heritage surveys, in consultation with the traditional owners of the land.

Tronox has also separately developed an Aboriginal Heritage Management Plan in consultation with traditional owners, including the South West Boojarah people and Harris Family native title claimants. The plan outlines procedures to be followed in the event any Aboriginal cultural heritage values are discovered during development and operation of the Wonnerup Mine, and is implemented in consultation with the relevant traditional owners.

We are proud to continue to sponsor the Wadandi Ranger program, which enables Aboriginal rangers to mentor younger members to encourage them to learn how to preserve their South West Boojarah culture. The rangers spend 24 weeks training and learning a number of cultural, environmental, and practical subjects, earning a certificate in Conservation and Land Management. They also plant thousands of shrubs and trees on native lands.

KWAZULU-NATAL SANDS, SOUTH AFRICA

Tronox has formal relationships with seven Traditional Authorities (Amakhosi) in KwaZulu-Natal. These agreements form part of the KwaZulu-Natal Sands Local Economic Development Projects, which aligns with the KwaZulu-Natal Sands Social and Labor Plan (SLP). We submit the SLP to the Department of Mineral Resources and Energy every five years to outline community projects that the company will embark on during that time period. These must be in line with the Municipalities' Integrated Development Plan, and we report annually on our progress in achieving the SLP commitments.

The Indigenous territories that KwaZulu-Natal Sands is on or adjacent to are:

- ▶ Dube Traditional Authority
- ▶ Somopho Traditional Authority
- ▶ Mkhwanazi Traditional Authority
- ▶ Macambini Traditional Authority
- ▶ Nzuzu Traditional Authority
- ▶ Ogagwini Traditional Authority
- ▶ Madlebe Traditional Authority

▶ CASE STUDY: PROTECTING ABORIGINAL CULTURE NEAR OUR SITES



The Abba River in Wonnerup, Western Australia, has spiritual and historical significance to the Aboriginal community. A crossing over the river was needed to enable our business

to grow, but it was important that we also protect this site that is listed on the State Register of Places of Aboriginal Significance.

to grow, but it was important that we also protect this site that is listed on the State Register of Places of Aboriginal Significance.

“Crossing the Abba River is the only way Tronox would be able to access an extension to the mine, but it is critical that we work alongside the traditional owners of this land to ensure we treat the site with the reverence it deserves,” said Toni Munro, Senior Environmental Advisor at Tronox.

For example, the Aboriginal custodians advised the crossing must not act like a dam and withhold water from downstream, so designs added additional culverts to allow the water to continue to flow freely. The designs were well received, and the families appreciated being part of the planning process. The meeting also gave the Tronox team the opportunity to build relationships with the younger members of the Aboriginal families.

Though the project already had legislative approval from the Department of Aboriginal Affairs, Tronox worked

As part of our Aboriginal Heritage Management Plan, a traditional owner was onsite to observe the initial geotechnical investigations in 2020, and additional traditional owners were onsite for ground clearing in early 2022, in case skeletal remains, archaeological stone tools or other culturally significant materials were uncovered. Construction on the crossing began in early 2022, and we continue to consult with representatives from the Aboriginal families to ensure we are treating the site with dignity.



Building respectful, reciprocal and trustworthy relationships with traditional landowners is integral to our way of working. It is a privilege to operate in regions with such rich heritage, and we firmly believe it is our responsibility to respect and preserve that culture for the future.

Gabby Maynard, Community and Stakeholder Relations, Australia

Local Communities

While Tronox is a global company, we are closely connected to the local communities surrounding our operations. Many of these are located in remote areas where Tronox is one of the primary employers. We understand the important role — and opportunity — we have in shaping the quality of life in these areas through investments in education and skill development, building gender equity, and supporting infrastructure projects.

In 2021, we awarded numerous scholarships for students in the local community to attend universities. We also hosted approximately 270 interns, apprentices and co-op students in a range of technical and professional areas, including internships expressly designed to accommodate for individuals with differing abilities from our communities.

Across Tronox, we find an abundance of cases in which our employees, who are members of these communities, support their neighbors through volunteerism and community initiatives related to sustainability, education in science and the arts.

We actively engage in dialogue through various communications 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 and identify 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.



Kwinana Pigment Plant, Western Australia

SOUTH AFRICAN MINING CHARTER SCORECARD

One showcase of our corporate citizenship approach is evident at our South African operations, where we work alongside the Department of Mineral Resources and Energy and local municipalities to invest in major projects that improve the communities surrounding our operations. Our South African operations annually measure and report on their progress against the Broad-Based Black Economic Empowerment criteria enacted by the Department of Mineral Resources in South Africa.

[View the South African Mining Charter Scorecards](#)

📌 CASE STUDY: INVESTING IN EDUCATION SUCCESS

Quality education — it is crucial to the future success of our business, as well as the strength of the communities in which we operate. Tronox has a long-standing commitment to supporting equitable and accessible education in our communities, including showcasing the opportunities available in our industry.

Australia

The Bunbury Pigment Plant hosted students from Australind Senior High School and Newton Moore Senior High School through The Smith Family, which is Australia's leading children's education charity. Its mission is to break the cycle of poverty through education.

Tronox welcomed 17 students to the site, where our employees shared their own career pathway experience with students, how their roles contributed to our collective success, and gave practical advice on how to become a trainee or apprentice with the company.



Bunbury Pigment Plant, Southern Operations, Western Australia

We want to promote local employment and create meaningful pathways into Tronox across a diverse range of education journeys and skill sets. It was great to show the students different options available to them, as well as give them the opportunity to ask questions in an open, relaxed environment.

Summa Hollins, Manager, Human Resources Southern Operations, Australia

📌 CASE STUDY: INVESTING IN EDUCATION SUCCESS *(continued)*

South Africa

▶ The **Langebaan Preschool** opened in 2012, operating out of a skate park near our Namakwa Sands operations in South Africa’s Western Cape. After nearly eight years, the nonprofit school contacted area businesses for support to construct a proper schoolhouse. Tronox and other local industries donated money to fund the classrooms.

▶ When it opened in 1977, **Weston High School** was one of the first intermediary schools in Vredenburg — near Tronox’s Namakwa Sands smelter — for underserved communities in the surrounding areas. In 2016, the school transitioned to become the only technical school on the West Coast of South Africa. It offers electrical, mechanical and civil engineering subjects — all important for our own workforce. For more than two decades, Tronox has played a vital role in making these programs a success by investing in weekend and holiday classes at the school, including winter and summer schools. A recent donation of R200,000 enabled the school to pay for teaching positions that focus on teaching math, science and mechanical technology.

▶ Our KwaZulu-Natal Sands operation handed over the keys to a state-of-the-art computer laboratory to **Mbuyiseni High School**, one of the best performing deep rural schools in its district. Students did not previously have access to computers, which prevented them from sourcing vital information needed to complete their projects and prepare for exams. In addition, students will gain exposure to Information Technology (IT) as a

new subject of study. The construction was completed by Getkate Projects — a black-woman-owned business that has been successfully operating in the KZN region for six years.

Find out more about how Tronox plays a vital role in math and science initiatives in South Africa.



Langebaan Preschool, Western Cape, South Africa

📍 CASE STUDY: INVESTING IN EDUCATION SUCCESS *(continued)*



Stallingborough Plant, United Kingdom

Brazil

With the limitations posed by COVID, education support by our operations in Brazil have focused on ensuring the continued operation of The Reading Club project, a reading incentive project, by transitioning to a virtual platform. It helps children and young people from Areias, Arembepe and Jauá to reduce gaps in their writing and reading skills, as well as promotes critical thinking skills that are fundamental to be good future citizens for the community.

United Kingdom

Our Stallingborough location deepened its relationship with the Engineering University Technical College in Northern Lincolnshire, which provides technical training for 13- to 19-year-olds to prepare them for engineering careers. In addition to now serving as a governor for the college, Tronox employees regularly meet with current and prospective students to talk about opportunities in the field. In 2022, we will help design engineering projects for the students to complete, as well as sponsor a team to compete in The Hull Street Race — a local competition for young people to build and race single-seater electric kit cars.

United States

Employees from our Hamilton plant in Mississippi held a workshop at the Lowndes County School District's Career Technology Center to help high school students learn how to better prepare to enter the workplace. These included understanding and practicing strong communication skills, building a solid resume and cover letter, and sharing interview techniques.

📍 CASE STUDY: INSPIRING A SAFER COMMUNITY



Weston Secondary School, Saldanha, South Africa

The COVID pandemic brought new complexity to keeping employees and contractors safe. Protecting our people has always been our highest priority, but in the midst of the pandemic, our employees' safety also hinged on the health of those they encountered outside of work. That is why Tronox debuted a public health campaign aimed at reducing the spread of COVID in South Africa.

We partnered with key leaders from local government and the industry, including King Cetshwayo District Municipality, the Department of Health and Department of Education, to

support the government's measures and messaging, making the socially distanced, mask-wearing citizen a hero who is protecting their neighbor and loved ones. Through public transportation billboards, shopping center ads and media placements, Tronox reminded hesitant community members that COVID safety protocols were an opportunity to protect each other and South Africa's future. As people went about their day, they heard, "It starts with me," and "Play your part to protect your family and friends," as they made critical decisions about behaviors that could stop the spread.

Throughout the campaign, we conducted surveys to better understand whether community members had engaged with materials and identify additional gap areas to address. Over time, the community adopted more of the prevention policies, helping to reduce infection rates.

By partnering with other stakeholders, Tronox contributed to a unified voice that emphasized public safety, helped protect our own employees, and set up our region for a more successful economic recovery post-pandemic.

Committed to Responsible Business

We operate in a responsible and sustainable manner so we can continue to meet the expectations and needs of our employees, customers, investors and communities.



Cooljarloo Mine, Northern Operations, Western Australia

We bring value to our shareholders and customers by delivering essential products that enhance our world. Our global presence gives Tronox the opportunity to have direct and indirect positive economic impact for our employees and shareholders, as well as for the communities in which we operate, through wages, taxes, spending with local suppliers and community investments.

We continue to invest in key strategic projects. Key mining projects that support our vertical integration — Atlas-Campaspe in Australia and the eastern extension of our Namakwa mine in South Africa — are underway to maintain sufficient mineral reserves and resources to support our operations. Another significant capital investment project is newTRON, a multi-year business transformation program that will enable Tronox to maintain our position among the lowest cost TiO₂ producers, enhance our customer service, optimize our global supply chain, reduce maintenance spend and improve throughput through automation.

Tronox operates in a very competitive industry, which can be impacted by changes in global GDP and general economic conditions. Therefore, we must remain a low-cost provider to sustain our industry-leading position and execute on our long-term strategy of being the world's leading vertically integrated producer of TiO₂. Throughout 2020 and 2021, our vertically integrated portfolio, which we optimize by leveraging our proprietary integrated business planning model, enabled us to react quickly to changing customer demand and successfully navigate various supply chain and inflationary challenges. Our 2021 revenue was US\$3.572 billion.

View our quarterly and annual filings at investor.tronox.com.

BUSINESS METRICS

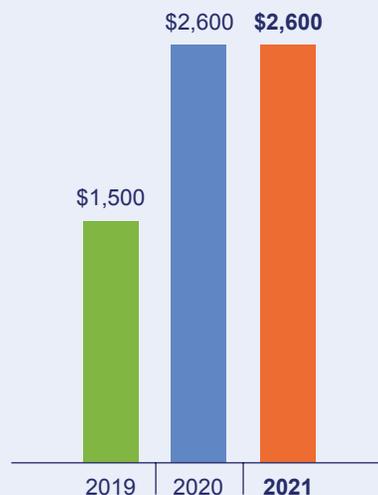
(Millions of U.S. dollars, except share and per share amounts)⁽¹⁾

	2019	2020	2021
Sales	\$2,642	\$2,758	\$3,572
Net income (loss) from continuing operations	\$ (102)	\$ 995	\$ 303
Diluted income (loss) per share from continuing operations	\$ (0.81)	\$ 6.69	\$ 1.81
Dividend paid per share	\$ 0.18	\$ 0.28	\$ 0.36
Total assets	\$5,268	\$6,568	\$5,987
Shares outstanding (at December 31)	141,900,459	143,557,479	153,934,677

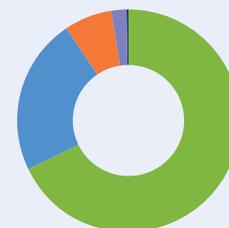
(1) The following information is from our Form 10-K for the year ended December 31, 2021, filed with the Securities and Exchange Commission on February 22, 2022.

COMMUNITY INVESTMENTS

(x1000)



COMPONENTS OF ECONOMIC VALUE DISTRIBUTED



- 68.0% Operating Costs
- 22.6% Employee Wages and Benefits
- 7.0% Payments to Capital Providers
- 2.3% Payments to Government
- 0.1% Community Investments

REVENUE FROM PRODUCT SALES



- 79% TiO₂
- 13% Zircon
- 8% Feedstock and Other Products

🔍 CASE STUDY: PRODUCTS BENEFITING THE WORLD



Tronox has an unrivaled range of products that aligns with our sustainability goals to combat climate change, reduce waste to external landfills, and protect the health and safety of people. We harness the unique properties of TiO₂, titanium chemicals, and other valuable byproducts to make the world a cleaner, safer and more brilliant place.

We proudly offer products that meet the needs of today, and continue to innovate to deliver new products that both address the needs of the future and prioritize sustainability. In 2020, Tronox moved its specialty TiO₂ R&D center to a new state-of-the-art facility in Thann, France. Having CristalACTIV™ R&D and manufacturing together enables collaboration and efficiency in providing new products and novel solutions for improving our environment and mitigating climate changes. Our key focus is to develop the most sophisticated specialty products that achieve greater performance and offer sustainable solutions while integrating safety from the earliest stages of product development.

From the moment we start to develop a new product in the laboratory through its scale-up to routine production, we evaluate the life cycle of the materials used for its manufacture and for the final product. Many new products are more efficient, so our customers can use less to achieve the same performance. We also strive for a final product that lasts longer.

📍 CASE STUDY: PRODUCTS BENEFITING THE WORLD *(continued)*

Products to Combat Climate Change

TiO₂ is essential to manufacturing catalysts for the denitrification of emissions from two of the largest emission sources: the transportation and power (electricity) generation sectors. A good number of the heavy-duty trucks on the road today — which we have seen throughout the pandemic are so vital to maintaining our supply chain — are using catalysts containing TiO₂ to meet emissions standards.

Harnessing the natural power of sunlight and TiO₂, our photocatalytic solutions used in building materials, paints and coatings can help to degrade air pollutants in the surrounding atmosphere. TiO₂'s photocatalytic properties

also make it an excellent component in solar energy technologies that are the foundation of achieving renewable energy targets. TiO₂ is an important ingredient in dye-sensitized solar cells, which are often used in windows, art installations, and shading facades and structures to transform light into electricity.

Thanks to the brightness and whiteness provided by TiO₂ used in paints and coatings, we also can contribute to efforts to reduce overall energy use. For example, using white coatings on rooftops lowers the temperature of buildings by reflecting heat. This helps to reduce the urban

heat island effect in large cities, and can reduce the energy that would otherwise be consumed by cooling devices, such as air conditioning.



Products to Increase Durability and Reduce Waste

It is not surprising that over 75 percent of Tronox sales are for paints and coatings. There is no alternative that provides the same light-scattering ability or covering power of TiO₂. In fact, around 95 percent of all paints use TiO₂. The high-quality physical properties of TiO₂ makes paint more durable and requires fewer layers to provide complete coverage, keeping material use down. Plus, the Titanium Dioxide Manufacturers Association's "cradle-to-gate" Product Environmental Footprint assessment found paints formulated with high levels of TiO₂ pigment have a lower environmental footprint across its full life cycle when compared to paints formulated with low TiO₂ content and high extender content.

TiO₂ pigment helps to maintain the quality of many other products as well. The refractive properties of TiO₂ extend the life of plastics used outdoors, like in windows and doors, so they do not need to be replaced as quickly. Coatings on bridges and ships use TiO₂ to protect the exterior and delay recoating or replacement. Without such a coating, a new ship or bridge will begin to degrade as soon as it is exposed to air.

Coatings and external paints with TiO₂ enhance the durability of construction products through its resistance to heat, light and weathering, creating less need to replace construction materials or renovate buildings. The protective qualities also combat paint degradation on cars.

📌 CASE STUDY: PRODUCTS BENEFITING THE WORLD *(continued)*

Products for a Healthier World

Tronox operations were deemed essential during the COVID pandemic because our TiO₂ and titanium chemicals are vital for products that support life-saving medical care.

Our products can be found in everything from personal protective gear, including surgery masks used by many people to reduce the spread of the COVID virus, to the plastic and coatings components in medical equipment. We also have customers who use titanium tetrachloride to manufacture key medications to treat illness.

TiO₂ is also critical in plastic and paper packaging to prevent contamination of medical products and food. For example, our Thann Pigment Plant supplies anatase TiO₂ for novel plastics used to manufacture milk bottles. The anatase is key to creating a light barrier and opaqueness to protect the milk and other packaged goods from spoiling.

At a time when it is estimated that only 71 percent of the world population has access to safe drinking water, we are proud that our TiO₂ products are being developed to support efforts to purify water. TiO₂ is well suited to trap difficult contaminants and heavy metals in water, and can support filtration and UV light treatment-style water purification applications as well.



A number of secondary products are produced when we manufacture TiO₂. Tronox seizes the opportunity to both reduce waste streams and generate additional value to our customers and shareholders by finding new uses for these byproducts. Read more about how we contribute to the circular economy on pg. 27.

Sustainable Procurement

Tronox operates an integrated supply chain to support its business. We leverage our economies of scale to supply and produce the necessary feedstock and other raw materials needed to support our business operations and our global customers. At the same time, we are mindful of our responsibility to support local communities by working with local and diverse global business partners, which contributes to socioeconomic advancements in our communities.

We have high standards for our suppliers in the areas of regulatory compliance, social responsibility and environmental stewardship. All Tronox vendors agree to our [Supplier Code of Conduct](#) and are expected to maintain management systems and controls to promote and facilitate compliance with applicable laws. We also expect their employees, subcontractors and the suppliers they work with to follow our Supplier Code of Conduct in providing goods and services to Tronox. We segment our global suppliers by risk, industry and carbon impact to understand how they impact our own goals. Suppliers are audited based on regional processes.



Hamilton Pigment Plant, United States

In 2021, Tronox added a [Conflict Minerals Policy](#) that suppliers are expected to uphold, and published a [Sustainable Procurement Policy](#) that defines the process and selection criteria that will be used for selecting suppliers who share in Tronox’s commitment to best-in-class sustainability and environmental practices. The policy also ensures that sustainable procurement practices are applied and maintained in a consistent manner across the entire company. Over the past year, we also deployed Tronox’s first supplier survey to understand the sustainability plans of our high carbon-emitting suppliers.

Future plans include:

- ▶ **Identifying and implementing action plans** for top-emitting suppliers. We will use ongoing Scope 3 emission studies to identify top emitting suppliers and then obtain their action plans toward emission reductions.
- ▶ Asking each of our Tronox sites to complete an internal **Sustainable Procurement Survey** self-assessment, which we will use for target setting in 2023.

- ▶ **Launching a training program** for European employees with a focus on the ISO 20400 Guidelines for Sustainable Procurement standard.

We are in the process of upgrading our supplier onboarding processes as part of the companywide newTRON transformation project. New platforms will enable us to more seamlessly screen and audit our suppliers and contractor companies, as well as assess their sustainability performance.

By working with suppliers who are as committed to sustainability as we are, we can share learnings with each other and ensure our entire supply chain is fully aligned with Tronox’s values.

Pamela Sutherland, Source to Contract Manager

COUNTRY/REGION	SPEND ON LOCAL SUPPLIERS (%)	TOTAL SUPPLIERS (#)	LOCAL SUPPLIERS (#)
Australia	93%	2,567	2,448
Europe	82%	2,534	2,085
Gulf Cooperation Council Region	69%	545	353
USA	92%	1,108	1,029
Brazil	79%	1,288	1,320
South Africa	88%	1,686	1,614
China	86%	425	413

Product Stewardship

Product Stewardship has an integral role in our sustainability strategy by supporting our broader relationship with our customers, the responsible use of our products and our contributions to a circular economy. Our recent progress in Product Stewardship includes:

- ▶ **Minimizing the use of hazardous substances** in our product portfolio. This includes an ongoing Product Stewardship assessment of substances and alternatives as part of a robust R&D stage-gate process.
- ▶ **Improved understanding of global requirements** related to registration, evaluation, authorization and restriction of chemicals. For example, newer requirements coming from South Korea have emphasized how important it is for Tronox's Commercial and Procurement functions to work in close collaboration to ensure regulatory compliance.

The global regulatory landscape continues to evolve rapidly as countries, such as South Korea, Turkey, and India, adopt specific registration requirements similar to the European Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulations. Tronox actively participates in the TDMA, European Chemical Industry Council (CEFIC), Chemicals Industry Association, and British Coatings Federation to learn about, and help inform, responsible use of chemicals. We then provide regular updates to our customers on the evolving regulatory landscape.

Ongoing compliance for our REACH registrations remains a high priority. We are committed to CEFIC's Dossier Improvement Plan, and are navigating for the compliance requirements of UK REACH as a result of Brexit and the REACH requirements for the identification and characterization of nanomaterials. The European Chemicals Sustainability Strategy, as part of the Green Deal, is setting out a roadmap for the next phase of REACH with the "One substance, One assessment" goal, "Safe and Sustainable by Design" approach and the concept of "Essentiality" as part of the circular economy agenda. Tronox is working toward addressing these new developments and the company's contribution as part of our sustainability efforts in 2022.

In 2021, the European Food Safety Authority (EFSA) decided to ban the use of TiO₂ in food products beginning in 2022. Tronox does not manufacture TiO₂ for food, cosmetics or medicine. Whether EFSA's decision will impact use in other applications, such as cosmetics and medicines, is yet to be determined. Nevertheless, we are evaluating scientific evidence and understanding how further regulatory developments could potentially impact our product portfolio. We remain in a strong position due to the focus of Tronox's sustainability program, including the use of clean technologies and reduction of our emissions footprint, which aligns with Europe's sustainable innovation and circular economy agenda. As always, we are in regular communication with our customers about how regulatory changes may impact their products.



Less than 1 percent of our revenue comes from products classified as Category 1 or 2 Health and Environment Hazardous Substances per the Globally Harmonized System of Classification and Labeling of Chemicals. Hazard assessments are conducted for 100 percent of these chemicals and Tronox maintains up-to-date safety data sheets to communicate hazards, exposure limits, control measures and emergency response guidelines to the downstream users. These products are titanium tetrachloride, caustic soda and hydrochloric acid.

Governance

We took major steps forward in 2021 to advance governance, including a reorganization of our Board of Directors' committee structure and the formation of a Global Sustainability Council comprised of some of our most senior executives. These improvements were oriented to ensure that decision-making by the Board and our managers was fully informed by considerations over climate change and other sustainability risks and opportunities. Strengthening governance at every level of the enterprise reflects our belief that management control is the first line of defense to identify and mitigate not only commercial and financial risks, but the wide range of environmental and sustainability risks that can derail a company like Tronox.

Our Board

Our Board is comprised of 10 individuals who represent the diversity of our global operations, with members from South Africa, Saudi Arabia, Australia and the United States. Six members are deemed independent by the rules of the New York Stock Exchange. The Board is actively engaged in monitoring key corporate risk factors, including human capital issues, business model and supply chain resilience, and consumer welfare and social impact, as well as matters of environmental stewardship.



33% female
independent
Board
membership

Director Emeritus

Namakwa Sands Northern Operations, South Africa



Corporate Governance and Sustainability Committee

Tronox reorganized its Board committees in 2021 to vest direct responsibility for sustainability-related risks in the Corporate Governance and Sustainability Committee whose new committee charter requires it to consider corporate social responsibility and sustainability issues that may have strategic, business and reputational implications. The committee is chaired by Ilan Kaufthal, Chairman of Tronox's Board.

The specific topics over which the committee will exercise more direct oversight include:

- Sustainability-related public disclosure.
- Target-setting.
- Review of our environmental, health, safety and sustainability program.
- The enterprise risk management program as it relates to sustainability.
- Periodic review of our Code of Conduct and other relevant policies.

Global Sustainability Council

A second element of our enhanced governance in 2021 was the launch of our Global Sustainability Council. The Council is a roundtable formed of senior leaders from Tronox's key functional groups to drive progress on our various sustainability initiatives and support the Executive Leadership Team and the Board to make informed decisions on sustainability strategy.

Tronox was a finalist for the Best Global Entity Management category of the 2021 Corporate Governance Awards.

Business Ethics and Compliance

Our Code sets forth the ethical and compliance-related standards applicable to all Tronox directors, officers, employees, contractors and vendors. The Code provides guidance for how employees should conduct themselves at work and highlights the importance of keeping accurate books and records. Employees receive and sign a copy of the Code at hiring. We train our employees and contractors at least annually about how to apply the Code in their daily work through a variety of methods, including in-person and online training. Tronox encourages its employees and other stakeholders to speak up about any violations of its Code, and promotes a hotline for employees, suppliers, customers or other stakeholders to raise concerns. Allegations can be reported anonymously, and the hotline is available 24/7 either online or through telephone operators who speak all of the languages in which we do business (tronox.com/speakup). Allegations are thoroughly investigated, and for substantiated allegations, we promptly take corrective actions consistent with our Code, as well as local laws and regulations. Whenever possible, we inform the person making the allegation about the outcome of our investigation. All of these allegations are reported to the Audit Committee.

Responsibility for oversight of our business ethics and compliance policies, processes, and procedures is vested in both our Audit Committee and Governance and Sustainability Committee. Quarterly, the Audit Committee receives a report from the Senior Vice President, General Counsel and Corporate Secretary on compliance-related activities that occurred in the prior quarter, as well as a detailed report on any allegations that our Code was violated by any employee, customer, vendor or other



Corporate Office, United States

POLICIES

Tronox's sustainability framework is underpinned by a series of written policies that guide our behavior and business practices. [View our policies](#) on a range of topics, including Safety, Health and the Environment, Human and Labor Rights, Compliance, Supplier Standards; and Data Privacy.

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.

relevant stakeholder. Our 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 antibribery and anti-corruption laws, including the Foreign Corrupt Practices Act and the UK Bribery Act. Our anti-corruption policy and risk management covers

all of our employees around the world. Tronox prohibits giving anything of value, directly or indirectly, to officials of foreign governments or foreign political candidates in order to obtain or retain business. Tronox has developed policies, procedures and internal controls for complying with antibribery and anti-corruption laws, including conducting third-party due diligence on customers, vendor and agents to mitigate the risk of becoming involved in corruption via third parties.

GRI Index

The report was prepared in accordance with the core option of the GRI Standards and its Mining and Metals Sector Disclosure Supplement.

ORGANIZATIONAL PROFILE		
102-1	Name of the organization	Tronox Holdings plc (Tronox, the company, or we).
102-2	Primary brands, products, and/or services	Page 5 and Tronox.com
102-3	Location of organization's headquarters	Headquartered in Stamford, Connecticut, USA
102-4	Countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	Page 5
102-5	Nature of ownership and legal form	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.
102-6	Markets served	Pages 5-6, 58-60; and Tronox.com
102-7	Scale of the reporting organization	Page 5; 2021 Annual Report
102-8	Information on employees and other workers	Pages 5, 45-46
102-9	Supply chain	The company operates a vertically integrated supply chain to support its TiO ₂ business. Pages 61; 2021 Annual Report
102-10	Significant changes during the reporting period	Pages 4, 7-8
102-11	Precautionary principle	Tronox supports the precautionary approach to evaluate and address potential environmental impacts.
102-12	External initiatives	Pages 8, 51-55
102-13	Memberships of associations or organizations	Tronox.com

STRATEGY		
102-14	Statement from senior decision-maker	Page 4

ETHICS AND INTEGRITY

102-16	Values, principles, standards, and norms of behavior	Page 6
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GOVERNANCE

102-18	Governance structure	Pages 63-64
102-19	Process for delegating authority to address economic, environmental and social topics	Page 64
102-20	Whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental, and social topics, and whether post holders report directly to the highest governance body	Tronox leadership includes the SVP, Chief Sustainability and Human Resources Officer.
102-22	Composition of the highest governance body and its committees	Tronox.com
102-23	Whether the Chair of the highest governance body is also an executive officer (and, if so, his or her function within the organization's management and reasons for this arrangement)	Tronox.com
102-26	Report the highest governance body's and executives' roles in developing, approving and updating the organization's purpose, mission, strategies, policies and goals related to sustainability	Pages 63-64
102-32	Highest position that formally reviews and approves the sustainability report	co-CEOs

STAKEHOLDER ENGAGEMENT

102-40	List of stakeholder groups engaged by the organization	Pages 10-12
102-41	Collective bargaining agreements	Page 41
102-42	Basis for identification and selection of stakeholders with whom to engage	Pages 10-12
102-43	Approach to stakeholder engagement	Pages 10-12
102-44	Key topics and concerns raised	Pages 9-12

REPORTING PRACTICE

102-45	Entities included in consolidated financial statements	Economic reporting reflects the global Tronox company for 2021.
102-46	Defining report content and topic boundaries	Page 9
102-47	Material aspects identified for defining report content	Page 9
102-48	Restatements of information provided in previous reports and the reasons for such	All significant restatements of data and information provided in earlier reports are noted in the particular report section in footnotes.
102-49	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries	Tronox completed the acquisition of the TiO ₂ business of Cristal on April 10, 2019. Data for 2019 reflects the full calendar year for legacy Tronox, and Cristal performance as of April 10, 2019.
102-50	Reporting period	2021 fiscal year, which is the same as the annual calendar year.
102-51	Date of most recent previous report	July 27, 2021
102-52	Reporting cycle	Annual
102-53	Contact point for questions regarding the report	Melissa Zona, SVP, Chief Sustainability and Human Resources Officer sustainability@tronox.com
102-54	Reporting in accordance with GRI Standards	This report has been prepared in accordance with the core option of the GRI Standards and its Mining and Metals Sector Disclosure Supplement.
102-55	GRI Context Index	Pages 66-70
102-56	External assurance	Tronox's internal auditing team is leading an effort to gain external assurance for sustainability reporting by the end of 2022. The environmental data in the 2021 report is subject to internal audits in line with our Environmental Management Systems and external audits in connection with ISO 14001 certification requirements.

MANAGEMENT APPROACH

103-1	Aspect boundaries inside the organization and aspect boundaries outside the organization	This report covers Tronox's global operations in mining, processing and manufacturing, and land rehabilitation.
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ECONOMIC TOPICS		
103-2, 103-3	Economic management approach	Page 57
201-1	Direct economic value generated and distributed	Page 57; 2021 Annual Report
204-1	Procurement practices	Page 61

ENVIRONMENTAL TOPICS		
Energy		
103-2, 103-3	Energy management approach	Page 25
302-1	Energy consumption within the organization	Page 26
302-3	Energy intensity	Page 26
Water		
103-2, 103-3	Water management approach	Page 30
303-3	Total water withdrawal by source	Page 31
Biodiversity		
103-2,103-3	Biodiversity management approach	Page 33
G4-MM1	Amount of land disturbed or rehabilitated	Page 34
304-3	Habitats protected or restored	Page 34
Emissions		
103-2, 103-3	Emissions management approach	Pages 21-22
305-1	Direct GHG Emissions (Scope 1)	Page 23
305-2	Energy indirect GHG emissions (Scope 2)	Page 23
305-4	GHG emissions intensity	Page 23
Effluents and Waste		
103-2, 103-3	Effluents and waste management approach	Pages 27-28
306-2	Total weight of waste by type and disposal method	Page 28

SOCIAL TOPICS

Labor Practices and Decent Work

103-2, 103-3	Labor/management relations management approach (collective bargaining)	Page 41
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G4-MM4	Number of strikes and lockouts exceeding one week's duration	Page 41
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Occupational Health and Safety Management

103-2, 103-3	Health and safety management approach	Pages 15-18
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403-9	Work-related injuries	Page 16
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Diversity and Equal Opportunity

103-2, 103-3	Diversity and equal opportunity management approach	Pages 42-46
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405-1	Diversity of governance bodies and employees	Pages 45-46
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Human Rights

103-2, 103-3	Indigenous rights management approach	Pages 48-50
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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	50% of proved and probable reserves are in or near Indigenous land. Pages 48-50
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Local Communities

103-2, 103-3	Local community engagement management approach	Pages 51-55
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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.
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SASB Index

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	tCO ₂ e	2,398,992	All global sites
		EM-MM-110a.1	tCO ₂ e/t product	0.86	All global sites
	Scope 2 emissions		tCO ₂ e	2,001,664	All global sites
			tCO ₂ e/t product	0.72	All global sites
	Scope 3 emissions		tCO ₂ e/ year	1,804,156	All global sites
Strategy, targets and performance	RT-CH-110a.2 M-MM-110a.2		Pages 21-23	All global sites	

Air Quality	Air emissions of the following pollutants:				
	CO	EM-MM-120a.1	t	141,294.61	All mining sites
	NOx (excluding N2O)	RT-CH-120a.1 EM-MM-120a.1	t	1,686.94	All global sites
	SOx	RT-CH-120a.1 EM-MM-120a.1	t	1,279.87	All global sites
	Hg	EM-MM-120a.1	t	0.00	All mining sites
	Pb	EM-MM-120a.1	t	1.00	All mining sites
	PM10	RT-CH-120a.1 EM-MM-120a.1	t	16,669.11	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	

TOPIC	ACCOUNTING METRIC	CODE	UNIT OF MEASURE	DISCLOSURE	SCOPE
Energy Management	Total energy consumed Energy intensity	RT-CH-130a.1 EM-MM-130a.1	GJ GJ/t product	41,758,891 14.96 Page 26	All global sites
	Percentage renewable	RT-CH-130a.1 EM-MM-130a.1	%	3.15%	All global sites
	Percentage grid energy	RT-CH-130a.1 EM-MM-130a.1	%	19.18%	All global sites
	Total self-generated	RT-CH-130a.1	GJ	4,256,298.97 GJ	Combined heat and power plants at Kwinana and Stallingborough
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: 79,633,505 Water consumed: 20,929,275 Percentages: Page 31	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, %	Page 31	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 #	2 incidents in 2020 and 1 in 2021	All global sites
	Water management risks, and strategies and practices to mitigate those risks	RT-CH-140a.3	Discussion and Analysis	Page 30	All global sites
Hazardous Waste Management	Amount of hazardous waste generated, % recycled	RT-CH-150a.1	t, %	77,928 18.04%	All global sites

TOPIC	ACCOUNTING METRIC	CODE	UNIT OF MEASURE	DISCLOSURE	SCOPE
Waste & Hazardous Materials Management	Waste generated		t	1,907,614	All global sites
	Waste diverted from disposal		t	675,124	All global sites
	Waste directed to disposal		t	1,232,490	All global sites
	Total weight of non-mineral waste generated	EM-MM-150a.4	t	Not reported. Covered under other categories	All mining sites
	Total weight of tailings produced, % recycled	EM-MM-150a.5	t, %	7,440,617 4.16%	All mining sites
	Total weight of waste rock generated	EM-MM-150a.6	t	Not reported. Covered under other categories	All mining sites
	Total weight of hazardous waste generated	EM-MM-150a.7	t	77,928	All mining sites
	Total weight of hazardous waste recycled	EM-MM-150a.8	t	Not reported. Covered 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	Pages 27-28

Namakwa Sands Northern Operations, South Africa



TOPIC	ACCOUNTING METRIC	CODE	UNIT OF MEASURE	DISCLOSURE	SCOPE
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	Pages 78-81	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		Page 28	All mining sites
	Approach to development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities	EM-MM-540a.3		Page 28	All mining sites
	Tailing impoundments broken down by MSHA hazard potential		Number - Low Hazard	25	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		Page 33-34	All mining sites
	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

TOPIC	ACCOUNTING METRIC	CODE	UNIT OF MEASURE	DISCLOSURE	SCOPE
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	%	50%	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	Pages 48-50	All mining sites
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	Pages 51-55	All global sites
	Number and duration of non-technical delays	EM-MM-210b.2	#, duration	0	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	%	Approximately 40% 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

TOPIC	ACCOUNTING METRIC	CODE	UNIT OF MEASURE	DISCLOSURE	SCOPE
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	2021 TRIFR (Chemicals): Employees 0.41, Contractors 0.67 Fatality rate: 0	All global 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	2021 NMFR (Mining): Employees 8 LIFE near hits (0.30 rate), Contractors 16 LIFE near hits (0.57 rate) 2021 TRIFR (Mining): Employees 0.31, Contractors 0.35 Fatality rate: 0 We do not operate mines in the U.S. MSHA all-incidence rate not reported. 83,240 training hours	All mining sites
Operational Safety	Process safety Incident Count (PSIC), Process Safety Incident Rate, Process Safety Incident Severity Rate	RT-CH-540a.1	Number, Rate	PSIC (Tier 1): 5 PSTIR (Tier 1): 0.10 PSISR (Tier 1): 0.10	All chemical sites
	Number of Transport Incidents	RT-CH-540a.2	Number	0	All global sites

TOPIC	ACCOUNTING METRIC	CODE	UNIT OF MEASURE	DISCLOSURE	SCOPE
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	Page 64 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	Page 65	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
Product Design for Use-phase Efficiency	Revenue from products designed for use phase resource efficiency	RT-CH-410a.1	Reporting currency	Approximately 28% Page 58-60	
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 (%)	Page 62	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	Page 62	All chemical sites

ACTIVITY METRICS

Production by reportable segment	RT-CH-000.A	Page 6
Total number of employees, percentage contractors	EM-MM-000.B	Page 45

Appendix: United Nations Global Compact Communication on Progress

Tronox became a signatory to the UN Global Compact (UNGC) in 2021. As such, we commit to annual reporting on our progress toward implementing the UNGC’s 10 principles covering human rights, labor, the environment, and anti-corruption. This is our first Communication on Progress indicating our management systems in support of the UNGC principles. More information on our initiatives and activities to support the UNGC principles can be found elsewhere in this sustainability report and on our [website](#).

TOPIC	UNGC PRINCIPLE	TRONOX INITIATIVES TO SUPPORT UNGC PRINCIPLES
Human Rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights	<ul style="list-style-type: none"> • Code of Ethics and Business Conduct • Supplier Code of Conduct • Sustainable Procurement Policy • Supplier Screening Process • Labor and Human Rights Report
	Principle 2: Make sure that businesses are not complicit in human rights abuses	<ul style="list-style-type: none"> • Code of Ethics and Business Conduct • Supplier Code of Conduct • Sustainable Procurement Policy • Supplier Screening Process • Labor and Human Rights Report • Tronox Speak Up Hotline
Labor	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	<ul style="list-style-type: none"> • Labor and Human Rights Report • Supplier Code of Conduct
	Principle 4: The elimination of all forms of forced and compulsory labor.	<ul style="list-style-type: none"> • Modern Slavery and Human Trafficking Statement • Labor and Human Rights Report • Supplier Code of Conduct
	Principle 5: The effective abolition of child labor.	<ul style="list-style-type: none"> • Modern Slavery and Human Trafficking Statement • Labor and Human Rights Report • Supplier Code of Conduct
	Principle 6: The elimination of discrimination in respect of employment and occupation.	<ul style="list-style-type: none"> • Labor and Human Rights Report • Anti-Harassment, Workplace Violence and Equal Opportunity Policy • Diversity and Inclusion Policy

TOPIC	UNGC PRINCIPLE	TRONOX INITIATIVES TO SUPPORT UNGC PRINCIPLES
Environment	Principle 7: Businesses should support a precautionary approach to environmental challenges.	<ul style="list-style-type: none"> • Environmental Policy • TCFD Report • Incident Classification Guidelines • Supplier Sustainability Policy • Conflict Minerals Policy
	Principle 8: Undertake initiatives to promote greater environmental responsibility.	<ul style="list-style-type: none"> • Environmental Policy • TCFD Report • Safety, Health and Environment Reporting Guidelines • Incident Classification Guidelines • Supplier Sustainability Policy • Conflict Minerals Policy
	Principle 9: Encourage the development and diffusion of environmentally friendly technologies.	<ul style="list-style-type: none"> • Environmental Policy • TCFD Report • Supplier Sustainability Policy • Conflict Minerals Policy
Anti-Corruption	Principle 10: Businesses should work against corruption in all its forms, extortion and bribery.	<ul style="list-style-type: none"> • Code of Ethics and Business Conduct • Supplier Code of Conduct • Anti-Bribery Laws Policy • Ethics, Compliance and Whistleblower Hotline Policy • Anti-Money Laundering Policy

Appendix: Mine Tailings Disclosure

Name	Location	Owner	Status	Current Impoundment Volume (m ³)	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	No	Yes	No
Pond 2A	Chandala	Tronox Holdings plc	Active	1046 m3 capacity below freeboard (500mm)	2009	Original drawings and reports on file	Low	No	Yes	No
Pond 2B	Chandala	Tronox Holdings plc	Active	1046 m3 capacity below freeboard (500mm)	2009	Original drawings and reports on file	Low	No	Yes	No
Pond 2C	Chandala	Tronox Holdings plc	Active	5931 m3 capacity below freeboard (500mm)	2012	Drawings and reports on file	Low	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	No	Yes	No
Pond 4A	Chandala	Tronox Holdings plc	Active	2586 m3 capacity below freeboard (500mm)	2017	Construction report and drawings on file	Low	No	Yes	No
Pond 4B	Chandala	Tronox Holdings plc	Active – not currently holding liquid	1768 m3 capacity below freeboard (500mm)	2009	Construction report and drawings on file	Low	No	Yes	No
Pond 4C	Chandala	Tronox Holdings plc	Active	10487 m3 capacity below freeboard (500mm)	2013	Construction report and drawings on file	Low	No	Yes	No
POND-5	30° 38' 55.5901" S 115° 25' 04.0059" E	Tronox Holdings plc	Active	3,000,000	2019	All relevant engineering documents available	Low	No	Yes	N/A In-Pit

Name	Location	Owner	Status	Current Impoundment Volume (m ³)	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 (continued)										
27E Pond	30° 38' 41.2436" S 115° 26' 03.5335" E	Tronox Holdings plc	Active	840,000	2020	All relevant engineering documents available	Low	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	All relevant engineering documents available	Low	No	Yes	N/A In-Pit
Pond7	30° 37' 31.8424" S 115° 24' 19.2417" E	Tronox Holdings plc	Active	4,500,000	Planned 2022	All relevant engineering documents available	Low	No	Yes	N/A In-Pit
S19_Pond	30° 35' 57.4311" S 115° 22' 10.1434" E	Tronox Holdings plc	Active	726,000	Planned 2023	All relevant engineering documents available	Low	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	Planned 2024	All relevant engineering documents available	Low	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	Planned 2025	All relevant engineering documents available	Low	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	Planned 2026	All relevant engineering documents available	Low	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	Planned 2027	All relevant engineering documents available	Low	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	Planned 2028	All relevant engineering documents available	Low	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	Planned 2029	All relevant engineering documents available	Low	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	Planned 2030	All relevant engineering documents available	Low	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	Planned 2031	All relevant engineering documents available	Low	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	Planned 2032	All relevant engineering documents available	Low	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	Planned 2033	All relevant engineering documents available	Low	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	Planned 2034	All relevant engineering documents available	Low	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	Planned 2035	All relevant engineering documents available	Low	No	Yes	N/A In-Pit

Name	Location	Owner	Status	Current Impoundment Volume (m ³)	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
SOUTH AFRICA										
BSB Mine Site	31°16'11.3"S 17°54'02.0"E	Tronox Mineral Sands (Pty) Ltd – Namakwa Sands	Inactive	3,036,000	2022	All relevant engineering documents available	High	No	Yes, External	December 2021
BSB Mine Site	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	2022	All relevant engineering documents available	High	No	Yes, External	December 2021
BSB Mine Site	31° 1639.4"S 17°53'28.6"E	Tronox Mineral Sands (Pty) Ltd – Namakwa Sands	Active – Emergency water collection	8,791,200	2022	All relevant engineering documents available	High	No	Yes, External	December 2021
BSB Mine Site	31°17'12.6"S 17°53'23.4"E	Tronox Mineral Sands (Pty) Ltd – Namakwa Sands	Active – Until RSF 6 is commissioned	23,297,400	2022	All relevant engineering documents available	High	No	Yes, External	December 2021
BSB Mine Site	31°17'16.1"S 17°53'23.0"E	Tronox Mineral Sands (Pty) Ltd – Namakwa Sands	Active	62,920,000	2022	All relevant engineering documents available	High	No	Yes, External	December 2021
BSB Mine Site	31°17'51.7"S 17°53'46.2"E	Tronox Mineral Sands (Pty) Ltd – Namakwa Sands	Active	26,700,000	2022	All relevant engineering documents available	High	No	Yes, External	December 2021
BSB Mine Site	31°15'47.1" S 17°55'15.0" E	Tronox Mineral Sands (Pty) Ltd – Namakwa Sands	Inactive – Rehabilitated	130,000	2022	All relevant engineering documents available	High	No	Yes, External	December 2021
BSB Mine Site	310 15'47.1"S 17°55'15.8" E	Tronox Mineral Sands (Pty) Ltd – Namakwa Sands	Inactive – Rehabilitated	110,000	2022	All relevant engineering documents available	High	No	Yes, External	December 2021
BSB Mine Site	31°15'57.5" S 17° 55'19.8"E	Tronox Mineral Sands (Pty) Ltd – Namakwa Sands	Active – Emergency water collection	110,000	2022	All relevant engineering documents available	High	No	Yes, External	December 2021
BSB Mine Site	31°16'07.1" S 17°55'05.5" E	Tronox Mineral Sands (Pty) Ltd – Namakwa Sands	Active – Emergency water collection	6,160,000	2022	All relevant engineering documents available	High	No	Yes, External	December 2021

Name	Location	Owner	Status	Current Impoundment Volume (m ³)	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
SOUTH AFRICA (continued)										
BSB Mine Site	31°16'07.1" S 17°55'05.5" E	Tronox Mineral Sands (Pty) Ltd – Namakwa Sands	Active	13,585,000	2022	All relevant engineering documents available	High	No	Yes, External	December 2021
Fairbreeze Mine Site	X: -3209000 Y: 68000	Tronox KZN Sands (Pty) Ltd	Active	55,000,000	2021	All relevant engineering documents available	Significant	Yes. Enhancing stability of western wall currently in progress	Yes, External	June 2020
Fairbreeze Mine Site	X: -3192000 Y: 89000	Tronox KZN Sands (Pty) Ltd	Inactive	11,140,000	2021	All relevant engineering documents available	Significant	No	Yes, External	September 2020

Cooljarloo Mine, Northern Operations, Western Australia





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