A close-up photograph of a Eucalyptus branch with a vibrant red stem. Several green, pointed buds are clustered along the stem, some in sharp focus and others blurred in the background. The lighting is bright, highlighting the textures of the buds and the stem.

2017 GLOBAL REPORTING INITIATIVE REPORT

**TRONOX**

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# INTRODUCTION

**September 18, 2018**

This 2017 Global Reporting Initiative (GRI) Report, based on the internationally recognized GRI Framework for Sustainability Reporting, supplements the Tronox Limited 2017 Annual Report by providing additional data and information on our economic, environmental, and social performance.

In developing this report, we utilized the “GRI Standards” guidelines, applied to data for the fiscal year ending December 31, 2017. We believe this level of data, combined with the required GRI Standard Disclosures, enables Tronox to declare that this report complies with the GRI Standards Core “in accordance” option (see also Disclosure 102-54). We also took into account the G4 Mining and Metals Sector Disclosures, including several sector-specific indicators.

Our persistent focus on safety has resulted in an exceptional safety performance in 2017. All injury frequency rates (lost time, disabling, and total recordable) were the lowest in Tronox history (employees and contractors combined) and no fatalities were recorded.

In February 2017, Tronox entered into an agreement to acquire the TiO<sub>2</sub> business of The National Titanium Dioxide Company Limited of the Kingdom of Saudi Arabia, known as Cristal, a privately held global chemical and mining company. Tronox also completed the sale of its Alkali business to Genesis Energy, L.P., on September 1, 2017. This was an important step in positioning Tronox as the global leader in the TiO<sub>2</sub> industry, and the proceeds will be used to fund the majority portion of the cash consideration for the pending Cristal acquisition. More information on changes to the organization and entities included in this report can be found in Disclosures 102-10 and 102-45 respectively.

Please refer to the GRI Index provided on page 46 for quick reference to specific disclosures and indicators.

# GENERAL DISCLOSURES (GRI 102)

## 1. Organizational Profile

### Name of the organization (Disclosure 102-1)

Tronox Limited (Tronox, the company, or we).

### Activities, brands, products, and services (Disclosure 102-2)

Tronox is a public limited company registered under the laws of the State of Western Australia. We are a global leader in the mining of titanium-bearing mineral sands and the production of titanium dioxide (TiO<sub>2</sub>) pigment. Our TiO<sub>2</sub> products are critical components of everyday applications, such as paint and other coatings, plastics, paper and other uses. Products we derive from mineral sands include titanium feedstock, zircon, and pig iron. Zircon, a hard, glossy mineral, is used for the manufacture of ceramics, refractories, TV screen glass, and a range of other industrial and chemical products. Pig iron is a metal material used in the steel and metal casting industries to create wrought iron, cast iron, and steel. Titanium feedstock is primarily used to manufacture TiO<sub>2</sub> pigment.

### Products

#### Pigment

##### Titanium Dioxide (TiO<sub>2</sub>)

Titanium dioxide is a white inorganic compound used primarily in the production of paints, printing inks, paper, and plastic products. Titanium dioxide has a remarkably high refractive index and exceedingly high reflectance, offering maximum opacity and imparting whiteness and brightness to the products made with it.

#### Electrolytic<sup>1</sup>

##### Elemental Boron / Boron Trichloride

Elemental boron and boron trichloride are used by the automotive industry in airbags and as a reactant in pharmaceutical production, respectively. Under U.S. federal export rules Elemental Boron is restricted from export to certain countries.

##### Electrolytic Manganese Dioxide (EMD)

EMD is used in the production of alkaline primary (non-rechargeable) batteries. It is also the starting material for making lithium manganese oxide (LMO), which is used in the production of rechargeable batteries.

#### Mineral Sands

##### Rutile

Naturally occurring rutile contains a very high titanium concentration and does not need to be upgraded for use in the company's titanium dioxide pigment process. Feedstock with high concentrations of titanium produce less waste at pigment plants and are more efficient. Rutile is also used for the coating of welding rods and the production of titanium metal.

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<sup>1</sup> On March 21, 2018, we announced that we had entered into a purchase agreement to sell our electrolytic business located in Henderson, Nevada.

### Chloride Slag and Slag Fines

Ilmenite is the most abundant titanium mineral in the world. Tronox upgrades ilmenite using a smelting process to create chloride slag and slag fines, which are converted by pigment manufacturers into titanium dioxide.

### Synthetic Rutile

Tronox also upgrades ilmenite into synthetic rutile using a rotary kiln. Synthetic rutile has a higher titanium content than chloride slag or slag fines, but not as high as natural rutile.

### Leucoxene

Leucoxene is a naturally occurring mineral formed through the geological alteration of ilmenite. It is an amorphous iron-titanium oxide mineral that contains high levels of titanium. In addition to its use as a raw material for chloride-process  $\text{TiO}_2$  pigment, higher grades of leucoxene are suitable for welding rod flux manufacturing.

### Zircon

Zircon is a primary co-product of heavy mineral sands mining. Zircon is separated from heavy mineral concentrate after being transported to a mineral separation plant or dry mill. A non-magnetic and non-conductive mineral, zircon is used in the production of ceramics, tiles and sanitary ware, refractories, TV screens, computers, and a wide range of industrial and domestic products.

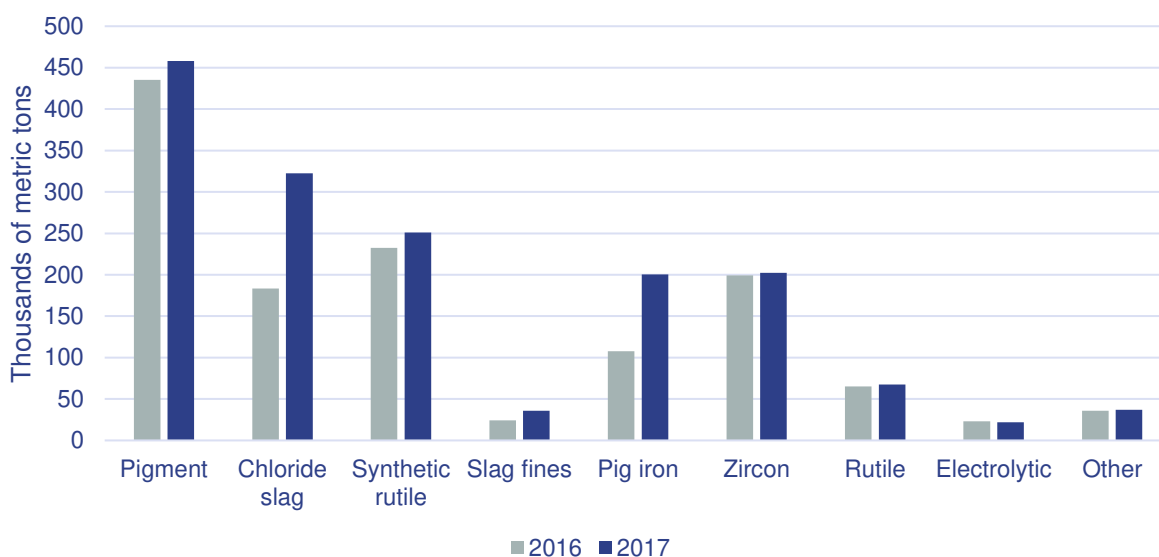
### High-purity Pig Iron

High-purity pig iron is a co-product of the titanium slag smelting process. It is typically low in manganese, phosphorous and sulfur, and is sold to foundries as a diluting agent for trace elements and to steel producers for iron units.

### Activated Carbon

Activated carbon is a byproduct of the synthetic rutile reduction kiln, in which coal is used as both a fuel and a reductant. Activated carbon is used as an absorbent, decolorizer or deodorizer in water, vapor, and gas purification/filtration.

**2017 Production by Product Distribution**



**Note:** "Other" includes activated carbon, leucoxene, and staurolite.

## Location of headquarters (Disclosure 102-3)

Tronox operates manufacturing and mining facilities, research and development labs, and corporate, sales, and marketing offices in 19 locations worldwide. The company maintains corporate offices in Australia, the United Kingdom and the United States, at the locations detailed on the back cover.

## Location of operations (Disclosure 102-4)

Tronox operates in 19 locations globally, including manufacturing and/or mining in the United States, the Netherlands, South Africa, and Australia.

Our seven primary manufacturing and mining facilities and their associated production capacities are summarized below.

| TiO <sub>2</sub> Pigment Facilities                                       | Capacity (metric tons) |
|---|------------------------|
| 1. <b>Hamilton</b> (Mississippi, USA)                                     | 225,000                |
| 2. <b>Botlek</b> (the Netherlands)  | 90,000                 |
| 3. <b>Kwinana</b> (Western Australia, Australia)                          | 150,000                |
| <b>Electrolytic Facilities</b>  |                        |
| 4. <b>Henderson</b> (Nevada, USA)   |                        |
| EMD   | 26,500                 |
| Boron Products  | 475                    |
| <b>Mineral Sands Facilities</b>   |                        |
| 5. <b>Cooljarloo/Chandala</b> <sup>2</sup> (Western Australia, Australia) |                        |
| Synthetic Rutile  | 220,000                |
| Zircon  | 40,000                 |
| Rutile  | 15,000                 |
| Leucoxene   | 20,000                 |
| 6. <b>Namakwa Sands</b> (Western Cape, South Africa)                      |                        |
| Titanium Slag   | 190,000                |
| Zircon  | 125,000                |
| Pig Iron  | 100,000                |
| Rutile  | 31,000                 |
| 7. <b>KZN Sands</b> (KwaZulu-Natal, South Africa)                         |                        |
| Titanium Slag   | 220,000                |
| Pig Iron / Scrap Iron   | 121,000                |
| Zircon  | 55,000                 |
| Rutile  | 25,000                 |

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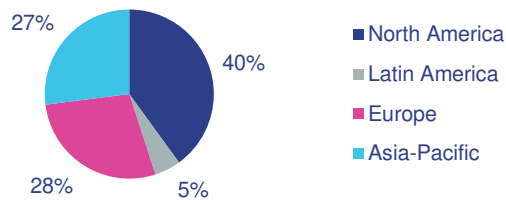
<sup>2</sup> Tronox operates its Cooljarloo mine and its Chandala synthetic rutile plant jointly as "Northern Operations."

## Ownership and legal form (Disclosure 102-5)

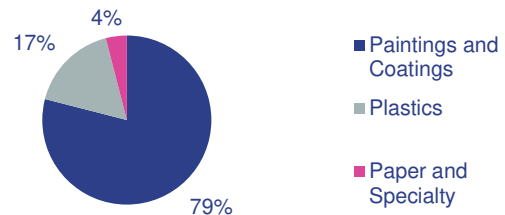
Tronox Limited is a public company traded on the New York Stock Exchange (NYSE) and registered in the state of Western Australia, Australia, under the Corporations Act 2001.

## Markets served (Disclosure 102-6)

2017 Sales volume distribution by geography



2017 Sales volume distribution by end use



## Scale of the organization (Disclosure 102-7)

### Human Resource Scale

As of December 31, 2017, Tronox employed 3,400 people around the world. Over 90 percent of our employees are based at our seven operational sites.

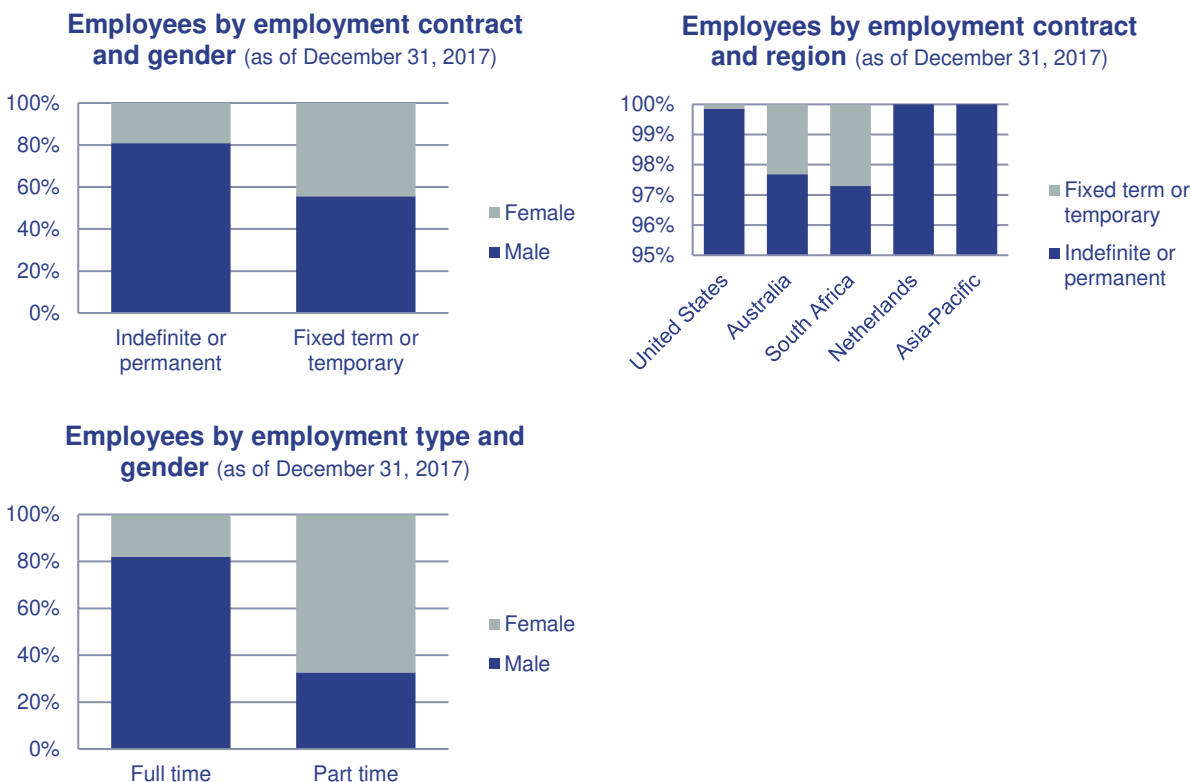
### Economic Scale

Breakdowns of our capitalization for 2016 and 2017 are provided below.

| Total capitalization broken down in debt and equity<br>[millions of US\$] | 2016           | 2017           |
|---|----------------|----------------|
| Current Liabilities   | 564            | 348            |
| Non-current Liabilities   | 3,247          | 3,501          |
| Equity  | 1,153          | 1,015          |
| <b>Assets</b>   | <b>\$4,964</b> | <b>\$4,864</b> |



## Information on employees and other workers (Disclosure 102-8)



## Supply chain (Disclosure 102-9)

Tronox mines and manufactures inorganic chemical compounds in the United States, the Netherlands, South Africa, and Australia. The company operates an integrated supply chain to support its TiO<sub>2</sub> business, as well as its corporate and administrative functions. Through a “hub and spoke” process, the company is able to leverage economies of scale to supply and produce materials to support our business operations and our global customers. At the same time, we are able to work with local business partners leading to socioeconomic advances in the communities in which we operate.

### Tronox Supplier Standards

Tronox values its partnerships with suppliers and fully recognizes that our mutual success is built on open communication and a commitment to common principles and business practices. Accordingly, the company has set high standards for the way it conducts business in the areas of regulatory compliance, social responsibility, and environmental stewardship.

It is the responsibility of each supplier to ensure that its employees and representatives understand and comply with this Code.

### Ethics and Legal Requirements

Suppliers will conduct their business in a legal and ethical manner and act with integrity. Further, they will ensure that all third parties and subcontractors are in full compliance with contractual agreements and compliance requirements, including:



*Compliance with Applicable Laws and Regulations*

Meet and document compliance of all applicable regulatory and statutory requirements.

*Avoid Conflicts of Interest*

Avoid any conflict of interest when interacting with Tronox employees.

*No Bribery*

Refrain from engaging in any form of commercial bribery with its suppliers, agents or customers, nor offer any incentive to any Tronox employee or family member of a Tronox employee in order to obtain or retain business. Abstain from any form of governmental bribery with any political, regulatory or other government employee and comply with all applicable laws dealing with the bribery of government officials, including the U.S. Foreign Corrupt Practices Act (FCPA) and the U.K. Bribery Act.

*Fair Competition*

Comply with all applicable laws regarding fair competition and antitrust.

*Protect Information*

Safeguard Tronox's confidential information and act to prevent its misuse, theft, fraud, or improper disclosure.

*Identification of Concerns*

Provide means for their employees to report concerns or potentially unlawful activities in the workplace. Treat any report in a confidential manner. Investigate such reports and take corrective action if needed.

**Human Dignity and Labor**

Suppliers are expected to protect the human rights of their employees and to treat them with dignity and respect, including:

*Child or Forced Labor*

Comply with the applicable child labor laws of the countries in which they operate and demonstrate zero tolerance of child labor that are not in accord with local laws. Demonstrate zero tolerance of forced or involuntary labor of any type and the trafficking or involuntary servitude of any worker.

*Nondiscrimination*

Nondiscrimination in hiring practices on grounds of race, creed, gender, religion, national origin, age, disability or sexual orientation, or other factors as mandated by the applicable laws of the countries in which they operate.

*Fair Treatment*

Respect for workers, and zero tolerance for any engagement in corporal punishment, violence or threats of violence, or other forms of physical coercion or harassment. Sexual harassment of employees will not be tolerated.

*Working Hours, Wages and Benefits*

Working hours for suppliers' employees will not exceed the maximum set by the applicable national law. Compensation paid to employees will comply with applicable national wage laws in the interests of providing an adequate standard of living. Employees must be paid in a timely manner in accordance with local laws.

### *Freedom of Association*

In accordance with local laws, respect the rights of employees to associate freely, join labor unions, seek representation, and engage in collective bargaining.

## **Environment, Health and Safety**

Tronox's commitment to sustainability includes efficient use of resources, respect for the environment, and safe and healthy workplaces. The company expects its suppliers to make similar commitments to continuously improve their environmental, health, and safety performance, including:

### *Respect the Environment*

Collaborate to eliminate waste and cost from the supply chain such as programs to reduce emissions and waste, promote the efficient use of energy and natural resources, and encourage responsible management of their products and processes through their entire life cycle, and for their intended end use.

### *Protect Health and Safety*

Demonstrate and actively work to advance sustainable business practices and a clear commitment to a safe workplace by complying with the Tronox LIFE Saving Rules. Health, safety and security must be priorities in product manufacturing and in planning for new products, facilities, or processes. Employees must work in a safe and healthy workplace, with the appropriate controls, training, work procedures, and personal protective equipment.

## **Quality**

Tronox strives for continuous improvement in quality of goods and services in all facets of operations and expects suppliers to partner in the investment. Suppliers will maintain a documented quality system that utilizes process controls and emphasizes defect prevention rather than defect detection, including:

### *Communication*

Promptly notify Tronox of changes to goods or services that may adversely impact Tronox's product usage and/or business relationship. Notify, in advance, any plans to discontinue goods or services and channel all communications on terms, conditions, and pricing through designated Tronox supply chain or departmental representatives. Obtain prior approval before soliciting or reaching out to others in the company.

### *Information*

Give a timely response to requests for information, technical assistance, or corrective actions. Commit to openly share information on all elements of cost and cost improvement initiatives. Share sustainability and related data and, if necessary, cooperate in a sustainability audit.

### *Service*

Accept only specifications or requirements that can be met. Pay prompt and professional attention to the highest customer service standards. Comply with purchase order and contract compliance regarding schedules and deliveries for goods and services.

## **Innovation**

### *Process Development*

Collaborate to develop process improvements and new applications. Provide goods, services or innovations that give Tronox a technical, process, or service advantage over our competition.

### *Productivity Improvements*

Assist with research and the implementation of productivity improvements that result in lower costs every year, as well as provide ideas and solutions that will improve the cost of goods and services.

### *Effective Use of Electronic Commerce*

Cooperate to improve efficiency of interaction through the utilization of e-Sourcing, e-Invoicing and other web-based electronic tools. Include purchase order numbers and reference numbers, where applicable, on all transaction documents. Participate in the automation of procure-to-pay processes, when applicable, and in the construction of parts catalogs.

### **Compliance**

This Code is supplemental to any contract between Tronox Limited and its subsidiary businesses and suppliers. To the extent that more specific or stringent terms are agreed in a contract, the contract terms shall control.

Suppliers are expected to maintain management systems and controls to promote and facilitate compliance with applicable laws and the principles set forth in this Supplier Code of Conduct. Suppliers should also apply these or similar principles to the subcontractors and suppliers they work with in providing goods and services to Tronox.

## **Significant changes to the organization and its supply chain**

### **(Disclosure 102-10)**

In February 2017, we entered into an agreement to acquire the TiO<sub>2</sub> business of The National Titanium Dioxide Company Limited of the Kingdom of Saudi Arabia, known as Cristal, a privately held global chemical and mining company, for \$1.673 billion of cash and 37,580,000 Class A ordinary shares.

On September 1, 2017, we completed the sale of our Alkali business to Genesis Energy, L.P., for proceeds of \$1.325 billion in cash. This was an important step in positioning Tronox as the global leader in the TiO<sub>2</sub> industry, and the proceeds will be used to fund the majority portion of the cash consideration for the pending Cristal acquisition.

**All data presented in this report includes information on the TiO<sub>2</sub> segment only. Data relating to the Alkali segment was not included for the sake of equal comparison of years.**

## **Precautionary approach (Disclosure 102-11)**

Tronox supports the precautionary approach to evaluate and address potential environmental impacts, reflected in the Tronox Code of Ethics and Business Conduct, which integrates our commitment to core values:

**Health & Safety:** We work safely – all the time

We believe passionately that everyone at Tronox should experience a safe and healthy workplace. We proactively identify and manage risk, conduct ourselves responsibly, exercise good judgment, and take responsibility for our actions.

**Responsibility:** We care for our environment and our communities

We are responsible citizens, as a company and as individuals. We are stewards of our environment and active in our communities.

**People:** People are our most important resource

We create opportunities for development and act intentionally to create a diverse and supportive work environment. Each of us is committed to personal growth and development, embraces change, and learns from our successes and mistakes in order to create a high-performance culture.

**Teamwork:** We will win – as a team

We collaborate effectively, communicate openly, engage honestly, treat others respectfully, and make informed decisions.

**Customers:** It really is all about the customer

Our collective purpose is to create and sell differentiated and competitive products and services, and to make it easy for our customers – internal and external – to do business with us.

**Results:** We measure, own, and deliver results

We encourage creativity and measure results. We set clearly defined and challenging objectives; we own those objectives, and we deliver results, with a relentless focus on operational excellence. We innovate our processes to continuously deliver better results.

Every facility owned and operated by Tronox must comply with the company's safety, health, and environmental policies, and demonstrate compliance with all applicable safety, health, environmental, and security laws pertaining to its operations. Each employee is expected to play a critical role in ensuring the quality and safety of Tronox products, from design through manufacturing, ongoing improvements, and customer support.

Tronox implements these requirements through (i) management and employee engagement; (ii) allocation of sufficient human and capital resources; and, (iii) rigorous measurement, review, and corrective action systems.

Advancing our safety, health, and environmental policies is an integral part of the company's commitment to ethical business conduct. We have a steadfast commitment to the safety and health of our employees, those that visit our operations, and the surrounding communities in which we live and work. We maintain an equal commitment to environmental stewardship and sustainable business practices. We work with our global business partners so they can meet our standards and we provide information and assistance on how to do so.

We have established a corporate responsibility committee, consisting of the executive committee of Tronox Limited and reporting to the corporate governance committee of the Board of Directors of Tronox Limited, to assess the company's overall compliance with applicable law and the Code of Ethics and Business Conduct ("the Code"). The committee oversees the compliance training program and considers the appropriate response to significant compliance matters and legal developments.

Any employee who learns of a suspected violation of the Code must immediately report it by following defined procedures. Employees are required to come forward with any such information without regard to the identity or position of the suspected offender. Tronox will treat the information in a confidential manner and will ensure that no acts of retribution or retaliation will be taken against anyone for making a report in good faith.

## **Cybersecurity**

Tronox takes the security of its information, infrastructure, and applications very seriously. We are committed to protecting our critical assets and resources through the implementation of technology, policies, controls, and standard procedures. As cyber security threats evolve and attacks against individuals and corporations increase, Tronox continues to take appropriate steps to detect, protect, and mitigate these threats.

## **External initiatives (Disclosure 102-12)**

Our South African operations annually publish the South African Mining Charter Scorecard. This Scorecard measures their progress against the Broad-Based Black Economic Empowerment criteria, posed by the Department of Mineral Resources in South Africa.

Please refer to page 46 for the 2017 South African Mining Charter Scorecard. Only KZN Sands' scores are included, as at the time of publication of this report, Namakwa Sands is still awaiting approval of their scoring by the South African Department of Mineral Resources.

## **Memberships of associations (Disclosure 102-13)**

- European Chemical Industry Council (Cefic)
- Titanium Dioxide Manufacturers Association (TDMA)

## 2. Strategy

### Statement from senior decision-maker (Disclosure 102-14)

Tronox is a company that mines and processes titanium ore, zircon and other minerals, and manufactures titanium dioxide (TiO<sub>2</sub>) pigments that add brightness and durability to paints, plastics, paper, and other everyday products. Because we consistently strive to operate in a responsible way, I am pleased to present our 2017 Global Reporting Initiative (GRI) summary.

Our environmental efforts continue in energy and water consumption, land restoration, and biodiversity. We have made enhancements to our energy efficiencies in terms of process control automation, heating and cooling optimization, and insulation measures. Our processes are designed to minimize overall water usage by reusing and recycling the precious resource. Total land area in rehabilitation and area restored both increased in 2017, and we are attempting to eradicate invasive flora to protect indigenous plants at one of our sites.

In 2017, Tronox made direct and in-kind investments of nearly US\$2 million to support local communities around the world. Once again, our employees took an active role in these efforts by devoting volunteer hours throughout the year.

Most importantly, we demonstrated an exceptional level of safety performance in 2017. Our persistent focus on safety resulted in the lowest injury frequency rates (lost time, disabling, and total recordable) in Tronox history. Our employees across all sites continue to embody our core value of Safety as the top priority.

In addition to company-wide focus and diligence on workplace safety, community involvement and environmental responsibility, we place a high value on communication with our stakeholders, including investors, customers, business partners, government and non-government entities, community leaders, and employees.

As a global industry leader, we understand that sustainable business practices are essential to our success. We also understand that there is more work to do and more progress to be made. On behalf of Tronox, I want to thank you, our stakeholders, for your support as we further our sustainability efforts and plan for a bright future.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffry N. Quinn". The signature is fluid and cursive, with a long horizontal line extending from the end.

Jeffry N. Quinn  
Chief Executive Officer

### 3. Ethics and Integrity

#### **Values, principles, standards, and norms of behavior (Disclosure 102-16)**

We are building a lasting foundation for growth around the six core values of Tronox: Health & Safety; Responsibility; People; Teamwork; Customers; and, Results, described more extensively under Disclosure 102-11. These values define our approach to business and corporate citizenship. The Tronox Code of Ethics and Business Conduct applies to all employees worldwide. The Code consolidates all company policies with respect to business ethics and conflict of interest.

The company has also adopted business standards and principles for all of its global business partners and suppliers (see also Disclosure 102-9).

### 4. Governance

#### **Governance structure (Disclosure 102-18)**

The company's business and affairs are managed by a multinational executive management team under the oversight of the Tronox Board of Directors, which is comprised of nine members. Seven Directors are elected annually by a vote of Class A common stockholders. Two Directors are elected annually by Class B shareholders.

The listing standards of the New York Stock Exchange (NYSE), as well as our Corporate Governance Guidelines, require that a majority of our Board of Directors be comprised of independent directors. Our Board has affirmatively determined that six of the nine directors were independent as of December 31, 2017.

#### **The Board's Role in Risk Oversight**

The Board of Directors administers its risk oversight function directly and through its various committees. The Board's role in the company's risk oversight process includes receiving regular reports from members of senior management on areas of material risk to the company, including operational, financial, competitive, management retention, and legal risks. The Board of Directors routinely discusses with senior management major risk exposures, their potential financial impact, and steps taken (both short-term and long-term) to manage them.

In 2012, the Board of Directors established three committees: corporate governance and nominating; human resources and compensation; and audit. Each committee is governed by a written charter. A current copy of each charter is available to our shareholders at [www.tronox.com](http://www.tronox.com).

The audit committee assists the Board of Directors in fulfilling its oversight responsibilities with respect to the areas of financial reporting, internal controls and compliance with legal and regulatory requirements, and, in accordance with NYSE requirements, discusses policies with respect to risk assessment and risk management, and their adequacy and effectiveness. The audit committee routinely discusses with senior management and an independent registered public accounting firm any financial risk exposures, including risks related to financial reporting, tax, accounting, disclosure, internal control over financial reporting, financial policies and credit and liquidity matters, steps taken to manage those exposures, and the company's risk tolerance in relation to its overall strategy.



As noted earlier in Disclosure 102-11, also reporting to the corporate governance committee is the Tronox corporate responsibility committee, consisting of the executive committee of Tronox Limited. The corporate responsibility committee assesses the company's overall compliance with applicable law and the Tronox Code of Ethics and Business Conduct, which defines obligations for ethical behavior and corporate responsibility by Tronox employees, directors, suppliers, contractors, and other related parties.

The Tronox Board of Directors (as of December 31, 2017):

| Name            | Audit | Human Resources and Compensation | Corporate Governance and Nominating |
|-----------------|-------|----------------------------------|-------------------------------------|
| Ilan Kaufthal*  |       |                                  |                                     |
| Daniel Blue     | •     | •                                | •                                   |
| Andrew P. Hines | Δ     |                                  |                                     |
| Wayne A. Hinman |       | Δ                                | Δ                                   |
| Timothy Carlson |       |                                  |                                     |
| Jeffry N. Quinn |       |                                  |                                     |
| Peter Johnston  | •     |                                  | •                                   |
| Sipho Nkosi     |       | •                                |                                     |
| Mxolisi Mgojo   |       |                                  |                                     |

\* Chairman of the Board

Δ Chair

• Member

### Subsequent event

On April 9, 2018, Timothy Carlson, who temporarily filled the Class A Director vacancy created by the untimely passing of former Chairman and Chief Executive Officer Thomas Casey, resigned from the Board of Directors. He remains senior vice president and chief financial officer of Tronox. The Board of Directors appointed Ginger M. Jones as a new Class A Director of the Company. She serves as a member of the audit committee.

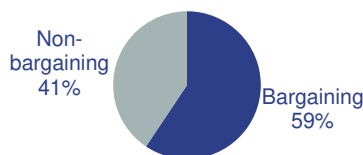
## 5. Stakeholder Engagement

### List of stakeholder groups (Disclosure 102-40)

Tronox engages a number of external and internal stakeholder groups, including the communities in which we live and work, business partners, community and tribal leaders, and employees. In addition, we engage with a number of regional or international not-for-profit and advocacy organizations.

## Collective bargaining agreements (Disclosure 102-41)

Percentage of employees covered by  
collective bargaining agreements  
(as of December 31, 2017)



## Identifying and selecting stakeholders (Disclosure 102-42)

Stakeholders are identified based on active community outreach and engagement activities at all Tronox business operations worldwide.

## Approach to stakeholder engagement (Disclosure 102-43)

We are a diverse global company and, as such, our approach to stakeholder engagement is determined at the local, regional, and corporate levels, as appropriate. Operating under our Code of Conduct and adhering to our corporate citizenship principles and guidelines, each operating site determines the frequency and level of interaction with local stakeholders. Our corporate affairs and investor relations teams conduct routine communications with key external stakeholders and shareholders.

## Key topics and concerns raised (Disclosure 102-44)

Stakeholder engagement is an integral component of the Tronox business strategy. Based on feedback from relevant constituents, the company has developed and implemented comprehensive programs in areas, such as:

- Health & Safety;
- Suppliers and business partner standards;
- Community-based initiatives that support STEM (science, technology, engineering, and mathematics) education, environmental awareness, health and sanitary concerns, and equal rights and empowerment;
- Reducing waste and lowering our carbon footprint; and,
- Investing in skills training and development curricula for our workforce.

## 6. Reporting Practice

### Entities included in consolidated financial statements (Disclosure 102-45)

In 2017, the company had two reportable operating segments: TiO<sub>2</sub> and Alkali. This last segment was sold to Genesis Energy, L.P., on September 1, 2017 (see also Disclosure 102-10). Only the TiO<sub>2</sub> segment is covered in this report.

## Defining report content and topic boundaries (Disclosure 102-46)

Applying the GRI principles for defining report content and completeness, this report focuses on the most material issues facing the company. These issues are guided by the GRI definition of materiality: topics and indicators that reflect the company's significant economic, environmental, and social impacts, or that would substantively influence the assessments and decisions of stakeholders. Our key stakeholders include employees and prospective employees, investors, lenders, customers, suppliers, governments and regulatory bodies, communities, and nongovernmental organizations.

To identify material issues to Tronox, we solicited input from our senior management team, and then asked relevant managers in the business to identify the matters of highest interest to external stakeholders with which they engage. A representative sample of this engagement follows:

| External Stakeholder      | Tronox Representatives Engaging   |
|---------------------------|---|
| Investors                 | CEO, CFO, SVP Investor Relations  |
| Lenders                   | CEO, CFO, VP Treasury   |
| Customers                 | Executive Vice President & Chief Operating Officer; SVP & Chief Commercial Officer, Sales Teams   |
| Suppliers                 | VP Procurement & Supply Chain, Supply Chain Team  |
| Government and Regulators | SVP & General Counsel; Assistant General Counsels; VP Corporate Communications and PR; General Managers of Operating Sites; VPs of Safety, Health & Environment (SHE); Site SHE Managers  |
| Communities               | Executive Vice President & Chief Operating Officer; General Managers of Operating Sites; VP Corporate Communications and PR; VPs of Safety, Health & Environment (SHE); Site SHE Managers |
| Non-Governmental Bodies   | VP Corporate Communications and PR; General Managers of Operating Sites; VPs of Safety, Health & Environment (SHE); Site SHE Managers   |

The resulting issues and topics that are most material to our business are summarized and explained on the next page. The topics selected formed the basis of our 2016 reporting, and are now being evaluated in this 2017 report.

We welcome feedback from stakeholders on our report content, and further request that matters of additional interest that are not covered here be communicated to Tronox via the appropriate communication channels described under Disclosure 102-53.

## List of material topics (Disclosure 102-47)

The table below includes the 2017 Tronox material topics for the economic, environmental, and social categories. Descriptions of the topics, boundaries, and management approaches are stated in the category-specific Disclosure 103 on page 20 (economic), 22 (environmental), and 37 (social).

| Category      | Material Topic to Tronox        |
|---------------|---------------------------------|
| Economic      | Economic Performance            |
| Environmental | Energy                          |
|               | Water                           |
|               | Biodiversity                    |
|               | Emissions                       |
|               | Effluents and Waste             |
| Social        | Labor/Management Relations      |
|               | Occupational Health and Safety  |
|               | Diversity and Equal Opportunity |
|               | Indigenous Rights               |
|               | Local Communities               |

Other relevant issues and topics were evaluated for report content, but were not deemed material at this time. Nevertheless, simply because these other issues were not deemed material does not mean they are not important nor that Tronox is not already engaged in addressing the relevant sustainability elements of the matter. It simply means that the matter is not yet material to Tronox from a GRI Standards reporting perspective.

## Restatements of information (Disclosure 102-48)

All re-statements of data and information provided in earlier reports are noted in the particular report section and can be identified by the text following a “**Note.**”

## Changes in reporting (Disclosure 102-49)

Tronox sold the Alkali business to Genesis Energy, L.P., in September 2017. Following the Alkali sale, we reverted to a business management structure including a single segment; the TiO<sub>2</sub> business.

**All data presented in this report includes information on the TiO<sub>2</sub> segment only. Data relating to the Alkali segment was not included for the sake of equal comparison of years.**

## Reporting period (Disclosure 102-50)

The reporting period is based on a fiscal year, which, at Tronox, coincides with a calendar year: January 1 to December 31.

### **Date of most recent report (Disclosure 102-51)**

The most recent report, which is the Tronox Limited 2016 Global Reporting Initiative Report, was published on July 20, 2017.

### **Reporting cycle (Disclosure 102-52)**

The reporting cycle of Tronox GRI Reports is on an annual basis.

### **Contact point for questions regarding the report (Disclosure 102-53)**

Questions regarding the report or its contents may be directed to the Tronox Limited Corporate Communications Department:

*263 Tresser Boulevard  
Suite 1100  
Stamford, CT, USA 06901  
T: +1-203-705-3800  
E: [sustainability@tronox.com](mailto:sustainability@tronox.com)  
W: [www.tronox.com](http://www.tronox.com)*

### **Claims of reporting in accordance with the GRI Standards**

**(Disclosure 102-54)**

This report has been prepared in accordance with the GRI Standards – Core option. See also the introduction on page 2.

### **GRI content index (Disclosure 102-55)**

The location of the General Standard Disclosures and Performance Indicators in this report can be found in the GRI Index, presented on page 46.

### **External assurance (Disclosure 102-56)**

Although no external assurance was obtained for the development of this report, Tronox has followed the GRI Standards “Reporting Principles” regarding (i) defining report content, and (ii) ensuring the quality of reported information.

The environmental data in this report is subject to internal audits in line with our Environmental Management Systems, and external audits in connection with ISO 14001 certification requirements, with which the majority of our operations are compliant.

In this report, a total of 15 indicators are reported. We also included three indicators from the Mining and Metals Sector Supplement.

# ECONOMIC TOPICS (GRI 200)

## Management Approach – Economic (Disclosure 103)

| Material Topic to Tronox | Description   | Topic Boundary           |   |                 |
|--------------------------|---|--------------------------|---|-----------------|
|                          |   | Within Tronox            | Outside Tronox  | Geography       |
| Economic                 |   |                          |   |                 |
| Economic Performance     | Tronox operates in cyclical commodity markets, and the economic sustainability of our business (of interest to all stakeholders) is linked to being a safe, quality, low-cost provider, which means we must invest and spend cash efficiently, where it can generate the highest returns. | TiO <sub>2</sub> segment | Investors, Lenders, Customers, Suppliers, Communities | US, EUR, ZA, AU |

Geography abbreviations: AU = Australia; EUR = Europe; US = United States; ZA = South Africa.

(All monetary figures are in US Dollars unless otherwise noted.)

### Safe Quality Low-Cost Tons (SQLCT)

Tronox aims to be recognized as the global leader in providing trusted high-quality mineral sands, titanium dioxide (TiO<sub>2</sub>) pigment, and other goods, as well as exemplary service. Through continuous improvement of products and processes, our customers can have confidence that Tronox's products and capabilities will meet or exceed their needs. Thanks to the dedication and diligence of Tronox employees at every step and every location, we will continue to produce safe, quality, low-cost tons, satisfying current customers and attracting new ones.

Tronox stakeholders, including investors, lenders, governments and regulators, customers, employees, suppliers, and communities, have a clear preference for a business that is committed to the health and safety of its workforce, superior product quality, strong customer relationships, and economically sustainable.

An economically sustainable business is one that uses its resources efficiently and responsibly so that the business can operate indefinitely. Two core elements of economic sustainability are (i) generating sufficient cash profits to satisfy our providers of debt and equity capital, and (ii) spending resources in such a way, as to satisfy all our other stakeholders and retain our license to operate.

The GRI Sustainability Guidelines identify six topics of economic disclosures that may be material to an organization: Economic Performance, Market Presence, Indirect Economic Impacts, Procurement Practices, Anti-corruption, and Anti-competitive Behavior. Tronox has identified Economic Performance as the only material topic to its stakeholders, using 201-1 as the performance indicator.

### Economic Performance

Given that Tronox principally operates in commodity markets, the economic sustainability of our business is linked to being a low-cost provider. This means that we must invest and spend cash efficiently, where it can generate the highest returns. Our annual 10-K report, filed with the U.S. SEC and available on the [tronox.com](http://tronox.com) website, is the primary mechanism we use to report our economic performance, and should be read in conjunction with this report. The 201-1 indicator

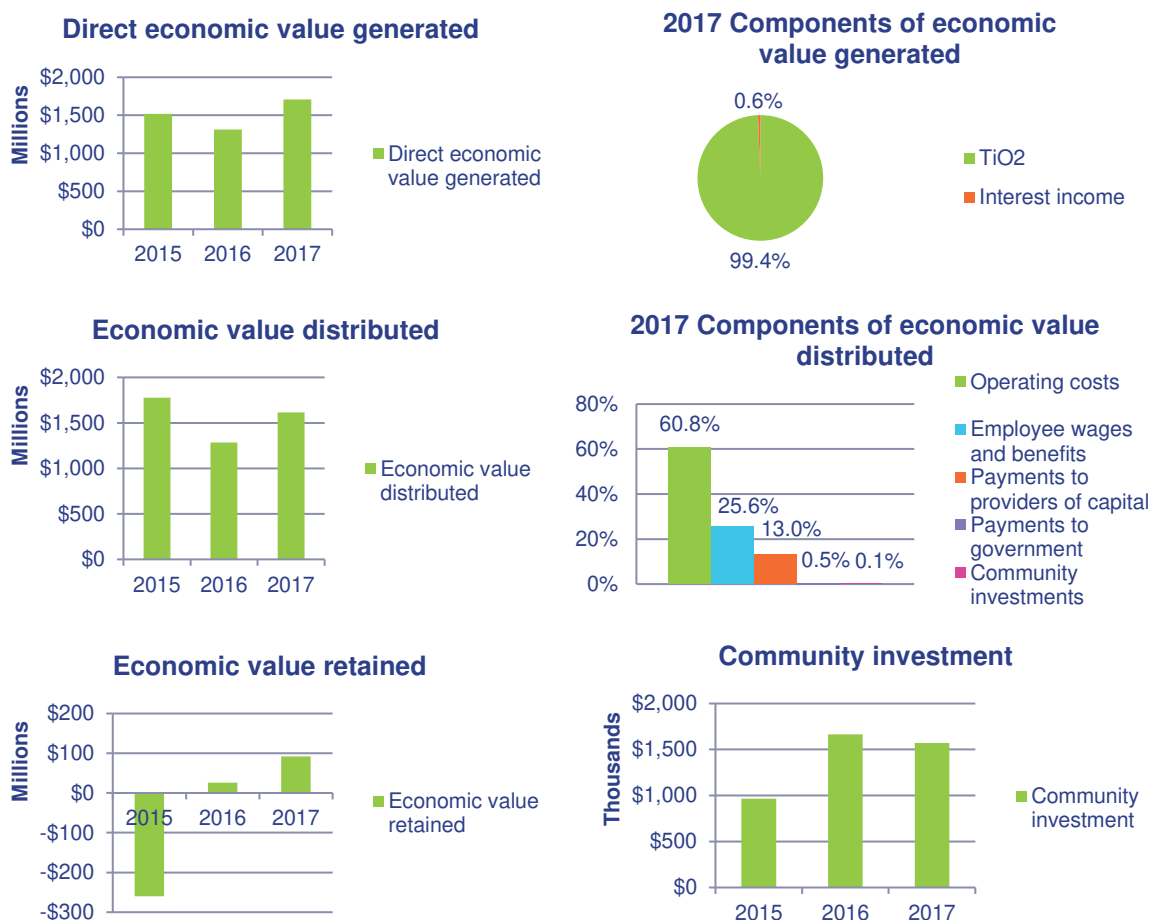
we report here is intended to measure the economic outcomes of our activities, and the effects of those outcomes on our stakeholders.

Tronox sells a range of commodity products, including titanium dioxide pigment, titanium feedstock, zircon, rutile, and pig iron.

In our 2017 Annual Report, we noted that we delivered robust results in 2017 from (i) strong commercial performance, (ii) cost reductions, and (iii) cash generation from a highly successful Operational Excellence program. The revenue of US\$1,698 million was 30% higher than in 2016, the TiO<sub>2</sub> segment Adjusted EBITDA of \$500 million was 112% higher than in 2016, and the TiO<sub>2</sub> segment Free Cash Flow was 33% higher than in 2016.

## Direct economic value generated and distributed (201-1)

This indicator reflects the economic value generated<sup>3</sup> (including community investment), distributed<sup>4</sup>, and retained<sup>5</sup>, during the fiscal year of 2017. All presented data relates to the TiO<sub>2</sub> segment only.



<sup>3</sup> Direct economic value generated refers to total revenue on an accruals basis.

<sup>4</sup> Economic value distributed refers to operating costs, employee wages and benefits, payments to providers of capital, payments to government, and community investments on an accruals basis.

<sup>5</sup> Economic value retained is calculated as direct economic value generated less economic value distributed.



## ENVIRONMENTAL TOPICS (GRI 300)

### Management Approach – Environmental (Disclosure 103)

| Material Topic to Tronox | Description  | Topic Boundary           |                                  |                 |
|--------------------------|--|--------------------------|----------------------------------|-----------------|
|                          |  | Within Tronox            | Outside Tronox                   | Geography       |
| Environmental            |  |                          |                                  |                 |
| Energy                   | Tronox consumes material amounts of energy in its TiO <sub>2</sub> operations, but particularly at our slag furnaces in Namakwa Sands and KZN Sands, ZA.   | TiO <sub>2</sub> segment | Markets, Communities, Regulators | ZA              |
| Water                    | Tronox uses material amounts of water in mining, beneficiation and processing in its TiO <sub>2</sub> operations. Water efficiency has become particularly critical at our Namakwa Sands and KZN Sands, ZA locations.  | TiO <sub>2</sub> segment | Markets, Communities, Regulators | ZA              |
| Biodiversity             | Tronox operates three above-ground ilmenite/rutile/zircon mines (two in ZA, one in AU). Each of these mines disturbs the land and the biosphere.   | TiO <sub>2</sub> segment | Markets, Communities, Regulators | ZA, AU          |
| Emissions                | The reduction of Greenhouse Gas (GHG) emissions is a matter of interest to all Tronox stakeholders, and increasingly to customers. Most Tronox GHG emissions are generated from our TiO <sub>2</sub> slag furnaces (ZA), Synthetic Rutile kiln (AU), and TiO <sub>2</sub> chemical plants (US, EUR, AU).                                   | TiO <sub>2</sub> segment | Markets, Communities, Regulators | ZA, AU, US, EUR |
| Effluents and Waste      | Tronox generates material amounts of waste, of which the majority (overburden and waste rock from the mines) is used to fill and contour mined out areas. Waste from chemical processing is primarily generated from our TiO <sub>2</sub> slag furnaces (ZA), Synthetic Rutile kiln (AU), and TiO <sub>2</sub> chlorinators (US, AU, EUR). | TiO <sub>2</sub> segment | Markets, Communities, Regulators | ZA, AU, US, EUR |

Geography abbreviations: AU = Australia; EUR = Europe; US = United States; ZA = South Africa.

Our business – mining and chemicals processing – can be disruptive to the environment. Among other activities, we disturb the ground to extract minerals and ore, we employ water in mineral separation, we burn carbon when we beneficiate ilmenite into titanium slag or synthetic rutile in our furnaces/kiln, we generate various emissions from our titanium dioxide pigment plants, and we dispose of waste tailings.

The Tronox Code of Ethics and Business Conduct holds managers and employees responsible for:

- Pursuing a business strategy that builds on sustainable innovation, operations and business practices, as we seek to grow our businesses and improve the quality of people's lives everywhere;
- Openly conducting our business in a manner that is protective of public and occupational health, the environment, and employee safety;
- Giving environmental considerations priority in manufacturing our products and planning for new products, facilities, and processes;
- Complying with all environmental laws and regulations;
- Striving to reduce emissions and waste, and use energy and natural resources efficiently as we grow;
- Actively soliciting constructive discussions with our employees, suppliers, customers, neighbors, and shareholders on managing environmental issues to ensure continuous improvement; and,
- Supporting the principles of responsible environmental stewardship, as embodied in voluntary standards and management systems appropriate to our operations around the world. These goals are accomplished by working with our employees, suppliers, customers, contractors, and commercial partners to promote responsible management of our products and processes through their entire life cycle, and for their intended end use, worldwide.

We implement these standards through management and employee engagement, allocation of sufficient human and capital resources, and rigorous measurement, review, and corrective action systems.

Tronox has determined that five of the eight environmental topics identified in the GRI Sustainability Guidelines are material to its stakeholders:

- Energy (302-1, 302-3);
- Water (303-1);
- Biodiversity (304-3, G4-MM1);
- Emissions (305-1, 305-2, 305-4); and,
- Effluents and Waste (306-2)

Within these topics, we report on environmental indicators that cover performance related to both inputs (e.g., energy, water) and outputs (e.g., emissions, waste).

## **Energy**

The production of high-quality Mineral Sands and TiO<sub>2</sub> products are associated with considerable energy consumption demand. Therefore, energy availability issues have a direct impact on operational efficiency at all locations. Also, energy consumption for mining and manufacturing operations is the primary driver of greenhouse gas (GHG) emissions. Proper management of energy consumption is therefore required in order to mitigate our impact on the local environment and on the climate.

Beginning in 2015, Tronox TiO<sub>2</sub> launched a multi-year operational excellence initiative that, among other things, addressed our energy demand. These efforts continued in 2017. Energy efficiency improvements include, but are not limited to, process control automation, heating and cooling optimization, and insulation measures, at all locations.

Tronox also invests in efficient energy-generation options, the reuse of process emissions, and renewable energy sources. Examples include: the combined heat and power plant that generates electricity and steam for the Kwinana TiO<sub>2</sub> Pigment Plant; the carbon monoxide (CO) gas facility that reuses CO gas formed during the furnace smelting operations at KZN Sands; the cogeneration plant that utilizes previously flared furnace gases to fuel eight General Electric Jenbacher gas-fired engines for electricity production at Namakwa Sands; and, the consumption of renewable electricity from the hydroelectric Hoover Dam in Nevada, USA, satisfying 100 percent of Electrolytic and Specialty Chemicals business' electricity needs.

## **Water**

Tronox realizes that fresh water is not an infinite resource. In fact, only 2.5 percent of all the water on Earth is considered fresh water, of which the majority is stored in glaciers and ice caps<sup>6</sup>. We therefore focus on “fit-for-purpose” water. In this way, we match water of a certain quality to a use appropriate for that quality, reducing our reliance on municipal water around the world.

A good example of fit-for-purpose water can be found at the Mine and Mineral Separation Plant (MSP) of our Namakwa Sands Operations in South Africa, where 78 percent of total water consumption is sea water. This low-quality water is sufficient for use in the concentration processes of heavy mineral sands in the Primary and Secondary Concentration Plants. At our Botlek facility in the Netherlands, an even higher total of 95 percent of water demand is satisfied by the use of low-quality brackish water from the adjacent river.

At Kwinana, Western Australia, in the past 10 years, a large portion of municipal water has been replaced with high-quality, industrial-grade water from the Kwinana Water Reclamation Plant (KWRP). The KWRP recycles industrial waste water and provides water at varying levels of quality to neighboring industries. We are currently investigating additional uses of water supplied by the KWRP, reducing Kwinana's dependency on municipal water even further.

In addition to our focus on fit-for-purpose water, Tronox relies on multiple water reuse and recycling systems to make sure scarce fresh water can be allocated as efficiently as possible. We also collect and consume rain water at KZN Sands, South Africa.

## **Biodiversity**

Tronox operates three above-ground mines (two in South Africa, one in Australia). Activities at our mines may disturb local ecosystems, which could have lasting impacts on biodiversity in the region. It is our mission to mitigate any impact from mining and beneficiation, to make sure designated ecosystems are protected, restored, and able to thrive in the long term.

Studies have been conducted, as part of Environmental Management Programs (EMPs) and Environmental Impact Assessments, to determine areas for mining and development, as well as for restricted areas. Rehabilitation measures have been included in the EMPs, Rehabilitation Guidelines, and Procedures, and are integrated in our way of doing business. These measures are monitored and reported on a consistent basis to ensure that closure objectives are met. In case rehabilitation of land is more effective in areas other than the affected land, Tronox identifies offset areas, such as the 12 hectare (30 acre) wetland area close to the KZN Sands' Fairbreeze Mine in South Africa. The offset commitment made by Tronox was to restore the historical biodiversity functions of the targeted wetlands, which would not only benefit the site, but also improve water quality and quantity to the Siyaya River.

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<sup>6</sup> United States Geological Surveys (USGS) (2016). *The World's Water*. Available on the world wide web: <<http://water.usgs.gov/edu/earthwherewater.html>>

At Western Australia's Northern Operations, Tronox has implemented plans to eradicate invasive flora, including *Phytophthora Cinnamomi* (Dieback), in order to protect indigenous plant species on the site.

### **Emissions**

The reduction of GHG emissions is a matter of interest to all Tronox stakeholders, and increasingly to customers. GHGs absorb and emit radiation in the atmosphere and are the fundamental cause of the greenhouse effect. Most Tronox GHG emissions are generated from our four TiO<sub>2</sub> slag furnaces (ZA), a synthetic rutile kiln (AU), and three TiO<sub>2</sub> chemical plants (US, EUR, AU).

GHG emissions are a direct result of the combustion of fossil fuels. The energy efficiency improvements, which are a key element of our operational excellence initiative described above, directly enhance our performance from a GHG emissions point of view. In addition, we employ strategies to minimize high-carbon content energy sources where possible (for example, favoring natural gas delivered by pipeline versus coal transported by truck).

The amount of GHG emissions (measured in CO<sub>2</sub> equivalents) is often used as a measure for environmental sustainability. Tronox, as a member of the Titanium Dioxide Manufacturers Association (TDMA), has contributed to a cradle-to-gate analysis that mapped the carbon footprint of its TiO<sub>2</sub> operations. This analysis was later expanded to a full-size cradle-to-gate life cycle assessment, of which carbon footprint is just one of 16 parameters measured in the process. The results from these studies will be used to engage with supply chain partners to advance product life cycle sustainability.

### **Effluents and Waste**

All Tronox waste is managed according to local waste management procedures that are based on the principles of cradle-to-gate waste management. We ensure that all waste leaving our sites is labeled, weighed, and only handled by contracted and/or authorized service providers. Waste processed onsite is either used to fill and contour mined-out areas (overburden and waste rock), deposited in sedimentation lagoons (tailings), or placed in specifically designed landfill pits (hazardous and non-hazardous waste).

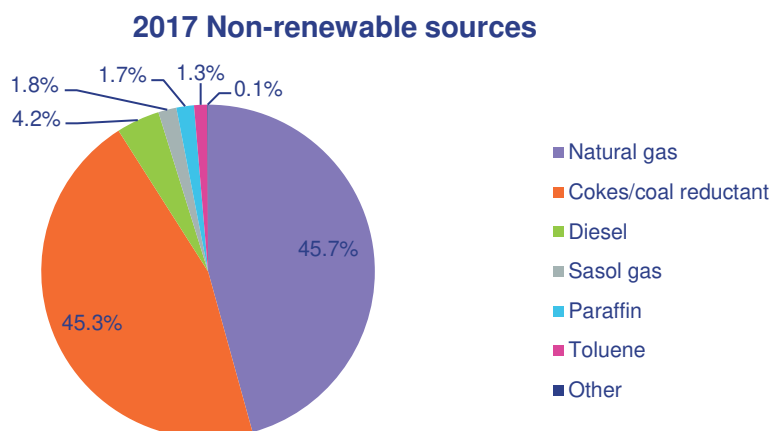
Our operations in Henderson, Nevada, USA, maintain a zero-discharge operation, which uses two waste-recovery distillation systems to recover clean distillate from process wastewater.

Tronox continuously seeks alternatives for waste streams. For example, the Tronox Botlek pigment plant in the Netherlands partners with local industries to research the application of filter cake (currently land filled) in concrete. Also, roundtable sessions should result in new destinations for waste streams, including sulfuric acid and hydrochloric acid. The Kwinana plant in Australia provides hydrochloric acid that can be upgraded for use in swimming pools.

## Energy consumption within the organization (302-1)

This indicator reflects the primary energy consumption within the organization during the fiscal year of 2017. All presented data relates to the TiO<sub>2</sub> segment only.

| [millions of gigajoules]                       | 2015        | 2016        | 2017        |
|--|-------------|-------------|-------------|
| Non-renewable fuel sources                     | 17.6        | 17.2        | 19.1        |
| Electricity and steam sold                     | -0.6        | -0.9        | -0.8        |
| <b>Total direct primary energy consumption</b> | <b>17.0</b> | <b>16.3</b> | <b>18.2</b> |



**Note:** Tronox does not consume direct renewable energy and does not self-generate electricity, heating, cooling, or steam from energy sources other than non-renewable sources.

| [millions of gigajoules]                         | 2015        | 2016        | 2017        |
|--|-------------|-------------|-------------|
| Electricity                                      | 18.5        | 12.3        | 16.3        |
| Steam  | 0.7         | 0.6         | 0.7         |
| <b>Total indirect primary energy consumption</b> | <b>19.1</b> | <b>12.9</b> | <b>17.0</b> |

The Botlek plant in the Netherlands is the only site which consumes imported steam in addition to self-generated steam. Other Tronox plants are self-sufficient with regards to steam consumption.

### Standards, methodologies, and assumptions used

Energy consumption within the organization includes the components stated below. All components are converted into primary energy, in order to arrive at total direct and indirect primary energy consumption.

- **Non-renewable fuel consumed**  
These sources are assumed to be primary energy sources, even though some sources have been through a transformation process.
- **Electricity and steam sold**  
This component is only applicable to the Kwinana pigment plant in Western Australia, where efficiencies of the combined heat and power plant and steam boilers, that generate electricity and steam respectively, are taken into account to arrive at primary energy.

- **Electricity and steam purchased for consumption**

Intermediate energy purchased for consumption is converted to primary energy by taking into account the energy input of the production process where possible, or by using efficiency assumptions. No primary energy conversion is applied for electricity and steam from renewable sources.

In case non-renewable fuel sources were consumed to produce electricity or steam used on site, only the non-renewable fuel sources were counted, in order to prevent double counting of energy consumption.

#### Source of the conversion factors used

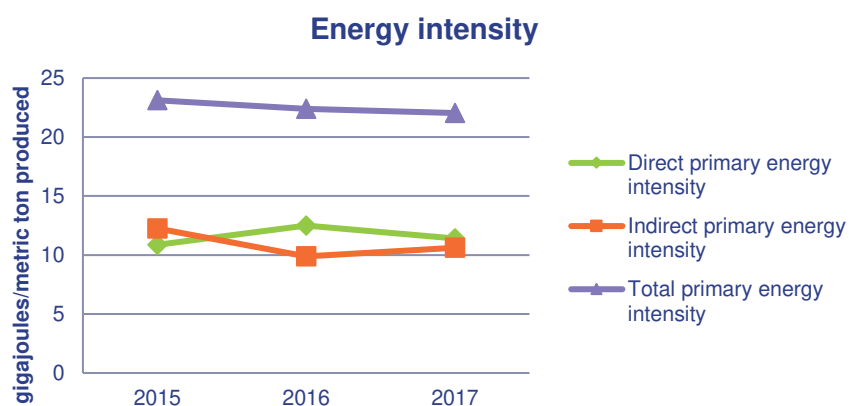
Calorific values that were used to convert volumes of **non-renewable fuel sources** into primary energy were taken from the energy suppliers where possible, or from the Guidelines for National Greenhouse Gas Inventories<sup>7</sup>.

Efficiencies used for **electricity and steam sold** were based on local metered input and output values and annual efficiency samples, respectively.

Regarding **electricity and steam purchased for consumption**, conversion efficiencies are provided by energy suppliers where possible, or assumptions of country-average efficiencies were taken from the Trends in Global Energy Efficiency Report<sup>8</sup>.

### Energy intensity (302-3)

This indicator reflects the primary energy intensity during the fiscal year of 2017. All presented data relates to the TiO<sub>2</sub> segment only.



**Notes:** 1) The total primary energy intensity is calculated by dividing the sum of direct and indirect primary energy consumption by the total weight of products produced.  
2) All energy sources included in 302-3 (non-renewable fuel, electricity, and steam, minus electricity and steam sold) are included in the energy intensity calculations.

<sup>7</sup> Intergovernmental Panel on Climate Change (IPCC) (2006). *Guidelines for National Greenhouse Gas Inventories*. Hayama, Japan.

<sup>8</sup> Asea Brown Boveri (ABB) (2011). *Trends in Global Energy Efficiency 2011*. Zurich, Switzerland.

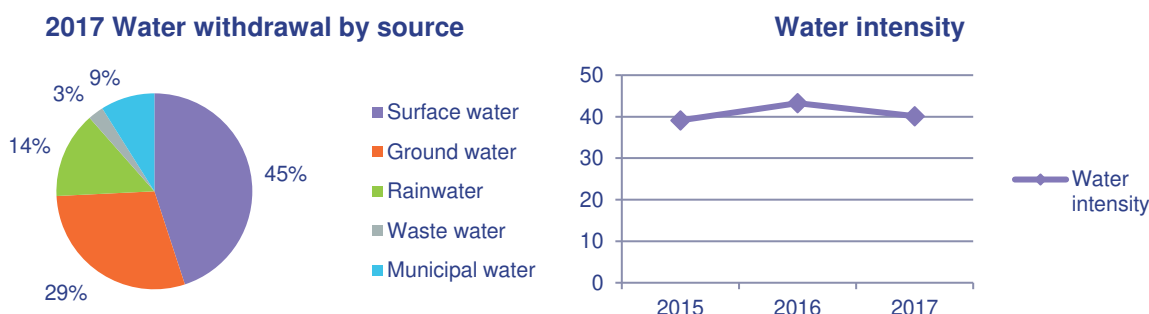
In Hamilton, Mississippi, USA, the shutdown of the sodium chlorate plant in November of 2015 resulted in the cessation of sodium chlorate production (Tronox did not produce any sodium chlorate in 2016). This halt in production had a negative impact on direct energy intensity, as the majority of the direct energy sources are consumed by the adjacent TiO<sub>2</sub> plant. Contrary, the stop of sodium chlorate production positively impacted the indirect energy intensity, as the majority of electricity was consumed by that operation.

The increase in global indirect energy intensity from 2016 to 2017 can be explained by increased furnace activity at the South African operations, in a response to higher feedstock demand for pigment production. This has significantly increased the South African proportion of total global electricity consumed. Since both South African sites operate at an intensity that is higher than the global average, the percentage increase in electricity consumed by South Africa pushes the total global indirect energy intensity up.

### Water withdrawal by source (303-1)

This indicator reflects the total water withdrawal during the fiscal year of 2017. All presented data relates to the TiO<sub>2</sub> segment only.

| [millions of cubic meters]    | 2015        | 2016        | 2017        |
|-------------------------------|-------------|-------------|-------------|
| <b>Total water withdrawal</b> | <b>61.1</b> | <b>56.5</b> | <b>64.1</b> |



Total water withdrawal only takes into account water that is used for the first time. Water that is reused or recycled to be consumed twice or more times, either in the same process or in a different process, is not included in this indicator.

In 2017, water withdrawal increased, mainly because of dewatering from the Northern Operation's North Mine voids to facilitate the removal of overburden in preparation for dredge mining. Compared to 2016, overall water intensity decreased in 2017, as a result of increased mineral sands production at all three mines. The mines use water relatively efficiently compared to the TiO<sub>2</sub> plants (per ton of product produced). An increase in the water proportion used by the mines therefore has a positive effect on total water intensity. Also, due to water restrictions because of a drought at Namakwa Sands, projects have been implemented to use water more efficiently.



## Habitats protected or restored (304-3)

### Amount of land disturbed or rehabilitated (G4-MM1)

The combined indicators 304-3 and G4-MM1, reflect the total land use of the organization, in terms of area protected, area disturbed, area in rehabilitation, and area restored. Partnerships and approval from independent external professionals are also reported. All presented data relates to the TiO<sub>2</sub> segment only.

| [hectares]             | 2015           | 2016          | 2017           |
|------------------------|----------------|---------------|----------------|
| Area protected         | 109,053        | 87,875        | 89,064         |
| Area disturbed         | 5,248          | 5,252         | 5,237          |
| Area in rehabilitation | 2,073          | 2,179         | 2,250          |
| Area restored          | 3,938          | 4,227         | 4,518          |
| <b>Total land use</b>  | <b>120,312</b> | <b>99,533</b> | <b>101,070</b> |

**Notes:** 1) All data refers to a snap shot at year end (December 31 of the relevant year).

2) The land use footprint includes all Tronox operations, however, more than 95 percent of total land use can be attributed to our three titanium feedstock mines in South Africa and Australia.

At Northern Operations, select exploration leases were ceded in 2016. As such, the area of protected land decreased (undisturbed land is included in our definition of area protected, see also “Standards, methodologies, and assumptions used” on the next page).

Total area restored increased in 2017, mainly due to rehabilitation activities at KZN Sands, where the majority of restorations at the Hillendale Mine has now been completed.

| Restored habitats at our mines |             | Area opened during fiscal year [hectares] | Area restored during fiscal year [hectares] | Expenditures on rehabilitation during fiscal year [US\$] |
|--------------------------------|-------------|---|---|--|
| KZN Sands                      | 2015        | 3   | 56  | \$2,223,194  |
|                                | 2016        | 20  | 20  | \$598,765  |
|                                | 2017        | 9   | 170   | \$2,206,444  |
| Namakwa Sands                  | 2015        | 226                                       | 73  | \$2,882,829  |
|                                | 2016        | 180                                       | 224   | \$2,632,120  |
|                                | 2017        | 208                                       | 66  | \$1,842,797  |
| Northern Operations            | 2015        | 127                                       | 107   | \$549,697  |
|                                | 2016        | 72  | 54  | \$304,566  |
|                                | 2017        | 100                                       | 55  | \$558,969  |
| <b>Total</b>                   | <b>2015</b> | <b>356</b>                                | <b>236</b>                                  | <b>\$5,655,721</b>                                       |
|                                | <b>2016</b> | <b>272</b>                                | <b>298</b>                                  | <b>\$3,535,451</b>                                       |
|                                | <b>2017</b> | <b>317</b>                                | <b>291</b>                                  | <b>\$4,608,210</b>                                       |

**Note:** Rehabilitation and restoration of mined out land is inseparably connected to the way we operate our mines. In the table above, the area opened, area restored, and expenditures on rehabilitation are presented for our mines.

Mining at KZN Sands' Hillendale Mine stopped in 2013 and the new Fairbreeze Mine was officially opened in 2016 (minor mining activities commenced in 2015). From 2013 onwards, major rehabilitation activities started at the Hillendale Mine to ensure the local habitat will be restored.

Expenditures on rehabilitation have decreased significantly at KZN Sands and Northern Operations during 2016. At KZN Sands, expenditures only include land management and maintenance at the retired Hillendale Mine. These costs are only a fraction compared to the costs related to the production of specialized soil for rehabilitation, which was completed in the prior years. At Northern Operations, costs related to rehabilitation of disturbed areas reduced because only pasture rehabilitation was completed. This activity has a lower unit rate compared to native rehabilitation (which comprised the majority of rehabilitation activities in 2015 and 2017).

### **Standards, methodologies, and assumptions used**

We apply the following definitions to the different land use categories:

#### *Area protected:*

This category includes undisturbed land (land not affected by any operations) that remains in its original state and land that is actively protected from operations to maintain a healthy, functioning ecosystem.

#### *Area disturbed:*

Reflects areas that are used during or affected by operational activities, including:

- Operational plants and units (including tank and silo storage)
- Office buildings (including maintenance shops, storage locations, and contractor areas)
- Other areas (occasionally used, including roads and parking lots)
- Waste treatment/storage (including ponds and storage of fine and coarse material fractions)
- Areas prepared for surface mining (i.e., areas where the top soil has been removed)
- Areas actively mined
- Former mining or operational areas where backfilling operations are in progress but where the top soil has not yet been replaced

#### *Area in rehabilitation:*

Reflects former mining or operational areas where the top soil has been placed back but where rehabilitation measures have not yet been completed. Offsetting areas where rehabilitation measures have commenced are also included in this category. This is a temporary phase between area protected/disturbed and area restored.

#### *Area restored:*

Former mining or operational areas where rehabilitation measures have been completed and a specified quality level has been achieved according to pre-determined agreements with authorities, or, in case of absence of agreements with authorities, according to internal standards. These agreements can include restoration to farm land, native land, land with a high biodiversity value, etc. Once the agreed quality level has been achieved, the area is considered to be restored, even if Tronox is still putting in effort (through third parties or otherwise) to maintain the area at that quality level.

### **Approval from independent external professionals**

Our Namakwa Sands operations in South Africa are currently in the process of determining (i) the criteria for rehabilitation success and (ii) establishing a methodology that can measure compliance with the criteria. The process will be open for public comment and submitted to the relevant authorities for final approval.

At our Northern Operations location in Australia, rehabilitation monitoring is conducted by an external contractor and is undertaken to track rehabilitation development over time, to confirm successful practices and identify improvement opportunities. Tronox, with an external contractor, has developed formal rehabilitation completion criteria in order to clearly define rehabilitation objectives, how these will be achieved, and measures to demonstrate success. These are outlined in the Cooljarloo Mine Closure Plan<sup>9</sup>, as endorsed by the government.

Where performance issues are recognized for any given site, appropriate corrective actions are identified and implemented. Where a solution is not obvious, further investigation is undertaken through research programs with the University of Western Australia, Murdoch University, external contractors, and internal on-site trials. Rehabilitation improvement programs have been detailed in the Cooljarloo Mine Closure Plan.

The rehabilitation data is presented to the Mineral Sands Agreement Rehabilitation Coordinating Committee (MSARCC; various government departments) each year. To date, no areas of rehabilitation have been signed off.

### **Partnerships**

As part of Tronox KZN Sand's impact mitigation measures at the Fairbreeze Mine in South Africa, the company has established protected areas, such as the Siyaya Biodiversity Offset (230 hectares / 568 acres). The strategic offset management plan was drafted by an outside consultant group (Eco-Pulse), and is retained by KZN Sands to finalize all offset management plans.

Tronox Northern Operations has provided grants, on an annual basis since 2005, to the Department of Parks and Wildlife (DPAW). This funding is for important conservation projects within the catchment area of the Chandala Processing Plant. Each year, a list of projects is submitted to Tronox by DPAW. Tronox then selects projects with a focus on improving the health of the surrounding environment. Since its inception, this program has delivered around US\$186,000 worth of funding to local environmental projects. Listed below are a few of the projects Tronox has funded:

#### *2011: Fox predation impact on Western Long-Necked Tortoise study*

This study confirmed that fox predation is having a significant impact on the western long neck turtle. This resulted in the implementation of methods for reducing fox predation, specifically during the breeding cycle of the turtles.

#### *2013: Feral European Honey Beehive mapping and eradication re-survey and control*

The feral European honey bee is recognized as a major threat to biodiversity in Western Australia. Feral honey bees also pose a serious threat to native bees and other insect pollinators by out competing them for limited food resources. The vegetation types common to the Chandala Region support a number of threatened species and communities, such that the presence of feral honey bees has the potential to place greater pressure on their conservation.

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<sup>9</sup> Tronox (2013). *Cooljarloo Environmental Management Programme*. Cooljarloo, Australia.

*2011 – 2016: Macro invertebrate and reptile studies across catchment*

Thanks to funding from Tronox, the area surrounding the Chandala Plant has undergone the most comprehensive macro-invertebrate and reptile inventory in Western Australia. The studies looked at hundreds of species of spiders, insects, lizards, snakes, and other fauna.

*2012 – 2016: Supporting the Chittering Wildlife Caretakers*

Tronox Chandala has committed funding to a local wildlife caretakers group to allow them to achieve their goal of treating and caring for sick, injured, and immature native wildlife in order to re-establish rehabilitated wildlife into their natural environment.

*2001 to date: Western Shield feral predator baiting program*

Tronox has sponsored the Western Shield fox baiting program in the Cooljarloo area since 2001. This program enables distribution of baits for the eradication of the feral fox. In 2018 this baiting program was extended to include Eradicat, which is a bait for feral cats. Both foxes and cats have a significant impact on fauna native to the Cooljarloo area.

Other environmental projects sponsored by Northern Operations include:

*Satellite tracking of Wedge Tail Eagles*

This project focuses on gaining insight into the movement and behavior of the Wedge Tail Eagles. The project will follow the full life cycle of these birds.

*Chittering Landcare*

Tronox has had a partnership with the Chittering Landcare group since 1990. Tronox supplies financial funding and supplies office facilities for the group to work out of. Chittering Landcare group carries out monitoring on all local water ways. They also receive government funding each year to carry out various environmental projects, such as planting of native flora on eroded lands.

*2000 onwards: West Midlands Natural Resource group.*

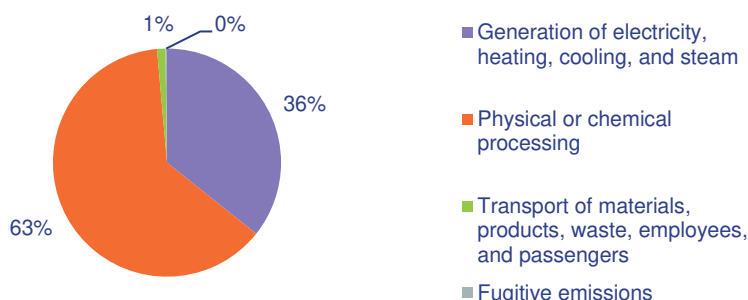
Tronox has been a major sponsor of this group since its inception in 2000. The group is responsible for promoting sustainable farming practices, reducing environmental impacts, and improving productivity. This includes fencing of creek beds to stop erosion, perennial grasses on light soils, various deep ripping and cropping practices, and fertilizer and grain trials. West Midlands also runs regular community meetings with guest speakers.

## Direct (Scope 1) GHG emissions (305-1)

This indicator reflects the direct GHG emissions (Scope 1)<sup>10</sup> of operations over which Tronox had operational control during the fiscal year of 2017. All presented data relates to the TiO<sub>2</sub> segment only.

| [millions of metric tons of CO <sub>2</sub> -equivalents] | 2015 | 2016 | 2017 |
|---|------|------|------|
| Direct GHG emissions (scope 1)                            | 1.3  | 1.2  | 1.4  |

### 2017 Direct (Scope 1) GHG emissions



**Note:** Global Warming Potential (GWP) factors were adjusted in line with the IPCC AR5 Report (see also “Source of the conversion factors used” below)

### Standards, methodologies, and assumptions used

Greenhouse gases included in this indicator are in line with the GHGs covered by the United Nations Kyoto Protocol, the World Resources Institute, and the World Business Council for Sustainable Development (WBCSD) GHG Protocol Corporate Accounting and Reporting Standard:

- Carbon dioxide (CO<sub>2</sub>)
- Methane (CH<sub>4</sub>)
- Nitrous oxide (N<sub>2</sub>O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulphur Hexafluoride (SF<sub>6</sub>)
- Nitrogen trifluoride (NF<sub>3</sub>)

Furthermore, the reporting of Scope 1 and Scope 2 GHG emissions is in line with the WBCSD Standard’s Operational Control Approach<sup>11</sup>.

### Source of the conversion factors used

GHG emission factors for CO<sub>2</sub> are based on data provided by local energy suppliers. In case this data is not readily available, the emission factors used are in line with the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (default emission factors on a net calorific basis).

For GHGs other than CO<sub>2</sub>, GWPs are used to convert GHG emissions into CO<sub>2</sub> equivalents. These GWPs are in line with the IPCC Fifth Assessment Report<sup>12</sup>.

<sup>10</sup> Direct GHG emissions, or Scope 1 emissions, refer to GHG emissions from operations that are owned or controlled by Tronox.

<sup>11</sup> World Business Council for Sustainable Development (WBCSD) (2004). *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard*. Washington, DC, USA.

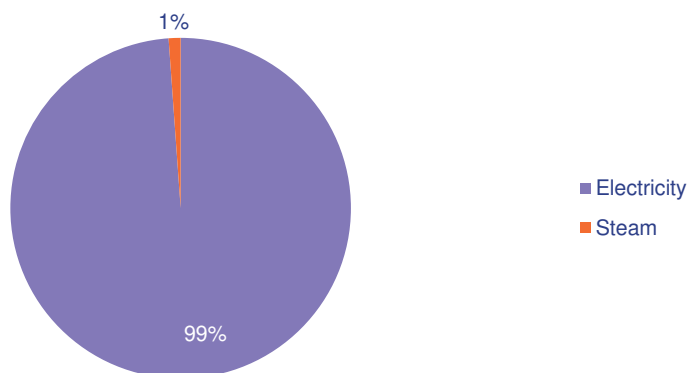
<sup>12</sup> Intergovernmental Panel on Climate Change (IPCC) (2007). *Fifth Assessment Report, Climate Change 2007: The*

## Energy indirect (Scope 2) GHG emissions (305-2)

This indicator reflects the energy indirect GHG emissions (Scope 2)<sup>13</sup> of operations during the fiscal year of 2017. All presented data relates to the TiO<sub>2</sub> segment only.

| [millions of metric tons of CO <sub>2</sub> -equivalents] | 2015 | 2016 | 2017 |
|---|------|------|------|
| Indirect GHG emissions (scope 2)                          | 1.5  | 1.1  | 1.5  |

### 2017 Indirect (Scope 2) GHG emissions



**Note:** Several electricity emission conversion factors have been updated, taking into account information from the particular local electricity supplier. This has improved the accuracy of energy indirect (Scope 2) GHG emissions data.

Indirect energy consumption and indirect GHG emissions were not aligned for the years 2015 and 2017. The 2017 GHG emissions per GJ used ratio increased due to a significant increase in the electricity consumed in the Tronox South African operations. South Africa recommissioned its furnace operations in line with increased demand for global Tronox products, resulting in a higher electricity consumption. The electricity production in South Africa is relatively more carbon intensive compared to the other countries Tronox operates in, pushing the total global GHG emissions intensity up.

### Standards, methodologies, assumptions, and source of conversion factors

Please refer to 305-1 for the type of GHGs included, the chosen consolidation approach, and the sources of emission factors and GWPs.

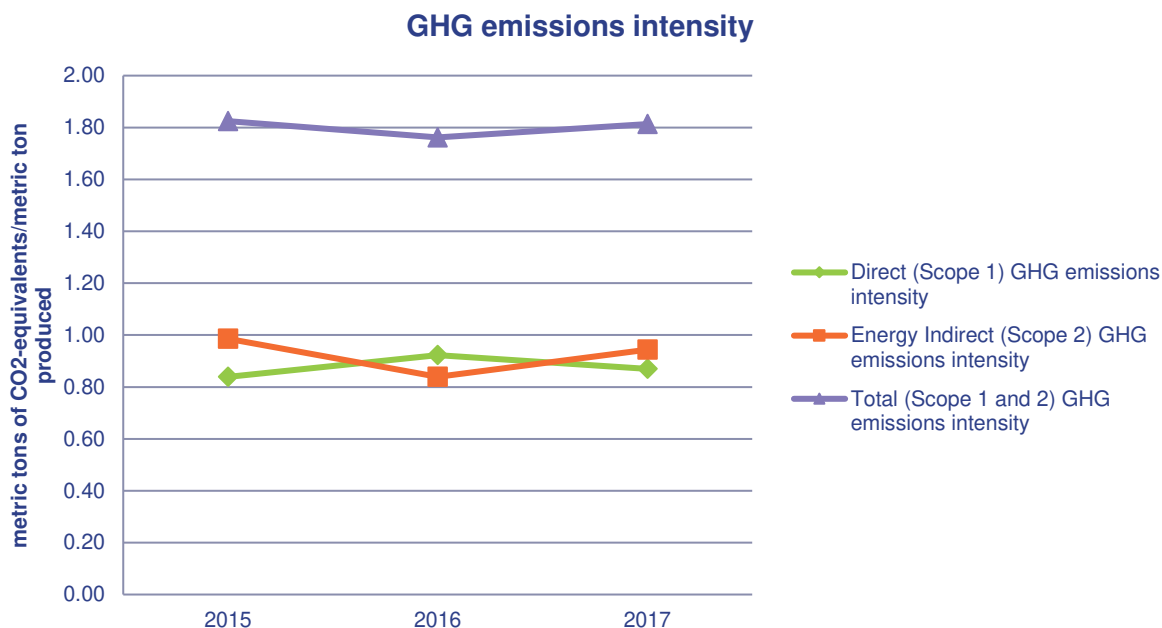
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*Physical Science Basis.* Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

<sup>13</sup> Indirect GHG emissions, or Scope 2 emissions, refer to emissions that result from the generation of purchased or acquired electricity, heating, cooling, and steam consumed by Tronox.

## GHG emissions intensity (305-4)

This indicator reflects the GHG emissions intensity during the fiscal year of 2017. All presented data relates to the TiO<sub>2</sub> segment only.



**Notes:** 1) The GHG emissions intensity is calculated by dividing the sum of direct and indirect GHG emissions by the total weight of products produced.  
2) All GHG emissions included in 305-1 and 305-2 (Scope 1 and Scope 2) are included in the GHG emissions intensity calculations. This automatically includes all GHGs stated under 305-1.

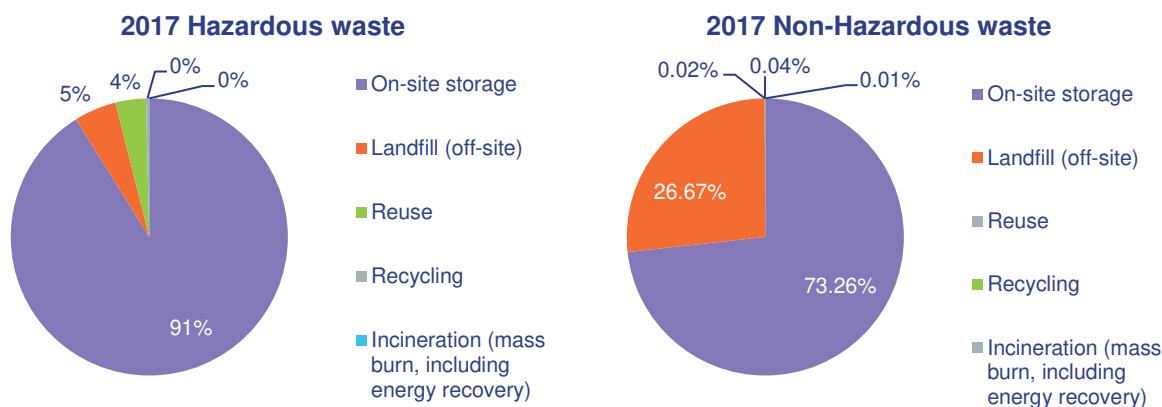
Indirect GHG emissions increased from 2016 to 2017 due to the increased consumption of electricity at the South African operations (as stated under 302-1). This increase is amplified by the fact that electricity produced for our South African operations is carbon intensive, compared to electricity produced for our plants outside of South Africa. This amplification explains why the increase in indirect GHG emissions intensity is larger than the increase in indirect energy consumption intensity from 2016 to 2017.



## Waste by type and disposal method (306-2)

This indicator reflects the total weight of waste produced during the fiscal year of 2017. All presented data relates to the TiO<sub>2</sub> segment only.

| [metric tons x100,000] | 2015 | 2016 | 2017 |
|------------------------|------|------|------|
| Hazardous waste        | 1.3  | 1.1  | 1.3  |
| Non-hazardous waste    | 6.6  | 6.2  | 6.7  |



The non-hazardous waste intensity decreased in 2017 to 2015 levels. The increase in 2016 was a result of the closure of the Hamilton, Mississippi, USA, Sodium Chlorate Facility in 2015. This facility generated relatively little waste, compared to the Hamilton TiO<sub>2</sub> plant. For this reason, the waste intensity for Hamilton is higher in both 2016 and 2017. By comparison, the global non-hazardous waste intensity has decreased in 2017, due to an increase in production at the South African operations. These operations generate little non-hazardous waste (the majority of waste from our South African operations is classified as hazardous) compared to the other plants.

## SOCIAL TOPICS (GRI 400)

### Management Approach – Social (Disclosure 103)

| Material Topic to Tronox        | Description   | Topic Boundary |                         |                 |
|---------------------------------|---|----------------|-------------------------|-----------------|
|                                 |   | Within Tronox  | Outside Tronox          | Geography       |
| Social                          |   |                |                         |                 |
| Labor/ Management Relations     | In ZA, over 70% of our TiO2 workforce members of a union and subject to a collective bargaining agreement (CBA). In AU, approximately 50% are represented by a CBA. In EUR, approximately 50% of our employees are represented by a CBA and 30% are members of a union.               | TiO2 segment   | Communities             | ZA, AU, US, EUR |
| Occupational Health and Safety  | “Health & Safety” is one of our core values, and we are deeply committed to the safety of our employees and our communities.  | TiO2 segment   | Communities, Regulators | ZA, AU, US, EUR |
| Diversity and Equal Opportunity | We have made “People” one of our core values, and our business is most effective when it is diverse and our people enjoy a fair and supportive work environment. In ZA, the Mining Charter obligates us to specific objectives for employment equity and human resources development. | TiO2 segment   | Communities             | ZA, AU, US, EUR |
| Indigenous Rights               | Two of our operations (KZN Sands, ZA, and Northern Operations, AU) are in or adjacent to Indigenous Peoples’ territories, and they are important communities to the success of our operations.  | TiO2 segment   | Communities             | ZA, AU          |
| Local Communities               | “Responsibility” is one of our core values, and we believe active engagement in our communities is key to our success. In ZA, the Mining Charter obligates us to address the housing and living conditions of our employees, and the development of our communities.                  | TiO2 segment   | Communities             | ZA, AU, US, EUR |

Geography abbreviations: AU = Australia; EUR = Europe; US = United States; ZA = South Africa.

Tronox has an impact on the social systems where it maintains operations, and management is engaged in understanding and addressing those social dimensions of sustainability. Our commitment to social sustainability is thoroughly addressed in both the Tronox values and the Tronox Code of Ethics and Business Conduct.

Within the Tronox Values, we define expectations for social sustainability, which include:

- Creating a safe and healthy workplace and driving continuous safety and health improvements;
- Caring for the environment, including taking personal responsibility for environmental stewardship;
- Remaining involved in our communities; and,
- Treating people as our most important resource, creating opportunities for development, and acting intentionally to create a diverse and supportive work environment.

Within the Tronox Code of Ethics and Business Conduct, we also address areas that include anti-corruption, anti-competitive behavior, and product stewardship.

Tronox has determined that five of the 19 social topics identified in the GRI Sustainability Guidelines are material to its stakeholders:

- Labor/ Management Relations (G4-MM4);
- Occupational Health and Safety (403-2);
- Diversity and Equal Opportunity (405-1);
- Indigenous Rights (G4-MM5); and,
- Local Communities (413-1)

**Labor/Management Relations:** Our employees in the United States are not represented by a union or collective bargaining agreement. In South Africa, more than 70 percent of the workforce are members of a union and subject to a collective bargaining agreement. In Australia, approximately 50 percent are represented by a collective bargaining agreement. In the Netherlands, approximately 50 percent of Tronox employees are represented by a collective bargaining agreement and 30 percent are members of a union.

**Occupational Health and Safety:** We proactively identify and manage risk, conduct ourselves responsibly, exercise good judgment, and take responsibility for our actions. Our goal is that every employee, contractor and visitor to one of our sites leaves that site unharmed.

**Diversity and Equal Opportunity:** We believe our business is most effective when it is diverse and our people enjoy a fair and supportive work environment. We describe the behaviors we expect from our employees as follows: listens to others with diverse perspectives; supports new and different approaches; supports fairness and equality in the workplace; encourages others to be open-minded and to appreciate alternative cultural perspectives; does not tolerate discrimination.

**Indigenous Rights:** Two of our operations (KZN Sands, South Africa, and Northern Operations, Australia) are in, or adjacent to, Indigenous Peoples' territories, and they are important communities to our license to operate, and to our community objective as discussed below.

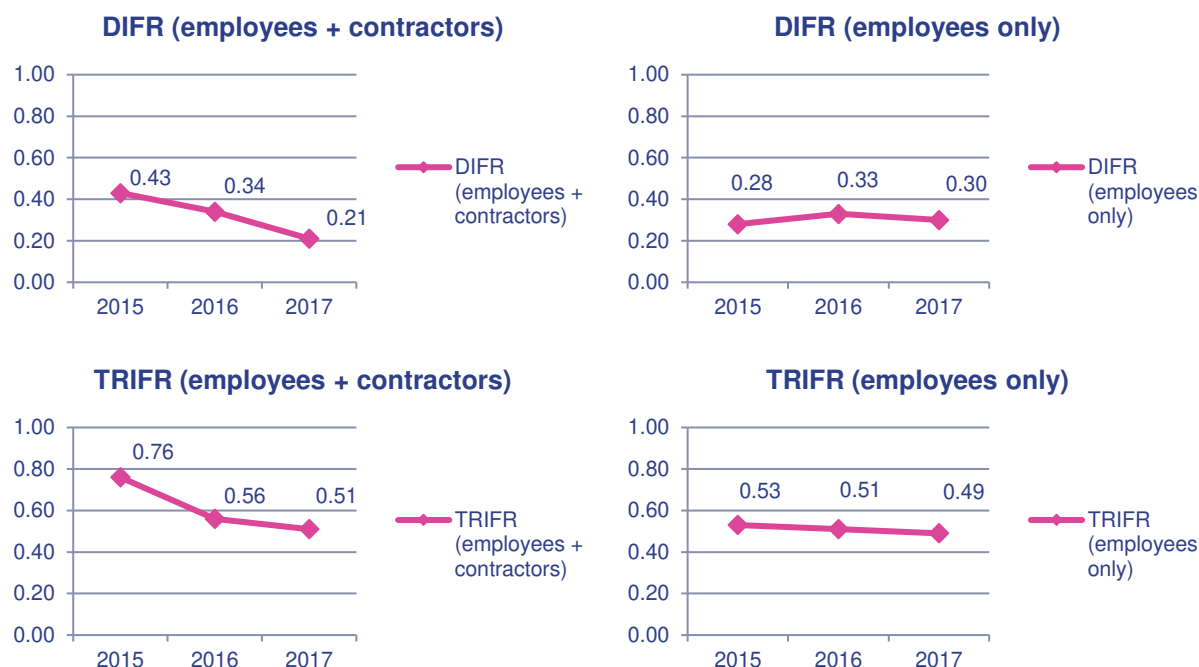
**Local Communities:** Active engagement in our communities is key to our success. We understand the social impacts of our activities and are committed to resolving situations where operational goals conflict with community goals, and to promoting positive engagement with the community. Our employees act as advocates for the community within our organization, fostering a culture of employee volunteerism, and promoting community initiatives related to education in science and the arts.

## Number of strikes and lock-outs exceeding one week's duration (G4-MM4)

There are no records of strikes or lock-outs at any Tronox location in the last 10 years.

## Type of injury and rates of injury, occupational diseases, and number of work-related fatalities (403-2)

This indicator reflects our safety results in terms of injuries and injury rates. All presented data relates to the TiO<sub>2</sub> segment only.



### Notes:

*Lost time injury* = An injury that prevents the individual from returning to work the next day

*Disabling injury* = Either a lost time injury or a restricted work injury (when the individual can return to work but cannot perform his/her previously assigned duties)

*Recordable Injury* = A disabling injury or a medical treatment case (when the individual requires more than basic first aid treatment but can return to work)

$LTIFR = (\text{\# of lost time injuries} / \text{total hours worked}) \times 200,000$

$DIFR = (\text{\# of disabling injuries} / \text{total hours worked}) \times 200,000$

$TRIFR = (\text{\# of total recordable injuries} / \text{total hours worked}) \times 200,000$

In 2017, all injury frequency rates (lost time, disabling, and total recordable) were the lowest in Tronox history (employees and contractors combined). These results, combined with no recorded fatalities during the year, coin 2017 as a year of exceptional safety performance.

| Recordable Injuries                      | 2015      |             |           | 2016      |             |           | 2017      |             |           |
|--|-----------|-------------|-----------|-----------|-------------|-----------|-----------|-------------|-----------|
|  | Employees | Contractors | Total     | Employees | Contractors | Total     | Employees | Contractors | Total     |
| Fatalities                               | 0         | 0           | 0         | 1         | 0           | 1         | 0         | 0           | 0         |
| Lost Time Incidents                      | 5         | 12          | 17        | 7         | 3           | 10        | 3         | 1           | 4         |
| Restricted Work Cases                    | 5         | 9           | 14        | 3         | 5           | 8         | 7         | 1           | 8         |
| <b>DISABLING INJURIES</b>                | <b>10</b> | <b>21</b>   | <b>31</b> | <b>11</b> | <b>8</b>    | <b>19</b> | <b>10</b> | <b>2</b>    | <b>12</b> |
| Medical Treatment Cases                  | 9         | 15          | 24        | 6         | 6           | 12        | 6         | 11          | 17        |
| Reversible Occupational Health Illnesses | 0         | 0           | 0         | 0         | 0           | 0         | 0         | 0           | 0         |
| <b>RECORDABLE INJURIES</b>               | <b>19</b> | <b>36</b>   | <b>55</b> | <b>17</b> | <b>14</b>   | <b>31</b> | <b>16</b> | <b>13</b>   | <b>29</b> |

### Safety Vision and LIFE Saving Rules

Tronox has a clear vision to be a world-class business. We are dedicated to making high-quality products at low cost in a safe and sustainable manner. Our commitment to safety is an integral element of our vision and is reflected by the steps we are taking toward an even safer and healthier workplace for everyone.

Our Global Safety Vision and Tronox LIFE (Life-altering Incident and Fatal Event) Saving Rules, which were introduced in 2015, provide a foundational view of how employees and contractors must operate and act. And it lays out our safety policy and illustrates what it means to live safety at Tronox at every level of the company. The set of LIFE Rules is a critical preventative tool. It is an unconditional obligation that applies to everyone at a Tronox facility, whether it is at a mine, beneficiation facility, chemical plant, or office building.

## Diversity of governance bodies and employees (405-1)



### Tronox Diversity Network

Diversity and inclusion is an important strategic issue for any modern organization. Worldwide trends mean organizations are taking a serious look at the role diversity has to play in ensuring they have access to the best talent and best ideas.

Tronox Diversity Network (TDN) chapters at many of our locations are hosting events to launch and promote the organization, which is the next generation of the Tronox Women's Network (TWN). It's approved charter and guidelines are very similar to what existed for the TWN, but they have been updated to reference a broader range of diversity.

In August, 2017, dozens of employees at Henderson gathered for their semi-annual safety luncheon, which included TDN information and recruitment. Audra Perchetti, production operator and member of Henderson's core TDN group, presented during the meeting. The week before

the Henderson launch, more than 80 people attended the TDN luncheon in Hamilton. After the meal, participants formed four smaller groups to brainstorm ideas for future projects.

Another development in the TDN world is a change in the group's steering committee leadership. In early August, Namakwa Sands' Process Development Manager Natasha Mouton stepped down as co-chair, after having been in the role since late 2014. Patrick Lockett, site education leader at Hamilton, took the reins. As a TDN leader, Patrick looks forward to bringing attention to the TDN and its mission.

"Understanding and embracing diversity throughout the entire organization enables us to gain more perspective and innovation, which are critical to success," he said. "We must all do our part in promoting diversity within the organization, and this platform gives me a valuable service opportunity."

Tronox South Africa is committed to building a diverse and inclusive workforce by having rolled out Phase 2B of the global diversity training program at their Namakwa and KZN Sands locations. The purpose of the workshops was to set a foundation on which Tronox can build toward greater diversity and inclusion.

The workshops were scheduled by the Human Resources Department in such a way that employees from all shifts were able to participate. The information was presented by employees who were trained as Diversity Facilitators. At Namakwa Sands, 14 facilitators presented the workshop to almost 700 employees and at KZN Sands, four facilitators trained approximately 358 employees.

## **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 (G4-MM5)**

Two of our operations (KZN Sands, South Africa, and Northern Operations, Australia) are in or adjacent to Indigenous Peoples' territories. A total of ten Indigenous Peoples' territories have been identified, of which seven are in or adjacent to KZN Sands, and three are in or adjacent to Northern Operations. Tronox has formal agreements with all ten communities.

### **KZN Sands**

Formal benefit agreements (e.g., Local Community Procurement Forum) with seven Traditional Authorities (Amakhosi) in KwaZulu-Natal, South Africa, form part of the KZN Sands Local Economic Development Projects, which are in line with the KZN Sands Social and Labor Plan (SLP). The SLP is a compliance document initiated through a legislative framework called Mineral and Petroleum Resource Development Act (MPRDA). Each mining house has to submit its SLP to the Department of Mineral Resources every five years, to indicate the type of Local Economic Development Projects that the company will embark on for the duration of that five-year period. In this plan, the names and communities are committed along with the budget to be spent. The Community projects must be in line with Municipalities' Integrated Development Plan.

*Various Indigenous Territories KZN Sands is adjacent to, or on, include:*

- Dube Traditional Authority
- Somopho Traditional Authority
- Mkhwanazi Traditional Authority
- Macambini Traditional Authority
- Nzuza Traditional Authority
- Ogagwini Traditional Authority
- Madlebe Traditional Authority

### **Northern Operations**

The Cooljarloo Mine site and Chandala processing plant in Western Australia are exempt from Indigenous Land Access Agreements, as the tenements were granted prior to the introduction of Australia's Native Title Act.

Tenements granted subsequent to the original tenements, however, are subject to Land Access Agreements. These include Falcon, Dongara Project, Cooljarloo West, an additional tenement to the south of Cooljarloo, which has been rolled into the Cooljarloo West Agreement, and a tenement for the Chandala borefield.

The Falcon and Cooljarloo sites are on Yued Native Title Group's land. The Chandala borefield is on Whadjuk land, and Dongara is on the Amangu Native Title Group's land.

Northern Operations is adjacent to or on various indigenous territories, which include the following formal agreements:

*Falcon Indigenous Territory (all completed now):*

- Work Ready training program
- Educational scholarships
- Apprenticeships
- Traineeships
- Cross-cultural awareness training for Tronox staff
- Business opportunities

*Dongara Project Indigenous Territory:*

- Signing fee (cash component)
- Establishment of administration center
- Workshops and training
- Educational scholarships
- Apprenticeships
- Traineeships
- Work Ready Program
- Business opportunities and support of business establishment
- Cross-cultural awareness training

*Cooljarloo West Indigenous Territory:*

- Signing fee (cash component)
- Educational scholarships
- Apprenticeships
- Traineeships



- Health fund
- Sporting and recreational fund
- Mentor program
- Indigenous community center
- Mogumber training facility
- Business/leadership training

## Operations with local community engagement, impact assessments, and development programs (413-1)

Below is a summary of the implementation levels of different engagements, assessments, and programs at our operations.

|  | Botlek | Kwinana | Hamilton | Henderson | KZN Sands | Namakwa Sands | Northern Operations |
|--|--------|---------|----------|-----------|-----------|---------------|---------------------|
| Social impact assessments, including gender impact assessments, based on participatory processes                         | ●      | ●       | ●        | ●         | ●         | ●             | ●                   |
| Environmental impact assessments and ongoing monitoring  | ●      | ●       | ●        | ●         | ●         | ●             | ●                   |
| Public disclosure of results of environmental and social impact assessments  | ◐      | ●       | ●        | ●         | ●         | ●             | ●                   |
| Local community development programs based on local communities' needs   | ●      | ◐       | ●        | ●         | ●         | ●             | ●                   |
| Stakeholder engagement plans based on stakeholder mapping  | ◐      | ●       | ●        | ●         | ●         | ●             | ●                   |
| Broad based local community consultation committees and processes that include vulnerable groups                         | ●      | ●       | ●        | ●         | ●         | ●             | ●                   |
| Works councils, occupational health and safety committees, and other employee representation bodies to deal with impacts | ●      | ●       | ●        | ●         | ●         | ●             | ●                   |
| Formal local community grievance processes   | ●      | ●       | ●        | ●         | ●         | ●             | ●                   |

**KZN Sands Dube Housing Project**

Tronox KZN Sands have built 121 quality houses for families living around its depleted and closed Hillendale Mine.

Sustainable Development Manager Nick Bulunga said the company had received an influx of requests in 2012 from host community members who had been battling with poor structures, largely made out of mud and substandard building materials that often collapse during heavy rains.

“With our intervention, 121 families now have quality houses that give them dignity and pride. In 2018, 14 more houses are going to be built in the area, bringing the total number to 135 from 2013 to date, as we move closer to the target of 214 households.”

The Dube Housing Project further empowers the community by allocating construction contracts to locals. In this way, short-term job opportunities are also created. This makes a difference in the lives of community members.

## SOUTH AFRICAN MINING CHARTER SCORECARD

| ELEMENT   | DESCRIPTION   | MEASURE   | Weighting | Compliance target by 2017         | KZN Sands performance 2017 | Score | Namakwa Sands performance 2017 <sup>14</sup> | Score |
|---|---|---|-----------|-----------------------------------|----------------------------|-------|--|-------|
| 1. Reporting  | Has the company reported level of compliance with the Charter for the calendar year   | Documentary proof of receipt from the department  | Y/N       | 100%                              | 100%                       |       | TBC  |       |
| 2. Ownership  | Minimum target for effective HDSA ownership   | Meaningful economic participation   | Y/N       | 26%                               | 13.1%                      |       | TBC  |       |
|   |   | Full shareholder rights   | Y/N       | 26%                               | 13.1%                      |       | TBC  |       |
| 3. Procurement                                      | Procurement Spent on BEE entity   | Capital Goods   | 5%        | 40%                               | 67.6%                      |       | TBC  |       |
|   |   | Services  | 5%        | 70%                               | 70.1%                      |       | TBC  |       |
|   |   | Consumable Goods  | 2%        | 50%                               | 27.2%                      |       | TBC  |       |
|   | Multinational suppliers contribution to social fund   | Annual spend on procurement from multinational suppliers  | 3%        | 0.5%                              | 0%                         |       | TBC  |       |
| 4. Employment Equity (Excl White Females)           | Diversification of the workplace to reflect the country's demographics to attain competitiveness  | Top Management (Board)  | 3%        | 40%                               | 100%                       |       | TBC  |       |
|   |   | Senior Management (Exco)  | 4%        | 40%                               | 80%                        |       | TBC  |       |
|   |   | Middle Management   | 3%        | 40%                               | 52.6%                      |       | TBC  |       |
|   |   | Junior Management   | 1%        | 40%                               | 64.7%                      |       | TBC  |       |
|   |   | Core Skills   | 5%        | 40%                               | 90.6%                      |       | TBC  |       |
| 5. Human Resources Development (Excl White Females) | Development of requisite skills, incl. support for South African based research and development initiatives intended to develop solutions in exploration, mining, processing, technology efficiency (energy and water use in mining), beneficiation as well as environmental conservation | HRD expenditure as percentage of total annual payroll (excl. mandatory skills development levy) | 25%       | 5%                                | 3%                         |       | TBC  |       |
| 6. Housing and living conditions                    | Conversion and upgrading of hostels to attain the occupancy rate of one person per room.  | Percentage reduction of occupancy rate towards 2014 target (1 person per room)                  | Y/N       | 100%                              | NA                         |       | NA   |       |
|   | Conversion and upgrading of hostels into family units   | Percentage conversion of hostels into family units  | Y/N       | 100%                              | NA                         |       | NA   |       |
| 7. Mine Community Development                       | Conduct ethnographic community consultative and collaborative processes to delineate community needs analysis   | Implement approved community projects   | 5%        | Up-to-date project implementation | 100%                       |       | TBC  |       |
|   | Project implementation  | Percentage of Net Profit After Tax (NPAT) spent on community development                        | 10%       | 1%                                | 100%                       |       | TBC  |       |
| 8. Sustainable Development and Growth               | Improvement of the industry's environmental management  | Implement approved environmental management programs (EMPs)                                     | 12%       | 100%                              | 100%                       |       | TBC  |       |
|   | Improvement of the industry's mine health and safety  | Implementation of tripartite action plan on health and safety                                   | 12%       | 100%                              | 100%                       |       | TBC  |       |
|   | Utilisation of South African based research facilities for analysis of samples across mining value  | Percentage of samples in South African facilities   | 5%        | 100%                              | 100%                       |       | TBC  |       |

<sup>14</sup> At the time of publication of this report, Namakwa Sands is still awaiting approval of their scoring by the Department of Mineral Resources.

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A Brighter Future – From the Ground Up

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