

# 2017 | SUSTAINABILITY REPORT



**ILUKA**

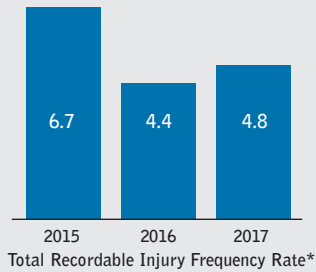


Ongoing integration of Iluka's safety and risk mitigation framework to strengthen Sierra Rutile's sustainability performance



Sierra Rutile Limited

Continued focus on preventing injuries and remaining fatality-free



Awarded the South Australian Premier's Community Excellence Award for Social Inclusion



Completion of 230 hectares of rehabilitation

MEMBER OF  
**Dow Jones Sustainability Indices**  
In Collaboration with RobecoSAM

Incorporated into 2017 DJSI Australia Index for leading sustainability performance

**Senior female representation**

**33%**  
Board and Executive

\*Excludes Sierra Rutile, which had a TRIFR of 2.2 for 2017





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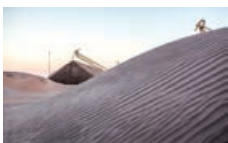
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## FROM THE MANAGING DIRECTOR

Jacinth-Ambrosia, South Australia

### Iluka aspires to achieve high levels of **sustainability performance.**



**Sustainability at Iluka means integrating economic, environmental and social considerations into business practice and ensuring safe and responsible conduct underpins everything we do.**

Welcome to Iluka's annual Sustainability Report. Following a year of transition across the business, Iluka reported substantially higher revenues in 2017 achieved on the back

of improved prices and volumes for the company's products. This enabled Iluka to deliver a solid dividend to shareholders and reduce net debt significantly post the acquisition of Sierra Rutile in December 2016. Sustainable economic outcomes and sustainability performance are mutually reinforcing and the company has a positive outlook for the period ahead.

Key developments at Iluka during the year included:

- the integration of the Sierra Rutile operation;
- a substantial improvement in mineral sands market conditions;
- changes in operational settings – reflecting both improved markets and a detailed review of Iluka's production portfolio and projects following the Sierra Rutile acquisition; and
- project approval of the Cataby development in Western Australia.

With the company's transition largely complete, delivery is Iluka's core focus for 2018. This includes delivery on operational excellence; delivery on expansion projects; and, as always, delivery on sustainable development, particularly in the areas of safety and environmental performance.

Protecting the safety and wellbeing of Iluka's people remains a core focus for the business. Twenty-six people sustained recordable injuries while working for the company in 2017. Eight of these injuries had the potential to be severe permanent disabling injuries or fatalities. This is unacceptable and we will continue to drive improvement in safety to protect Iluka's most important asset – our people. We similarly strive to maintain a workplace where we protect and promote the health of workers and the community. In 2017 Iluka achieved a reduction in potential occupational exposure to noise and airborne contaminants at Australian sites relative to baseline. Community health is an important aspect of our Sierra Rutile operations, where Iluka supports malaria and typhoid control in the region.

Sierra Leone represents a new operating jurisdiction for Iluka and in 2017 the company commenced introducing its group-level sustainability frameworks to Sierra Rutile. Initial focus areas were safety, anti-bribery and corruption and alignment to Iluka's Code of Conduct. On safety, Iluka has adopted a 'back to basics' approach, emphasising personal accountability, understanding risks, incident and hazard reporting and the wearing of appropriate personal protective equipment. We have also commenced a large capital upgrade of infrastructure which, once completed, will improve the safety of working conditions.

Iluka's approach to environmental management is based on understanding and minimising the potential impacts of its operations on the environment. In December, Iluka announced a US\$90 million increase in the rehabilitation provision for our closed operations in the United States. This is a particularly disappointing outcome in the context of the company's strong rehabilitation performance over recent years. Iluka continues to engage proactively with regulatory agencies to assess the nature and extent of any change to its proposed rehabilitation program. As the nature and extent of any rehabilitation program remains uncertain, the provision increase has been calculated on a probabilistic basis across a range of scenarios. Land rehabilitation is an essential part of Iluka's operating model and I can assure you of our ongoing focus in this area.

During 2017 Iluka embedded social performance standards and procedures and continued a human rights work program, with the Executive undertaking human rights training. Work was also undertaken to prepare for the introduction of proposed modern slavery legislation by the Australian Government, including the development of a human rights vendor screening and assessment process.

Iluka's workforce in 2017 comprised more than 2,600 staff, with around three quarters of them located at Sierra Rutile, where the workforce is over 95% Sierra Leonean. Iluka has continued to work towards its diversity targets and, in 2017, female participation at executive level was 33%. This was supported by the consistent practice and process of annual succession planning and employee development.

Finally, I am pleased to report that Iluka has made considerable progress towards aligning the company's activities with the International Council of Mining and Metals (ICMM) Sustainable Development Framework. This has resulted in the company being recognised as a leading sustainability performer through listing on the Dow Jones Sustainability Index (DJSI) Australia.

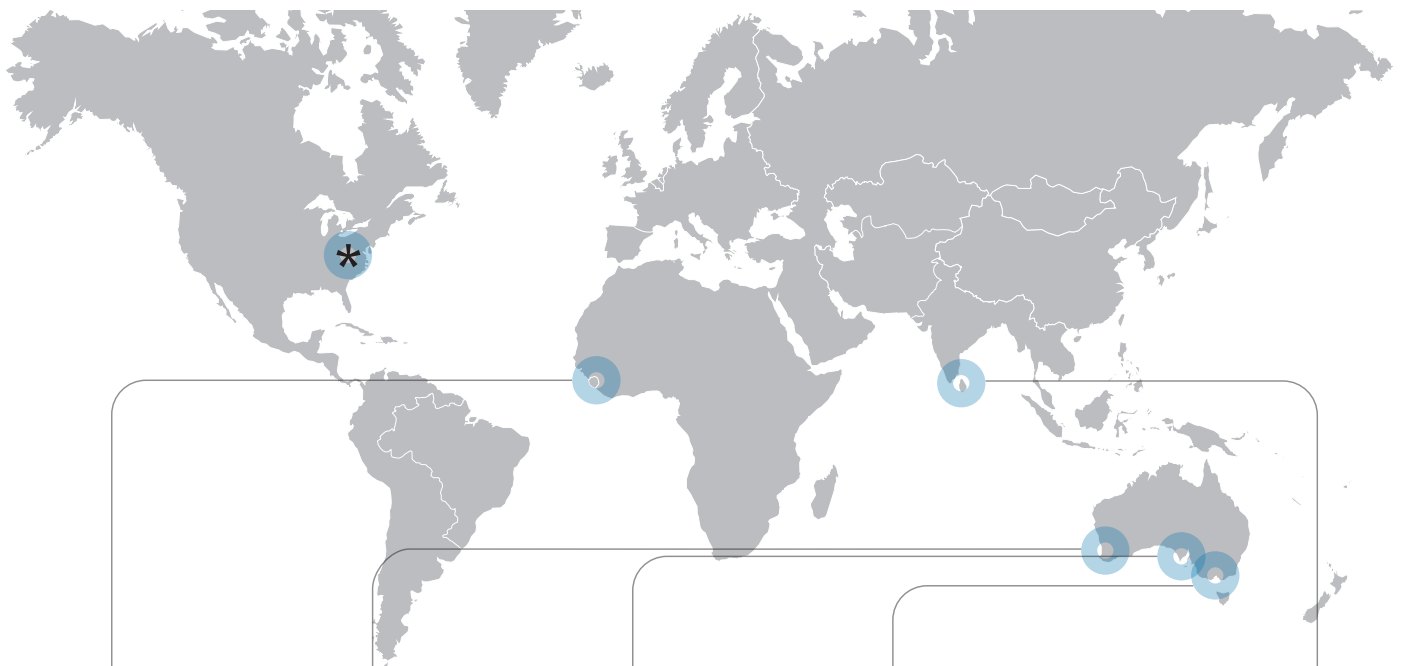
**Tom O'Leary**  
Managing Director



**ABOUT ILUKA**

Murray Basin operations, Victoria

We are an **international mineral sands company** with expertise in exploration, development, mining, processing, marketing and rehabilitation.



**Sierra Leone**  
Sierra Rutile MSP  
Gangama dry mine  
Lanti dry mine  
Lanti dredge mine  
Sembehun project



**Perth Basin**  
Narngulu MSP  
North Capel separation mill  
Synthetic rutile kilns  
Tutunup South mining  
Cataby project



**Eucla Basin**  
Jacinth-Ambrosia mine



**Murray Basin**  
Hamilton MSP



**Sri Lanka**  
Puttalam project

\*Mining and processing activities were completed in Virginia, USA in 2016 and the mineral sands areas are currently being rehabilitated.

The company is a major producer of zircon globally and a large producer of the high-grade titanium dioxide products, rutile and synthetic rutile. Iluka's products are used in an increasing array of areas including home, workplace, medical, lifestyle and industrial applications.

Iluka has operations in Australia and Sierra Leone; projects in Australia, Sierra Leone and Sri Lanka; rehabilitation programs in the United States, Sierra Leone and Australia; and a globally integrated marketing network.

The company also has a royalty over iron ore sales revenues from tenements of BHP Billiton's Mining Area C province in the north west of Western Australia.

Iluka is listed on the Australian Securities Exchange and is headquartered in Perth, Western Australia.

## Mineral sands process

Iluka is involved in all of the main stages of the mineral sands process, from exploration through to delivery of products to customers.



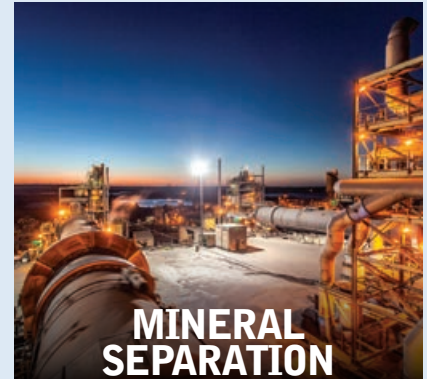
### EXPLORATION

Finding the next generation of mineral sands deposits involves a systematic process of research, licence application and access negotiation, a variety of surveys, drilling, sampling and analysis, resource estimation and financial evaluation. This process, which can take years to complete, is the foundation data on which future feasibility studies may be considered.



### MINING APPROACH

Mineral sands mining involves either dry mining or wet (dredge or hydraulic) operations. Mining unit plants and wet concentrator plants concentrate and separate the heavy mineral sands from waste material.



### MINERAL SEPARATION

The heavy mineral concentrate is transported from the mine to a mineral separation plant for final product processing. The plant separates the heavy minerals from each other in multiple stages by magnetic, electrostatic and gravity separation.



### SYNTHETIC RUTILE

Iluka also produces synthetic rutile, ilmenite that is upgraded by high temperature chemical processes.



### REHABILITATION

As mining progresses, the mining pit is backfilled and covered with stockpiled soils that were removed at the start of the process. Rehabilitation is progressively undertaken to return land to a form similar to its pre-mining state and suitable for various uses including agricultural, pastoral and native vegetation.



### MARKETING

Iluka transports the final products of zircon, rutile, synthetic rutile and ilmenite to customers around the world.

**Sustainability approach**

Iluka is a company which aspires to achieve high levels of sustainability performance. To us, that means integrating economic, environmental and social considerations into business practice, and ensuring safe and responsible conduct underpins everything we do.

Iluka's sustainability approach is governed through a series of policies and management systems that span across six key elements.



**GOVERNANCE**

Iluka conducts its business in accordance with the highest standards of corporate governance.



**ECONOMIC RESPONSIBILITY**

Iluka pursues sustainable economic outcomes, allowing us to share economic benefits with the communities in which we operate, while creating and delivering value.



**PEOPLE**

Iluka seeks to attract and retain the best people while building and maintaining a diverse, inclusive and high-achieving workforce.



**HEALTH AND SAFETY**

Iluka strives to maintain a fatality-free workplace, and to minimise injuries and protect the health and wellbeing of its people.



**SOCIAL PERFORMANCE**

Iluka respects human rights, engages meaningfully with stakeholders and seeks to make a positive difference to the social and economic development of the areas in which it operates.



**ENVIRONMENT**

Iluka seeks to manage its impact on the environment, use resources efficiently and leave positive rehabilitation and closure outcomes.

## Markets and products

From everyday applications in the home and workplace, to medical, lifestyle and industrial applications, the unique properties of titanium dioxide and zircon are utilised in a vast array of products.

Iluka is an established global supplier of zircon and titanium minerals, providing a range of high-grade titanium dioxide feedstock as well as zircon products for end markets. Iluka also recovers and markets activated carbon and iron concentrate, both of which are by-products of the synthetic rutile process.

Through its sales and marketing network, the company supplies over 50 products to more than 250 direct customers with sales in more than 40 countries. We are committed to product quality and reliable supply, and we offer technical support to our customers.



### AUTOMOTIVE



Brake linings/pads, car parking sensors, automotive paint, catalytic converters, automotive electrics

### SPORTING GOODS/RECREATION



Golf clubs, tennis racquets, bicycle frames (titanium)

### HEALTHCARE/MEDICINE



Dental implants, hip and bone replacements, heart pacemakers, kidney dialysis

### AIRCRAFT/INDUSTRY



Titanium metal, desalination plants, zirconia-nuclear medicine, zirconium metal, corrosion resistant coatings



### ROOF/BUILDING/CONSTRUCTION



Solar panels, electrical insulators, bricks/cement, fibre optics, exterior and interior paint, tiles/anti-pollution coatings

### HOME/OFFICE



Mobile phones, plastic, printer inks, paper, packaging

### BATHROOM/LIFESTYLE



Ceramics, sanitary and toilet basins, glass, faucets for taps, cosmetics, pharmaceutical products, toothpaste, anti-perspirants, sunscreens

### KITCHEN/UTILITIES



Light bulbs, dishes, glasses, clock parts, food colouring, ceramic knives, pans



## Production settings

The following chart presents Iluka's production activities in 2017 and expected activities for 2018.

	2017	2018
<b>Australia</b>		
Jacinth-Ambrosia mining <i>South Australia</i>	Mining and concentrating activities recommenced December 2017, following a 20-month suspension to allow inventory draw down	100% utilisation
Murray Basin mining <i>Victoria</i>	Processing of existing concentrate until stocks were exhausted in October 2017	Rehabilitation and closure of Kulwin, Douglas and WRP
Hamilton mineral separation plant (MSP) <i>Victoria</i>	Idled from October 2017	Idle
Tutunup South mining <i>South West Western Australia</i>	100% utilisation	100% utilisation, until mining completion (February 2018)* followed by rehabilitation and closure
Cataby mining <i>Mid West Western Australia</i>	Mine development approved December 2017	Construction of mine and wet concentrator ongoing for full year
Narngulu MSP <i>Mid West Western Australia</i>	Utilisation based on market demand and inventory considerations	100% utilisation
Capel dry plant <i>South West Western Australia</i>	Ilmenite circuit operational for full year	Ilmenite circuit operational for first half
Synthetic rutile (SR) kiln 1 <i>South West Western Australia</i>	Idle	Idle
SR kiln 2 <i>South West Western Australia</i>	100% utilisation	100% utilisation
North Capel separation mill <i>South West Western Australia</i>	100% utilisation	100% utilisation
<b>Sierra Leone</b>		
Lanti dredge mine <i>Sierra Rutile</i>	100% utilisation	100% utilisation
Lanti dry mine <i>Sierra Rutile</i>	100% utilisation	100% utilisation, capacity expansion underway
Gangama dry mine <i>Sierra Rutile</i>	100% utilisation	100% utilisation, capacity expansion underway
Sierra Rutile MSP <i>Sierra Rutile</i>	100% utilisation	100% utilisation, upgrade planned for 2018
Sembahun mining project <i>Sierra Rutile</i>	Pre-feasibility study	Definitive feasibility study
<b>United States (US)</b>		
Stony Creek MSP <i>Virginia</i>	A small amount of remnant zircon concentrate stocks were shipped in 2017 and was recognised as zircon production (16kt) when sold	Idle

\* Cataby will be the next source of ilmenite feedstock to maintain kiln operations: forecast commencement of mining is 2019.



## ABOUT THIS REPORT

Rehabilitation, Murray Basin

### **The 2017 Sustainability Report has been published for our stakeholders to share information on our sustainability approach, performance and key material issues for the 12-month period ending 31 December 2017.**

The report is reviewed by Iluka's Executive and Board of Directors and complements Iluka's 2017 Annual Report, available on our website [www.iluka.com](http://www.iluka.com). It has been prepared to align with the core option of the Global Reporting Initiative (GRI) Standards, including the Mining and Metals Sector Disclosure Supplement.

There are no material re-statements of the 2016 Sustainability Report data or content. The previous year's reporting data can be found on our website [www.iluka.com](http://www.iluka.com) and contained within the 2016 Sustainability Report.

All dollar figures in this report are in AUD currency, unless otherwise stated.

Iluka and the companies in which it directly and indirectly owns investments are separate and distinct entities.

Iluka expects any entities it is associated with to operate and act with the same degree of care and standards as Iluka does. However, it will not have direct control over the operations of those companies and must rely on their separate boards and management teams to meet appropriate standards including compliance with all health, safety and environment regulations. If Iluka was to become aware of failings by an associated company in this respect it would endeavour to insist on changes so that Iluka's expectations were met.

In this publication, the collective expressions "Iluka" and "Iluka Group" may be used for convenience where reference is made in general to those companies. Similarly, the words 'we', 'us', 'our' and 'ourselves' are used in some places to refer to the companies of the Iluka Group in general. These expressions are also used where no useful purpose is served by identifying any particular company or companies.

#### **Report boundary**

This report covers our operations globally, comprising exploration, project development, mining, processing and rehabilitation activities.

The acquisition of Sierra Rutile has changed Iluka's reporting boundary when compared to the 2016 report.

Integration priorities at Sierra Rutile have included the introduction of Iluka's health, safety, environment and community (HSEC) and risk mitigation frameworks, as well as the Code of Conduct, to ensure alignment and integration of Group level procedures and processes.

Where possible and practical, performance measures and reporting are combined across the Iluka Group. There are, however, some aspects where different reporting metrics are required due to different risk profiles or local requirements.

#### **Operating in Sierra Leone**

Sierra Rutile became a part of the Iluka Group in December 2016. The acquisition of an operating mine in West Africa has changed Iluka's risk profile since the previous reporting period, given the company previously operated primarily in Australia and the United States.

Sierra Rutile has an established operating history spanning 50 years and a project mine life in excess of 20 years. The operation consists of a dredge mine, two dry mines, a mineral separation plant and associated infrastructure in the Bonthe District in south west Sierra Leone. The operation is one of the largest rutile deposits in the world and also produces smaller quantities of ilmenite and zircon in concentrate.

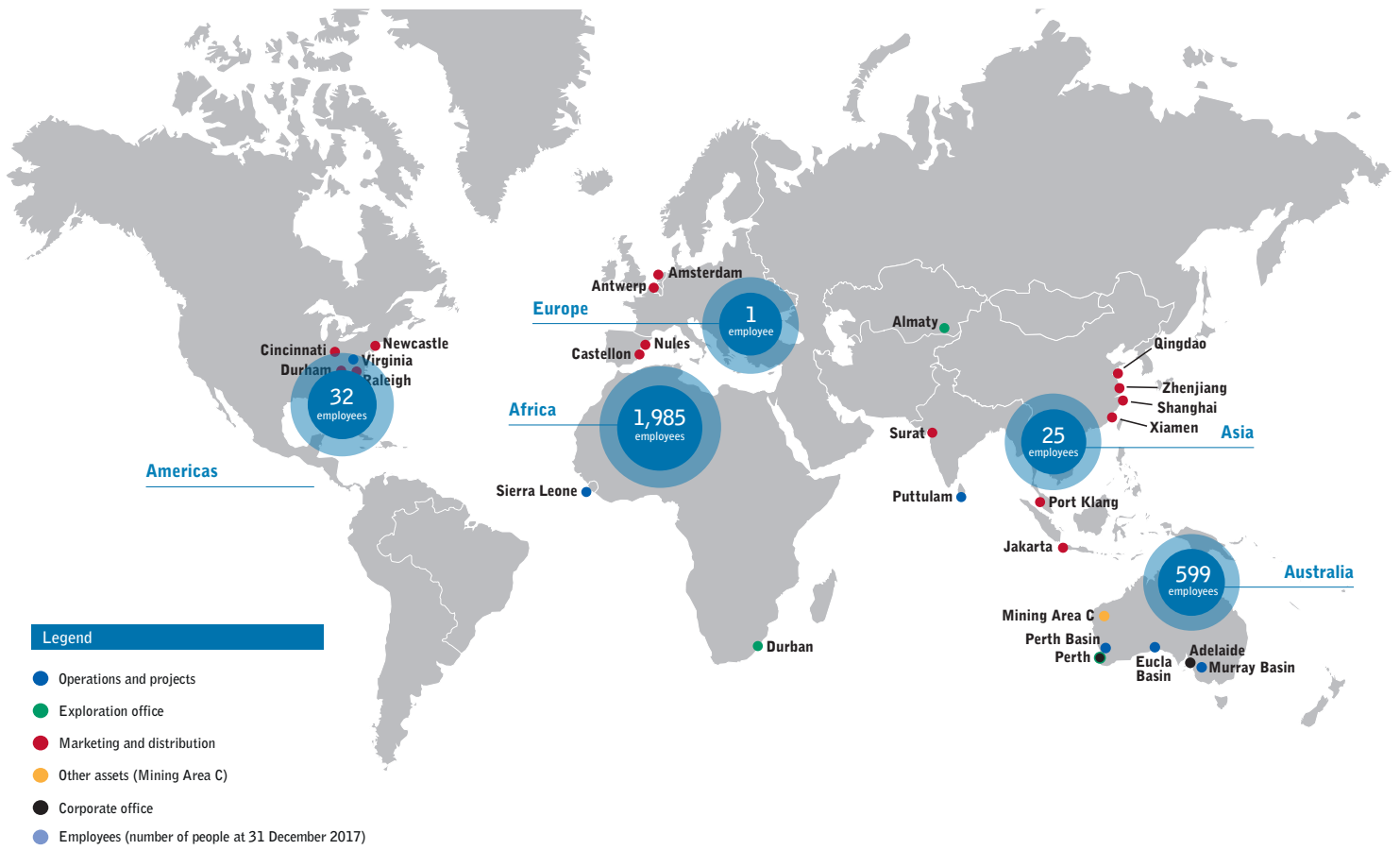
Two previous Environmental and Social Impact Assessments (ESIA) were undertaken in 2001 and 2012, when the primary mining process was dredge (wet) mining. The mining process has since been revised to undertake open cast (dry) mining as the primary method of ore extraction, in conjunction with dredge mining. As such, Sierra Rutile is in the process of completing a comprehensive Environmental, Social and Health Impact Assessment (ESHIA) and developing an Environmental, Social and Health Management Plan (ESHMP) to consider the impacts and subsequent management and mitigation measures relating to the existing and future mining activities within the mining lease.

The ESHIA and ESHMP are being developed in alignment with the relevant Sierra Leonean legislation, Iluka's policies and standards, and good international industry practice. Various components of the ESHIA are discussed throughout this report. The final ESHIA will be publically available in 2018.



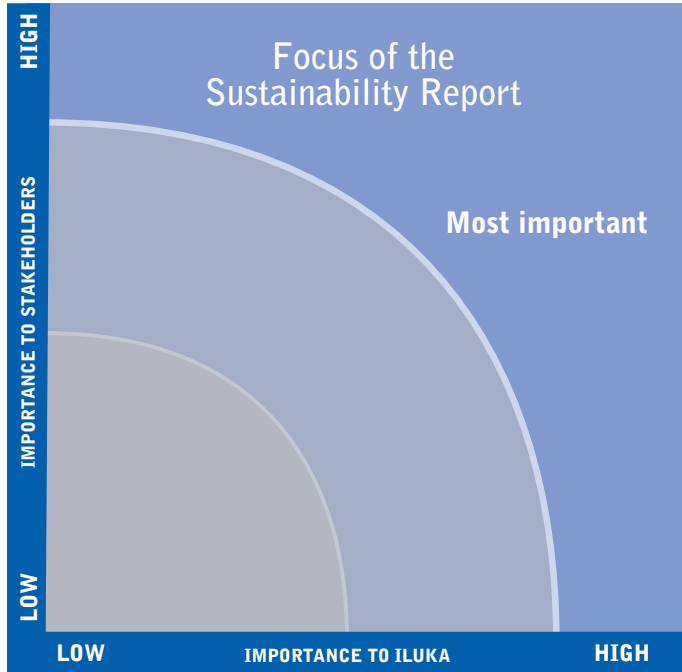
South West, Western Australia

### Iluka's locations and employee distribution



**Report approach**

Each year, we conduct a materiality assessment to identify the sustainability topics that are most important to the business and our stakeholders. The outcomes of the assessment determine the focus of this report.



**Materiality assessment**

Iluka's materiality assessment is in accordance with the GRI principles for defining report content. It is comprised of a four stage process: identification, prioritisation, validation and reporting.

**Issue identification**

1. Material sustainability issues are identified by considering both internal and external factors, including a review of current and emerging sustainability topics impacting the industry, risk assessments, internal policy, peer benchmarking and stakeholder engagement.

**Prioritisation**

2. Each issue is assessed and prioritised based on the significance of the potential impact it may have on the business and the influence it may have on stakeholder assessments and decisions.

**Validation**

3. The list of material issues outlined in the table were reviewed by senior decision makers of the business and reassessed by the Executive throughout the preparation of this report.

**Reporting**

4. Additional sustainability topics have also been included in this report to meet expectations of stakeholders and other reporting requirements.



## Material issues

By identifying and responding to material sustainability issues, we aim to provide transparent coverage of key topics of interest for our stakeholders, and deliver on Iluka's strategy of creating and delivering value.

	Material issue	Description	Impact		Page
			Internal	External	
<b>Governance</b>					
Ethics and conduct	MI	Corporate governance, ethics and conduct	✓	✓	20
<b>Economic responsibility</b>					
Contribution to local and regional economies	MI	Economic benefits delivered through jobs created, taxes and royalties paid, public infrastructure built, local procurement spend and social investment	✓	✓	21
Tax transparency	MI	Public transparency of taxes paid		✓	24
<b>People</b>					
Diversity	MI	Diverse and inclusive workforce	✓		27
Attracting, developing and retaining employees	MI	Talent attraction and retention, human capital development (including competency and training) and succession planning	✓		29
<b>Health and safety</b>					
Fatality-free	MI	Focus on activities that have the potential to result in a fatality or permanent disabling injury	✓		32
Exposure to occupational health hazards	MI	Protection of the workforce from occupational exposures	✓		33
Community health		Protection and enhancement of community health and employee health	✓	✓	33
<b>Social performance</b>					
Stakeholder engagement	MI	Community engagement, maintain a social licence to operate and grievance management	✓	✓	36
Human rights	MI	Uphold fundamental human rights and respect cultures, customs and values	✓	✓	37
Resettlement	MI	Avoid or minimise impacts of project-induced resettlement		✓	37
Indigenous relations and cultural heritage		Cultural heritage and Indigenous engagement	✓	✓	37
<b>Environment</b>					
Land rehabilitation and closure	MI	Process of planning for and undertaking rehabilitation and closure activities including land use design and planning, provisioning, rehabilitation execution and land relinquishment	✓	✓	41
Mineral waste management	MI	Materials removed from the mine void and separated from the valuable minerals over various process stages	✓	✓	42
Biodiversity		Protection and enhancement of biodiversity	✓	✓	40
Energy efficiency and greenhouse gas emissions		Energy consumption and efficiency and greenhouse gas emissions contributing to climate change impacts	✓	✓	43
Water use		Water supply, use, management and discharge	✓	✓	44
Environmental incidents		Uncontrolled impacts on the environment	✓	✓	44

MI = material issue

### Performance improvement targets

Commencing in 2017, Iluka set Group level performance targets against each of its material sustainability challenges, informed by the materiality assessment. These targets enable common understanding, both internally and externally, of Iluka’s sustainable development goals and performance.

Progress against these targets is reviewed by the Board mid year and at year end, and performance is reported externally on an annual basis in the Sustainability Report.

The majority of the targets are effective for the period 2017-2018, with progress made towards achieving them detailed in the table below.

	Target	By when	Status	2017 progress
Governance	Targeted training on anti-bribery and corruption for employees working in higher risk areas is maintained at greater than 90%	Annually	●	Classroom training provided to >90% of relevant Sierra Rutile employees
	Alignment to the ICMM sustainable development principles is completed by 2020, including reporting in accordance with the GRI framework	2020	●	<ul style="list-style-type: none"> <li>Annual Sustainability Report published</li> <li>Gaps in alignment integrated into the sustainability annual work plan</li> </ul> <b>Next steps</b> <ul style="list-style-type: none"> <li>Review climate change strategy</li> <li>Continue work plan for alignment</li> </ul>
Economic responsibility	Integrate Sierra Rutile into Iluka’s annual Tax Transparency Report and ensure reporting requirements are met under the Extractive Industries Transparency Initiative (EITI) in relevant jurisdictions	2018	●	<ul style="list-style-type: none"> <li>Decision made to address Iluka’s tax transparency reporting through this report and Iluka’s Annual Report 2017</li> <li>Integration of Sierra Rutile’s taxes paid into Iluka reporting framework</li> </ul> <b>Next steps</b> <ul style="list-style-type: none"> <li>Continue public tax transparency reporting</li> <li>Reporting requirements in Sierra Leone under discussion with government</li> </ul>
People	Continue to improve female and Indigenous participation in the Australian workforce to meet diversity targets of 30% female and 8% Indigenous participation by 2018	2018	●	For the Australian workforce: <ul style="list-style-type: none"> <li>Female participation was 27%</li> <li>Indigenous participation was 5%</li> </ul> <b>Next steps</b> <ul style="list-style-type: none"> <li>Review Diversity Policy</li> <li>Review of recruitment strategy to promote female and Indigenous participation in operational and technical roles</li> </ul>
Health and Safety	Zero fatalities and total permanent disabling injuries across the Iluka Group	Annually	●	There were zero fatalities or total permanent disabling injuries across the Iluka Group
	A year on year reduction in annual Total Recordable Injury Frequency Rate (TRIFR) at Australian, United States and exploration sites	Annually	●	TRIFR increased from 4.4 to 4.8, with one less injury in 2017 and a reduction in hours worked
	Drive an improvement in reporting culture at Sierra Rutile targeting a 5% month on month increase in new hazards reported	2017	✓	Achieved <ul style="list-style-type: none"> <li>Hazard reporting increased by an average of 34 per month in the March quarter to 342 per month in the December quarter</li> </ul>
		2018	NEW	<b>Next steps</b> <ul style="list-style-type: none"> <li>2018 target set at 10% increase each quarter on the previous quarter in new hazards reported</li> </ul>
	A reduction in potential occupational exposure to noise and airborne contaminants at Australian sites relative to baseline	Annually	●	<ul style="list-style-type: none"> <li>There has been a reduction in the number of similar exposure groups with potential exposures above relevant occupational exposure standards of 23% compared to baseline</li> </ul>

	Target	By when	Status	2017 progress
Social Performance	Implement new Iluka standard for social performance and develop alignment plans at all sites and projects	2017	✓	Achieved <ul style="list-style-type: none"> <li>• Social Performance Group Standard and Procedure released</li> <li>• Gap assessments and alignment plans completed for all relevant sites and projects</li> </ul>
	Local-level grievance mechanism established for all sites and projects by 2018, that enables effective capture and resolution of complaints	2018	●	<ul style="list-style-type: none"> <li>• Grievance Procedure released in 2017</li> </ul> Next steps <ul style="list-style-type: none"> <li>• Implement training on grievance management</li> </ul>
	Develop and implement human rights work program by 2018	2018	●	<ul style="list-style-type: none"> <li>• Human rights work program established</li> <li>• Integration of human rights into impact assessments in Sierra Rutile and Sri Lanka</li> <li>• Training completed on human rights for the Executive</li> </ul> Next steps <ul style="list-style-type: none"> <li>• Continue implementation of human rights work program</li> </ul>
Environment	All sites to have closure plans in accordance with Iluka Group standard and legislative requirements by 2018	2018	●	<ul style="list-style-type: none"> <li>• 73% of sites have completed closure plans</li> <li>• 23% partially completed</li> <li>• 4% (Sierra Rutile) to be updated</li> </ul> Next steps <ul style="list-style-type: none"> <li>• Improvement of Sierra Rutile conceptual closure plans</li> </ul>
	All sites have up to date surface water management plans and site water balances by 2018	2018	●	<ul style="list-style-type: none"> <li>• 90% of sites have up to date surface water management plans and site water balances in place</li> </ul> Next steps <ul style="list-style-type: none"> <li>• Continue to develop and review management plans for remaining sites</li> </ul>
	Drive an improvement in reporting culture at Sierra Rutile targeting a 5% month on month increase in new environmental incidents reported	2017 2018	✓ NEW	Achieved <ul style="list-style-type: none"> <li>• Incident reporting increased by an average of 23 per month in the March quarter to 64 per month in the December quarter</li> </ul> Next steps <ul style="list-style-type: none"> <li>• 2018 target set at a 10% increase each quarter on the previous quarter for reporting environmental incidents</li> </ul>

✓ Complete

NEW New target set, commencing 1 January 2018

● In progress and expect to meet target

● In progress but target may not be met

● Target not met

● Not commenced



## GOVERNANCE

Geraldton Port, Western Australia

### **Iluka conducts its business in accordance with the highest standards of corporate governance.**

The Board, comprised of five independent, non-executive directors and one executive director (the Managing Director) has established a corporate governance framework which complies with the Australian Securities Exchange Corporate Governance Council Principles and Recommendations. This encompasses policies, procedures and charters. The framework is reviewed regularly and revised in response to changes in law, developments in corporate governance and changes to Iluka's business. It is available on our website.

#### **Board of Directors**

The Board is responsible for the overall corporate governance of Iluka including approving and overseeing Iluka's strategic direction, strategies and financial objectives, assessing the performance of management and reporting on performance, including for Sustainability.

The Board has three established committees: Audit and Risk Committee; Nominations and Governance Committee; and People and Performance Committee.

The Board has a commitment to ongoing improvement of its governance practices. In 2017, focus areas included:

- restructuring agendas to ensure that the Board's attention is primarily focused on strategic matters impacting Iluka's business;
- updating the Nominations Committee charter to expressly include governance responsibilities and thus renaming the committee to the Nominations and Governance Committee;
- development of a formal Director Conflicts of Interest Policy;
- completion of an external review of the performance of the Board and its committees, with recommendations to be implemented in 2018; and
- reviewing the incentive payment structure, including increasing the weighting of the sustainability component as described below.

Commencing in 2018, the weighting of sustainability related objectives within the incentive payment structure will increase from 10% to 15%. Performance measures will continue to include lagging measures such as reduction in TRIFR and environmental incidents. They will also now include leading measures relating to a closing out of actions and a metric which seeks to estimate the closure risk associated with all open areas. Closure is a key risk to the business and this metric seeks to measure and compare the closure risk associated with open areas across the Iluka Group as at the beginning and end of the report year. Further information on the incentive payment review is available in the Remuneration section of the Annual Report which can be viewed on our website, [www.iluka.com](http://www.iluka.com).



## Board of Directors



### Greg Martin

#### Chairman

Joined Iluka 2013



### Tom O'Leary

#### Managing Director

Joined Iluka 2016



### Marcelo Bastos

#### Independent Non-Executive Director

Joined Iluka 2014



### Xiaoling Liu

#### Independent Non-Executive Director

Joined Iluka 2016



### James (Hutch) Ranck

#### Independent Non-Executive Director

Joined Iluka 2013



### Jennifer Seabrook

#### Independent Non-Executive Director

Joined Iluka 2008

## Committees

The Board of Directors is comprised of five non-executive directors and one executive director (the Managing Director).

### Audit and Risk Committee

Chair – Jennifer Seabrook

### People and Performance Committee

Chair – James (Hutch) Ranck

### Nominations and Governance Committee

Chair – Greg Martin

**Sustainability governance**

Iluka’s sustainability approach and performance is overseen by the Board and integrated to all levels of the business. Monthly Sustainability Performance Reports are provided to the Board and sustainability is a standing agenda item for all meetings. In addition, the Board reviews this annual Sustainability Report including Iluka’s material issues and targets.

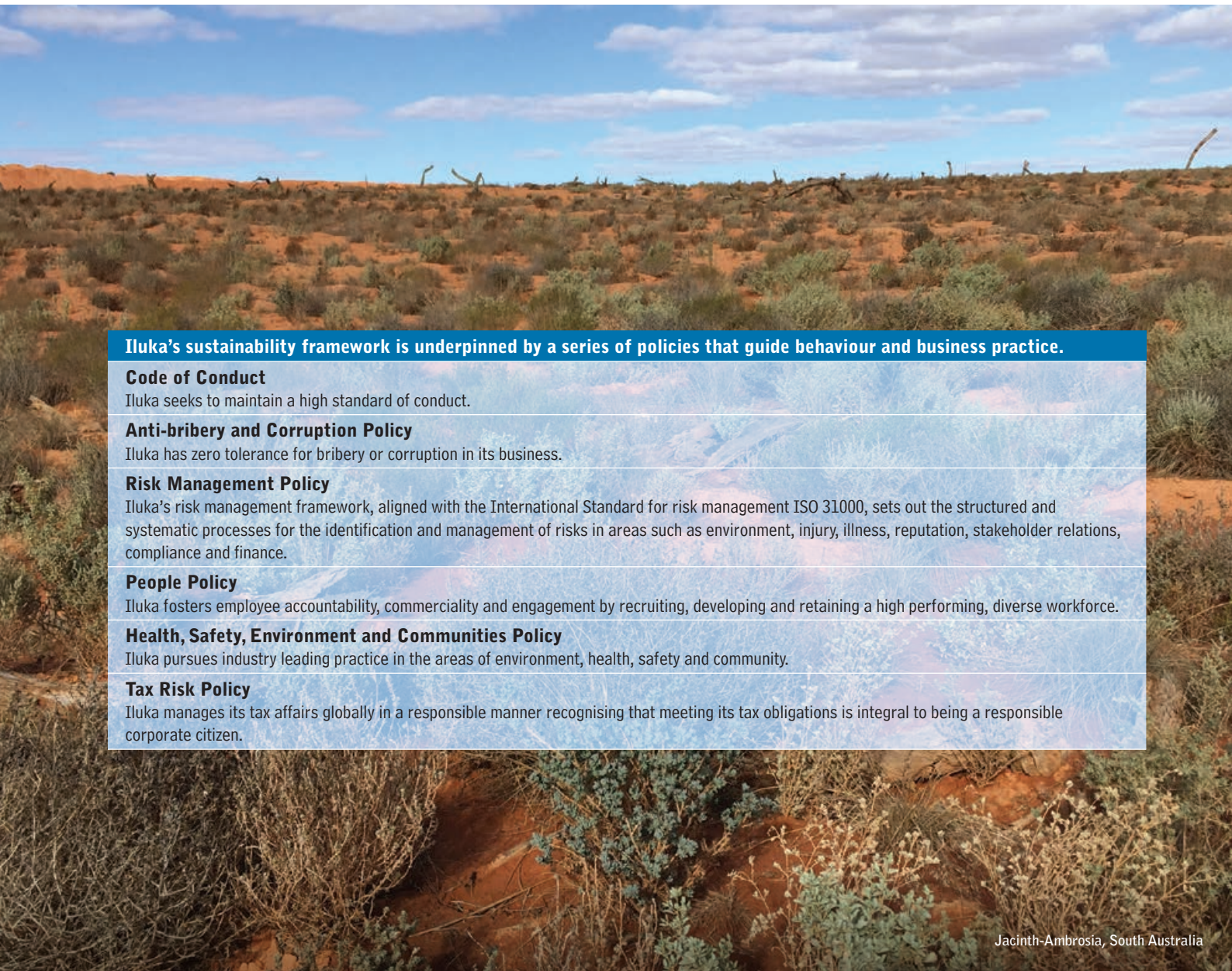
Iluka maintains an Executive Sustainability Forum chaired by the member of the Executive responsible for Sustainability. This forum met three times in 2017 to consider and determine sustainability initiatives and direction. Group health, safety, environment and community performance is also reviewed monthly by the Executive.

Performance incentive payments for the Managing Director and eligible employees are, in part, linked to sustainability related objectives. The targets are set based on a combination of industry best practice and improvement versus prior year performance. In 2017 these objectives were targeted at reducing both the Total Recordable Injury Frequency Rate (TRIFR) and the number of moderate and above environmental incidents, and improving the incident reporting culture for Sierra Rutile. Performance in 2017 versus incentive targets is provided in the Performance Data section.

**Sustainability framework**

To advance Iluka’s sustainability framework, we have committed to progressively aligning our sustainability practices with the ICMM Sustainable Development Framework. As illustrated in the targets, Iluka plans to achieve alignment with the ICMM framework by 2020.

Progress against alignment with the ICMM principles is shown in the table on the next page.



**Iluka’s sustainability framework is underpinned by a series of policies that guide behaviour and business practice.**

**Code of Conduct**

Iluka seeks to maintain a high standard of conduct.

**Anti-bribery and Corruption Policy**

Iluka has zero tolerance for bribery or corruption in its business.

**Risk Management Policy**

Iluka’s risk management framework, aligned with the International Standard for risk management ISO 31000, sets out the structured and systematic processes for the identification and management of risks in areas such as environment, injury, illness, reputation, stakeholder relations, compliance and finance.

**People Policy**

Iluka fosters employee accountability, commerciality and engagement by recruiting, developing and retaining a high performing, diverse workforce.

**Health, Safety, Environment and Communities Policy**

Iluka pursues industry leading practice in the areas of environment, health, safety and community.




**Tax Risk Policy**

Iluka manages its tax affairs globally in a responsible manner recognising that meeting its tax obligations is integral to being a responsible corporate citizen.

Jacinth-Ambrosia, South Australia

## Progress towards alignment with the ICMM sustainable development principles

ICMM principles	Alignment	Alignment commentary
1 Apply ethical business practices and sound systems of corporate governance and transparency to support sustainable development		<ul style="list-style-type: none"> <li>The Code of Conduct, Anti-bribery and Corruption Policies and Whistleblower Procedure govern Iluka's ethical business practice</li> <li>Tax Transparency Report published</li> <li>Sierra Leone taxes paid integrated into disclosure reporting</li> </ul>
2 Integrate sustainable development considerations within the corporate decision-making process		<ul style="list-style-type: none"> <li>Sustainable development principles are integrated through corporate policy and decision-making processes</li> </ul>
3 Respect human rights and the interest, cultures, customs and values of employees and communities affected by our activities		<ul style="list-style-type: none"> <li>Human rights work program commenced in 2016, with an internal human rights risk assessment</li> </ul>
4 Implement effective risk management strategies and systems based on sound science and which account for stakeholder perceptions of risks		<ul style="list-style-type: none"> <li>Risk management framework, aligned with International Standard for risk management ISO 31000, is implemented throughout the organisation</li> </ul>
5 Pursue continual improvement in health and safety performance with the ultimate goal of zero harm		<ul style="list-style-type: none"> <li>Continual improvement is embedded in the HSEC policy</li> </ul>
6 Pursue continual improvement in environmental performance issues, such as water stewardship, energy use and climate change		<ul style="list-style-type: none"> <li>Continual improvement is embedded in the HSEC Policy</li> </ul>
7 Contribute to conservation of biodiversity and integrated approaches to land use planning		Biodiversity research partnerships have been maintained and research progressed
8 Facilitate and support the knowledge base and systems for responsible product design, and the use, re-use, recycling and disposal of products containing metals and minerals		<ul style="list-style-type: none"> <li>Product stewardship approach defined</li> <li>Participation in life cycle assessments conducted by the Zircon Industry Association and Titanium Dioxide Manufacturers Association</li> </ul>
9 Pursue continual improvement in social performance and contribute to the social, economic and institutional development of host countries and communities		Continual improvement is embedded in the HSEC Policy
10 Proactively engage key stakeholders on sustainable development challenges and opportunities in an open and transparent manner; effectively report and independently verify progress and performance		<ul style="list-style-type: none"> <li>Publication of external Sustainability Report aligned to GRI (this report)</li> <li>HSEC Policy and Social Performance Standard provide direction for transparent and meaningful stakeholder engagement</li> </ul>

-  Aligns with principle requirements
-  Partially aligns with principle requirements and actions are in place to address gaps by 2020
-  Does not align with principles

## Risk management

The identification and management of risk is fundamental to achieving Iluka's objectives.

Iluka's Risk Management Policy is supported by a risk management framework which is aligned to the International Standard for risk management, ISO 31000. This framework provides a whole of business approach to the management of risks and sets out the process for the identification, management and reporting of risk to facilitate the achievement of our plans and objectives.

The Board, through the Board Charter, delegates responsibility for identifying and managing risks to management. Management is required to report to the Board on those risks which could have a material impact on the company's business. The Audit and Risk Committee assists the Board with regard to oversight of the company's risk management practices.

Through the risk management framework we seek to:

- embed a culture of risk awareness by integrating risk management into our business activities and processes;
- identify, assess and manage risks in a structured and systematic manner;
- enable prudent risk taking in line with business objectives and strategies;
- establish and monitor appropriate controls in line with agreed risk tolerances;
- ensure material business risks, including sustainability risks, are effectively identified, communicated and appropriately elevated throughout all levels of management and to the Board; and
- continue to fulfil governance requirements for risk management.

Iluka applies a structured and systematic approach to assess the consequence of risk in areas such as environment, health, safety, people, reputation, stakeholder, compliance, financial and company objectives.

Company risks, and how they are being managed, are reviewed by the Executive regularly and reported to the Board on a twice yearly basis.

Pages 40 and 41 of the Annual Report provide further detail on key risk areas than could impact on the company.

## Ethics and conduct

### Code of Conduct

Iluka seeks to maintain the highest standards of conduct and has adopted a Code of Conduct that identifies the standard of ethical conduct expected of all Iluka employees and contractors. The Code of Conduct describes the objectives, values and standards of behaviour that employees and contractors must apply to all business practices. In addition, the Board has specifically adopted a Directors' Code of Conduct which establishes standards for appropriate ethical and professional behaviour for directors.

Iluka treats actual or suspected breaches of its Codes of Conduct and policies seriously and has adopted mechanisms to ensure that suspected breaches are reported and acted upon fairly and effectively. The Codes of Conduct are supported by Iluka's Anti-bribery and Corruption Policy and Whistleblower Procedure.

We encourage all employees, directors, contractors and consultants to raise concerns regarding any misconduct that they believe constitutes a breach of the Code of Conduct, Iluka's policies or the law. Our Whistleblower Procedure sets out the mechanism by which employees can confidently, and anonymously if they wish, raise concerns in a responsible manner without fear of discriminatory treatment, recrimination or reprisal, and with Iluka's commitment to properly investigate any issues.

Copies of the Code of Conduct, Directors' Code of Conduct and Whistleblower Procedure can be found in the Governance section of our website, [www.iluka.com](http://www.iluka.com).

### Bribery and corruption

Iluka has a zero tolerance for bribery or corruption in its business. The Anti-bribery and Corruption Policy, supported by the Anti-bribery and Corruption Procedure sets out the standards and behaviour Iluka expects of its directors, officers, employees, agents, contractors and representatives, and links with the Whistleblower Procedure for the reporting of any actual or suspected breaches of the policy.

Iluka also maintains a Gift Register which management are required to complete and retain as a record for the receipt of entertainment or gifts.

Any policy breaches or material incidents are reported to management and the Audit and Risk Committee.

Sierra Rutile has adopted its own Anti-bribery and Corruption Policy which replaced the policy in place at the time of the acquisition. This policy, is tailored to reflect operating conditions and local laws in Sierra Leone. It contains the key elements of Iluka's Group policy, including zero tolerance for bribery and corruption.

Anti-bribery and Corruption training has been provided to key personnel via direct and on-line training.

The only identified breaches of our Anti-bribery and Corruption Policies related to conduct that occurred prior to Iluka taking control of Sierra Rutile in December 2016. Consistent with standard practice, upon taking control, Iluka undertook a review of Sierra Rutile with the assistance of external accountants and lawyers to identify any inappropriate conduct. Following this review, the company reported conduct that was inconsistent with Iluka's Code of Conduct to the appropriate regulatory authorities for further investigation. These investigations are ongoing. Please refer to August 2017 ASX Notice: Media Reporting on Sierra Rutile Regulatory Investigations, for further information.

A copy of Iluka's Anti-bribery and Corruption Policy can be found in the Governance section of our website, [www.iluka.com](http://www.iluka.com).

## ECONOMIC RESPONSIBILITY

Jacinth-Ambrosia, South Australia

### Iluka pursues sustainable economic outcomes allowing us to share economic benefits with the communities in which we operate, while creating and delivering value.

We undertake a range of activities to advance the objective of delivering value, with a business approach comprising the following key elements:

- operating with a cost focus and flexing operations in line with demand;
- seeking a sustainable price environment for mineral sands products;
- preserving and advancing growth opportunities;
- exploring for minerals in prospective locations;
- disciplined capital allocation; and
- acting counter-cyclically where appropriate.

In 2017, significant developments included:

- the integration of the Sierra Rutile operation;
- the consolidation of our Australian mineral separation plants following a detailed review of Iluka's production portfolio and projects;
- pursuit of an appropriate pricing strategy to allow sustainable returns; and
- increase in US operations rehabilitation provision by US\$90 million following detailed planning and analysis for the closed sites.

For 2017, Iluka recorded a loss after tax for the year of \$171.6 million, compared with \$224.0 million for the previous corresponding period. The higher mineral sands revenue achieved – driven by increased volumes and prices from the Mining Area C iron ore royalty – resulted in a strong underlying performance. Free cash flow of \$322 million was generated with Iluka ending 2017 with net debt of \$183 million, down from \$506 million at the beginning of the year.

Further information on Iluka's financial results and economic performance can be found in the 2017 Annual Report, available on our website [www.iluka.com](http://www.iluka.com).

#### Contribution to local and regional economies

Our activities create direct and indirect economic benefits to countries and communities in which we operate, including:

- employment opportunities;
- investment in community infrastructure and services;
- local procurement supporting community businesses wherever practicable; and
- community support through sponsorships and partnerships.

Iluka engages in a wide range of partnerships and contributes to a large number of community programs and events. Some of these programs are closely tied to business objectives, such as employee diversity, environmental excellence and local employment and procurement, while others are influenced by regional and local development priorities.

In 2017, we contributed \$1,213,000 globally in community investment, comprised of \$607,500 in corporate level programs in Australia and \$605,869<sup>1</sup> to site and regional level initiatives in countries where Iluka has a presence.

Iluka maintained several major corporate partnerships during 2017, including:

- University of Western Australia – Iluka Chair in Vegetation Science and Biogeography, Western Australia;
- Virginia Polytechnic Institute and State University in Blacksburg, Virginia;
- Clontarf Foundation, Australia; and
- Ochre Contemporary Dance Company, Western Australia.

<sup>1</sup> Figure includes statutory payment of \$139,000 to Agricultural Development Fund (ADF) of Sierra Leone as per government conditions.

All Iluka sites make a range of contributions to their local communities. These include programs and events in the areas of youth, education, sport, culture, community safety, mental health and the arts. In 2017, over 80 organisations, events or groups received contributions from Iluka, including:

- Jackson and Devon Anderson (JADA) Technical Institute, Sierra Leone;
- Ruby Rose Educational and Recreational Centre, Sierra Leone;
- Ceylon Chamber of Commerce, Sri Lanka flood relief, Sri Lanka;
- SHINE, Western Australia; and
- Undalup Association – NAIDOC festival, Western Australia.

Iluka does not grant applications for support of religious or political activities and does not provide funds to political parties.

A summary of the economic value generated and distributed from Iluka’s activities in 2017 is provided below.

2017 economic contribution*				
A\$million	Revenue	Operating costs	Employee wages and benefits	Payments to contractors and suppliers
Australia	833.7	254.7	108.6	51.4
Sierra Leone	145.9	53.9	33.6	38.9
Other	37.9	13.5	6.1	0
Total	1017.5	322.2	148.3	90.4

\*Refer to page 25 for Iluka’s tax contribution summary

Sierra Rutile has a well-established community affairs department made up of Sierra Leoneans, predominately from the local community, to conduct engagement and monitor social performance. The Sierra Rutile Foundation was the funding vehicle for corporate social responsibility initiatives. This has been replaced with a new Community Development Agreement (CDA). The CDA was developed to govern the sharing of benefits with local communities. A Community Development Committee (CDC) was established to implement the CDA. Going forward, corporate social responsibility spend in Sierra Leone will be directed to two key areas – education and the activities of the CDC.



Sierra Rutile operations

## CASE STUDY

### Sierra Rutile – improving community links

Residents of Higima and Nyandehun both in Imperi Chiefdom, neighbouring communities to our Sierra Rutile operations, were delighted when construction of a footbridge was completed in 2017 creating a much-needed transport link between the two villages. The 60-metre bridge, which is constructed over the spillway of the Lanti dredge pond, is designed to aid the safe movement of people and motorbikes.

Residents of both villages noted that such a development in their communities will foster trade and safer movement, which has been constrained for some time.

During commissioning of the bridge, Sierra Rutile's Chief Executive Officer, Rob Hattingh reiterated Sierra Rutile's commitment to support and promote projects geared towards improving the lives of people impacted by its operations.

The Paramount Chief of Imperi Chiefdom, PC Madam Hawa Kpanabom Sokan IV, expressed her satisfaction at seeing this development in her chiefdom.



Footbridge commissioning, near Sierra Rutile



Narngulu Analytical Laboratory, Western Australia

## Tax transparency

**We are proud of the contribution we make to the communities in which we operate and take our responsibility to pay our taxes seriously. In 2017 Iluka paid \$47.1 million in income taxes, royalties and other payments to national, regional and local governments.**

Iluka understands the need for transparency on its tax payments and has now published the company's taxes paid data for a third consecutive year following adoption of the Australian Board of Taxation's Voluntary Transparency Code in 2015. This year, the company's tax transparency reporting has been integrated into this report, including Sierra Rutile's contributions. This reflects the recognition by Iluka and its Board of the importance of tax transparency in meeting the company's sustainability objectives and the impact of taxes paid in context of Iluka's overall economic contribution and therefore its social licence to operate.

The information provided in this report, together with data published in Iluka's 2017 Annual Report, reflects the disclosure requirements under the Australian Voluntary Tax Transparency Code (the Code) and the UK Finance Act 2016. Iluka adopted the Code in 2016 and has published a Tax Transparency Report for the 2015 and 2016 income years. The Code is divided into Parts A and B with both parts recommended to be adopted by large businesses, such as Iluka. Part A of the Code aims to improve tax disclosures contained within general purpose financial statements. Part B of the Code details Iluka's approach to tax policy, strategy and governance, as well as providing information on the total tax contribution for the year and international related party dealings. For 2017 and going forward, Part A information (including commentary on Iluka's Group and Australian effective tax rates) is reflected in Iluka's Annual Report. Part B requirements are addressed in this report.

## Tax policy, strategy and governance

Tax governance is an essential and important element of Iluka's corporate governance framework. Iluka's tax governance framework, including its Tax Risk Policy, emphasises a prudent and responsible approach to tax management and operates within our broader governance and risk management framework. The Tax Risk Policy is reviewed annually by the Board and sets out the accountability and reporting framework for managing Iluka's tax risks. Key to our approach to managing tax risk is meeting our obligations to pay taxes in accordance with the respective prevailing tax laws and ensuring payment obligations are met on time.

The broader tax governance framework operates to ensure that Iluka is compliant with statutory reporting and disclosure obligations and that all material tax risks are recognised, managed and recorded in a manner consistent with:

- the Board's risk management philosophy;
- generally accepted industry practice and corporate governance standards;
- guidance from regulatory authorities; and
- shareholder expectations.

Tax issues are regularly reported to and considered by the Board and senior executives at meetings of the company's Audit and Risk Committee.

Tax planning is undertaken in this context, with material tax risks identified at the earliest opportunity and risk mitigation strategies implemented. In structuring Iluka's commercial activities, the company considers – among other factors – the tax laws of the countries in which it operates, with a view to maximising value on a sustainable and responsible basis for shareholders. All tax planning is undertaken with commercial and economic substance and with regard to the potential impact on Iluka's reputation and commercial objectives.

Given the scale of Iluka's business and volume of tax obligations, risks will inevitably arise from time to time in relation to the interpretation of tax law and the nature of our compliance arrangements. We proactively seek to identify, evaluate, manage and monitor these risks. Where there is significant uncertainty or complexity, external advice is sought.

The company acts with integrity in dealing with all stakeholders, including tax authorities, with whom Iluka maintains a transparent, respectful and professional relationship.



Murray Basin rehabilitation, Victoria



## International related party dealings

Iluka's principal activities are mineral sands exploration, project development, operations and marketing, and rehabilitation. These activities are undertaken in a number of countries across the globe through subsidiaries and branches which are considered international related parties in respect to Iluka.

Our operating model leads to intra-group services and transactions including support services for management and other intra-group services, the sale and purchase of commodities and financing arrangements. The aggregate value of these intra-Group transactions comprises less than 2% of sales revenue.

Under Iluka's Tax Risk Policy, all international related party transactions are priced in accordance with the Organisation for Economic Cooperation and Development (OECD) guidelines and local laws. Iluka obtains independent advice from transfer pricing experts to ensure that the transactions are compliant with legal and local tax requirements, are priced on an arm's length basis and are appropriately documented.

## Tax contribution summary

Taxes represent a significant part of our economic contribution to the main countries in which we operate. The following table illustrates the types of taxes paid, collected and remitted by Iluka in 2017 to national, regional and local governments in jurisdictions that Iluka conducts mining operations. Taxes paid in other jurisdictions in which Iluka has a presence have not been included on the basis that they are not material to Iluka's overall tax contribution.

Royalties paid to national, regional and local governments continue to be the largest component of our taxes borne, followed by corporate income tax. Payroll taxes collected and remitted to governments on behalf of employees represent 43% of our total tax contribution (before net taxes refunded).

Total payments made by country								
A\$million	Corporate income tax	Royalties	Fees <sup>1</sup>	Employer taxes <sup>2</sup>	Other <sup>3</sup>	Total taxes borne	Employee payroll taxes <sup>4</sup>	Net taxes refunded <sup>5</sup>
Australia	6.7	19.2	1.9	5.4	-	33.2	26.9	(25.6)
Sierra Leone <sup>6</sup>	5.3	7.3	1.6	-	-	14.2	6.4	-
USA <sup>6</sup>	(2.1)	-	-	0.6	1.2	(0.3)	2.2	-
Total	9.9	26.5	3.5	6	1.2	47.1	35.5	(25.6)

### Notes

Note 1 Payments to governments for the right to use an area for exploration or extractive activities.

Note 2 Payments to governments in relation to Iluka's capacity as an employer. This includes payroll taxes and Australian fringe benefits tax.

Note 3 Property and sales tax paid to state governments.

Note 4 Payroll and employee taxes withheld from employee remuneration and paid to governments.

Note 5 Net refunds of transactional taxes, such as Goods and Services Tax (GST) and Value Added Tax (VAT).

Note 6 Foreign denominated taxes were converted to A\$ using an average daily exchange rate for 2017 of 0.803 from the Reserve Bank of Australia.





**PEOPLE**

Hopetoun, Victoria

## We seek to attract and retain the best people while building and maintaining a diverse, sustainable and high achieving workforce.

Iluka's People Plan, aligned with the Iluka People Policy, establishes our approach to recruiting, developing and retaining a high performing workforce to achieve Iluka's objectives. Iluka also maintains fair work policies, including an Equal Employment Opportunity Policy and a Bullying and Harassment Procedure.

Iluka recognises that leadership at all levels is required to create alignment of purpose which, together with the right resources, is crucial to the achievement of extraordinary performance. We are committed to ensuring that employees and contractors have the appropriate skills, knowledge and behaviours to fulfil their positions safely, efficiently and effectively, and we provide opportunities for learning and development that enhance the capability of our workforce.

Through the acquisition of Sierra Rutile, Iluka's workforce has increased by more than 1,900 employees, with over 95% of those being Sierra Leonean.

Iluka will continue to seek to maximise local content at Sierra Rutile, as guided by the Sierra Rutile Local Content Policy and the Sierra Leone Local Content Agency Act (2016).

Upon acquisition, Sierra Rutile had a large proportion of casual employees who had spent one year or more of continuous employment with the company. A project was undertaken in 2017 to bring more than 250 of those casual employees into permanent positions, providing them with improved employee benefits and job security.

### 2017 Australia workforce profile

599 employees
~500 annual average contractors (additional to employees)
133 new employees
27% female / 73% male
5% Indigenous <sup>1</sup>
<2% recognised disability <sup>1</sup>
14% flexible work arrangements
7% employee initiated turnover

### 2017 Sierra Leone workforce profile

1985 employees
~800 annual average contractors (additional to employees)
360 new employees
7% female / 93% male
95% Sierra Leonean
2% employee initiated turnover

<sup>1</sup> Iluka respects employee privacy; data is identified employees only

**Diversity** 

Iluka's People Policy underpins our approach to diversity. We respect and encourage workplace diversity and aim to create a flexible and inclusive workplace environment which assists employees to balance their responsibilities. The Managing Director and Executive promote awareness of diversity and inclusion and integrate those principles into company activities, including recruitment, training, talent management and employment policies.

The table below highlights gender diversity across the Iluka Group as at 31 December 2017. Female participation at Executive level increased by 14% in 2017. This has been supported by consistent practice and process with annual succession planning and identification and development of high potentials within the company.

Level	Proportion of female (%)	Proportion of male (%)
Board	33	67
Executives <sup>(1)</sup>	33	67
Other management levels	14	86
Total Iluka Group (ex Sierra Rutile)	27	73
Total Sierra Rutile	7	93
Total Iluka Group	12	88

(1) Executives excludes the Managing Director.

**Australian diversity targets**

The People and Performance Committee set measurable objectives for Australian workforce diversity of 30% female and 8% Indigenous employee participation to be achieved by 2018. These were integrated into Iluka's sustainability performance improvement targets in 2017. This year, female employment participation in Australia remained at 27%, while executive female representation was 33%. In 2018 the focus will be on recruitment strategies to increase the participation of female and Indigenous recruitment into operational and technical roles.

The number of Australian Indigenous employees remained at 5%, with the majority based at Jacinth-Ambrosia operation. Partnership programs with the Clontarf Foundation and SHINE continued in 2017 and focused on creating employment pathways for Aboriginal youth.



Capel, Western Australia

Diversity focus areas

Area of focus	Objectives	Progress
Promote awareness of diversity	Employees and stakeholders have access to meaningful diversity information	<ul style="list-style-type: none"> <li>• Iluka’s People Policy and Diversity Standard is accessible to employees online and at Iluka locations</li> <li>• Diversity progress against targets was reported to the Executive and the People and Performance Committee of the Board</li> <li>• Iluka sponsored the Inspiring Girls Initiative for the 2017 Women in Resources Awards</li> <li>• Iluka sponsored the Ochre Contemporary Dance Company and was recognised at the 2017 State Arts and Culture Partnership Honours with an Aboriginal Arts Partnership Award</li> <li>• Iluka sponsored the Beach Access Day for the Perth Sculptures by the Sea in 2016 and 2017 allowing people with a disability to have access to the beach and sculptures</li> </ul>
Integrate workplace diversity principles into company activities	People management practices implemented to reflect diversity and inclusion	<ul style="list-style-type: none"> <li>• Behavioural expectation (Code of Conduct and Equal Employment Opportunity) training continued during the year</li> <li>• Gender pay equity review completed</li> <li>• Workplace Gender Equality Agency Report submitted for 2016-2017</li> </ul>
Attract, develop and retain employees across age ranges, people with a disability, women and Indigenous people	<p>Achieve 30% gender diversity by 2018*</p> <p>Achieve 8% Indigenous diversity by 2018*</p> <p>Provide sustainable employment opportunities for people with disabilities*</p>	<ul style="list-style-type: none"> <li>• Succession planning and high potential identification and development plans</li> <li>• Sponsorship partnership with Clontarf Foundation and SHINE in Geraldton</li> <li>• Relationship with Edge Employment Solutions, to provide employment for people with disabilities</li> </ul>
Create a flexible workplace culture which assists employees to balance their responsibilities	Flexible employment arrangements supported	<ul style="list-style-type: none"> <li>• Promotion of flexible work arrangements, including part-time, working from home and modified start and finish times</li> </ul>

\*Excluding Sierra Rutile



Sri Lanka

Australian workforce profile from the 2016-2017 Workplace Gender Equality Agency Report*									
	Female			Male			Total	%	
	Full time	Part time	Casual	Full time	Part time	Casual		Female	Male
Managing Director	-	-	-	1	-	-	1	-	100
Key management personnel	-	-	-	4	-	-	4	-	100
Executives/general managers	2	-	-	4	-	-	6	33	66
Senior managers	2	1	-	16	-	-	19	16	84
Other managers	6	2	-	27	-	-	35	23	77
Professionals	48	20	1	138	6	-	213	32	68
Technicians and trade	24	1	-	87	2	-	114	22	78
Clerical and administrative	33	14	2	5	2	-	56	88	12
Machinery operators and drivers	10	1	-	161	-	-	172	6	94
Other	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>125</b>	<b>39</b>	<b>3</b>	<b>443</b>	<b>10</b>		<b>620</b>	<b>27</b>	<b>73</b>

\*Workplace Gender Equality Agency numbers for Australian operations as at 30 March 2017

### Attracting, developing and retaining employees

Iluka considers employee development important and invests in building employees' capabilities and skills. The development of employees is critical to an engaged and high achieving performance culture that improves team effectiveness, increases business effectiveness and delivers Iluka's objective.

Programs include:

- sponsoring and/or employing apprentices and trainees;
- employing vacation students and graduates;
- technical and professional development; and
- management and leadership development.

Employees participate in an annual performance review process. Position-relevant objectives are set at the beginning of each year, aligned to the Iluka corporate plan. Regular feedback is provided throughout the year and formal mid-year and full year reviews are conducted.

Employee performance plans include a development planning component as well. Training and professional development is planned specifically for each individual.

In addition, internal mechanisms are utilised to identify high performing individuals and to facilitate succession planning across all levels of the company. Succession planning and development plans are in place for leadership positions, including the Managing Director and his direct reports and key critical roles.

In 2017, Mineral Sands Operations implemented the Operational Excellence Program at Australian operational sites. The program was established to ensure that the transition from low to high plant utilisation is well managed with a focus on safety, costs, throughput and quality. The program was run at Jacinth-Ambrosia prior to the restart in December 2017 and will be rolled out to other Australian sites in 2018.



Jacinth-Ambrosia, South Australia

**Australia training**



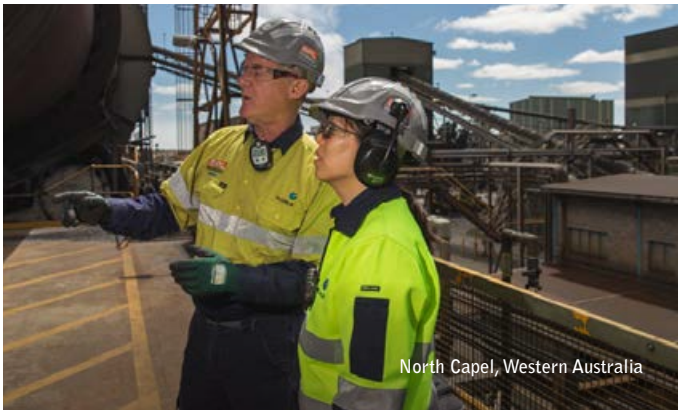
Narngulu Apprentices and Trainees, Western Australia

**2,906 employees and contractors completed training.  
7,358 hours of training were undertaken.**



Clontarf Trainee at Narngulu, Western Australia

**64% of training was completed face to face,  
awarding individual qualifications to participants.**



North Capel, Western Australia

**36% of training was online learning,  
which was up from 11% in 2016.**



South West, Western Australia

**73% of all training occurrences were completed  
by contractors.**

**12% of training participants were female,  
with a total of 1,433 training hours.**

### Sierra Leone training

The training focus in Sierra Rutile has been on safety behaviours.

In late 2017 Sierra Rutile appointed a Senior Safety Training Advisor with the scope to identify training needs, develop training packages and deliver those packages to Sierra Rutile employees. The training package scope covers:

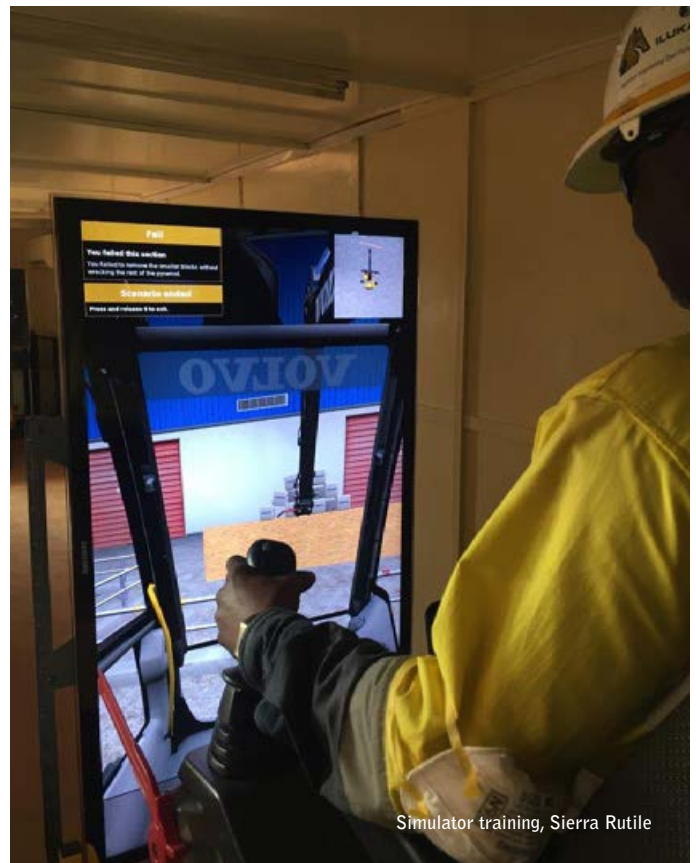
- light vehicle pre-start;
- risk and hazard management;
- hazard and incident reporting; and
- supervisor training.

During the year, a simulator for training in mobile equipment operations was installed which allows employees to be trained in the practical operation of equipment without impacting on operations. In 2018, a refurbishment of the Kpanguma training facility is planned to further support training opportunities at Sierra Rutile.

In 2017 the entire Sierra Rutile workforce, including both employees and contractors, completed a new general induction. The induction introduced the Iluka health and safety framework with a focus on safety behaviours and hazard identification.



Simulator training, Sierra Rutile



Simulator training, Sierra Rutile

<b>Number of employees and contractors who completed general induction</b>	<b>3,252</b>
<b>Number of employees and contractors who attended risk and hazard training</b>	<b>350</b>
<b>Number of toolbox meetings held</b>	<b>377</b>
<b>Number of participants at toolbox meetings</b>	<b>10,275</b>



## HEALTH AND SAFETY

North Capel, Western Australia

### “Protecting the safety and wellbeing of Iluka’s people lies at the heart of the business.” **Greg Martin, Chairman**

We strive to maintain a fatality-free workplace, minimise injuries and protect the health and wellbeing of our people. For 2017, this has included introducing Iluka’s safety and risk mitigation frameworks to Sierra Rutile.

Our health and safety approach focuses on creating a culture which encourages all members of our workforce to be leaders in creating a safe work environment. This is supported by Iluka standards outlining minimum requirements of performance, implementation of targeted programs and facilitated training, and incident investigation processes.

Regular communication about health and safety at all levels of the business is integral to promoting Iluka’s safe work environment. Health and safety meetings are held at a departmental level by safety representatives and employees, and between management and contractors, to identify improvement areas and to ensure that concerns are addressed. Field safety visits (interactions) are regularly performed to ensure operational activities are meeting standard requirements and to communicate potential improvements. Scheduled workplace inspections are carried out as part of maintaining a safe work environment. Investigations are undertaken for serious incidents to ensure the cause is identified, that appropriate steps are taken to avoid repetition of the incident and that key learnings are shared.

The health and wellbeing of employees and contractors is equally important. We seek to identify and manage occupational exposure risks, minimise occurrences of occupational illness and promote healthy lifestyles.

#### Fatality-free

Iluka promotes a culture that aims to minimise the severity and frequency of safety incidents and a workplace that is fatality-free.

Safety risk identification and preventative action planning have been key focus areas for Sierra Rutile. The initial safety focus could be characterised as “back to basics”: personal accountability, understanding risks, incident and hazard reporting and the wearing of appropriate personal protective equipment (PPE). Examples of actions taken include:

- safety boots, shirts, pants and other PPE have been distributed to employees;
- regular daily alcohol testing has been introduced; and
- review and rollout of local procedures for high risk activities, such as traffic management and tailings management.

To monitor safety performance, a series of indicators are tracked, such as the number of safety visits, planned workplace inspections and the identification of near hits and hazards. These statistics are detailed in the Performance Data section of this report and summarised below.

The Iluka safety and environment incident definitions were applied at Sierra Rutile from January 2017. The alignment will be progressive and it will take time to achieve the same level of reporting as for other operations. As such, 2017 was a baseline reporting year for Sierra Rutile, with the focus on ensuring all incidents were identified, reported and classified. Performance improvement targets were set to measure the increase in reporting, with targets for both environmental and hazard reporting being exceeded.

Twenty-six people sustained recordable injuries while working for Iluka in 2017; nine of these were lost time injuries, 13 were medical treatment injuries and four were restricted work cases. Eight of these injuries also had the potential to be severe permanent disabling injuries or fatalities. All injured persons were male, and a total of 899 days were lost to injury during the year.

Iluka’s primary safety measures, in accordance with industry practice, include the Lost Time Injury Frequency Rate (LTIFR) and the Total Recordable Injury Frequency Rate (TRIFR). These measures are calculated per million hours worked by our employees and contractors. The frequency rates for 2017 exclude the Sierra Rutile operation. In 2017, the TRIFR increased slightly from 4.4 in 2016 to 4.8, while the LTIFR increased from 0.4 to 0.9. Over the same period, employee and contractor work hours decreased from 2,758,690 to 2,292,715.

Sierra Rutile ended 2017 with a TRIFR of 2.2 and a LTIFR of 1.0.

At 31 December 2017, the combined Iluka (including Sierra Rutile) TRIFR was 2.8 and LTIFR was 1.0. These rates will be used for 2018 comparisons.



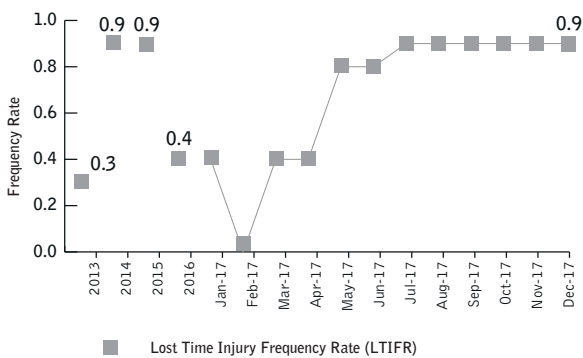


We are continuing our focus on preventing fatalities through monitoring and investigating serious potential injuries (SPIs). An SPI includes any event where there is a potential consequence of a fatality regardless of likelihood. Both injuries and near hits can be rated as an SPI.

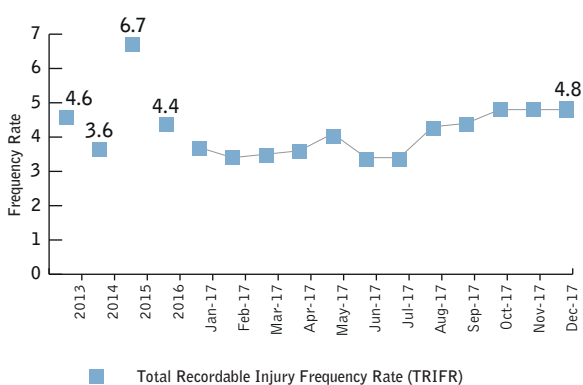
There were 45 SPIs recorded at Sierra Rutile in 2017. The majority of these were related to surface mobile equipment and light vehicles.

For the remainder of the business there were 15 SPIs recorded in 2017 compared to 13 in 2016. The majority of these were related to surface mobile equipment, road haulage and falling objects. The 2018 work plan will focus on addressing these aspects.

**LOST TIME INJURY FREQUENCY RATE 2017**



**TOTAL RECORDABLE INJURY FREQUENCY RATE 2017**



**Exposure to occupational health hazards**

Iluka conducts occupational exposure monitoring annually across the business to quantitatively assess potential exposure to identified contaminants, and to assess the effectiveness of risk mitigation strategies. The monitoring programs are based on qualitative risk assessments and are guided by our standards and guidelines. Programs are in place at all Australian sites and will be developed for the US and Sierra Leone sites in 2018.

Progress and performance results for each monitoring program are reviewed by the Board quarterly, inclusive of occupational exposure limit (OEL) exceedances.

Based on our operational risk profile, the programs typically focus on monitoring exposure to airborne contaminants including respirable dust, respirable crystalline silica, inhalable dust, noise and radiation.

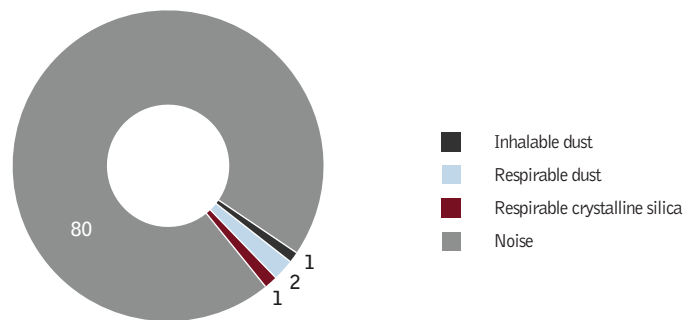
Management plans are developed and implemented at site level for significant occupational hygiene risks and include detail on risk controls, monitoring programs, designated responsibilities, objectives, targets and timeframes.

In Australia, there were 84 exceedances of OELs recorded, with the majority (95%) attributed to noise. Radiation monitoring results and dose assessments for the workforce did not record any employees and contractors above the regulatory annual limit. For more on Iluka’s management of naturally occurring radioactive material (NORM), refer to the Environment section of this report.

Noise exposure remains a potential risk across all Australian sites. As a result, a focus on reducing exposure has been included in the sustainability performance improvement targets.

In 2017, there were five cases of occupational illnesses reported, with four of these cases related to employees undertaking short-term work at international locations other than their usual place of work (typhoid and malaria). There was one reported case of noise induced hearing loss.

**NUMBER OF EXPOSURE EXCEEDANCES ABOVE THE OEL**



**Community health**

Ensuring our activities have negligible impact on community health and where possible have a positive impact on community health is an area of focus for our Sierra Rutile operation. Additionally, there is a risk of local community health issues impacting on our workforce that travel internationally to Sierra Leone, Sri Lanka, China, India and other countries. It is important that these employees are educated on the areas they are travelling to and have the appropriate health information and protection.

A health impact assessment is being completed as part of the ESHIA studies at Sierra Rutile. Health impacts associated with our activities can be as a result of influx of new workforce, opening of transport corridors, changes in the biophysical environment, lifestyle and demographic changes. These activities can have an impact on communicable and non-communicable diseases; vector related diseases; water, sanitation and waste related disease; sexually transmitted disease; food and nutrition; and health service infrastructure. Prevention programs and management plans will be updated following the health impact assessment.

## CASE STUDIES

### Sierra Rutile Clinic

The Sierra Rutile clinic is equipped to handle a wide range of health tests and collaborates with specialist physicians to provide routine screening of diseases to its workforce and their immediate dependants. Sierra Rutile promotes the fundamentals of fitness for work and conducts a number of initiatives and toolbox talks to enhance health awareness amongst the workforce.

Developments undertaken at the clinic in 2017 include:

- mechanical repairs to two existing ambulances and ordering of a new ambulance;
- purchase of new equipment for lung function (spirometer), visual acuity (Snellen chart) and audiometric function (audioscope);
- rapid tests such as hepatitis B antigen and prostatic specimen antigen have been introduced;

- continuation of the vaccination of employees against typhoid fever and hepatitis B infection;
- continuation of the distribution of insecticide-treated mosquito bed nets to all employees; and
- educating the workforce on the prevention of diseases in relation to seasonal, environmental and behavioural factors.

In 2017 the total clinic attendance was 28,307 patients. This included 3,482 malaria cases and 1,485 typhoid cases. Sierra Rutile continued its successful partnership with non-government organisations, the United Mine Workers Union and the National AIDS Secretariat of Sierra Leone to support the prevention of HIV/AIDS.

### Improving communication methods in Sierra Rutile

There are significant ranges in literacy levels at the Sierra Rutile operation. The capability to communicate hazards and incidents across the Sierra Rutile workforce is a challenge.

Communication methods have been enhanced by adopting the use of forms that convey messages in different media to the user. Examples include the development of a light vehicle pre-start check sheet and a

hazard report form. These forms have minimised the amount of writing required with an increased use of ticks, crosses and circling of pictorial information to indicate hazards and faults.

Application of these forms is supported by practical training in the field and minimal time in a classroom.

**Incident Report**

Who, when and where abc

Reported By \_\_\_\_\_ / / AM/PM

Location \_\_\_\_\_

What happened? ○

Harm to ○

Cause ○

Please take this report to your Supervisor

**This section to be completed by the Supervisor**

Incident/hazard details abc

What was done to fix it or make it safe? abc

Rating ○

Actual Rating	1	2	3	4	5
Potential Risk	L	M	H	VH	E

Investigation required? abc

Yes  No  Investigator \_\_\_\_\_

Sign off abc

Supervisor \_\_\_\_\_

Signature \_\_\_\_\_



## CASE STUDIES

### Reducing manual handling exposure

At our operations in Western Australia's Mid West, we have developed a mechanical aid to lift and align the open end of the roll cassette mechanism in mineral magnetic separator machines.

Rare earth rolls (RER) and rare earth drum rolls (RDR) are used in the Narngulu mineral separation plant to separate non-magnetic particles from magnetic particles. There are currently 32 of these machines in operation.

Due to the belt speed required to produce effective separation, combined with the high machine temperatures ( $>80^{\circ}\text{C}$ ), the polyurethane belts can track off, crease and/or seize which affects the grade of the mineral stream. When this occurs, replacement of the belt is required and is routinely completed by operators.

The task required manual handling to lift the open end of the roll cassette mechanism to release the cassette support bracket for removal of the belt, and again to reposition the support bracket after the belt had been replaced. This required awkward lifting practices and body position, increasing the potential for serious injury.

This risk of injury has been eliminated by designing and using a mechanical aid that removed the need for the operator to lift the open end of the cassette mechanism. Mechanical advantage allows the cassette mechanism to be lifted while the operator simultaneously removes and relocates the support bracket, minimising the risk of manual handling injury.



### Recognition of effort to address mental health

Since 2016, a site wide mental health awareness initiative at our South West Western Australian operations has aimed to raise awareness, encourage discussion and provide tools and referral options for employees.

Iluka has partnered with local Dardanup farmer, Peter Milton (pictured below, right), and mental health awareness organisation Black Dog Institute. A steer called Winston was sponsored and taken as a mascot to various events, to increase awareness and raise funds to support mental health organisations such as Lifeline.

These industry-leading innovations resulted in Iluka being named Winner of the "Systems and People" category at the Western Australian Department of Mines, Industry Regulation and Safety Awards for Excellence ceremony.

The award recognises an innovative approach to raising awareness of mental health issues within the workforce, resources industry and wider community.





## SOCIAL PERFORMANCE

Sembahun, Sierra Leone

### We seek to respect human rights, engage meaningfully with stakeholders and make a positive difference to the social and economic development of the areas in which we operate.

Our approach to social performance is based on understanding and minimising the potential impacts of our activities on communities and managing social risks to the business.

Social performance is a critical component of the sustainability of Iluka's activities across our entire business lifecycle. It is governed by the company's HSEC management system. This includes the Group level Social Performance Standard and related procedures. These contain the following requirements:

- the robust identification, management and monitoring of social impacts and risks;
- meaningful engagement with stakeholders;
- responsive management of grievances;
- the appropriate sharing of benefits; and
- where applicable, additional requirements pertaining to aspects such as human rights, local employment and procurement, cultural heritage management, resettlement and social monitoring.

Iluka recognises that compliance with legislative requirements is a minimum standard that should be achieved while performing at or beyond these requirements. Our expanding global footprint in countries outside Australia has heightened our proactivity in identifying and addressing a broader range of social issues, risks and impacts. This is particularly relevant with the acquisition of Sierra Rutile and project development in Sri Lanka. The social context of these locations, and the nature of Iluka's activities, has enhanced the materiality of issues such as human rights and project-induced displacement.

Social performance governance is led by our Communities team, part of the Sustainability group. In 2017, key areas of work for the Communities team included embedding Iluka's new social performance standard and associated procedures and strengthening capability at sites to develop and monitor social management plans. An initial social performance gap assessment against the new standard was undertaken in 2017 to provide a roadmap for continual improvement.

#### Stakeholder engagement

Iluka recognises that the success of our business is linked to our relationships with our neighbours and stakeholders. We seek to engage early in open, inclusive and meaningful communication and incorporate stakeholder views into our decision-making processes, as stated in our HSEC Policy.

Relevant stakeholders and their interests are identified, analysed and mapped to inform impact and risk assessments and social management plans. All sites and projects are required to establish a process to ensure affected stakeholders receive relevant up-to-date information, are provided with opportunities to express their views on decisions that may affect them, and that these views are considered in decision-making processes.

Iluka monitors its operations and local environments for potential issues or matters of local concern. We have suitably trained site-based personnel, who are able to respond to stakeholder concerns, and, where required, engage with relevant authorities. We seek to build strong relationships with stakeholders and effectively manage the impact of our business activities on communities. Nevertheless, we recognise that complaints will occur from time to time.

In 2017 the Group level Grievance Management Procedure was updated in line with the United Nations "Protect, Respect and Remedy" Framework. The procedure sets minimum requirements that all sites must adhere to when developing their local grievance management process, with the aim of achieving the following key objectives:

- external stakeholders are able to access a locally-appropriate process to raise grievances; and
- grievances are recorded, investigated and resolved in a timely manner.

We feel strongly that stakeholders should feel comfortable about contacting us to report any kind of feedback or conduct, and all complaints are taken seriously and are investigated. All grievances of a medium to high-level risk classification are reported through to the Executive and Board as part of the monthly Sustainability Performance Report. Grievance management training is provided to build capability and ensure grievance mechanisms are tailored and appropriate for each site and project.

Public complaints by region	2015	2016	2017*
Sierra Rutile	n/a	n/a	30
All other Iluka sites	28	27	9
Total public complaints received	28	27	39

\*All complaints were classified as low level risk and were variable in nature.

**Human rights** 

In 2017 we continued to advance our human rights work program, developed in accordance with the UN Guiding Principles on Business and Human Rights. This is to ensure we appropriately address potential human rights risks and impacts in all relevant jurisdictions and to support responsible business growth.

Accordingly, this saw the inclusion of human rights in our social impact assessment work in Sierra Rutile and Sri Lanka in 2017 .

Iluka’s Executive all undertook human rights training while topical training on labour, human rights and resettlement was provided to relevant members of the broader workforce.

**Resettlement** 

Iluka seeks to avoid or minimise project-induced displacement in all its planning activities. However we anticipate project growth and expansion of our Sierra Rutile operation will lead to some displacement and resettlement over time.

As part of our Social Performance Standard, Iluka has committed to managing all project-induced displacement in alignment with the International Finance Corporation (IFC) Performance Standard 5: Land Acquisition and Involuntary Resettlement. This includes avoiding or minimising any adverse social and economic impacts from land acquisition or restrictions on land use and ensuring all affected people are able to improve, or at least restore, their livelihoods and standards of living once resettled.

Sierra Rutile has recently developed a Resettlement Policy Framework to govern all project induced displacement in Sierra Leone and has also established a Resettlement Management Unit, headed by an experienced Resettlement Manager.

In late 2017, we recommenced the Foinda village resettlement project to allow for mining of the areas below the current village footprint. This project is being undertaken in accordance with Iluka’s standards and good international industry practice and will be subject to independent monitoring.

**Indigenous relations and cultural heritage**

Iluka acknowledges the special connection that Indigenous people have with land and we seek to work together to build constructive and respectful relationships. In addition to our social performance requirements, we are expanding our expertise to ensure development of an Indigenous Peoples strategy that respects the rights and interests of all Indigenous people.

At Iluka locations where cultural heritage is identified, site leadership are required to develop a Cultural Heritage Management Plan to ensure the protection of the sites and to meet regulatory requirements. This is especially important when our projects are located on land traditionally owned by, adjacent to, or under customary use by Indigenous people. In these instances specific engagement is undertaken.

Iluka currently has two agreements in place with Indigenous people for its Australian operations. Iluka’s Native Title Mining Agreement with the Far West Coast (FWC) Native Title holders has been in place since the commencement of operations at Jacinth-Ambrosia in South Australia. In Western Australia, Iluka has a voluntary agreement with the Yued People for our Cataby project.

Both agreements ensure we develop and maintain constructive and respectful relationships with Traditional Owners. They include activities such as training and business opportunities, employment, Aboriginal heritage protocol and cultural awareness training while also providing a forum for regular engagement.

During 2017, there were no incidents of violations involving the rights of Indigenous people.



Lanti dredge, Sierra Rutile



Sierra Rutile has a well-established community affairs department made up of local people to conduct engagements and monitor social performance. In 2017 a new Community Development Agreement (CDA) was developed to govern the sharing of benefits with local communities. A Community Development Committee (CDC) was established to implement the CDA. Sierra Rutile was involved in this process which was led by the National Minerals Agency. Sierra Rutile commenced the process to dissolve the Sierra Rutile Foundation, which used to be the funding vehicle for corporate social responsibility initiatives. The Jackson and Devon Anderson Technical Institute (JADA) was one of the key recipients of funding, governed by an independent board. Going forward, corporate social responsibility spend will be directed to two key areas – education (driven by Sierra Rutile on a voluntary basis) and the activities of the CDC (as per legal requirement).

Bamba Village, Sierra Leone



**CASE STUDIES**

**South Capel Remediation Project – Western Australia**

In 2017, Iluka undertook significant stakeholder and community engagement as part of the South Capel Remediation Project. Iluka consulted landowners and the community regarding a legacy issue caused by historical mineral sands mining and processing activities in Capel, Western Australia.

Iluka’s storage dams met regulatory and industry standards of the day and pose no risk to human health. However, in keeping with our commitment to environmental performance, we put a regulatory approved remediation plan in place to ensure the dams meet current regulations.

Iluka undertook extensive stakeholder engagement which included over 50 individual face to face conversations with landowners and multiple community information sessions. These were further supported by a dedicated community feedback line, fact sheets, online information and letters. To date, we have received good feedback from the community on our approach to engagement on this matter.





## CASE STUDIES

### Preparing for an end to modern slavery

In 2017, the Australian government announced its intention to introduce reporting requirements for Australian businesses under a proposed new Modern Slavery Act. The Australian legislation is anticipated to be modelled on the UK Modern Slavery Act 2015 and aims to combat human trafficking, forced labour and slavery-like practices in business supply chains.

Iluka's current human rights work program includes a workstream to address human rights related risks in our supply chain. Through a collaborative effort between our Communities, Procurement and Legal teams, we are in a good position to respond to the reporting requirements if and when they are introduced.

During this initial phase in 2017, Iluka has undertaken multiple activities to prepare our business and gain a greater understanding of any potential risks in our global supply chain, including:

- the development and inclusion of clauses that reference human rights in Iluka standard purchase order terms and conditions and master goods and services contracts;
- developing a Group level human rights vendor screening and assessment process, to be initially applied to our Australian registered suppliers, and subsequently extended to other jurisdictions;
- a high level assessment of Australian vendors to identify those that may be high risk;
- commencement of meetings with two major vendors to discuss the proposed legislation and ways of working together to strengthen supply chain transparency; and
- proactive engagement with industry groups and sector peers to keep up-to-date with developments and inform our internal processes.

### Committing to our local community

Iluka's Jacinth-Ambrosia (J-A) operation won the 2017 South Australian Premier's Community Excellence Award for Social Inclusion. The award recognises our commitment to preserving local employment and development opportunities during the temporary suspension of mining and concentrating activities.

Following the idling of operations in April 2016, a key focus at site was on preserving employment and development opportunities for the J-A team, with a view to an eventual restart of full operations. This included redeployment of staff from mining and concentrating roles to rehabilitation activities, as well as other initiatives. As a result of this focus, Iluka exceeded its aspirational target of 20% Indigenous employment at J-A, with Indigenous members currently comprising 26% of the workforce.

Since J-A commenced production in 2009, a number of programs have been implemented to increase the number of Far West Coast (FWC) Aboriginal people with the appropriate skills, qualifications and experience necessary to maximise their eligibility for future employment.

An employee management plan was developed with a focus on retaining key staff; prioritising local employment where appropriate; and maintaining or, if possible, exceeding our commitment to FWC members. For example, personnel retained for rehabilitation earthmoving roles were trained in operating various, nationally-recognised surface mobile equipment and gained licences. The program provided up-skilling opportunities in readiness for the restart of full operations and future career opportunities for current site based personnel.

The award was presented in Adelaide at the South Australian Chamber of Minerals and Energy function in May 2017.





## ENVIRONMENT

Douglas rehabilitation, Victoria

### **Our approach to environmental management is based on understanding and minimising the potential impacts of our operations on the environment, using resources efficiently and leaving positive closure outcomes for the land that we disturb.**

Iluka's approach is underpinned by our HSEC management system which guides us through all business activities from exploration, planning, research and project development, through to operation, rehabilitation and closure. We pursue leading practice in environmental management as outlined in our HSEC Policy.

Activities are conducted such that adverse impacts on existing and potential environmental values, including ecosystem function, abundance, diversity, distribution, integrity and productivity are understood and minimised. The individual environmental requirements of each site are considered and site specific procedures and work instructions are developed in compliance with our HSEC management system.

Iluka recognises that compliance with legislative requirements is a minimum standard that should be achieved while performing at, or beyond, these requirements. We have a team of multi-disciplinary technical experts in the areas of environmental management including rehabilitation practices.

For Sierra Rutile, 2017 was treated as a baseline year to understand the extent of its activities on the environment.

#### **Biodiversity**

Iluka owns, leases or manages a number of operational, rehabilitation and future project sites that contain areas of high biodiversity value. Our approach is aimed at the protection and enhancement of biodiversity values and to prevent adverse impacts from occurring or, if this is not possible, to limit their significance to an acceptable level.

A hierarchy of controls – avoidance, minimisation, restoration, biodiversity offsets or other conservation actions – is followed. Consideration of biodiversity values is conducted within each of the planning, operational and rehabilitation phases. At this level, practical and quantifiable outcomes can be achieved in protecting and enhancing biodiversity at our sites.

The protection and enhancement of biodiversity is formalised in a range of management measures. In the planning phase these include:

- pre-mine or baseline surveys of both flora and fauna by qualified experts;
- commissioning of vegetation mapping of undisturbed native vegetation areas;
- assessment of groundwater extraction on groundwater dependent ecosystems;
- assessment of surface water extraction and discharge on dependent ecosystems;
- determination of the direct and indirect impacts on biodiversity; and
- identification of environmental offsets to mitigate potential residual impacts on biodiversity.

Operational sites have a number of management plans that include mitigation measures to protect and address specific biodiversity aspects such as fauna, native vegetation, pest/weed species, plant disease and soil management. The plans include measures to control access to areas of importance for biodiversity and protected areas, controls for vegetation and/or fauna removal prior to disturbance, and monitoring of specific fauna and flora. Collection of seed can occur prior to mining and these are stored and/or treated for later use during rehabilitation. Similarly, native vegetation on the mine path can be removed prior to mining and stored separately for later use as mulch for soil stabilisation or rehabilitation.



**Key partnerships**

**Virginia Polytechnic Institute and State University**

Virginia Polytechnic Institute and State University in Blacksburg, Virginia, and Iluka have collaborated for over 25 years to measure rehabilitation outcomes by comparing post-mining crop yields with crop yields in adjacent undisturbed farmlands and average crop yields in the surrounding region. Key focus areas for 2018 would include the determination of the net effects of tillage and soil reconstruction practices on post-mining soil productivity and associated physical and chemical properties and the monitoring of soil reconstruction, materials handling and placement activities.

**The University of Western Australia**

Iluka formed a partnership with The University of Western Australia in March 2013 to research the restoration of areas of kwongan heathland at Eneabba in the Mid West of Western Australia. The partnership involves sponsorship of the Chair in Vegetation Science and Biogeography with a five-year term that ended in December 2017.

**University of Adelaide**

Iluka has a strong history of supporting ecological research at Jacinth-Ambrosia (J-A), through its partnership with the University of Adelaide. The research programs and partnerships complement the onsite rehabilitation activities and contribute to the broader understanding of revegetation in saline and arid environments.

Researchers from the University of Adelaide visited the Jacinth-Ambrosia (J-A) mine in July 2017, to begin work on a project that will investigate the seeding triggers of the local species *Maireana sedifolia* (pearl bluebush). Over the next two years the researchers, in collaboration with the J-A rehabilitation team, will be investigating methods for inducing regular seeding events in the pearl bluebush which is a dominant chenopod in the local vegetation association.

**Botanic Gardens and Parks Authority**

Iluka supports research by the Botanic Gardens & Parks Authority (Kings Park Science Directorate) into the ecology and restoration of known vegetation post mining in Western Australia.

**Land rehabilitation and closure** MI

Land management and rehabilitation are a major focus for Iluka and constitute a significant and continuous part of our activities. Rehabilitation efforts are aligned with leading practice and undertaken in a socially and environmentally responsible manner.

Closure planning begins before mining starts and, where practicable, rehabilitation occurs progressively with ongoing mining activity. Closure documentation is developed in the planning phase of a project and reviewed and refined as the operations move through the project life cycle. Closure risk assessments are reviewed and updated prior to a change in the project life cycle (for example, from the cessation of operations to commencement of final rehabilitation earthworks), or when operational risks are identified that may have an impact on closure. Closure provisioning is reviewed annually and reported to the Board. Research projects are undertaken to support rehabilitation activities and address knowledge gaps. Return of land to the final land use and relinquishment of obligations and tenure is the final step in the closure process.

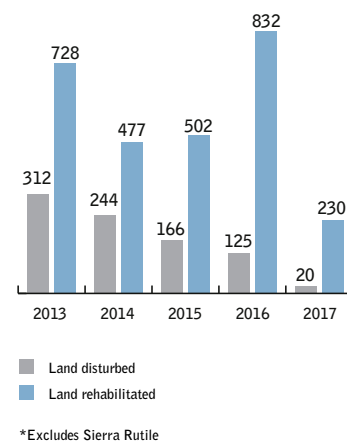
In 2017 a performance target was set for all sites to have closure plans in accordance with the internal standard and legislative requirements by the end of 2018. A review of our internal standard and current level of implementation was undertaken in 2017. Sites with legislative requirements for closure plans had plans in place and these resulted in many of the internal requirements being met.

During 2017, the rehabilitation of 230 hectares of land in Australia and the US was completed. Twenty hectares of land was disturbed in 2017, with eight of these hectares due to the commencement of the Cataby project. Total open area decreased from 5,720 hectares to 5,510 hectares in Australia and the US.

A review of rehabilitation and closure practices for the Sierra Rutile operations commenced in 2017. Sierra Rutile's total open area will be integrated with Australia and the US in 2018.

Iluka relinquished over 70 hectares of tenure in Western Australia during 2017 and released 45 hectares of land in the US.

**LAND DISTURBED AND LAND REHABILITATED (HECTARES)\***



We implement leading practice in protecting and enhancing biodiversity through undertaking scientific research through partnerships with research institutions.

Our nationally accredited Eneabba nursery (Nursery Industry Accreditation Scheme Australia) currently does not produce any plants itself and is exclusively used as a holding nursery during the planting season (around six weeks during mid-winter). Rehabilitation specialists in the Mid West collect and send seed, cuttings and plant materials to three nurseries in the Mid West and Perth where they have been developing techniques for the successful propagation of 30 recalcitrant and 15 difficult-to-grow species.

Iluka's ongoing support of research science that protects rare and endangered species that occur on our tenements continued in 2017. Our Principal Rehabilitation Specialist, Mark Dobrowolski, co-authored a paper on the "Isolation and characterisation of microsatellite primers for the critically endangered shrub *Styphelia longissimi* (Ericaceae)"<sup>1</sup>. Additionally we also funded a taxonomic project<sup>2</sup> that enabled the Western Australia Herbarium to better describe this endangered species along with four other species in the Eneabba region.

<sup>1</sup> <http://www.bioone.org/doi/pdf/10.3732/apps.1700108>

<sup>2</sup> <https://florabase.dpaw.wa.gov.au/science/nuytsia/795.pdf>

### External collaboration

- Iluka contributed to the inaugural Research Symposium on Mineral Resources of Sri Lanka, held in Colombo in October 2017 and organised by the Minister for Mahaweli Development and Environment. Our Senior HSEC Specialist, Matthew Harding, provided a presentation "Restoration to Productive Land Use" to an audience of about 250 delegates.
- The Western Australia Department of Mines, Industry Regulation and Safety hosted a forum in Perth in July 2017 for a group of Australian government officials to workshop new ways to prioritise the rehabilitation of abandoned mine sites. As part of the workshop, delegates visited our Yoganup, Yoganup West and Cloverdale sites to view examples of successful mine site rehabilitation and closure.

### Mineral waste management

Mineral waste is defined as the materials removed from the mine void that are separated from the valuable minerals over various processing stages. These are handled, stored and disposed of according to their properties, environmental factors and regulations. Many wastes are returned to the mine void to enable the formation of a final land surface similar to the pre-mining environment.

Where mineral waste is contained in a slurry form, either within mine voids or in off-path storage, Iluka utilises tailings storage facilities (TSFs). We seek to minimise, and where possible eliminate risks to the environment, people and property associated with the use of TSFs. Mineral wastes stored in TSFs include clay fines; sand tails; co-disposal (sand and clay) tailings; and tailings from mineral separation and synthetic rutile plants. Iluka adopts the Australian National Committee of Large Dams guidelines and state or country specific guidelines. Annual audits by an external geotechnical specialist are conducted to confirm structural integrity and to assess that the design is appropriate for the current situation.

We acknowledge that, in the past, some practices of managing mineral waste streams undertaken in accordance with the standards of the day may not meet current standards. We have programs in place to ensure the appropriate management of legacy issues associated with historic activities, with the principal focus on the protection of human health and the environment. We recognise the significant social, regulatory and financial challenges associated with meeting this objective. We ensure due process is applied to the management of legacy issues and recognise that any action must be undertaken in conjunction with relevant stakeholders.

The total amount of overburden, rock, mine and processing tailings (including sand tails and clay fines) for 2017 was 3,056,800 tonnes.

### Sierra Rutile

During 2017 Sierra Rutile has significantly reduced the geotechnical risk of its tailings structures. Quarterly inspections are being carried out by a geotechnical specialist consultant and their recommended actions are being progressed on site. Ongoing water management remains a risk for the operation and is currently being monitored and managed closely.

### Naturally occurring radiation and mineral sands

Mineral sands, as with other minerals such as clay, soils, rocks and many ores, contain levels of natural occurring radioactive material (NORM). This is associated with low level, naturally occurring uranium and thorium contained within the grains of the minerals monazite, xenotime, zircon and sometimes ilmenites. While the level of NORM in most natural substances is low, any operation in which material containing radiation is extracted from the earth and processed, can potentially concentrate NORM in the mineral sands products, by-products and waste (residue) materials. For this reason, stringent, internationally-accepted radiation management standards are adopted to minimise the risk to human health and the environment.

We apply radiation management practices that are aligned with international best practice according to the publications of the International Commission on Radiological Protection and the International Atomic Energy Agency, as well as the relevant country's legislation. We identify, assess and control risks associated with NORM, radon gas and man-made sources through all phases of our activities – exploration, project development, operations, rehabilitation and closure. Our Group Radiation Management Standard and site specific radiation management plans ensure exposure to radiation meets the prescribed statutory limits and is as low as is reasonably achievable.

## CASE STUDY

### Demolition of redundant infrastructure

In 2017 Iluka commenced a proactive rolling five year decommission and deconstruct program for redundant infrastructure on sites where mining and processing operations have been completed and the asset cannot be reutilised. Removal of this infrastructure is an important milestone in working towards final closure and relinquishment of the sites.

The first infrastructure to go was nine final product storage silos at the Bunbury Outer Harbour. Some of the original silos were built in 1962 and had become a prominent feature in the outer harbour landscape. The demolition project required Iluka to work closely with the Southern Ports Authority and other key stakeholders. Demolition commenced in November 2017 and was completed in March 2018. A significant amount of waste was separated and recycled during the demolition. The project was a success with no reported community complaints, environmental incidents or reportable injuries. In 2018 Iluka will continue activities under the decommission and deconstruct program with a focus on infrastructure at Eneabba and Narngulu.



Bunbury Port, Western Australia

**Product stewardship**

Our product stewardship approach seeks to guide the application of mineral sands products to ensure a thorough understanding of their health, safety and environmental benefits and risks and to promote their responsible use. This follows the ICMM Sustainable Development Framework which requires companies to facilitate and encourage responsible design, use, recycling and disposal of its products. Product stewardship is integrated throughout business decisions and materials management. We engage with customers to create opportunities that promote the responsible use of mineral sands products. We also support scientific research activities and participate in industry consortia to support productive utilisation of products.

Over the course of 2017, we participated in two separate life cycle assessments conducted by the Zircon Industry Association as well as the Titanium Dioxide Manufacturers Association.

We seek market opportunities for a number of by-products (or secondary products) including iron concentrate, activated carbon and gypsum which supports Iluka’s commitment to responsible use of our products throughout the value chain and reduces rehabilitation legacies.



**Energy and greenhouse gas emissions**

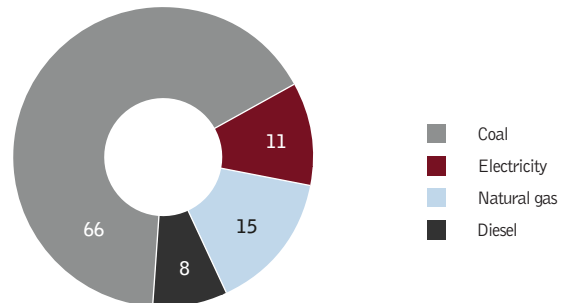
Energy use and carbon emissions are recognised for their economic, social, environmental and regulatory impacts. We aim to conserve energy, measure outputs, monitor impacts and meet regulatory requirements.

Methodologies used to calculate direct (Scope 1) greenhouse gas (GHG) emissions include direct measurements of energy sources consumed, calculations based on site-specific data and calculations based on published criteria (such as emission factors and global warming potential). In general, we report our emissions and energy consumption under the country of operation’s regulations and policies. For example, in Australia, we report our emissions and energy consumption under the National Greenhouse and Energy Reporting System (NGER).

We acknowledge that our activities are inherently energy-intensive with the majority of our GHG emissions generated from energy use during mining and processing. Energy consumption for 2017 increased slightly over 2016 levels. Coal usage continues to make up 66% of energy resources used. Scope 1 and Scope 2 emissions were slightly lower in 2017 due to decreased activities in all the regions and a three-month maintenance shutdown at our Narngulu operations.

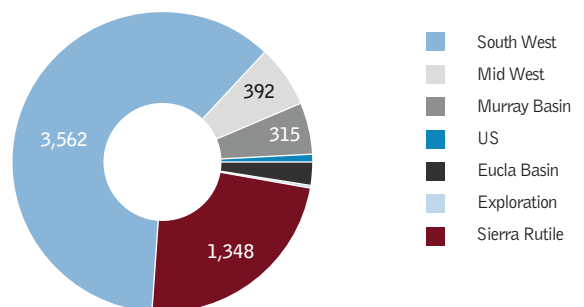
Scope 1 emissions at our Sierra Rutile operation are largely related to the use of diesel in vehicles and the power plant for the generation of electricity. The power plant consists of four engine driven generators with marine fuel oil as a power source and operates all year to supply electricity to the operations.

**ENERGY RESOURCES USED %**



\*Excluding Sierra Rutile, where >99% of energy is derived from marine fuel oil.

**ENERGY USED BY REGION (TERAJOULES)**



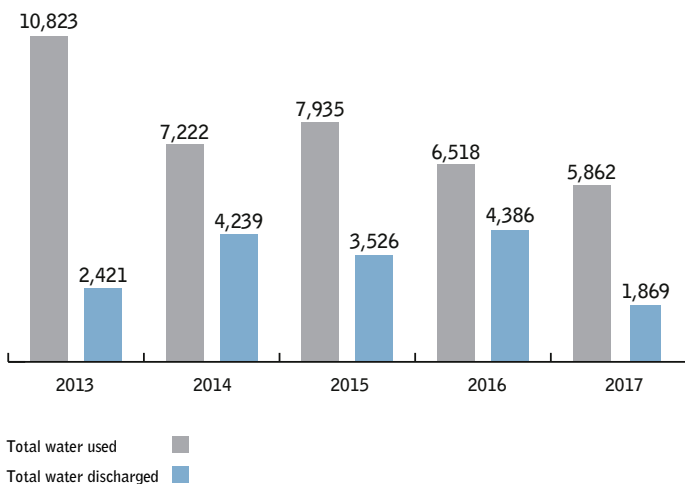
## Water use

We understand that water is a precious shared resource and mining is a significant water user. We have an important role in the sustainable management of water resources in the locations we operate, particularly in water-stressed areas and in areas where water resources are shared with the community. We use water in our mining, processing and separation processes, and place a strong focus on the sustainable use of water and in continually developing efficient and improved solutions for water use. Initiatives include the process use of hyper saline water and recycled water in process plants. If we can recycle process water through the system there are only minor losses due to evaporation and infiltration.

2017 saw a decrease in water use across our operations (excluding Sierra Rutile) mainly due to the suspension of activities at Hamilton MSP, the continued suspended activities at Jacinth-Ambrosia and the three-month maintenance shutdown of the plant at Narnagulu. The increase in the use of collected rainwater can be attributed to the increased stormwater runoff stored onsite at our Virginia operations in the US. Similarly, the decrease in water discharge is in part due to the Virginia operations reducing on-site water before idling operations during 2016 which meant that no water discharges were required during 2017, as well as a decrease in production and improvements in recycling water within the production circuit at Hamilton.

Recognising that water connects an operation to the surrounding landscape and communities, water management forms a large part of the current Sierra Rutile ESHIA investigation to better understand the baseline environmental water flow, water quality conditions and existing water users (including the environment). Water management requirements, risks and more efficient use of water during processing are also being considered.

**TOTAL WATER USED AND DISCHARGED (MEGALITRES)**



## Environmental incidents

Iluka uses an event management system to record environmental incidents, which are then classified according to the severity of the potential impact to the environment. Level 1 incidents have no or minimal impact and Level 5 incidents have the greatest potential cumulative impact over time.

During 2017 the number of Level 3 and above environmental incidents decreased from previous years (2015: 14; 2016: 11; 2017: 7). The overall number of incidents reported also decreased from 744 in 2016 to 445 in 2017 and this is attributed to a number of factors including the suspension of mining and concentrating activities at Jacinth-Ambrosia and processing activities at Hamilton. Four of the Level 3 and above incidents related to the discharge of turbid surface water off-site which followed significant rainfall events in both Australia and the United States. During 2017 we reviewed and updated our site surface water management plans and, as a result, incidents relating to turbid surface water runoff reduced during 2017.

2017 was the baseline year for Sierra Rutile in terms of environmental incident reporting as the operation transitioned to our internal reporting standards and guidelines. A performance improvement target was set in the 2016 Sustainability Report to encourage and increase incident reporting. This encouragement resulted in the number of environmental hazards reported increasing from 23 per month average in the March quarter to 64 per month average in the December quarter. During the year, 20 Level 3 and above incidents were reported, with the majority relating to product or hydrocarbon spillages on haul roads and water quality discharge. A number of management and mitigation measures as well as awareness training have been implemented. A total of 508 incidents, ranging from Level 1 to Level 4, were reported.

Incident level	2013	2014	2015	2016	2017 (Iluka)	2017 (SRL)
Level 3	45	30	11	8	6	12
Level 4	12	4	3	3	1	8
Level 5	0	0	0	0	0	0
Level 3-5	57	34	14	11	7	20
Total (all levels)	986	1,196	887	744	445	508



## CASE STUDIES

### Improvements in native vegetation establishment

Improvements in native vegetation establishment on rehabilitated land at Eneabba, in the Mid West of Western Australia, are advancing with a multi-pronged approach of experimental assessment, training and trialling innovative methods. Nearly 700 hectares of land remain to be rehabilitated to native vegetation. The establishment of the native vegetation of this region – known as kwongan – is difficult given the diversity of plant species present and the nutrient poor sandy soils that hold little water and are prone to wind erosion. Revegetation of kwongan previously relied upon the harvest and spread of native mulch, which stabilised the soil surface against wind erosion, provided niches for germinating seed, and contained seed from bradyisporous species (plants that hold their seed in the canopy). Mulch became unavailable at Eneabba after 2009 so alternative revegetation methods are being adopted and trialled. These methods, some of which are quite innovative, are already delivering improvements in the diversity and density of establishing seedlings.

The rate of revegetation at Eneabba is limited by seed availability. Iluka has increased the seed quantity, quality and diversity of species collected over recent years by training an in-house rehabilitation team. The team has been assisted by an expansion of the Eneabba local provenance (the region from which seed collection can occur) in 2015 that considered the latest scientific information and was approved by the regulating government authority. This gave the rehabilitation team access to more seed while ensuring seed collection minimises impact on the remnant native vegetation.

There is much potential in the broadcast seed used in revegetation. Experimental assessment at Eneabba in 2015 indicated that seven to eight times more seedlings emerge under ideal nursery conditions than from broadcast seed. Unlocking this potential is a key focus of trials in Eneabba revegetation.

Controlling both wind and water erosion has been critical for ensuring seedlings emerge and establish in the field. To control wind erosion Iluka changed from using cereal rye as a “nurse crop” – which was adopted to



replace mulch but was demonstrated to inhibit native seed germination by an allelopathic chemical exuded from cereal rye roots – to applying a crust of dilute non-toxic bitumen emulsion to the sandy soil surface. This non-toxic crust degrades over a few years but does not inhibit germination. It allows seedlings to emerge and establish, protecting them from wind erosion. Combining this crust with the water erosion preventing techniques of ripping and mounding on sloping terrain in 2016, increased seedling establishment almost twofold in comparison to previous years.

Further improvements in seedling emergence and establishment have been shown in 2017 by trialling innovative methods. Soil imprinting, a technique developed in the 1970s, reduces rainfall run-off and increases infiltration and nutrient/organic matter accumulation thereby improving seedling emergence and establishment. However, the imprints erode too quickly in sandy soils such as found at Eneabba. A trial of soil imprinting in combination with a non-toxic bitumen emulsion crust improved seedling emergence and establishment more than twofold on the practices adopted in 2016. These innovative methods will be adopted in future years to increase the quantity and quality of native revegetation at Eneabba.



**Economic responsibility**

	2013	2014	2015	2016	2017
<b>Financial performance</b>					
Mineral sands revenue (million)	763.1	724.9	819.8	726.3	1017.5
Underlying mineral sands EBITDA (million)	204.1	189.2	231.8	103.0	300.9
Mining Area C EBITDA (million)	88.3	66.8	61.6	47.5	59.6
Underlying Group EBITDA (million)	292.4	256.0	293.4	150.5	360.5
Net profit (loss) after tax (million)	18.5	(62.5)	53.5	(224.0)	(171.6)
Operating cash flow (million)	124.0	254.8	222.2	137.3	391.7
Net (debt) cash (million)	(206.6)	(59.0)	6.0	(506.3)	(182.5)
Total taxes borne *	-	-	-	-	47.1

\*refer to Tax Transparency section

**People**

	2013	2014	2015	2016	2017
<b>Gender diversity (Australia)</b>					
Male (%)	76	73	71	73	73
Female (%)	24	27	29	27	27
<b>Gender diversity (Sierra Leone)</b>					
Male (%)	-	-	-	-	93
Female (%)	-	-	-	-	7
<b>Gender diversity (Total Iluka Group)</b>					
Male (%)	-	-	-	-	88
Female (%)	-	-	-	-	12
<b>Indigenous diversity (Australia)</b>					
Non-Indigenous (%)	96	95	95	95	95
Indigenous (%)	4	5	5	5	5
<b>Employee turnover</b>					
Employee initiated turnover Australia (%)	14	5	5	11	7
Employee initiated turnover Sierra Rutile (%)	-	-	-	-	2
<b>Employee number by region (number of people 31/12/17)</b>					
Australia	-	-	-	643	599
Asia	-	-	-	10	25
Europe	-	-	-	3	1
Africa	-	-	-	>1600	1985
Americas	-	-	-	55	32

\*compared to 2016 statistics

## Health and safety

	2013	2014	2015	2016	2017 <sup>#</sup>	Trend*
<b>Proactive or leading metrics</b>						
Safety visits (number)	24,572	24,564	25,252	25,030	21,132	n/a
Safety visits per employee per month	2.26	2.37	2.27	2.51	2.57	●
Planned workplace inspections	3,434	3,508	4,108	5,198	4,279	n/a
Planned workplace inspections per employee per month	0.32	0.34	0.37	0.52	0.52	●
Hazard cards	3,773	6,564	4,657	4,012	2,218	n/a
Training compliance (%)		60	60	87	79	●
<b>Reactive or trailing metrics</b>						
Lost time injuries (LTI)	1	3	3	1	2	●
Lost time injury frequency rate (LTIFR)	0.3	0.9	0.9	0.4	0.9	●
Medical treatment injuries (MTI)	10	6	17	8	5	●
Medical treatment injury frequency rate (MTIFR)	3.1	1.8	5.2	2.9	2.2	●
First aid (FA) and minor injuries upgraded to restricted work case (RWC) injuries	4	3	2	3	4	●
Total recordable injuries	15	12	22	12	11	●
Total recordable injury frequency rate (TRIFR)	4.6	3.6	6.7	4.4	4.8	●
Percentage of recordable injuries assigned to employees (as opposed to contractors)	33%	33%	36%	17%	82%	n/a
Severity – number of days lost	109	74	8	3	106	●
Severity rate	33.7	21.9	2.4	1.1	46.2	●
All injury frequency rate (AIFR)	14.9	9.5	14.8	12.0	10.9	●
Serious Potential Incidents	2	11	21	13	15	●

<sup>#</sup> Excludes Siera Rutile

\* Compared to 2016 statistics

**Environment**

	2013	2014	2015	2016	2017 <sup>#</sup>	Trend*
<b>Environmental incidents</b>						
Level 3 environmental Incidents (number)	45	30	11	8	6	●
Level 4 environmental incidents (number)	12	4	3	3	1	●
Level 5 environmental incidents (number)	0	0	0	0	0	●
Total Level 3-5 environmental incidents (number)	57	34	14	11	7	●
Fines and prosecutions (number)					0	n/a
<b>Land footprint</b>						
Land disturbed (hectares)	312	244	166	125	20	n/a
Land rehabilitated (hectares)	728	477	502	832	230	●
<b>Greenhouse gas emissions</b>						
Scope 1 and 2 emissions (ktCO <sub>2</sub> e)	333	244	436	386	348	●
<b>Energy use and resources used</b>						
Energy use (terajoules)	3,702	2,330	4,537	4,415	4,476	n/a
Coal (%)	28.7	0.0	45.7	60.2	66.0	n/a
Electricity (%)	19.5	24.7	18.0	12.0	11.0	n/a
Natural gas (%)	16.4	24.2	14.3	15.7	15.0	n/a
LPG (%)	0.1	0.1	0.0	0.0	0.0	n/a
Diesel (%)	35.0	50.3	21.4	12.4	7.5	n/a
Petrol (%)	0.3	0.5	0.5	0.2	0.1	n/a
Fuel, oil and greases (%)	0.0	0.2	0.1	0.0	0.2	n/a
<b>Water use<sup>1</sup></b>						
Total water used (megalitres)	10,823	7,222	7,935	6,518	5,862	n/a
Total water discharged (megalitres)	2,421	4,239	3,526	4,386	1,869	n/a
Total water reused and recycled (megalitres)	-	-	6,707	129	593	n/a
Surface water withdrawn (megalitres)	-	258	464	25	16	n/a
Ground water withdrawn (megalitres)	-	6,036	6,414	5,033	4,404	n/a
Rainwater collected directly and stored (megalitres)	-	483	409	905	1,032	n/a
Municipal water supplies or other water utilities (megalitres)	-	598	647	555	410	n/a
<b>Mineral Waste volumes</b>						
Overburden (kilotonnes)	-	-	5,943	1,387	981	n/a
Rock (kilotonnes)	-	-	790	298	110	n/a
Tailings, includes mine and processing tailings, as well as clay fines (kilotonnes)	-	-	12,195	4,228	3,057	n/a

<sup>#</sup> Excludes Siera Rutile

\* Compared to 2016 statistics



## Mineral waste disposal

	Murray Basin	Eucla Basin	South West	Mid West	United States	Projects	Total
<b>MINING</b>							
<b>Overburden</b>							
Volume (tonnes)	-	687,159	293,657	-	-	-	980,816
Disposal location	-	Returned to mine void	Returned to mine void	-	-	-	n/a
<b>Rock</b>							
Volume (tonnes)	-	17,793	91,890	-	-	-	109,683
Disposal location	-	Returned to mine void	Returned to mine void	-	-	-	n/a
<b>Clay fines, sand tails, co-disposal material (sand and clay)</b>							
Volume (tonnes)	-	387,303	1,493,018	-	-	-	1,880,321
Disposal location	-	Co-disposal in TSF cells within mine void	Off-path TSF for drying (clay fines) and then return to mine void	-	-	-	n/a
<b>PROCESSING</b>							
<b>Mineral separation plant tailings</b>							
Volume (tonnes)	-	-	4,725	60,610	-	-	65,335
Disposal location	-	-	Returned to mine void	TSF	-	-	n/a
<b>Synthetic rutile plant tailings</b>							
Volume (tonnes)	-	-	20,646	-	-	-	20,646
Disposal location	-	-	Returned to mine void	-	-	-	20,646



**ILUKA**

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