



**ILUKA**

Sustainability Report

**2020**



**DELIVER  
SUSTAINABLE  
VALUE**

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**DELIVER  
SUSTAINABLE  
VALUE**

Iluka's full financial results are available in its 2020 Annual Report available on the Iluka website [www.iluka.com](http://www.iluka.com).

Currency is in Australian dollars unless otherwise indicated.

## 2020 YEAR IN REVIEW



**>3000**

DIRECT EMPLOYEES



**584 ha**

LAND REHABILITATED



**2.8**

TRIFR  
DECREASED



FEMALE REPRESENTATION

**29%** BOARD

**36%** EXECUTIVE



**0**

MAJOR ENVIRONMENTAL  
INCIDENTS



FIRST PRODUCTION OF

**20%**

MONAZITE-ZIRCON  
CONCENTRATE AT ENEABBA

NOW THE HIGHEST GRADE RARE  
EARTHS OPERATION GLOBALLY



**\$1.6 M**

MADE IN VOLUNTARY  
CONTRIBUTIONS AND  
STATUTORY PAYMENTS FOR  
SOCIAL AND ECONOMIC  
DEVELOPMENT



OPERATIONAL CONTINUITY

IMPLEMENTATION OF COVID-19  
SITE CONTROLS AND THE  
SUPPORT OF LOCAL INITIATIVES  
MAINTAINED SIERRA RUTILE'S  
OPERATIONAL CONTINUITY  
THROUGHOUT 2020



LEADING SUSTAINABILITY  
PERFORMER

INCLUSION IN 2020 AUSTRALIAN  
DJSI AND FTSE4GOOD INDEX



SOUTH AUSTRALIAN  
PREMIER'S AWARDS

WINNER FOR HEALTH AND SAFETY  
COMMENDATION FOR YOUNG  
ACHIEVERS



RECYCLING OF OVER  
3000 TONNES

OF 'DEMOLITION'  
INFRASTRUCTURE AND  
SUPERFLUOUS REDUNDANT  
EQUIPMENT



REPORTED WATER REUSE  
AND RECYCLING

INCREASE TO 3 TIMES THE TOTAL  
VOLUME OF WATER WITHDRAWN



**"ABORIGINAL EMPLOYMENT AT ILUKA HAS INCREASED TO 7% OVER SEVERAL YEARS WITH CLOSE TO 30% ABORIGINAL EMPLOYMENT AT OUR JACINTH-AMBROSIA OPERATIONS. THIS IS A REFLECTION OF OUR STRONG WORKING RELATIONSHIP WITH THE FAR WEST COAST PEOPLE OF SOUTH AUSTRALIA."**

**Tom O'Leary**  
Managing Director

## FROM THE MANAGING DIRECTOR

### WELCOME TO OUR 2020 SUSTAINABILITY REPORT

In 2020 we faced a year like no other and I am proud of how our people have responded in the face of these unprecedented circumstances. Their resilience has enabled us to deliver a disciplined performance in response to the significant challenges COVID-19 posed to our business. These challenges spanned market demand, operational and supply chain continuity, and progression of key projects. In this environment we were able to progress key sustainable development initiatives to meet our performance improvement targets and that reflects our commitment across six key pillars - Health & Safety, Our People, Our Communities, Environmental Stewardship, Governance and Integrity and Value Creation.


The safety of our people and our communities is paramount. In 2020 we implemented protective measures including risk-based infectious disease management plans at all our sites, and mental health programmes and support across the business. The impact of COVID-19 on our Sierra Rutile operations was more severe than it was on our Australian operations. We were, however, able to maintain operations in Sierra Leone throughout 2020 and implement some measures to protect our employees and the community. These included establishing on-site quarantine and isolation facilities and funding to support the community through COVID-19 safety education, donations of medical supplies and personal protective equipment.

We intensified our efforts on safety and implemented a number of 'back to basics' initiatives including the re-launch of the Safe Production Leadership programme in Australia and the US focusing on safety leadership and capability. Across the Group, we achieved a 20% reduction of serious potential incidents during 2020; further reduction of such incidents remains a key target for ongoing improvement and vigilance. At the end of 2020, our Total Recordable Injury Frequency Rate (TRIFR) was slightly lower at 2.8, compared to 2.9 the previous year.

We continue to prioritise and invest in the development of our people. Across the business, 71 leaders completed our leadership acceleration programmes during 2020. Creating pathways into Iluka is critical to building a pipeline of future talent and we currently have 80 enrolled apprentices and trainees across our Australian operations. Our partnership with Clontarf Foundation facilitates aboriginal employment pathways and we currently have 8 Clontarf graduates at our Narnghulu processing plant. Aboriginal employment at Iluka has increased to 7% over several years with close to 30% aboriginal employment at our Jacinth-Ambrosia operations. This is a reflection of our strong working relationship with the Far West Coast people of South Australia.

Our Human Rights Work Programme continues to progress and further detail can be found in our first Modern Slavery Statement. Reporting on the 2020 calendar year, the Statement is available online at [www.iluka.com](http://www.iluka.com).

We recognise that climate change presents potential risks and opportunities for our business. Iluka is committed to the Paris Agreement objectives and accepts the Intergovernmental Panel on Climate Change (IPCC) assessment of climate change science. Iluka's core products – zircon, rutile and synthetic rutile – have a variety of end-use applications which support sustainable development outcomes such as renewable energy technologies, photocatalytics and water and air purification. Our very high grade titanium dioxide products present opportunities for Iluka's customers to increase their own efficiency, to use less raw materials, to generate less waste and to lower emissions. Iluka also has rare earths assets which are essential to facilitate the global transition to electrification, and we are pursuing the development of these assets in a disciplined manner. Of their many high value applications, some rare earths are essential for the manufacture of products to support sustainable development technologies such as the motors within wind turbines and electric vehicles.



In 2020, the company completed the identification of climate-related risks and opportunities associated with the transition to a low carbon economy; this built on the work done in 2019 to assess physical risks presented by climate change. In 2021 Iluka plans to incorporate shadow carbon pricing into the economic modelling that informs our planning and investment decisions relating to operations and future projects. 2021 will see the commissioning of solar power and electric turbo compounding technology to reduce the reliance on diesel power generation at our Jacinth Ambrosia mine, delivering reductions in Scope 1 emissions. This initiative makes sense from both a commercial and sustainable development perspective. It also offers a potential blueprint for the future use of renewable energy at other existing and planned operations and we will continue to investigate further renewable energy opportunities for our operations.

Continuity of rehabilitation activities was maintained, with 584 hectares of land rehabilitated at current and former mine sites; significant rehabilitation earthworks were also completed which contribute to future rehabilitation and reduce Iluka's closure liability.

Achieving positive community outcomes requires Iluka to remain a resilient and economically strong business. With this requirement in mind, in 2020, we implemented a company-wide efficiency programme to improve business processes and cost effectiveness. More than one hundred cost and production related initiatives were identified and prioritised with the potential to realise annualised value of approximately \$30-\$40 million.

This Report sets out our approach to sustainability, our 2020 performance and our targets for 2021 and beyond. These targets consider our material sustainability risks and the opportunities for Iluka to further enhance its sustainability performance. Iluka remains committed to the transparent reporting of our sustainability performance and will continue to participate in selected sustainability indices such as the Dow Jones Sustainability Index to benchmark our progress.

**Tom O'Leary**  
Managing Director and  
Chief Executive Officer

## ABOUT ILUKA

Iluka Resources Limited (Iluka) is an international mineral sands company with expertise in exploration, project development, mining, processing, marketing and rehabilitation.

The company's objective is to deliver sustainable value.

With over 60 years' industry experience, Iluka is a leading global producer of zircon and the high grade titanium dioxide feedstocks rutile and synthetic rutile. In addition, the company has an emerging position in rare earth elements (rare earths). Iluka's products are used in an increasing array of applications including home, workplace, medical, lifestyle and industrial uses.

With over 3,000 direct employees, the company has operations and projects in Australia and Sierra Leone and a globally integrated marketing network.

Iluka conducts international exploration activities and is actively engaged in the rehabilitation of previous operations in the United States, Australia and Sierra Leone.

Listed on the Australian Securities Exchange (ASX) and headquartered in Perth. Iluka holds a 20% stake in Deterra Royalties Limited (Deterra), the largest ASX-listed resources focussed royalty company.



## WHERE WE OPERATE

### UNITED STATES

Rehabilitation

### SIERRA LEONE

Sierra Rutile mining, concentrating and processing operations  
Sembahun project  
Rehabilitation

### WESTERN AUSTRALIA

Narngulu processing  
Cataby mining and concentrating  
Eneabba monazite processing  
Capel synthetic rutile processing  
Corporate support centre  
Rehabilitation

### SOUTH AUSTRALIA

Jacynth-Ambrosia mining and concentrating  
Atacama project  
Rehabilitation

### VICTORIA

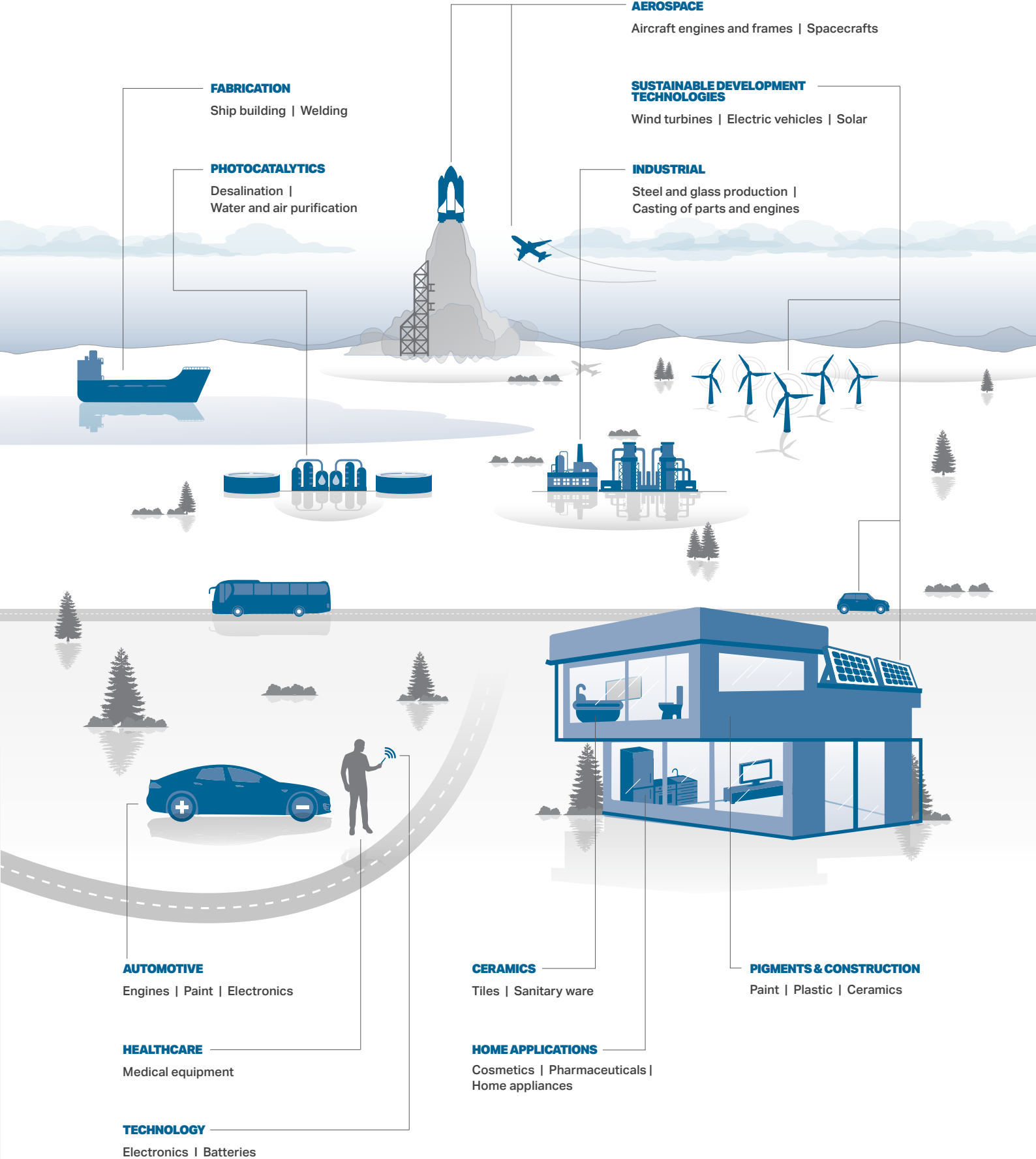
Wimmera project  
Rehabilitation  
Hamilton processing (idle)

### NEW SOUTH WALES

Balranald project

# MINERAL SANDS & RARE EARTHS

## PART OF EVERYDAY LIFE





## PRODUCTS

**TiO<sub>2</sub>**

### TITANIUM DIOXIDE

Iluka is the largest producer of natural rutile and a major producer of synthetic rutile, which is an upgraded, value added form of ilmenite. Collectively, these products are referred to as high-grade titanium dioxide feedstocks, owing to their high titanium content. Primary uses include pigment (paints), titanium metal and welding.

**Zr**

### ZIRCON

Iluka is a leading global producer of zircon. Zircon is opaque; and heat, water, chemical and abrasion resistant. Primary uses include ceramics; refractory and foundry applications; and zirconium chemicals.



### RARE EARTHS

Iluka has an emerging position in rare earths, which are contained in the mineral sands monazite and xenotime. Certain rare earths are considered a critical input across a number of rapidly evolving markets, including permanent magnets used in electric cars, wind turbines and electronics.

These products have wide-ranging environmental benefits; from lower environmental impacts in production compared to alternatives, to the enhancement of various end use applications and their sustainability.

### OTHER PRODUCTS

Iluka recovers and markets activated carbon and iron concentrate, which are produced as a part of the synthetic rutile process.



**RARE EARTHS, ZIRCON AND HIGH GRADE TITANIUM DIOXIDE (RUTILE AND SYNTHETIC RUTILE) PRODUCTS HAVE WIDE RANGING ENVIRONMENTAL BENEFITS; FROM LOWER ENVIRONMENTAL IMPACTS IN PRODUCTION COMPARED TO ALTERNATIVES, TO THE ENHANCEMENT OF VARIOUS END-USE APPLICATIONS AND THEIR SUSTAINABILITY.**

### **LOWER GLOBAL WARMING POTENTIAL<sup>[1]</sup>**

Zircon has approximately a 20% lower Global Warming Potential than alumina, the main alternative product, when used in porcelain tile production. Using zircon generates 20-50% lower overall environmental impacts in production, over a range of environmental indicators.

### **LOWER PRODUCT ENVIRONMENTAL FOOTPRINT<sup>[6]</sup> [7]**

TiO<sub>2</sub> pigment is used in approximately 95% of paints; and is the main end-use of Iluka's rutile and synthetic rutile products. Paints with high TiO<sub>2</sub> pigment content have the highest opacity, meaning fewer coats of paint are needed. The closest potential alternative opacifier is around 35% less effective, requiring a higher raw material demand and producing greater waste generation.

### **REDUCE AIR POLLUTION<sup>[8]</sup>**

The World Health Organization estimates that 2.4 million people die every year from air pollution. Specialty TiO<sub>2</sub> pigments are helping to reduce air pollution through photocatalysis on the surface of buildings; converting nitrogen oxides into harmless soluble nitrate salts which wash away in rain. Further, zirconium (derived from zircon) is used as a dopant to further increase the photocatalytic activity of TiO<sub>2</sub> in air quality improvement.

### **ESSENTIAL IN THE CONSTRUCTION OF WIND TURBINES AND ELECTRIC VEHICLES<sup>[10]</sup>**

The high value rare earth elements (rare earths) neodymium and praseodymium, are the key inputs required to produce state of the art permanent magnets. These ultra-strong, long life magnets are in turn essential in the production of the motors that power electric vehicles and wind turbines. Rare earths are also used in the manufacture of catalytic converters for vehicle emission control of hybrid and petrol-fuelled cars.

### **HIGHER ENGINE EFFICIENCY AND LOWER VEHICLE EMISSIONS<sup>[2]</sup> [3]**

Zirconia oxygen sensors are essential in ensuring top performance outcomes from modern car engines. The zirconium compounds are used as catalysts in emissions reduction of carbon monoxide, hydrocarbons, nitrogen oxides and other toxic substances. The oxygen sensors avoid fuel wastage and enhance environmentally-friendly operation.

### **ENHANCE PRODUCT DURABILITY, REDUCING RAW MATERIAL CONSUMPTION<sup>[7]</sup>**

TiO<sub>2</sub> enhances the durability and sustainability of construction products and buildings through its resistance to heat, ultraviolet degradation and weathering. With lower maintenance requirements, raw material consumption and waste production are reduced. In plastics, TiO<sub>2</sub> pigment helps to protect and extend product lifetime, reducing plastic waste.

### **GREATER EFFICIENCY FOR NUCLEAR ENERGY AND ZERO GREENHOUSE EMISSIONS<sup>[4]</sup> [5]**

Zirconium-containing alloys are widely used across structural components in the nuclear industry. The alloys offer excellent corrosion and irradiation creep resistance, as well as low neutron-absorption, critical for increasing the efficiency of the nuclear reactor. Nuclear power plant operations produce zero greenhouse gas emissions.

### **REDUCE URBAN HEAT ISLAND EFFECT<sup>[9]</sup> [7]**

Zircon-containing tiles, used as a building envelope, improves a building's thermal comfort as zircon increases the tiles solar reflectance index. Ceramics with zircon-containing glazes are also able to reduce maintenance costs compared to other 'cool materials' thanks to its high chemical and abrasion resistance. TiO<sub>2</sub> pigments in paint applied to the surfaces of buildings and 'cool roofs' can also help to reduce heat build-up. TiO<sub>2</sub> pigment has a very high refractive index, reflecting the heat generated by the infrared rays of the sun.

Source:

[1] [https://www.zircon-association.org/assets/files/KnowledgeBank/ZIA\\_LCA\\_Executive\\_Summary.pdf](https://www.zircon-association.org/assets/files/KnowledgeBank/ZIA_LCA_Executive_Summary.pdf)

[2] [How Does a Zirconia Oxygen Sensor Work? | CO2Meter.com](https://www.co2meter.com/how-does-a-zirconia-oxygen-sensor-work/)

[3] [technical\\_report\\_on\\_engine\\_and\\_emission\\_system\\_technology.pdf \(fcai.com.au\)](https://www.fcai.com.au/technical_report_on_engine_and_emission_system_technology.pdf)

[4] [Download Zircon Technical Handbook | Zircon Industry Association \(zircon-association.org\)](https://www.zircon-association.org/download-zircon-technical-handbook/)

[5] [Nuclear energy and climate change - World Nuclear Association \(world-nuclear.org\)](https://www.world-nuclear.org/nuclear-energy-and-climate-change/)

[6] <https://tdma.info/life-cycle-inventory/>

[7] <https://tdma.info/tio2-in-the-sustainable-built-environment/>

[8] <https://tdma.info/sustainable-industry/>

[9] [IOM3 | Clay Technology](https://www.iom3.com/clay-technology/)

[10] <https://doi.org/10.1016/j.jclepro.2020.123299>

## MINERAL SANDS PROCESS

### 1 GEOLOGICAL SETTING

Mineral sands are heavy minerals found in sediments on, or near to, the surface of ancient beach, dune or river systems. Mineral sands include minerals such as rutile, ilmenite, zircon and the rare earth bearing minerals monazite and xenotime.

### 2 MINING APPROACH

Mineral sands mining involves both dry mining and wet (dredge or hydraulic) operations. All of Iluka's current mining operations use a dry mining approach. Mining units and wet concentrator plants separate ore from waste material and concentrate the heavy mineral sands.

### 3 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 zircon, rutile, ilmenite, monazite and xenotime from one another in multiple stages by magnetic, electrostatic and gravity separation.

### 4 SYNTHETIC RUTILE

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

### 5 MARKETING

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

### 6 REHABILITATION

As mining progresses, mining pits are backfilled and covered with stockpiled soils that were removed at the start of the mining process. Rehabilitation is undertaken progressively to ensure land is suitable for various pre-mining uses including agricultural, pastoral and native vegetation.

## THE ILUKA PLAN

The Iluka Plan is the reference point that guides our business decisions. It outlines the company's purpose, direction and values. Iluka's purpose is to deliver sustainable value for all of our stakeholders, which is achieved by:

- protecting the safety, health and wellbeing of our employees;
- optimising shareholder returns through prudent capital management and allocation;
- developing a robust business that can maintain and grow returns over time;
- providing a competitive offering to our customers;
- managing our impact on the environment;
- supporting the communities in which we operate; and
- building and maintaining an engaged, diverse and capable workforce.

## OUR PURPOSE

### DELIVER SUSTAINABLE VALUE



# SUSTAINABILITY AT ILUKA

## SUSTAINABILITY APPROACH

Sustainability is central to everything we do.

Our approach to sustainability is guided by the Iluka Plan and is built around six pillars – Health and Safety, Our People, Our Communities, Environmental Stewardship, Governance and Integrity and Value Creation. Reflected in our approach is our genuine commitment to improving our sustainable development performance aligned to a range of voluntary principles and contributing to the advancement of the UN Sustainable Development Goals.

Over a number of years, we have sought to align with the International Council of Mining and Metals Sustainable Development Principles which has led to significant progress in our practices and performance. We seek to maximise performance through the integration of our approach into everyday business practices, the development of our workforce capability and engagement with external partners.

This Report is structured around our six pillars of sustainability, as follows:



### HEALTH AND SAFETY

We strive to protect the wellbeing, health and safety of our people through identifying risk and taking appropriate action to eliminate workplace fatalities and minimise injuries and illnesses.



### OUR PEOPLE

We seek to create a workplace which is respectful and inclusive, which attracts and retains talent by developing and supporting our people, allowing us to build and maintain an engaged, diverse and capable workforce.



### OUR COMMUNITIES

We respect human rights, engage meaningfully with stakeholders and look to make a positive difference to the communities where we operate whilst minimising and managing potential impacts.



### ENVIRONMENTAL STEWARDSHIP

We seek to understand and manage our impact on the environment, use resources efficiently and leave positive rehabilitation and closure outcomes.



### GOVERNANCE AND INTEGRITY

In conducting our business we adhere to the highest standards of corporate governance whilst acting with integrity by being transparent and honouring our commitments.



### VALUE CREATION

We aim to create sustainable economic outcomes, which allow us to share economic benefits and create value for our host communities and delivering long term sustainable value.

## VOLUNTARY INITIATIVES

To inform our sustainability approach and demonstrate our commitment to high standards of social, environmental and governance performance and support transparent disclosure to our stakeholders we take guidance from in a range of voluntary global initiatives.



## PERFORMANCE IMPROVEMENT TARGETS

Each year Iluka sets public performance improvement targets against each of its material sustainability challenges. Our performance against these targets is shown below. These targets enable common understanding, both internally and externally, of our sustainable development goals and performance.

Target	By When	Status	How we progressed in 2020
No material incidents of bribery and corruption	Annual Review	●	<b>0</b> Material incidents of bribery and corruption
Complete alignment to the ICMM sustainable development principles by 2020	2020	●	<b>In progress</b> Alignment Gap Analysis identified medium to high level of alignment across the majority of ICMM principles. External framework alignment to be reviewed in 2021.
Develop corporate Social Investment Strategy	2020	●	<b>In progress</b> 2020 strategy aligned to impact of the bushfires in Australia and COVID with regional support provided to communities in which we operate. Ongoing strategy to be reviewed and implemented H1 2021
Maintain tax transparency reporting through public disclosure annually	Annual Review	●	<b>Tax Transparency Report published</b> Stand-alone Tax Transparency Report for 2020 published EITI requirements met
Improve female and Aboriginal participation in the Australian workforce to meet diversity targets of 30% female and 8% Aboriginal participation	2023	●	Aboriginal workforce increased from 6.6% in 2019 to 6.9% in 2020. Female participation down from 24.3% on 2019 to 23.2% in 2020.
Continue to implement leadership development programmes across the group, including a specific focus at Sierra Rutile to build technical and leadership capabilities	2020	●	<b>Delayed</b> Solid progress made in delivering leadership Development programmes to Australian employees, however delivery in SRL significantly disrupted by COVID-19.
Zero major social incidents (Level 5 as defined by Iluka's incident classification matrix)	Annual Review	✓	<b>0</b> major social incidents (Level 5 incidents)
Develop and implement human rights due diligence framework	2021	●	<b>On track</b>
Implement modern slavery work programme and publication of 2020 Modern Slavery Statement	2021	●	Modern Slavery work programme progressed (refer to Iluka's 2020 Modern Slavery Statement)
Deliver Aboriginal cultural awareness and engagement programme	2020	●	<b>In progress</b> Cultural awareness training programme in development with a pilot training delivered in January 2021
Develop work programme to support Modern Slavery Reporting, inclusive of a supplier risk assessment	2020	✓	Supplier risk assessment finalised and supplier screening commenced in 2020.
Zero fatalities and total permanent disabling injuries/illnesses across the Iluka Group	2020	✓	<b>0</b> Fatalities or serious complex permanent disabling injuries/illnesses
A year-on-year reduction in annual total recordable injury frequency rate (TRIFR)	Annual Review	✓	<b>TRIFR 2.8</b> Reduction from 2019 TRIFR of 2.9
Implement Critical Control Management Programme	2022	●	<b>On track</b> Programme launched on all Australian sites and development of similar programme under way for Sierra Rutile
Develop and deliver Safe Production Leadership training	2020	✓	<b>Delivered</b> Programme developed and delivered to all Australian and US sites
No increase year-on-year in the number of potential occupational exposures above occupational exposure limit to noise and airborne contaminants at Australian sites	2020	✓	<b>Zero</b> increase for all sites against 2019 baseline. 35 exceedances of occupational exposure levels recorded in 2020, compared to 37 in 2019
Implement Sierra Rutile Malaria Management Plan	2020	✓	<b>Delivered and Implemented</b>
Zero major environmental incidents (Level 5 as defined by Iluka's incident classification matrix)	Annual Review	✓	<b>0</b> Major environmental events (Level 5 incidents)
Management of Iluka Group rehabilitation liability through achievement of Closure Index target	Annual Review	✓	<b>Exceeded Closure Index Target (103%)</b> Closure index is a risk-weighted measure reflecting total land area open considering disturbance and rehabilitation undertaken in the year.
Implement climate change work programme in accordance with Task Force on Climate-related Financial Disclosures (TCFD) recommendations	2022	●	<b>On Track</b> Year 2 - Transition risks and opportunities identified.

✓ Complete
✗ Target not met
● In progress but target under threat
● In progress and expect to meet target

## 2021 + TARGETS

Our performance targets for 2021 and beyond came into effect on 1 January 2021. In the development of these targets, we considered our material sustainability risks as well as global challenges – including those defined by the United Nations Sustainable Development Goals, ICMM Sustainable Development Principles and the World Economic Forum's Global Risk Report.

We will publish our progress on these targets annually through our sustainability reporting.

	Targets	By when
Governance	No material incidents of bribery and corruption	Annual review
Value Creation	Maintain Tax Transparency Reporting through public disclosure annually	Annual review
Our People	Develop and implement a Group Level Guideline and support programme on Mental Health and Wellbeing.	2021
	Improve female and Aboriginal participation in the Australian workforce to meet diversity targets of 30% female and 8% Aboriginal participation	2023
Our Communities	Zero major social incidents (Level 5 as defined by Iluka's incident classification matrix)	Annual review
	Implement 2021 modern slavery work programme including publication of the 2020 Modern Slavery Statement and development of a Supplier Code of Conduct	2021
Health and Safety	Zero fatalities or serious complex permanent disabling injuries / illnesses (life-changing)	Annual review
	A year-on-year reduction in annual total recordable injury frequency rate (TRIFR)	Annual review
	Implement Critical Control Management Programme	2022
	No increase year-on-year in the number of potential occupational exposures above occupational exposure limit to noise and airborne contaminants at Australian sites	Annual review
Environmental Stewardship	Zero major environmental incidents (Level 5 as defined by Iluka's incident classification matrix)	Annual review
	Management of Iluka Group rehabilitation liability through achievement of Closure Index target	Annual review
	Develop waste and water measurement metrics	2021
	Implement climate change work programme in accordance with Task Force on Climate-related Financial Disclosures recommendations	2022

# ABOUT THIS REPORT

## REPORT APPROACH

This Sustainability Report details our approach to sustainability, our material issues and our performance against our targets.

It covers Iluka's operations globally, comprising exploration, project development, mining, processing, marketing and rehabilitation activities. The focus is on the 12-month period ending 31 December 2020.

The Report complements Iluka's 2020 Annual Report and Tax Transparency Report available on our website. The preparation of the Report has been guided by Global Reporting Initiative (GRI) Standards, including the Mining and Metals Sector Disclosure Supplement. Iluka's Executive and Board of Directors reviewed this Report. There are no material re-statements of the 2019 Sustainability Report data or content. The previous year's reporting data can be found on [www.iluka.com](http://www.iluka.com).

Note:

All dollar figures in this Report are in AUD currency, unless otherwise stated. In this Report, the collective expressions "we", "us", "our", "ourselves", "the company", "the Group", "Iluka" and "the Iluka Group" are used where reference is made, in general, to Iluka Resources Limited and its respective subsidiaries. The use of those terms is for convenience only and used where no useful purpose is served by identifying any particular company or companies, and is not intended to convey how the Iluka Group is structured, managed or controlled. Iluka produces group-wide policies and procedures to ensure uniform practices across the Iluka Group. Certain Iluka Group operating subsidiaries, including Sierra Rutile Limited, have independent policies, procedures and management teams.

## UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

The United Nations Sustainable Development Goals (SDGs), established in 2015 by the United Nations General Assembly, define a set of universal targets to address global sustainability challenges. The 17 SDGs focus on the most urgent economic, social and environmental challenges and are intended to be achieved by the year 2030.

Each of the 17 SDGs includes specific targets that cover a range of areas including development, social inclusion and environmental conservation. It is recognised that their success is dependent on collaboration between governments, business and communities.

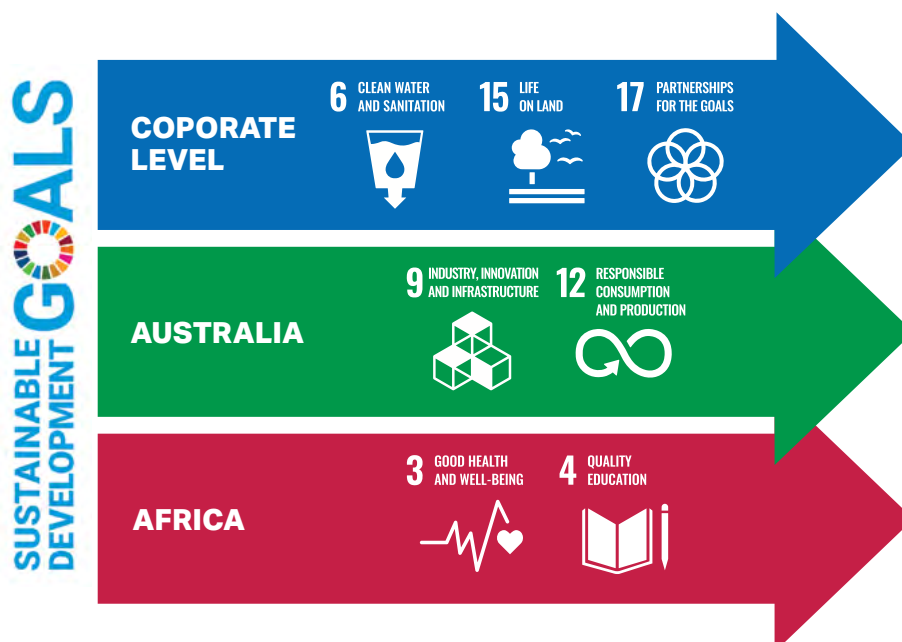
Key to this is the role of business in supporting sustainable development; through influence on operations, supply chains, infrastructure and employment opportunities.

In November 2020, we mapped our activities and impacts across our value chain against the SDGs, focusing on the following:

- the SDGs, specifically the targets, Iluka is already contributing to. This includes where Iluka is making a positive and potentially negative contribution; and
- the SDGs where Iluka could have a greater positive impact.

Iluka's initiatives and activities contribute to all 17 goals. We believe that if we focus on what Iluka does well, we will be able to make a more substantial contribution. To this end, we have shortlisted the SDGs that we will focus on as a business.

We have woven examples of how we are contributing to the SDGs, throughout the Report. This includes identifying the SDG and the relevant target. We have identified seven SDGs where we will focus our contributions.



## MATERIALITY ASSESSMENT

Each year, we conduct a materiality assessment to prioritise our sustainability topics. This helps to identify the most important topics for both the business and our stakeholders. Our assessment is comprised of a four-stage process.



### 1 IDENTIFICATION

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 regular internal and external stakeholder engagement.



### 3 VALIDATION

The list of material issues outlined in the table are reviewed by senior decision makers of the business, including the Board.



### 2 PRIORITISATION

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.



### 4 REPORTING

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

Our top material issues identified during the 2020 process are shown below, as well as other topics covered in this Report. A full description and their impact boundary (where the impact occurs) is provided in the Performance Data annex of this Report.



#### HEALTH & SAFETY

- Occupational Health and Safety
- Workforce health and well-being



#### OUR PEOPLE

- Workforce engagement, capability and development
- Diversity and inclusion



#### OUR COMMUNITIES

- Community relationships
- Human rights and modern slavery
- Cultural heritage and Indigenous relations



#### ENVIRONMENTAL STEWARDSHIP

- Climate change, energy and emissions
- Closure and rehabilitation
- Waste, materials and tailings management
- Product stewardship



#### GOVERNANCE AND INTEGRITY

- Corporate governance, ethics and contact
- Transparency and disclosure
- Risk and crisis management



#### VALUE CREATION

- Financial performance and productivity
- Economic contribution and social value creation
- Responsible supply chain

## HEALTH AND SAFETY

**Iluka's philosophy on safety is clear - create a culture that recognises that all members of the workforce are leaders in promoting a safe working environment.**

The physical and mental health and wellbeing of our people is equally important and we seek to identify and manage occupational exposure risks, minimise occurrences of occupational illness and injury and promote healthy lifestyles.

Our approach is supported by our Health, Safety, Environment and Community (HSEC) Management System, which contains Iluka's Group Standards that define the minimum performance requirements across the business to ensure consistency in our approach to health and safety.





## MAINTAINING HEALTH AND SAFETY THROUGH COVID-19

COVID-19 has had a significant impact, but our business and our people have shown resilience in adapting and responding to the pandemic. A key focus on protecting the health and safety of our people and communities and maintaining business continuity. The impact of COVID-19 varied widely across our various sites and offices:

- Our Chinese offices were the first to implement social distancing measures and remote working arrangements, closely followed throughout all of our operations;
- Sierra Rutile spent over \$2.7 million on COVID-related measures and established its own on-site quarantine and isolation facilities, in addition to the progression of faster in-house polymerase chain reaction (PCR) testing capabilities. Support was provided to the community through COVID-19 safety educational messages and donations of medical supplies and personal protective equipment. A total of 25 Sierra Rutile personnel contracted COVID-19 over the course of 2020, with many more protected as a result of the contact tracing and isolation measures in place;
- The US operations mobilised 170 contractors from across the country to commence rehabilitation works for the 2020 season. Implementation of the specific COVID-19 Management Plan and employee and contractor engagement saw zero cases recorded for 2020; and
- In Australia, while we had no cases of COVID-19 in the workforce, people had to adapt to different ways of working. Victoria in particular experienced various levels of lockdown for much of the year. The Balranald Project, which drew on personnel from across Australia, was delivered despite changing border restrictions and permitting and quarantine requirements.

Standard response protocols were implemented across all sites, including:

- suspension of all non-essential international and domestic travel;
- development and implementation of COVID-19 risk assessments and Disease Management Plans;
- formation of a Group Crisis Management Team and Site Emergency Management Teams to actively monitor and coordinate response;
- communicating regularly to the workforce on company processes and providing links to authoritative information sources;
- identification of at-risk personnel and communities and protocols to minimize the risk of infection;
- implementation of social distancing measures;
- increased personal hygiene and sanitisation measures;
- screening of personnel prior to site entry; and
- increased number of charter flights to enable social distancing.

While many of these measures were new to us, and in many cases placed considerable physical and mental demands on our employees, contractors and their families, their response has been positive.

## SAFETY INITIATIVES

In 2020 we are focusing on minimising the severity and frequency of injuries through implementation of frontline safety initiatives.

### OCCUPATIONAL HEALTH AND SAFETY

To ensure the continued safety of our people, contractors, suppliers, and the communities in which we operate we:

- empower all our people to actively contribute to making their workplace safe and intervene when they observe an activity that is unsafe;
- identify, assess and control fatality risks;
- set performance targets;
- invest in our leadership training; and
- prequalify our contractors to ensure they are selected, engaged and managed to meet Iluka's performance requirements.

Iluka's total recordable injury frequency rate (TRIFR) decreased from 2.9 to 2.8 in 2020, with three less injuries than 2019. Notwithstanding the reduction in TRIFR, the number of lost time injuries (LTIs) increased from 1 in 2019 to 5 in 2020 and the severity rate increased from 2.4 to 14.8 in 2020. The 5 LTIs related to 4 bone breaks/fractures and 1 sprain with the increase in severity rate reflecting days off in relation to these injuries.

Medically treated injuries (MTIs) reduced from 23 to 16 in 2020. Improvements have been made in the management of the injuries in line with external guidance such as Australian based return to work bodies (e.g., Workcover). In 2021 Iluka will engage an external injury and rehabilitation provider to support early and effective case management where injuries do occur.

There was a reduction from 76 to 61 in Serious Potential Incidents (SPIs) across Iluka including reduced SPIs (from 50 in 2019 to 33 in 2020) at Sierra Rutile. It remains a key area of focus across the Iluka Group.

2020 saw the in-house development and delivery of the Safe Production Leadership programme, in Australia and the US coupled with changes to the Safety Visit programme (in field safety conversations) and a focus on "Back to Basics".



**GOAL 3.9. BY 2030, SUBSTANTIALLY REDUCE THE NUMBER OF DEATHS AND ILLNESSES FROM HAZARDOUS CHEMICALS AND AIR, WATER AND SOIL POLLUTION AND CONTAMINATION.**

## SAFETY PERFORMANCE SUMMARY

	2020	2019
Workplace fatalities	0	0
Total recordable injury frequency rate <sup>(1)</sup>	2.8	2.9
Lost time injury frequency rate <sup>(1)</sup>	0.5	0.1
Recordable injuries	27	30
	Comprising: 5 lost time injury 16 medical treatment injuries 6 restricted work case injuries 8 of these injuries had the potential to be severe permanent disabling injuries or fatalities	Comprising: 1 lost time injury 23 medical treatment injuries 6 restricted work case injuries 2 of these injuries had the potential to be severe permanent disabling injuries or fatalities
Days lost due to injuries	145	25
Serious potential incidents <sup>(3)</sup>	61 (53 NEAR HIT)	76 (74 NEAR HIT)
	Majority were related to surface mobile equipment / vehicles, and gravitational exposures 53 near hits 8 injuries	Majority were related to surface mobile equipment, stored energy and gravitational exposures 74 near hits 2 injuries

Notes:

<sup>(1)</sup> Per million hours worked by employees and contractors.

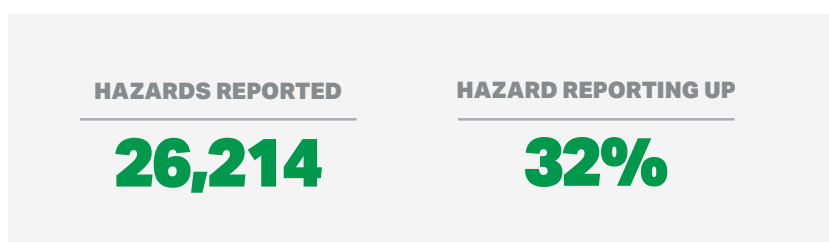
<sup>(2)</sup> Increase in days lost due to 5 LTIs (4 bone breaks/fractures and 1 sprain).

<sup>(3)</sup> Injuries and near hits are recorded as a serious potential incident (SPI), where there is a risk of fatality or permanent disabling injury regardless of likelihood.

### AUSTRALIA



### SIERRA RUTILE





Health care worker using community  
Veronica Buckets, Sierra Leone

## HEALTH AND SAFETY PROGRAMMES

During 2020 we focused on developing and implementing a series of initiatives to continue to improve health and safety performance. 2021 will see the embedding of these initiatives within the business.

The overall Safe Production Leadership programme is a 'back to basics' behavioural leadership and competency building initiative aimed at improving our frontline leadership effectiveness through focusing on competency, engagement, responsiveness and major risk management.

### SAFE PRODUCTION LEADERSHIP - FRONTLINE LEADER CAPABILITY TRAINING

The Safe Production Leadership programme provides classroom based training specifically focused on increasing the knowledge and competence of frontline leaders in Iluka systems, processes and procedures.

The first 8 modules (of 10) had a total of 231 training sessions held across Iluka with 1656 participants, including 223 contractors, completing the training during 2020.

### SAFETY VISIT PROGRAMME

The Safety Visit Programme is a tool for positive leadership interaction, focused on acceptance, treatment and control of workplace health and safety hazards. The programme has been redesigned to focus on increased visibility of leaders in the field and 'thematic' interactive discussions with the leadership team members. The programme generates opportunities to engage with all levels of the business to identify safety improvements.

### CRITICAL CONTROL MANAGEMENT (CCM) PROGRAMME

A Critical Control is a physical barrier or object, technical system or direct human action that (when used correctly) prevents an unwanted event sequence that could lead to a fatality.

The CCM programme seeks to formalise the minimum controls necessary when conducting high risk work. It narrows the focus onto those controls that have the most impact on preventing fatalities and mandating point in time validation that the control is present and effective.

A total of 18 train-the-trainer sessions were held across Iluka with 208 participants during 2020.

## WORKER HEALTH AND WELLBEING

### PHYSICAL HEALTH

In 2020 Iluka ran a steps challenge across its operations, with teams from each site or department undertaking the challenge to 'walk around' all Iluka operations worldwide. The teams managed a collective 138,949,814 steps equivalent to 105,880 km.

During the festive period of 2020 Iluka released a "Healthy body, healthy mind, happy human" awareness campaign which encouraged employees to change one or two small things such as starting regular exercise programmes, taking up outdoor physical activities or even just having a regular check up with a medical practitioner. Team Iluka also participated in the MACA bike ride challenge in October and raised \$52,295 for cancer research at the Harry Perkins Institute.

### MENTAL HEALTH

Iluka has established a Mental Health Working Group (MHWG) to drive improvements to the support that we can provide to our employees, this includes the mental health portal on the Iluka intranet which is accessible to all employees. 2020 saw many individual initiatives across our operations to support a mentally healthy workplace such as the Winston Project in support of the Black Dog Ride, R U OK Day initiatives, mental health first aid training for employees and supervisors, the Blue Tree Project and Shining the Light on Mental Health initiative at Jacinth Ambrosia, which culminated in the team receiving the South Australian Premiers award for the Health and Safety Category.

### HYGIENE

Iluka has a robust Occupational Hygiene Programme in place across its operations to monitor the potential work place exposures which may impact health. 2020 saw this monitoring programme expanded to Sierra Leone operations. Additional equipment, training and analysis of results allows the early detection and control of any potential exposures to our employees.

Monitoring programmes are based on qualitative and quantitative risk assessments and are guided by our standards and guidelines. Based on our operational risk profile, programmes typically focus on monitoring exposure to airborne contaminants including respirable dust, respirable crystalline silica, inhalable dust, noise and radiation.

In Australia, there were 35 exceedances of occupational exposure levels recorded in 2020, all attributed to noise, compared to 37 in 2019. Limiting the potential for occupational over-exposures to noise and airborne contaminants is a 2020 sustainability performance improvement target. There were no cases of noise induced hearing loss reported during 2020.

Radiation monitoring results and dose assessments for employees and contractors were well below 50% of the regulatory annual dose limit. For more on Iluka's management of naturally occurring radioactive material (NORM), refer to the Environment section of this Report.

In 2020, Iluka reported 22 cases of occupational illness which equalled a total recordable occupational illness frequency rate (TROIFR) of 2.2. The majority of these cases (95%) related to employees contracting malaria or typhoid while undertaking short-term assignments at international locations other than their usual place of work and one was a reaction to an insect bite.

### COMMUNITY HEALTH

Sierra Rutile operations continues to provide medical support to its employees, their families and members of the local community in times of emergency. The team of doctors, nurses, intensive care paramedics, laboratory specialists and support staff provide health care for a very wide range of medical conditions. The purchase of additional medical equipment in late 2019 now allows the team to provide advanced diagnostics through improved laboratory equipment and improved patient care. In 2020 the Sierra Rutile clinical team treated 21,405 patients, 8,492 of whom were not employees.

Community education on diseases such as typhoid, malaria, polio, HIV and other sexually transmitted diseases is undertaken by the staff of the Sierra Rutile Clinic to support efforts by the Sierra Leonian Government to reduce communicable diseases across the broader population. These education sessions are generally held in public forums such as local markets, community groups or other gatherings, as well as a regular radio talkback session, to ensure the broader community is able to access the information.

The employee and dependants typhoid vaccine programme has continued throughout 2020 and has resulted in a significant reduction over an extended period for Sierra Rutile employees. Throughout 2020, Sierra Rutile's Chief Medical Officer has been collecting and analysing data to inform a wider typhoid fever reduction strategy across employees, dependants and the wider community.

## OUR PEOPLE

Attracting, recruiting and developing the best people is critical to achieve our purpose – to deliver sustainable value. We aim to maintain a diverse and inclusive workplace that reflects the local communities in which we operate and brings a range of perspectives to the issues we face.

Our five values – **Integrity, Respect, Courage, Accountability and Collaboration** – reflect how we work together across the business.

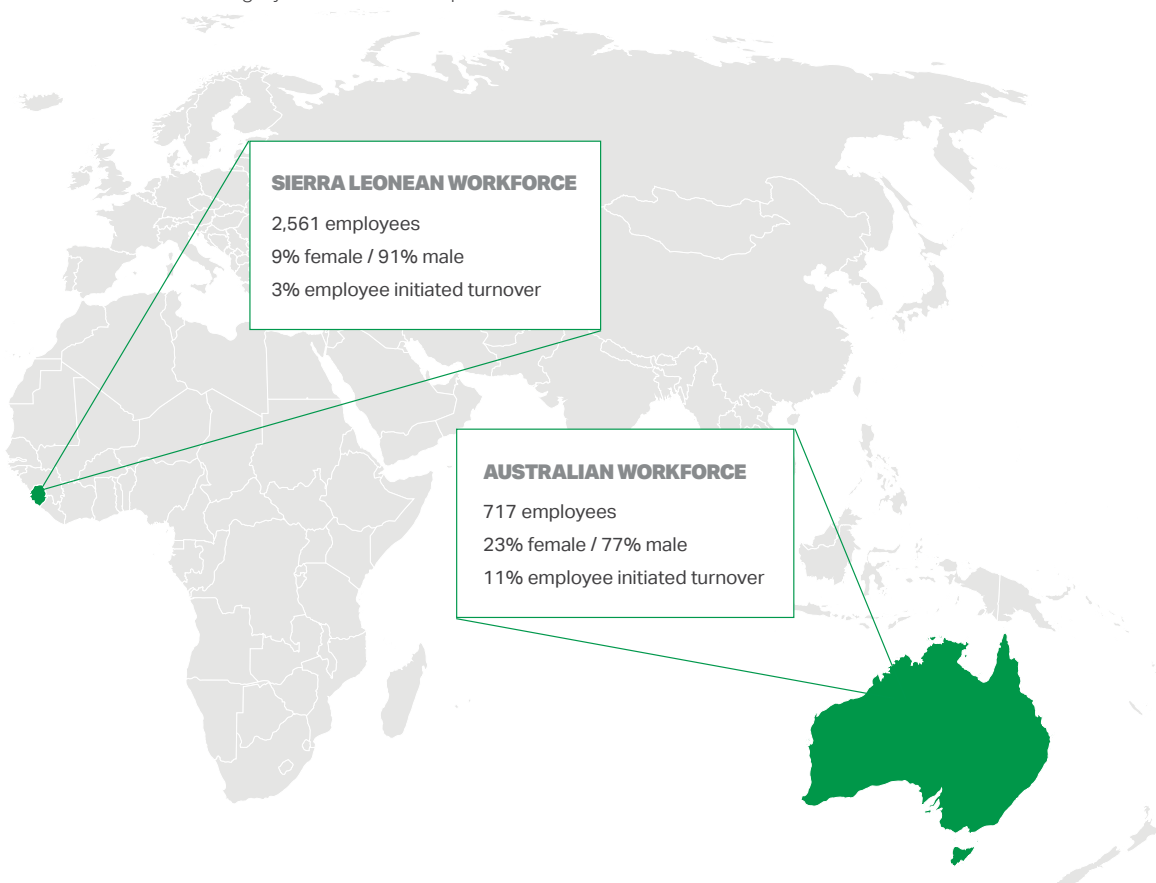
Iluka's People Policy, and supporting procedures, sets out our approach to recruiting, developing and retaining an engaged, diverse and capable workforce.

Our fair work policies strive to provide all of our employees with a safe working environment, where they are treated with dignity and respect, free from harassment and discrimination. These policies cover equal employment opportunity, conduct, bullying and harassment and grievance processes. Further information is provided in the Governance and Integrity section of this Report.

Our employees and their families have access to our Employee Assistance Programme, which provides confidential counselling and support. In response to the COVID-19 pandemic, 2020 saw Iluka launch a mental health portal on our intranet, providing employees with links to important information under five categories - healthy mind, healthy body, working from home, staying connected and financial health. Further information is provided in the Health and Safety section of this Report.

We employ over 3,000 employees globally. The majority of our employees are based in Australia and Sierra Leone. In Sierra Leone we are one of the largest private sector employers.

At the date of this Report, our workforce profile is as follows:



## DIVERSITY AND INCLUSION

### INCLUSIVE WORKPLACES

We respect and encourage workplace diversity and aim to create a flexible and inclusive working environment that assists employees to balance their responsibilities. Senior leaders promote awareness of diversity and inclusion and integrate those principles into company activities, including recruitment, training, talent management and employment policies.

### EMPLOYEE AND INDUSTRIAL RELATIONS

We are committed to having an engaged and collaborative relationship with our employees. Iluka respects our employees' rights to freedom of association, including the right of each individual to join a union. Iluka does not inquire into employees' union membership and does not keep union membership statistics.

Where Iluka is making significant operational changes, we provide timely disclosure and consult with employees in accordance with mechanisms under relevant industrial instruments. Through consultation we take into account employees' circumstances and needs, and all reasonable measures are taken to mitigate any adverse effects of the changes on employees.

Iluka recognises our employees' rights to collective bargaining. In each operational region in Australia, collective agreement conditions are renewed approximately every four years through bargaining with the representatives of our employees. The majority of Sierra Rutile employees are covered by a collective bargaining agreement negotiated with all mining companies in Sierra Leone and the United Mineworkers' Union every three years. In 2019 a three-year Collective Bargaining Agreement was negotiated and agreed with the United Mineworkers Union.

### FEMALE REPRESENTATION IN MANAGEMENT AS AT 31 DECEMBER 2020

Level	Proportion of female (%)
Board	29
Executives / General Managers <sup>(1)</sup>	36
Other management levels	16
<b>Total Iluka Group (excluding Sierra Rutile)</b>	<b>23</b>
<b>Total Sierra Rutile Limited</b>	<b>9</b>
<b>Total Iluka Group</b>	<b>12</b>

Note:

<sup>(1)</sup> Excludes the Managing Director

### AUSTRALIAN EMPLOYMENT AND DIVERSITY TARGETS

A new Diversity and Inclusion Policy was released in 2020 and sets out Iluka's commitment to diversity and inclusion, replacing our previous Diversity Standard. The Policy articulates our commitment to providing a safe and inclusive workplace that is free from harassment and discrimination, and that is representative of the wider communities in which we operate.

In 2020, our People and Performance Committee approved continuation of measurable objectives for gender and Aboriginal diversity relating to Iluka's Australian operations. Our target is to achieve 30% female participation and 8% Aboriginal participation in the workforce by 31 December 2023. At the end of 2020, female participation was 23% and Aboriginal participation 7%.

#### Aboriginal Employment

Aboriginal workforce participation of 7% is driven by strong performance at a number of our operations. Jacinth-Ambrosia has 28% aboriginal employment, reflecting our strong working relationship with the Far West Coast people of South Australia. Our partnership with the Clontarf Foundation has facilitated participation at our Narngulu processing plant with eight Clontarf graduates currently working at the operation.

### SIERRA LEONE LOCAL EMPLOYMENT AND DIVERSITY

We strive to maximise local employment at Sierra Rutile, with 98% of our workforce being made up of Sierra Leoneans. Our commitment to employing locally is guided by the Sierra Rutile Local Content Policy and the *Sierra Leone Local Content Agency Act (2016)*. Currently, 9% of our Sierra Rutile's workforce are female.

We have established talent pools of potential employees from among the immediate localities within the mining concession from which we recruit skilled and semi-skilled roles such as security guards and ADT operators.

Wherever possible, we also seek to engage local companies and suppliers to support economic development in the region. This has included engaging local service providers for implementing coaching and development programmes.

As part of our partnership with the International Finance Corporation (IFC) in Sierra Leone, the IFC advisory mission has formed a multi-stakeholder Gender Task Force with representatives from different areas and levels within Sierra Rutile. This has included improved and more gender friendly recruitment material designed to encourage more female applicants, monitoring of female participation in our recruitment processes and tracking female participation in training and development, as well as tracking the number of female staff who have been promoted.

Further, in consultation with the IFC we will be launching Respect in the Workplace training for all Sierra Rutile employees in 2021. Development of this training was informed by the 2020 virtual surveys on the workplace as a gender friendly environment.

## DIVERSITY AND INCLUSION WORK PLAN

Area of focus	Objectives	Progress
<b>Diversity and Inclusion Working Group</b>	Identify and drive diversity and inclusion initiatives	<ul style="list-style-type: none"> <li>Cultural awareness training programme in development and to be implemented across all Australian locations (following pilot delivered in January 2021).</li> </ul>
<b>Promote awareness of diversity</b>	Employees and stakeholders have access to meaningful diversity information	<ul style="list-style-type: none"> <li>Iluka's People Policy and Diversity and Inclusion Policy (updated this year) are accessible to employees online and at Iluka's offices and operations.</li> <li>Diversity progress against targets is reported to the Executive and the People and Performance Committee of the Board.</li> <li>Continued a partnership with the Clontarf Foundation, and with SHINE in Geraldton.</li> <li>Iluka sponsored the Inspiring Girls Initiative for the 2020 Women in Resources Awards, although the event was delayed to 2021 due to COVID-19.</li> </ul>
<b>Integrate workplace diversity principles into company activities</b>	People management practices implemented to reflect diversity and inclusion	<ul style="list-style-type: none"> <li>Gender pay equity review is completed annually.</li> <li>Succession planning and high potential identification and development plans are in place.</li> <li>Relationship established with Edge Employment Solutions, to provide employment for people with disabilities.</li> </ul>
<b>Create a flexible workplace culture which assists employees to balance their responsibilities</b>	Flexible employment arrangements supported	<ul style="list-style-type: none"> <li>Flexible work arrangements are promoted, including part-time, working from home and modified start and finish times.</li> <li>Gender neutral parental leave policy is available.</li> <li>Volunteering opportunities to support the community through the provision of two days volunteer leave per year are available.</li> </ul>



Find out more about our partnerships with Clontarf and Shine online at [iluka.com/sustainability/case-studies](https://iluka.com/sustainability/case-studies)

## WORKFORCE ENGAGEMENT - CAPABILITY AND DEVELOPMENT

Iluka prioritises employee development and invests in building capabilities and skills. Through our strategic workforce planning and talent management processes we identify critical skills required within the business and facilitate succession planning throughout the company.

Employees participate in an annual performance review process. Objectives are set at the beginning of each year, aligned to the Iluka corporate plan. Feedback is provided throughout the year and formal mid-year and full year reviews are conducted. Employee performance plans include a development planning component. Training and professional development is planned specifically for each individual and can encompass a variety of formal and informal routes to learning and growth.

### TRAINING AND DEVELOPMENT

It is critical that our employees have the necessary technical and safety training and qualifications in order to perform their roles competently and safely. Training requirements are set based on individual role requirements. In 2020, Iluka implemented a new Learning Management System, which provides an enhanced user experience, integrated with our human resources information system.

Training initiatives for Sierra Rutile continue to focus on building technical and leadership capabilities, including operator training and implementation of a leadership enhancement programme.

## TALENT DEVELOPMENT PROGRAMMES

### Leadership development

71 leaders from across Iluka's operations and corporate functions completed our leadership acceleration programmes in 2020, spanning three different levels:

- Senior Leadership Programmes – focused on the transition from senior leader to executive / general manager positions (12 participants)
- Engaging Leadership Programmes – focused on the transition from mid-level leader to more senior leadership positions (15 participants)
- Emerging Leader Programmes – focused on the transition from individual contributor to frontline leader positions (44 participants across four operational sites)

These programmes are all based around Iluka's leadership framework, containing five leadership drivers – leading sustainably, leading commercially, leading with insight, leading authentically and leading through our people. Partnering with two specialised leadership development organisations, the programmes incorporate workshops, coaching, business challenges and mentoring. Our Emerging Leader Programme also provides participants with statements of attainment towards a Certificate IV in Leadership and Management (BSB42015).

In addition to the formal leadership acceleration programs, we helped the development of a number of our leaders in 2020 through 360° feedback processes, external leadership coaching and mentoring opportunities. All Iluka employees have access to LinkedIn Learning licences, giving them access to over 12,000 on-demand courses across a range of topics and skills.

### Professional development opportunities

Iluka maintains strong relationships with a variety of professional bodies and institutions to provide employees with technical and professional development opportunities. In 2020, these have included providing educational assistance to employees undertaking professional qualifications and supporting a variety of professional development courses and events.



**GOAL 4.4. BY 2030, SUBSTANTIALLY INCREASE THE NUMBER OF YOUTH AND ADULTS WHO HAVE RELEVANT SKILLS, INCLUDING TECHNICAL AND VOCATIONAL SKILLS, FOR EMPLOYMENT, DECENT JOBS AND ENTREPRENEURSHIP.**

### Sponsoring and employing apprenticeships and traineeships

Iluka currently has over 80 enrolled apprentices and trainees across our Australian operations. To facilitate pathway employment opportunities for Aboriginal employees, Iluka offers traineeship opportunities for both Clontarf and SHINE students. Recent successes of these programmes include the offer of permanent full-time employment to a SHINE trainee from our Narngulu operation, and a Clontarf trainee starting an electrical apprenticeship at our Cataby operation. During the year, Iluka was pleased to sign a continuation of our sponsor partnership with the Clontarf Foundation for another three-year period.

In 2020, Iluka partnered with the WA Mining Club to offer a scholarship opportunity to a promising metallurgy student. The scholarship was awarded to Sandrine Symons, who will be provided with exposure to the mineral sands industry at our operational sites throughout 2021, as well as mentoring from two of our production metallurgists.

### 2020 ILUKA EMPLOYEE SURVEY

Iluka regularly runs an employee 'pulse' survey to gather feedback on employee engagement and areas of focus for the organisation. The 2020 survey focused on understanding employees' views on organisational effectiveness, diversity and inclusion, and safety culture whilst asking for open and honest feedback about working at Iluka. A total of 83% of employees responded to the survey, providing an overall engagement score of 71%, and providing over 10,000 qualitative comments about various aspects of their work and engagement.

At an organisational level, as well as the above areas of focus, the results of the 2020 survey provided important insights into employees' views on the challenges raised by the COVID-19 pandemic, and Iluka's response. Other key takeaways from the survey included emphasis on our strong safety culture, the pride that our employees feel in contributing to Iluka's success and that people generally feel comfortable being themselves at work.



### CASE STUDY

#### DEVELOPING OUR LEADERS IN UNCERTAIN TIMES

Iluka launched a suite of leadership development programs in 2019, with 71 leaders at various levels throughout the organisation forming the inaugural cohorts for 2020. An important component of these programs is a workshop component, providing participants the opportunity to share experiences and ideas, and broaden their networks outside of their location or technical discipline. Participants also undertake leadership coaching based on their identified areas for growth and development.



Read more about our case studies online  
[iluka.com/sustainability/case-studies](https://iluka.com/sustainability/case-studies)





Narngulu, Western Australia

## OUR COMMUNITIES

Iluka takes an evidence-based approach to social performance. We manage our potential impacts on communities and social risks to the business based on a deep understanding of community needs and expectations. We respect human rights, and aim to engage constructively with community stakeholders towards positive social and economic outcomes.

Iluka's social performance objectives include:

- the identification, management and monitoring of social impacts and risks;
- meaningful engagement with stakeholders;
- responsive management of grievances;
- the sharing of benefits; and
- addressing location or project-specific social considerations such as cultural heritage management, human rights, local employment and procurement, and resettlement.

Our HSEC Policy, Human Rights Policy and Social Performance Standard guide our approach to working with communities and stakeholders. The standard, and related procedures, provide a framework of mandatory social performance requirements. Sites and projects are subject to periodic assessments and audits.

In 2020, Iluka undertook an internal audit on social risk management for a selected number of Australian sites. The audit found that our social performance framework is in line with good practice and provided a number of recommendations to strengthen social performance practices in addition to a number of activities that are ongoing. Identified improvements focus upon a risk based approach to capacity and capability to meet the requirements of the framework whilst activities in progress include the development of regional strategies that consider risk profile (by region), and provision of a social risk reporting mechanism to provide oversight of social risk impacts, management actions and the results of monitoring. The latter has been developed within the Isometrix software stakeholder management module launched in 2020.

Iluka's 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 our operations in Sierra Leone. Our strategic partnership with the IFC commits the Sierra Rutile operations and the Sembahun project to meeting the IFC's Environmental and Social Performance Standards.

### SHARING BENEFITS WITH COMMUNITIES

In 2020 Iluka made more than \$1.6 million in voluntary contributions and statutory payments for social and economic development. A range of in-kind provisions were also made to support local communities. This includes support for disease prevention in Sierra Rutile, as well as a wide range of volunteering activities by Iluka staff globally.

### HUMAN RIGHTS AND MODERN SLAVERY

Iluka's Human Rights Policy, which is applicable to Iluka's stakeholders including its Directors, employees, suppliers and contractors, conveys our commitment to upholding and respecting human rights within our business and supply chain. While many aspects of the protection of human rights are covered through a range of Iluka policies and practices, the Human Rights Policy is supported by a work programme that translates our commitments into actions.

In 2020, as part of the work programme, Iluka developed a Human Rights and Modern Slavery online training module.

In line with our commitment, Iluka commenced a multi-year initiative to meet Australia's modern slavery requirements, under the *Modern Slavery Act 2018*. The approach is risk based, to ensure initial efforts are dedicated to where there is the highest potential for modern slavery to exist. Iluka's first Modern Slavery Statement, reporting on the 2020 calendar year, can be found online at [www.iluka.com](http://www.iluka.com).

### COMMUNITY RELATIONSHIPS

Iluka recognises that our commercial success depends on our ability to operate in a manner that is socially acceptable. This requires an understanding of community priorities and expectations, which can vary widely between our operating regions. To facilitate this, we aim to engage communities in integrated, efficient and effective ways that enable realistic judgments and meaningful participation in decisions about social impacts, risks and opportunities.

In 2020, Iluka expanded its modes of community engagement by developing and implementing a bespoke online engagement portal. The [iluka.com/engage](http://iluka.com/engage) site hosts pages for active engagement processes. It provides accessible project information, document repositories, and survey and feedback mechanisms that align with recognised good practices and maintain a deliberate level of engagement when face-to-face options are not available or preferred.

Iluka also introduced the collection of community sentiment data as an integrated part of project engagement processes, as opposed to conducting discrete perception surveys at multi-year intervals. This approach is targeted at improving our confidence around levels of community consent and satisfaction towards Iluka, and at enabling adaptive management of engagement processes to ensure they are effective for pursuing their objectives.

### GRIEVANCES

Iluka's Grievance Management Procedure was developed in accordance with the United Nations Guiding Principles on Business and Human Rights. A requirement of the procedure is that all locations develop and maintain a locally-appropriate grievance mechanism that is respectful of local cultural norms and easy for community members to access. All complaints are taken seriously and investigated, in accordance with Iluka's Grievance Management Procedure. All grievances of a medium to high-level classification are reported through to the Board as part of the monthly Sustainability Performance Report.

Iluka received and investigated 96 complaints globally in 2020, which is similar to the previous year. Approximately 90% of complaints made were in relation to our Sierra Rutile operations, in regards to crop damage and crop compensation.

### SOCIAL INCIDENTS

Iluka requires that all social incidents be recorded. Social incidents are either:

- unplanned or unwanted events which involve the local community, or other external stakeholders, and have the potential to affect the security, safety and/or reputation of Iluka employees, contractors, site visitors and/or assets;
- unplanned or unwanted events associated with Iluka sites, projects or personnel that affect communities or community members;
- a community complaint/grievance; or
- a breach of Iluka's social obligations.

Iluka uses an event management system to record social incidents, which are then classified according to the severity of the incident. Level 1 incidents have no or minimal impact, while Level 5 incidents have the greatest potential impact. All Level 3 and above incidents are reported to the Board. The number of social incidents has continued to decrease over the past two years, with 36 social incidents recorded for the Iluka Group in 2020; of which four of those were Level 3 and above. No Level 5 social incidents were recorded in 2020.

## OUR STAKEHOLDERS

Stakeholders		Engagement activities
<b>Communities</b>	Stakeholders include landowners, Traditional Owners, local residents, not-for-profit groups, businesses, community-based and other special interest groups.	Face-to-face engagement, phone calls, electronic and paper newsletters, community meetings, focus group discussions and events, website, feedback mechanisms, sponsorships.
<b>Employees and contractors</b>	Our employees and contractors are often local community members.	Intranet, email, townhalls/briefings, social events, newsletter, annual people survey, department and site meetings, direct engagement between manager and employees.
<b>Government and regulators</b>	We are engaged at all levels of government from local government to regional or state and national.	Briefings, direct engagement and emails.
<b>Suppliers</b>	Suppliers from a global supply chain, although we preference local businesses where practical.	Out to market approaches, discussions and briefings, contractual agreements, supplier questionnaires.
<b>Shareholders</b>	Shareholders receive regular communication on our business performance via Iluka's corporate reporting process.	Annual Report, Quarterly Review, website, email, investor briefings, market announcements, annual general meetings, conferences, Sustainability Report.
<b>Customers</b>	Customers source our products from around the world. We aim to deliver quality products, tailored to their needs.	Meetings, report, website, discussions, site visits, tenders.

## 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. Relationships with Iluka's Aboriginal stakeholders extend from Board level through to day-to-day relationships at our operational sites.

At locations where cultural heritage values are identified, Cultural Heritage Management Plans or procedures are implemented to ensure the protection of sites and artefacts. This is especially important when our projects are located on land traditionally owned, adjacent to, or under customary use by Indigenous peoples. In these instances, specific engagement is undertaken.

To develop internal capability to build and maintain strong, effective relationships with Aboriginal groups, Iluka is developing an Aboriginal Cultural Awareness and Engagement programme, which was piloted at the end of January 2021. It is intended that training will be progressively implemented across all Australian locations.

Iluka currently has two agreements in place with Aboriginal 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 2007 at Jacinth-Ambrosia in South Australia. In Western Australia, Iluka has a voluntary agreement with the Yued People for our Cataby operations.

Both agreements act as a foundation to guide our engagement and the development of constructive and respectful relationships with Traditional Owners. They include activities such as training and business opportunities, employment, Aboriginal heritage protocols and cultural awareness training, while also providing a forum for regular engagement.

In 2020, Iluka undertook a desktop assessment of heritage risk at our Australian sites. As a result we have identified opportunities to enhance our record-keeping and data analysis by incorporating group wide heritage data into the newly developed compliance and stakeholder data management system.

During 2020, there were no incidents of violations involving rights of Indigenous peoples.

## FAR WEST COAST

Iluka has a strong ongoing relationship with the Traditional Owners at its Jacinth Ambrosia operations in South Australia. The relationship is underpinned by the Native Title Mining Agreement (NTMA) with the FWC Title holders which has been in place since December 2007.

The FWC Native Title Holders and communities are represented by the FWC Liaison Committee. All native title mining agreement (NTMA) related engagement or Jacinth Ambrosia operational updates are required to go through the Liaison Committee, and any community visits and/ or activities must be reported to the Liaison Committee through the quarterly meetings. This is managed by the Indigenous Relations Officer.

While the Indigenous Relations Officer is the first point of contact for FWC and Aboriginal employees and contractors, the most senior Iluka representative on site, the Operations Manager, is responsible for the day to day relationship with the FWC, and is in contact with the FWC on a weekly basis. FWC Liaison Committee are regular visitors to the operations to inspect the site and monitor cultural heritage matters. Any artefacts identified are dealt with in strict accordance with the Cultural Heritage Management Plan set out in the NTMA. All employees and contractors complete cultural awareness training every two years.

Iluka's Managing Director also has direct relationships and regular contact with the FWC. In 2020 this included attending an initial Atacama NTMA meeting with the FWC in Ceduna in February 2020, enabling face-to-face engagement with FWC elders over two days.

## YUED

In Western Australia Iluka has established relationships with the Yued People and has a voluntary co-operation agreement in place for Iluka's Cataby mine, which has been operating since 2019.

The agreement sets out agreed Aboriginal Heritage Protocols for Iluka to follow and requires Iluka to take into account the cultural concerns of the Yued People when conducting its operations. Heritage surveys were undertaken before construction of the mine and have been expanded where there has been additional footprint and exploration. All employees and contractors at Cataby complete cultural awareness training which also covers the Aboriginal Heritage Protocols.

A bi-annual meeting of a joint Iluka-Yued Implementation Committee acts as a forum for discussion on a number of matters including employment, training and business opportunities for Yued People at the mine, mining operations and any effects on Yued People, including environmental impacts, mine closure and rehabilitation, and implementing the cultural heritage protocol.

Following the success of the Liaison Officer at Jacinth Ambrosia, Iluka has employed an Aboriginal Liaison Officer to support and mentor Aboriginal employees and potential recruits in the community. Other recent initiatives to support potential recruits include a driving programme through the Wheatbelt Driving School to teach young people to drive, and supporting job-ready training programmes at the local TAFE institute.



## CASE STUDIES

### EDUCATION AND FRONTLINE PROTECTION

Sierra Rutile spent approximately AU\$315,000 in medical equipment for its clinic and donated approximately AU\$100,000 in medical supplies and Personal Protective Equipment to 10 Community Health Centres (CHCs) in the Bonthe and Moyamba districts. In addition to this, 252 sets of veronica buckets, liquid soaps and hand sanitisers valued at approximately AU\$15,000, were distributed to communities in the five mining chiefdoms; and financial support of approximately AU \$10,000, was distributed to seven community radio stations for the dissemination of COVID-19 awareness and prevention messages.



Continue reading online at [iluka.com/sustainability/case-studies](https://iluka.com/sustainability/case-studies)

### COVID-19 COMMUNITY RESPONSE

In response to the COVID-19 crisis Iluka expanded its social investment strategy to support local communities through the pandemic. An additional \$160,000 was distributed across the four Australian regions within which Iluka operates, providing direct investment to ameliorate the impact of the pandemic. A one-off corporate donation of \$100,000 was also provided to FoodBank.



Continue reading online at [iluka.com/sustainability/case-studies](https://iluka.com/sustainability/case-studies)

### VOLUNTEERING TO HELP FOODBANK WA AND THE SMITH FAMILY

As part of Iluka's commitment to a flexible workplace culture, employees are entitled to two days' volunteering leave per year to actively support their communities. Employees from our Perth and Adelaide offices volunteered in 2020 for Foodbank and The Smith Family, sorting and packing toys, books, food and 60 crates of community donated products.



Continue reading online at [iluka.com/sustainability/case-studies](https://iluka.com/sustainability/case-studies)

### INVESTING IN GRADUATE TECHNICAL TALENT

In 2020, Iluka partnered with the WA Mining Club to offer a scholarship opportunity to a promising metallurgy student, who will be provided with exposure to the mineral sands industry at our operational sites throughout 2021, as well as mentoring from two of our production metallurgists.



Continue reading online at [iluka.com/sustainability/case-studies](https://iluka.com/sustainability/case-studies)

### PARTNERSHIP WITH THE CLONTARF FOUNDATION

Iluka Resources has been a proud partner of the Clontarf Foundation since 2011 and extended this partnership agreement for another three-year period during 2020. Iluka engaged with the Foundation and a number of its Western Australian Academies throughout 2020, including;

- Joining the WA Southern Region Year 12 Leadership Camp, attended by senior boys from seven academies across the Southern Region;
- Holding mock interviews for Year 12 boys from Geraldton Academy;
- Joining young men from Sevenoaks Academy (Cannington) for a game of cricket;
- Joining the Newton Moore Employment Forum in Bunbury;
- Six Year 12 students from Geraldton Academy took part in a worksite visit at Iluka's Geraldton site; and
- Iluka joined representatives from other Clontarf partners at the Wadjemup Cup football carnival on Rottnest Island.



Continue reading online at [iluka.com/sustainability/case-studies](https://iluka.com/sustainability/case-studies)



Clontarf Geraldton Academy Operations Officer Gavin Mallard with Iluka Apprentice Leroy Shiosaki



## ENVIRONMENTAL STEWARDSHIP

Our approach to environmental stewardship is based on understanding and managing the potential impact of our operations on the environment. We focus on using resources efficiently, and achieving positive closure outcomes.

Studies are undertaken to ensure that the environmental consequences of a project are fully understood and residual impacts are adequately managed. The individual environmental requirements of each site are assessed and site-specific procedures and management plans are developed in compliance with our Health, Safety, Environment and Communities (HSEC) management system.

Tutunup South, Western Australia

## BIODIVERSITY

Iluka owns, leases, manages or accesses a number of operational, rehabilitation and future project sites that contain areas of high biodiversity value in Australia and Sierra Leone. The protection and enhancement of biodiversity is formalised through a range of management measures and considered throughout the project lifecycle.

Biodiversity baseline studies are done by experts in the field to collect information on the current biodiversity values of a site. These values can include fauna and flora species, habitats and ecological systems present before a project commences. The baseline studies provide assessment of the biodiversity values of the site and contribute to facilitating effective mitigation of impacts and design of biodiversity management strategies.

Operational sites have a number of management plans that build on the pre-mining biodiversity assessment. These plans include measures to control access to areas of important and protected biodiversity, controls for flora and/or fauna removal prior to disturbance, and monitoring of specific biodiversity aspects during the life of a mine.

Collection of seed may occur prior to mining which is stored and/or treated for later replanting use during rehabilitation. Similarly, vegetation on the mine path can be removed prior to mining and stored separately for later replanting use or as mulch for soil stabilisation. Management measures are also put in place to avoid the introduction and spread of pest or invasive species (for example, dieback) especially in operational and rehabilitation areas.

In 2020 Sierra Rutile completed its Biodiversity Action Plan (BAP) for the active mining area, Area 1. The BAP, developed in compliance with the IFC Performance Standard, presents Sierra Rutile's approach to applying the mitigation hierarchy to avoid impacts on biodiversity and ecosystem services, and where such impact is unavoidable, implement measures to minimise impacts and restore biodiversity and ecosystem services.

<sup>161</sup> Biodiversity Conservation and Sustainable Management of Living Natural Resources (2012) [Performance Standard 6 \(ifc.org\)](#)



## 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 or actual cumulative impact over time.

Iluka's environmental incident performance is connected to employee incentive plans and the company's sustainability improvement targets. Incidents which are classified as Level 3 or above are reported to the Board, for review.

For 2020, there were zero major environmental events (i.e. Level 5 incidents) and no prosecutions or fines issued. There was an increase in Board reportable incidents, with the Iluka Group recording 15 Level 3 and above environmental incidents for the year, up from 13 in 2019. None of these were Level 4, compared to 3 in 2019, indicating a slight reduction in severity of the nature and impact of the incidents occurring; and reflecting increased awareness and urgency around minimising the impact of any incident. The majority of these were attributable to spills (hydrocarbon and storm water) and had negligible long-term environmental impact.

## CLOSURE AND REHABILITATION

How we rehabilitate and close our mines is just as important as how we build and operate them.

Our land management and rehabilitation efforts are aligned with leading practice and undertaken in a socially and environmentally responsible manner. We have a strong track record, which has been built over several decades, of leading successful rehabilitation, leading to relinquishment.

We have an integrated approach to planning the rehabilitation and closure of our mines that commences at the feasibility phase and continues throughout the life of the asset – evolving over time as more information becomes available. We have a Closure Standard that guides our approach to ensure consistency across the business. This requires every site to have an overarching Closure Framework which consists of a number of closure components – either contained in a singular closure plan or maintained in several documents in a central database. The closure components contain a level of detail that is appropriate to the project phase and current understanding of site conditions. These components are reviewed as required to reflect changing circumstances of a site such as transitioning between project phases, and changes in operational activities and mining methods. This is underpinned by consistent and transparent stakeholder consultation, through which we work towards mutually beneficial and supported closure outcomes.

During the early phases of a project, closure planning identifies uncertainties related to closure objectives or criteria, and potential rehabilitation research or engineering required to address these uncertainties. A detailed handover of all closure components occurs at the transition of each phase of a project.

We focus on progressive rehabilitation during the operations phase of the mine lifecycle to minimise the mining footprint, assist with understanding and evaluating closure risks, identify knowledge gaps and inform research and development programmes, and refine closure provision estimates.

Rehabilitation targets are linked to the company's sustainability improvement targets and employee incentive plans.

During 2020, a total of 563 hectares of land was disturbed and the rehabilitation of 584 hectares of land was completed in Australia, the United States and Sierra Leone. In addition to completed rehabilitation, significant earthworks have been ongoing at Jacinth-Ambrosia, Cataby, South Capel and the US during 2020 contributing to future rehabilitation.

The Cataby mine accounted for 46% of the land disturbance and is attributed to activities such as excavation of pits to access ore, stockpiling of overburden, subsoil and topsoil that were removed during excavation of the pits and which will be used later for rehabilitation of the site and expansion of service corridors associated with pit expansion, including roads and pipeline and electricity corridors.

**SITE CLOSURE PLANS**

**100%**

**AU OPERATIONAL SITES**

**REHABILITATION AND CLOSURE EXPENDITURE**

**\$75 MILLION**

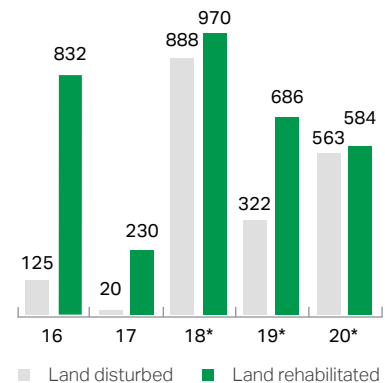
**HECTARES REHABILITATED**

**584 HA**

**LEGACY CONTAMINATION**

In addition to the ongoing environmental management of our operating mines and processing sites, we seek to address historical land contamination issues prior to or during closure. Given Iluka's long history, contamination may exist by virtue of the standards of the day, as opposed to any regulatory non-compliance. Iluka seeks to address any potential risk of harm to communities and the environment through a programme of identification, assessment and remediation of contaminated land. In 2020, Iluka completed its \$14 million South Capel Remediation Project, which will help to achieve an enhanced environmental outcome at South Capel and support the future safe and successful closure of the site. In 2021, works will continue at the site to revegetate designated areas of the site with selected native species.

**LAND DISTURBED AND REHABILITATED (HECTARES)**



\* includes Sierra Rutile



**GOAL 15.5. TAKE URGENT AND SIGNIFICANT ACTION TO REDUCE THE DEGRADATION OF NATURAL HABITATS, HALT THE LOSS OF BIODIVERSITY AND, BY 2020, PROTECT AND PREVENT THE EXTINCTION OF THREATENED SPECIES.**

**CASE STUDY**

**SOUTH CAPEL REMEDIATION PROJECT**

In 2019, Iluka commenced a project to remove approximately 70,000 cubic metres of residue in the old storage dam at the Capel dry plant and relocate about 410,000 cubic metres of residue stored at our South Capel site, moving it to a new purpose-built facility. The project was completed in 2020 and removes potential risk to groundwater, achieving an enhanced environmental outcome.

Continue reading online at [iluka.com/sustainability/case-studies](https://iluka.com/sustainability/case-studies)



## KEY PARTNERSHIPS AND COLLABORATIONS

### MURDOCH UNIVERSITY

In 2019, Iluka partnered with the Harry Butler Institute at Murdoch University which involves sponsorship of the Iluka Chair in Vegetation Science and Biogeography for a five-year term. This research position, occupied by Professor Laco (Ladislav) Mucina, focuses on understanding the ecology and restoration of kwongan vegetation, which occurs at Iluka's Eneabba mine site.



[murdoch.edu.au/research/hbi](https://murdoch.edu.au/research/hbi)

### THE UNIVERSITY OF WESTERN AUSTRALIA (UWA)

Iluka maintains links with researchers and PhD students at UWA's School of Biological Sciences on projects that began under the Iluka Chair and an Australian Research Council Linkage Project. A third PhD student from this partnership, also co-supervised by the Iluka Chair and Iluka's Principal Rehabilitation Scientist (Mark Dobrowolski), completed their studies in 2020. An external link to a publication from this collaboration in 2020 is



<https://onlinelibrary.wiley.com/doi/abs/10.1111/rec.13360>

### BOTANIC GARDENS AND PARKS AUTHORITY

Iluka has ongoing projects with researchers at Kings Park including investigation into endangered flora, the pollination biology of restored vegetation, and the soil microbiology of rehabilitated mine sites. The latter project is part of a larger research programme comparing the soil microbiology of post-mining and natural ecosystems, in collaboration with other mining companies and the Australian Microbiome Initiative.



[www.australianmicrobiome.com](https://www.australianmicrobiome.com)

### VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY (VIRGINIA TECH)

Iluka has had a cooperative research partnership with the Department of Crop and Soil Environmental Sciences at Virginia Tech since 2004.

Research has included: management and analysis of crop rotation, yields and farming practices; native species revegetation trials; post-mining soil reconstruction research; and a trial to determine the net effects of mining on post disturbance water quality. In 2020, Iluka and Virginia Tech continued a study on mine soil and crop yield spatial variability on previously mined land that has been placed back into intensive agriculture.



<https://landrehab.org/>

17 PARTNERSHIPS FOR THE GOALS



**GOAL 17.17. ENCOURAGE AND PROMOTE EFFECTIVE PUBLIC, PUBLIC-PRIVATE AND CIVIL SOCIETY PARTNERSHIPS, BUILDING ON THE EXPERIENCE AND RESOURCING STRATEGIES OF PARTNERSHIPS.**

## WASTE, MATERIALS AND TAILINGS MANAGEMENT

We aim to manage our waste and product materials through mining and processing to ensure they are handled, stored and disposed of appropriately. Our most substantial waste stream is mineral waste; our operations handled approximately 56 million tonnes of material in 2020, comprising overburden, rock, and mine and processing tailings. Mineral waste is defined as material removed from the mine void that is separated from the valuable minerals through processing. These are handled, stored and disposed of according to their properties, environmental factors and regulations, and often returned to the mine as part of landform restoration.

Each of our operations manages its waste in accordance with a Waste Management Plan. We have non-hazardous waste streams – such as cardboard, glass and plastic – which are recycled, while general household waste is diverted to landfill. Hazardous waste generated by our operations includes oil, tyres, batteries and hydrocarbon contaminated waste. We have systems in place to ensure that all hazardous waste is appropriately managed on site, then transported by waste companies to licensed facilities off-site.

### TAILINGS MANAGEMENT

Where mineral waste is contained in a slurry form, Iluka utilises engineered tailings storage facilities (TSFs) either within mine voids or off-path storage. 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. TSF failures around the globe have reinforced the efforts of mining companies to ensure best practices are implemented. We recognise the potential risks TSFs present to our people, our communities and the environment and we are committed to the safe and responsible management of our TSFs.

We take a risk-based approach to the management of our TSFs. All of Iluka's TSFs are constructed using downstream method or final height embankment and are managed in accordance with ANCOLD guidelines which include internal and external risk management protocols. Internal risk management protocols include risk focused surveillance systems/processes, internal geotechnical risk reporting and tailings/water management focus meetings.

Geotechnical auditing of TSFs is undertaken by internationally reputable geotechnical specialists and forms part of Iluka's external risk management protocol.

In 2019 Iluka published its Tailings Management Approach in response to the request for disclosure received from The Investor Mining & Tailings Safety Initiative.

The ICMM, the United Nations Environment Programme (UNEP) and the Principles for Responsible Investment (PRI) co-convened the Global Tailings Review to establish an international standard for the safer management of TSFs. In 2020, the Global Industry Standard on Tailings Management was published. In 2021, Iluka will conduct a gap assessment of our management approach against the Standard to inform our future practices.



Read more about our Tailings Management at: [iluka.com/getattachment/941d66bc-f997-43b6-a30c-2fa76e4a6c7c/iluka-tailings-management-overview.aspx](https://iluka.com/getattachment/941d66bc-f997-43b6-a30c-2fa76e4a6c7c/iluka-tailings-management-overview.aspx)

## GLOBAL TAILINGS PORTAL

The Global Tailings Portal, launched in January 2020, is a free, searchable database that contains detailed information on more than 1,900 mine tailings dams around the world. It enables users to sort data about tailings dams by location, company, dam type, height, volume and risk, among other factors. The data was submitted by approximately 100 of the world's largest mining companies, including Iluka. The portal was built and is hosted by GRID- Arendal in collaboration with the Investor Mining and Tailings Safety Initiative, which is co-chaired by the Church of England Pensions Board and the Swedish National Pension Funds' Council on Ethics, with support from the UN Environment Programme.

## NATURALLY OCCURRING RADIATION AND MINERAL SANDS

Mineral sands, as with other mineral ores, mineral products and soils, contain natural occurring radioactive material (NORM). This is associated with low levels of naturally occurring uranium and thorium contained within the grains of the minerals we recover and return to the mine void. 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 concentrate NORM in the mineral sands products, by-products and 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 set out by the International Commission on Radiological Protection and the International Atomic Energy Agency, as well as the relevant jurisdiction'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.



**GOAL 12.6. ENCOURAGE COMPANIES, ESPECIALLY LARGE AND TRANSNATIONAL COMPANIES, TO ADOPT SUSTAINABLE PRACTICES AND TO INTEGRATE SUSTAINABILITY INFORMATION INTO THEIR REPORTING CYCLE.**



**GOAL 9.5. ENHANCE SCIENTIFIC RESEARCH, UPGRADE THE TECHNOLOGICAL CAPABILITIES OF INDUSTRIAL SECTORS IN ALL COUNTRIES, IN PARTICULAR DEVELOPING COUNTRIES, INCLUDING, BY 2030, ENCOURAGING INNOVATION AND SUBSTANTIALLY INCREASING THE NUMBER OF RESEARCH AND DEVELOPMENT WORKERS PER 1 MILLION PEOPLE AND PUBLIC AND PRIVATE RESEARCH AND DEVELOPMENT SPENDING.**

## PRODUCT STEWARDSHIP

Iluka's 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 promote their responsible use. We engage with customers to create opportunities that promote the responsible use of mineral sands products. We also support scientific research and participate in industry consortia such as the Zircon Industry Association (ZIA), to facilitate productive and sustainable utilisation of products.

Iluka continuously seeks to maximise resource efficiency, reduce waste at source and increase our contribution to the circular economy. For example, Iluka is halfway through the execution of a five-year demolition strategy that is removing redundant assets across its Australian sites, which would have otherwise gone to waste.

We also seek market opportunities for a number of co-products including iron concentrate and activated carbon. Once viewed as a waste product, Iluka's activated carbon is now a successful co-product of the synthetic rutile process and generates over \$20 million per year. By the end of 2020, Iluka produced a total of 120,000 tonnes, which is used for potable and waste water treatment, food decolourisation, and industrial applications.

In 2020, Iluka progressed the processing of monazite (a mineral containing rare earths) at Eneabba, produced as a by-product of our processing activities at Narngulu. Phase 1, now in operation, is producing a mixed monazite-zircon concentrate, with the monazite fraction at approximately 20%. Phase 2, currently under construction, will see an upgrade to produce a dedicated monazite concentrate at approximately 90%, suitable as a direct feed to a cracking and leaching plant. First production from Phase 2 is expected in the first half of 2022. This supports maximising resource efficiency and leveraging the full life cycle of our materials throughout the value chain. We aim to continually improve our understanding of the possible circularity of our products and identify where further opportunities may exist for further value addition.

All of our products and co-products sold into global markets have associated Safety Data Sheets (SDS). The SDS contains product specification details, including chemical and radiological elements, and provides information on the possible hazards, safe storage, handling and disposal of those materials.

## ZIRCON INDUSTRY ASSOCIATION

Iluka is a foundation member of the ZIA, which provides a forum for the cooperation and exchange of ideas and information on scientific and technical matters related to the zircon value chain.

For more details on zircon such as uses, emerging research and development and lifecycle assessments, refer to the ZIA website.



[www.zircon-association.org](http://www.zircon-association.org)

## CLIMATE CHANGE, ENERGY AND EMISSIONS

The impacts of climate change are widely recognised – from changing weather patterns and regulatory requirements to shifts in technology and societal expectations. Organisations around the world are working together to respond, and at Iluka we want to be part of the solution.

We support the Paris Agreement objectives and Intergovernmental Panel on Climate Change (IPCC) assessment of climate change science. Through our climate change approach, we are seeking to contribute to UN SDG13: Climate Action. We recognise that the changing climate presents both potential risks and opportunities, which we aim to capture within our business strategy and investment decisions.

### CAPITALISING ON OPPORTUNITIES

A range of opportunities may present as a result of climate change, including increased utilisation of renewable energy by sites; increased utilisation of Iluka's by-products; and improved market position due to higher demand for Iluka's products. The company's entry into the rare earths market is one such opportunity, due to the increasing demand for rare earths as a result of global shift toward renewable power generation and electrification.

In addition, we are reviewing our land holdings with the aim of identifying opportunities to create enduring social, economic and environmental value through projects such as biodiversity conservation, carbon offsets and renewable energy opportunities. We recognise the potential to realise economic and environmental value through transitioning our energy sources to renewable energy and will continue to explore such opportunities.



### CASE STUDY

#### CASE STUDY: JA SOLAR HYBRID

In 2020, planning commenced for the conversion of Jacinth Ambrosia's diesel operated power station to hybrid electricity. The conversion will involve electric turbo compounding (ETC) technology which works by recovering waste energy from the exhaust, and the installation of 3.5MW of solar power. Believed to be a world first, the integration of solar and ETC technology is expected to save over 5,500 tonnes of CO<sub>2</sub> per year. Commissioning is scheduled for 2021.



Continue reading online at  
[iluka.com/sustainability/case-studies](https://iluka.com/sustainability/case-studies)

### TASK FORCE FOR CLIMATE-RELATED FINANCIAL DISCLOSURES

In 2018, we committed to align our approach with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) framework; we continue to progress this commitment. In 2020, an assessment of the key transition risks that may impact our business was undertaken. This built on the work completed in 2019 to identify, understand and manage our physical risks; risks identified are broadly within the company's control.

In 2020, an external review was conducted to determine the extent to which climate-related risks could be recorded and addressed within our risk management framework. Our strategic risk register records and describes climate related risks that extend out to 10 years, with those risks beyond this period recorded as emerging risks. The physical risks identified in 2019 are now addressed at group and site level, for example implementation of heat stress management measures.



### PHYSICAL RISK ASSESSMENT

As described by the TCFD, physical risks resulting from climate change can be event driven (e.g. extreme weather events) or longer-term shifts (e.g. sustained higher temperatures) in climate patterns. Physical risks may have financial implications for organisations, such as direct damage to assets, reduced access to critical resources (e.g. water) and indirect impacts from supply chain disruption.

In 2019, we reviewed our potential physical risks. This involved climate modelling using two warming scenarios (2 degrees and 4 degrees) at timescales 2030 and 2050. The aim was to understand the projected changes to climate which might impact on our operations. This process considered potential impacts from extreme weather events, temperature changes and changes in access to water.

Using the modelling outputs, we completed climate-related risk workshops to identify risks and opportunities across our operations. The results were integrated into Iluka's existing risk registers to ensure that the risks are actively managed going forward. No physical risks were identified as having a material impact on the carrying value or overall operating costs of our sites. Further details are available in our 2019 Sustainability Report.

## TRANSITIONAL RISK ASSESSMENT

Transition risks are described by the TCFD as those which arise due to the transition of global economies away from fossil fuels and towards a future where global warming is limited to 'well below' 2°C.

To better understand the changes associated with adjusting to a lower carbon economy, we undertook a transitional risk and opportunity assessment in 2020. Iluka utilised scenario analysis to consider the range of possible outcomes that may impact the economy, society, and policy; in line with the recommendations of the TCFD. Specifically, the assessment looked at a Structured Decarbonisation Scenario and a Delayed Policy Response Scenario.

The scenario analysis identified a number of opportunities and several short, medium and long-term risks all of which are within Iluka's control to manage. One of the key recommendations to support evaluation of opportunities and manage risks was the implementation of internal shadow carbon pricing to understand its impact upon operations and future capital projects and inform business strategy and decision making. Iluka is looking to implement this recommendation in 2021.

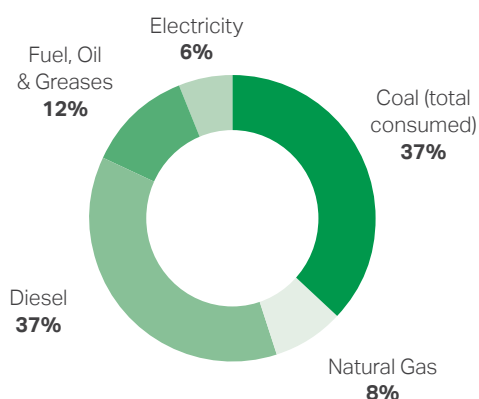
	Governance	Strategy	Risk Management	Metric and Targets
<b>TCFD Framework</b>	Disclose the organisation's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material.	Disclose how the organisation identifies, assesses and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
<b>Current Progress</b>	The Board Charter stipulates that our Board is required to conduct an annual review of climate-related risks and approve climate-related disclosures. In 2020, the Board was provided updates on Iluka's roadmap to implementing the recommendations of the TCFD, together with an overview of the scenario analysis used to identify climate-related transition risks and opportunities. The Board's duties also extend to measuring and reviewing Iluka's performance against climate and sustainability related targets.	We understand that the changing climate presents potential risks and opportunities. Transition opportunities are as numerous as risks and include: <ul style="list-style-type: none"> <li>increasing demand for products supporting sustainable development applications; and</li> <li>enabling our customers to lower their own emissions footprint by providing high grade product.</li> </ul> <p>We have the potential to realise opportunities presented by the increasing commerciality of renewable energy sources on and off-site. Transition risks relate to the direct or indirect impact a future price on carbon would have upon production and operational costs, supply chain and markets.</p>	Through climate modelling and scenario analysis we seek to understand and respond to climate risks and opportunities. We have completed a physical risk assessment, and a transition risk and opportunities assessment. <p>The assessment comprised a series of cross-function and location workshops to identify climate-related risks and opportunities covering the company's entire value chain (including both upstream supply chains and downstream customers), and to consider possible metrics and targets to assess and manage those risks and opportunities. The outcomes of both the physical and transitional risk assessment are tracked through our strategic risk register, which records and describes climate related risks and mitigations for the next 10 years.</p>	Iluka reports on Scope 1 and 2 emissions according to the regulatory context of the geographies in which we operate. We are seeking to refine our collection and analysis of emissions data to support our customers in their assessment and reduction of emissions. <p>We are progressing opportunities to further embed circularity in our processing, to minimise waste and maximise emissions efficiency through generation of co-products.</p> <p>We actively monitor a series of signposts such as climate and carbon policy, investor and customer priorities.</p>
<b>Moving Forward</b>	We will continue to report and disclose the Company's climate change governance, strategy, risk management and targets and metrics in a transparent manner; in alignment with the recommendations of the TCFD.	Monitoring the scenario assumptions behind the identified risks and opportunities will ensure their impact on the business is understood and controlled. Quantifying these risks will inform our business planning and decision making to ensure our business is resilient to changes in climate.	We will continue to review the management of climate-related risks and opportunities within our risk management systems, broader business strategy and investment decisions to ensure our business is resilient to changes in climate.	In 2021 Iluka will look to introduce shadow carbon pricing as a metric within its economic modelling. The pricing, which will consider potential theoretical costs per ton of carbon emissions, will give some insight into the impact of a range of carbon cost settings on potential business decisions.

## MANAGING OUR EMISSIONS FOOTPRINT

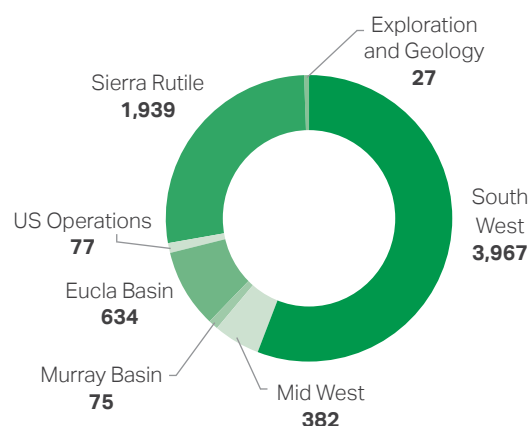
Elements of our business are energy intensive and we have a responsibility to minimise our emissions footprint. This starts with making sure we have a strong understanding of how we use energy. Iluka's Carbon and Energy Standard requires all of our operations to monitor their energy use and greenhouse gas (GHG) emissions and seek emission minimisation opportunities. We are looking at ways to improve energy efficiency, including assessing low-emissions technology opportunities and increasing the circularity of co-products. One such example is the solar hybrid power generation solution for the Jacinth-ambrosia mine site which, following assessment and design in 2020, is due to be completed and commissioned 2021.

We use standard methodologies to calculate direct GHG emissions, including direct measurements of energy consumed by source, 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 emissions and Energy Reporting System.

ENERGY RESOURCES USED, %



ENERGY USED BY REGION, TJ



## CHANGES IN OUR EMISSIONS PROFILE

We seek to reduce the amount of carbon released to the atmosphere and maximise the efficient use of energy where possible. This starts with making sure we understand how energy is used in our business. The majority of our Scope 1 and 2 GHG emissions are generated from energy use during mining and processing.

Energy consumption for 2020 (7.1 petajoules (PJ)) increased over 2019 levels through higher outputs from the Cataby mine and Capel synthetic rutile operations, increased power demand from mining operations at Sierra Rutile, partly offset by lower utilisation of Narngulu MSP. Scope 1 and Scope 2<sup>2</sup> emissions (589 ktCO<sub>2</sub>-e) increased by 17% on 2019, in line with mine plans and production settings.

Scope 1 emissions at our North Capel synthetic rutile operations are largely related to the use of coal in the process, and made up 37% of energy resources used. In the synthetic rutile process coal is used as a reductant for the metallurgical processing of ilmenite into synthetic rutile which is a high grade titanium. To maximise efficiency, we recover waste heat generated in the processing kiln, generating the majority of the electricity consumed by the operation.

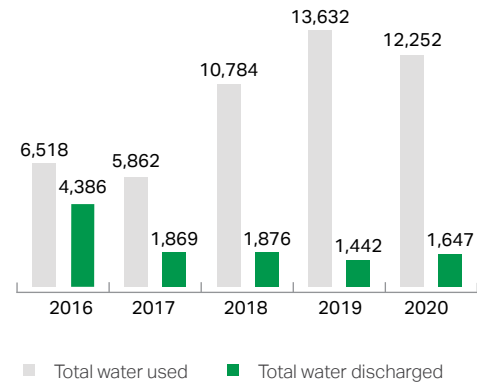
<sup>2</sup> Emissions reported exclude carbon capture as carbon co-product from coal utilised in SR production, and exclude emissions from operations under rehabilitation.

## WATER STEWARDSHIP

Iluka considers water a precious shared resource, with high social, environmental and economic value. We recognise it is an essential component for our mining activities, a fundamental ecosystem requirement and a basic human right. Therefore, we have an important role in its stewardship. We use water in all parts of our business, including exploration drilling, mining and processing, dust suppression, rehabilitation and for drinking and domestic use in our accommodation camps. Each of our operations maintains water management plans and site-wide water balance to guide responsible water use throughout the mine lifecycle and in the context of the local catchment. Our water-related activities are regulated by relevant legislation in each jurisdiction and are subject to set quality and quantity thresholds.

We are focused on maximising the reuse of water to reduce impacts on water availability at our operations in water scarce regions. Recognising that water connects an operation to the surrounding landscape and communities, water management at Sierra Rutile is of particular importance. Due to high rainfall in the region, Sierra Rutile is able to use rainfall and natural inflows in historic ponded areas as its water resource. Total water use for the Iluka Group decreased by 10% for 2020. It is standard practice across our operations to maximise the volume of water recycled. The majority of water withdrawn is groundwater and is used in processing operations and for dust suppression. Whilst the majority of groundwater returns to the aquifer through natural drainage from mine tailings, reinjection and infiltration, our processing operations have increased their recycling with water re-use representing over three times the volume withdrawn.

TOTAL WATER USED AND DISCHARGED (MEGALITRES)



### CASE STUDY

#### RECYCLE, REPURPOSE, DEMOLITION SUPPORTING A CIRCULAR ECONOMY

Recycling or reuse of equipment is paramount and in the forefront of all demolition projects; this again has enabled Iluka to complete projects at a lower capital cost. In 2020, 970 tonnes of HDPE Piping and 400 tonnes of ferrous / non-ferrous components were removed and reused or recycled from Eneabba, while at Yoganup, 30 tonnes of HDPE Piping and 200 tonnes of ferrous / non-ferrous components were removed and recycled. Other activities involved the relocation of thickener from Gingin to North Capel, sale of office and crib buildings and scrapping of 125 tonnes of redundant HV Transformers from Capel and Eneabba.



Continue reading online at [iluka.com/sustainability/case-studies](https://iluka.com/sustainability/case-studies)

Repurposed piping, Eneabba, Western Australia





## GOVERNANCE AND INTEGRITY

Iluka is committed to being transparent, behaving ethically and conducting its business in accordance with the highest standards of corporate governance through its systems and processes.

### CORPORATE GOVERNANCE

Iluka's Board is comprised of six independent, non-executive Directors and one executive Director (the Managing Director). Our Board is responsible for the corporate governance of Iluka including approving and overseeing our strategic direction, achieving our strategies and financial objectives, assessing performance and reporting on the business.

Our Board Charter stipulates the Board's duties in relation to sustainability. The Board has not delegated its responsibilities to a separate committee and maintains a strong focus on sustainability at every board meeting.

The Board conducts an annual review of climate-related risks and measures and reviews Iluka's performance against climate change and sustainability targets.

The Board has three established committees: Audit and Risk Committee; Nominations and Governance Committee; and the People and Performance Committee. Iluka also has a stand-alone Executive Sustainability Committee attended by all executives and chaired by the General Manager – People and Sustainability. This forum met twice in 2020 with a focus on key areas including: COVID-19 response, health, safety and environmental performance and management; climate change work programme including transition risk and opportunities assessment; social investment, community engagement, aboriginal engagement and cultural heritage and modern slavery programmes.

## ETHICS AND CONDUCT

### CODE OF CONDUCT

Iluka is committed to practising the highest standards of conduct and has adopted a Code of Conduct that identifies the standard of ethical conduct expected of all Iluka employees, Directors and contractors. During 2020 a new Code of Conduct was released which incorporates the previous Directors Code of Conduct and Employees Code of Conduct into one document. We also expect people who are assigned to work at our sites, including consultants and contractors, to follow our Code of Conduct in connection with their work. Our Whistleblower Policy outlines the mechanism by which our people can confidently, and anonymously, raise concerns in a responsible manner without fear of discriminatory treatment, recrimination or reprisal, and with Iluka's commitment to properly investigate any issues. This is done via STOPline.

In relation to our Securities Trading Policy and our Continuous Disclosure and Market Communications Policy, all employees must complete training, with additional training required for selected key personnel.

### ANTI-BRIBERY AND CORRUPTION

Iluka has zero tolerance for bribery or corruption. Our Anti-bribery and Corruption Policy, supported by the Anti-bribery and Corruption Procedure, sets out the standards and behaviour Iluka requires of our Directors, officers, employees, agents, contractors and representatives. There is a link to our Whistleblower Policy for the reporting of any actual or suspected breaches of the Anti-bribery and Corruption Policy.

Anti-bribery and corruption training is provided to all employees. All reported incidents of non-compliance or potential non-compliance are taken seriously, reviewed and investigated. Serious incidents must be reported to the Managing Director within 24 hours and to the Audit and Risk Committee at its regular meetings.

Sierra Rutile has a location-specific Anti-bribery and Corruption Policy tailored to reflect the 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.

Iluka maintains a Gift, Entertainment and Other Benefits Register as a record for the receiving or giving of gifts, entertainment or other benefits from or to external parties.

Performance incentive payments for employees include sustainability related targets. The targets are reviewed and set annually derived from a combination of accepted industry practice targets and a consideration of which targets will incentivise and reward continual improvement in performance. In 2020, the Board considered executive remuneration outcomes in light of the exceptional circumstances of the year. This consideration encompassed company performance and achievements; the experience of shareholders; rewarding executives appropriately; and alignment with stakeholder expectations.

For further details, please refer to the Remuneration Report on page 63 of the 2020 Annual Report.



Access our Annual Report online at [iluka.com/investors-media/financial-results/2020-full-year-results-suite](https://iluka.com/investors-media/financial-results/2020-full-year-results-suite)

## TRANSPARENCY AND DISCLOSURE

The trust of the company's stakeholders is essential. We seek to be transparent in our operational, financial and sustainability performance disclosures and listen to our stakeholders.

During 2020, tax transparency, climate change, tailings management and human rights, inclusive of modern slavery, were all matters of specific interest to stakeholders. In response to this interest, Iluka has published disclosures on these specific topics. Each is discussed further in the relevant section of this Report and disclosures are available via our website. Refer to the Our Communities section of this Report for further information on our stakeholder engagement approach.

Beyond direct disclosures, Iluka supports the Extractive Industries Transparency Initiative (EITI) and is an active participant in EITI in Sierra Leone via our 90% owned subsidiary, Sierra Rutile. The IFC holds the remaining 10% in Sierra Rutile. The EITI seeks to promote the open and accountable management of resources and to inform reforms for greater transparency and accountability in the extractives sector. Sierra Rutile also works closely with the Sierra Leone Chamber of Mines to provide industry input to the Sierra Leone EITI by way of its role in the multi-stakeholder group.

### TAX TRANSPARENCY

Iluka supports transparency in our payments to governments and takes into consideration relevant transparency standards in ensuring relevant information is provided to our stakeholders. At a minimum, Iluka seeks to comply with the Australian Government's Voluntary Tax Transparency Code. Iluka's payments to government, including taxes and royalties, is provided separately in our 2020 Tax Transparency Report available at [www.iluka.com](http://www.iluka.com).



More information our annual Corporate Governance Statement and policies are available online at [iluka.com/about-iluka/governance](https://iluka.com/about-iluka/governance)



## RISK AND CRISIS MANAGEMENT

The identification and management of risk is fundamental to achieving Iluka's objective to deliver sustainable value. The company is committed to managing risk in a proactive and effective manner. We systematically identify and manage risk across all our business activities. Iluka's Risk Management Policy sets the commitment, direction and intention of how we apply risk management. The policy is supported by a risk management framework which is aligned to the International Standard for Risk Management, ISO 31000.

The Board, through the Board Charter, delegates responsibility for identifying and managing risks and implementing effective controls to management. Management reports to the Board every six months on those risks which could have a material impact on the company's business. Emerging risk is a standing Board agenda item. Risks identified through this process are incorporated into the Iluka corporate planning process. The Audit and Risk Committee assists the Board in overseeing the company's risk management practices.

We assess the consequence of risk across a number of areas including environment, injury, illness, community, compliance, financial, company objectives and reputation. Company risks and their management are reviewed and updated by the Executive regularly and are reported, along with the Executive's assessment of the company's risk profile, for approval by the Board twice yearly.

In 2020, Iluka commenced a review of the company's Risk Framework, which will continue through 2021. The aim of the review is to better define our risk appetite and establish a strategic risk register that is linked to the corporate planning process. The expectation is that this integration will result in a more robust and practical risk assessment and reporting process that will be cascaded to our operations, enabling us to better focus on our material risks.

Iluka's key business risks and mitigations are detailed on page 46 to 49 of the 2020 Annual Report and these align with the topics identified in the materiality assessment.

### GEOPOLITICAL AND POLICY LANDSCAPE

Iluka monitors geopolitical developments as part of core business and is an active participant in policy debates relevant to the company's interests. In 2020, critical minerals policy was an area of increasing focus for governments globally, with a dual emphasis on secure supply chains post COVID-19; and the essential end-use applications of certain critical minerals in a future low carbon economy.

All of Iluka's core products – zircon, titanium feedstocks and rare earths – are regarded as critical minerals. This presents both opportunities and risks, with the company's rare earths business in particular attracting considerable interest from stakeholders.

Of their many high value applications, some rare earths are essential for the production of permanent magnets, which are in turn used to produce the motors that power electric vehicles, generate power in wind turbines and in other sustainable development technologies.

Demand across this supply chain is expected to grow substantially over coming years. As the world pursues widespread electrification, Iluka's assets at Eneabba (the world's highest grade rare earths operation) and potentially Wimmera provide the company a world class foundation from which to participate. This position brings with it several options for further development, which are being pursued in a disciplined manner.

### REGULATORY COMPLIANCE

At Iluka, regulatory compliance is essential to delivering on our objective to deliver sustainable value. We are committed to complying with the laws, regulations and authorisations that apply to the many facets of our organisation. We acknowledge the importance of meeting compliance obligations to maintaining our licence to operate. We routinely conduct targeted audits of compliance against applicable regulatory standards and report the outcomes to our Audit and Risk Committee.

#### Highlights for 2020:

- No instances of non-compliance with regulatory authorisations leading to any fines or other enforcement actions.
- Implementation of an improved, centralised environmental compliance management tool known as Isometrix to support the management, monitoring and auditing of company-wide regulatory commitments.

### CYBER SECURITY

Iluka takes a risk-based approach to manage cyber-related security risks with a focus on ensuring good practice across standard processes. Iluka leverages leading frameworks such as National Institute of Standards and Technology (NIST) and guidance from Australian Government's Cyber Security Centre. Iluka has a range of measures to manage the risk including:

- a cybersecurity strategy program as part of Iluka's overall IT strategy;
- clear responsibilities with a centralised IT function and dedicated capability of a cyber team;
- governance reporting and regular assurance including external audits, penetration testing, and assessment against standards and leading guidance such as the Australian Cyber Security Centre Essential Eight;
- a focus on 'good basics' including awareness and training, patching, accurate asset and software registers, authentication controls, management of change, physical access controls to critical centres and servers and cyber risk reviews;
- a range of technical platforms and controls from leading providers; and
- cyber response plan including post incident review processes with root cause analysis.

The Sierra Rutile operation has a stand-alone separate IT and environment team, including locally set and managed cyber controls.



## **BUSINESS RESILIENCE AND CONTINUITY**

The COVID-19 pandemic was the source of unprecedented challenges for Iluka's business in 2020. The business responded to protect the safety, health and wellbeing of our employees, prudently manage the company's financial position, adjust production settings in line with market conditions and progress key projects.

### **MAINTAINING BUSINESS CONTINUITY THROUGH COVID-19**

Iluka responded promptly early in 2020 by establishing a central Crisis Management Team, to oversee the company's response to the pandemic. Site level Emergency Management Teams were also established to implement site-specific COVID-19 Management Plans.

Our actions enabled us to stay ahead of government-imposed restrictions. This involved conducting risks assessments for each site, developing COVID-19 prevention controls, and preparing response plans in the event of a suspect or confirmed positive case. Please refer to page 15 for further information on our response to COVID-19.

### **OPERATIONAL AND PROJECT CHANGES**

From a continuity perspective, changes to operational settings have been implemented in response to the uncertain market conditions. The aim has been to preserve margins and cash flow to maintain a strong balance sheet. This included:

- Altered production settings at the Narngulu mineral separation plant from April 2020 to reduce zircon production in light of market conditions;
- Return from Ambrosia to mining at Jacinth from August 2020 to reduce costs and defer tailings management capital spend; and
- Delayed commencement of the Balranald field trial until easing of travel restrictions in New South Wales.

Other projects continued with a focus on non-site based technical and desktop study work.

### **BUSINESS CHANGES**

Iluka took advice from our internal auditors, KPMG, who advised that, as a result of COVID-19 with people working from home, there was potential for internal controls to be weakened through process changes and reduced management oversight. Iluka Business Risk management undertook a review to confirm what changes might have occurred resulting in control weaknesses and greater fraud risk. This internal review spanned: finance, procurement, business analysis, HR and accounts payable. No reduction in control processes were identified as our business activities were still being effectively managed through our enterprise wide systems.

Additionally, with the expectation that our customers may be financially impacted by COVID-19, a Debtor Dashboard was developed in house (April 2020) which integrated a range of aspects to display the status of our debtors in real time, rather than having to run regular reports.

## VALUE CREATION

Iluka pursues sustainable economic outcomes allowing us to share benefits with our host communities and deliver sustainable value.

### ECONOMIC CONTRIBUTION AND SOCIAL VALUE CREATION

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

- employment opportunities;
- investment in community infrastructure and services;
- taxes, royalties and other payments to government;
- payments to landowners and community groups (i.e. statutory development funds, surface rent payments);
- procurement supporting local businesses; and
- community support through sponsorships and partnerships.

A summary of the economic value generated and distributed through Iluka's activities in 2020 is provided below. We support the transparent disclosure of taxes, royalties and fees to government. Iluka's payments to government, including taxes and royalties, is provided separately in our 2020 Tax Transparency Report available at [www.iluka.com](http://www.iluka.com).



Sierra Rutile Limited, Sierra Leone

## 2020 ECONOMIC CONTRIBUTION

A\$ million	Revenue	Employees	Suppliers and contractors	Government
		Expenses for salary, wages and benefits	Payments made to suppliers and contractors for the purchase of utilities, goods and services (operating and capital cost)	Total taxes borne and collected
Australia	719.9	134.4	396.3	187.1
Sierra Leone	223.1	45.6	148.2	44.8
Other	4.0	13.6	2.7	(4.7)
<b>Total</b>	<b>947.0</b>	<b>193.0</b>	<b>547.2</b>	<b>227.2</b>

### ILUKA'S DIVERSIFICATION TO RARE EARTHS

In 2020, Iluka entered the rare earths market with first sales of a monazite-zircon concentrate from Eneabba in Western Australia; the world's highest grade rare earths operation. Monazite (a mineral containing rare earths) is produced as a by-product of our processing activities at Narngulu.

Rare earths (neodymium and praseodymium in particular) are essential for the production of permanent magnets, which are in turn used to produce the motors that power electric vehicles, generate power in wind turbines and in other sustainable development technologies. Demand across this supply chain is expected to grow substantially over coming years as the world pursues widespread electrification.

Through the Eneabba project over 200 jobs were created during construction, and 10 positions for the operation of the mine site. Throughout Phase 2 of the project, which is currently in execute, a further 200+ jobs will be created during construction and up to 30 positions during operation.

A Feasibility Study has commenced for Phase 3 of the project, with Iluka actively exploring the development of a fully integrated rare earths refinery.

Production adjustments at the Narngulu mineral separation plant in Western Australia reduced global zircon supply by approximately 10%. Mine planning adjustments at Jacinth-Ambrosia also resulted in improved cash flow, lower operating costs, and deferred capital spend. More information can be found in the Iluka 2020 Annual Report.

### RESPONSIBLE SUPPLY CHAIN

Contractors and suppliers form an integral part of our business. In 2020, our Australian operations engaged more than 1,650 suppliers, of which 94% are located in Australia and 6% are located outside of Australia. Our Sierra Rutile operations engaged 245 suppliers during 2020 of which 55% were Sierra Leonean based suppliers and 45% international suppliers.

Through our Procurement Policy and supporting processes we contribute to economic development in the communities in which we operate. Iluka identifies and includes local businesses tender and sourcing activities which are evaluated on a range of criteria including, health, safety, environment, technical, service, innovation and value.

Iluka's Human Rights Policy conveys our commitment to rejecting any form of slavery or forced or child labour, and working to ensure that such practices are not present in our business or our supply chain. Iluka has adopted a formal process to identify potential modern slavery risks in our supply chain. We are part of an industry collaboration group that has resulted in the development of a supplier self-assessment questionnaire. This questionnaire has been embedded as a standard requirement when on boarding new vendors and included in Iluka procurement processes. Further details on Iluka's approach to human rights and modern slavery is presented in the Our Communities section of this Report and our 2020 Modern Slavery Statement.

### FINANCIAL PERFORMANCE AND PRODUCTIVITY

Iluka's ongoing focus on maintaining a strong balance sheet saw the company end 2020 in a net cash position of \$50 million. Free cash flow was \$36 million, incorporating investment of \$71 million in capital expenditure and payment of \$166 million in tax in Australia. Throughout 2020, Iluka was able to maintain operational continuity at all sites through disciplined performance. Iluka's operational flexibility enabled the company to preserve margins across its core product suite throughout a period of uncertainty and market instability.



The Modern Slavery Statement can be found online at [www.iluka.com](http://www.iluka.com)

# ANNEXURES



Catoby, Western Australia

## PRODUCTION ACTIVITY

The following chart shows Iluka's production activities for 2020 and expected activities for 2021 as at date of this Report.

Location	2020	2021
<b>Australia</b>		
Jacinth-Ambrosia (J-A) mining <i>South Australia</i>	100% utilisation	100% utilisation
Murray Basin mining <i>Victoria</i>	Rehabilitation and closure of Kulwin, Douglas and WRP	Rehabilitation and closure of Kulwin, Douglas and WRP
Hamilton mineral separation plant (MSP) <i>Victoria</i>	Idle	Idle
Cataby mining <i>Mid West Western Australia</i>	100% utilisation	100% utilisation
Narngulu MSP <i>Mid West Western Australia</i>	100% utilisation	100% utilisation
Synthetic rutile (SR) kiln 1 <i>South West Western Australia</i>	Idle, feasibility study	Idle, feasibility study
SR kiln 2 <i>South West Western Australia</i>	100% utilisation	83% utilisation, 2 month idle
North Capel separation mill <i>South West Western Australia</i>	100% utilisation	100% utilisation
Eneabba mineral sands recovery <i>Mid West Western Australia</i>	Commissioned Q1, production from Q2	Production throughout year
<b>Sierra Leone</b>		
Lanti dredge mine <i>Sierra Rutile</i>	Decommissioned	Decommissioned
Lanti dry mine <i>Sierra Rutile</i>	100% utilisation	100% utilisation
Gangama dry mine <i>Sierra Rutile</i>	100% utilisation	100% utilisation
Sierra Rutile MSP <i>Sierra Rutile</i>	100% utilisation	100% utilisation
<b>United States</b>		
US mining <i>Virginia</i>	Rehabilitation and closure of Brink and Concord	Rehabilitation and closure of Brink and Concord
Stony Creek MSP <i>Virginia</i>	Rehabilitation and closure	Rehabilitation and closure
US mining <i>Florida</i>	Maintenance and monitoring of Green Cove Springs	Maintenance and monitoring of Green Cove Springs

## ECONOMIC RESPONSIBILITY

	2016	2017	2018	2019	2020
<b>Financial performance</b>					
Mineral sands revenue (million)	726	1,018	1,244	1,193	947
Underlying mineral sands EBITDA (million)	103	301	545	531	342
Mining Area C EBITDA (million)	48	69	56	85	81
Underlying Group EBITDA (million)	151	361	600	616	423
Net profit (loss) after tax (million)	-224	-172	304	-300	2,410 <sup>#</sup>
Free cash flow (million)	47	322	304	140	36
Net (debt) cash (million)	-506	-183	2	43	50
<b>Total taxes borne*</b>	<b>55</b>	<b>47</b>	<b>57</b>	<b>206</b>	<b>215</b>

\* Refer to Tax Transparency Report 2020.

<sup>#</sup> includes non-cash, non-taxable gain on sale of MAC Demerger

## PEOPLE

	2016	2017	2018	2019	2020
<b>Gender diversity (Australia)</b>					
Male (%)	73	73	76	75	77
Female (%)	27	27	24	25	23
<b>Gender diversity (Sierra Leone)</b>					
Male (%)	-	93	92	92	91
Female (%)	-	7	8	8	9
<b>Gender diversity (Total Iluka Group)</b>					
Male (%)	-	88	92	88	88
Female (%)	-	12	8	12	12
<b>Indigenous diversity (Australia)</b>					
Non-Indigenous (%)	95	95	94	93	93
Indigenous (%)	5	5	6	7	7
<b>Employee turnover</b>					
Employee initiated turnover Australia (%)	11	7	11	13	11
Employee initiated turnover Sierra Rutile (%)	-	2	2	2	3
<b>Employee number by region</b>					
Australia	643	599	735	769	717
Asia	10	25	17	17	10
Europe	3	1	3	4	2
Africa	1	1,986	2,467	2,595	2,580
Americas	55	32	37	42	45

## SAFETY

	2016*	2017	2018	2019	2020
<b>Proactive or leading metrics (excludes Sierra Rutile)</b>					
Safety visits (number)	25,030	21,132	22,523	26,999	28,095
Planned workplace inspections per employee per month	0.52	0.52	0.62	0.56	0.51
Hazard cards	4,012	2,218	2,914	2,888	5,856
Training compliance (%)	87	79	79	82	83
<b>Reactive or trailing metrics</b>					
Workplace fatality (injury)	0	0	0	0	0
Lost time injuries (LTI)	1	9	10	1	5
Lost time injury frequency rate (LTIFR)	0.4	1	1	0.1	0.5
Medical treatment injuries (MTI)	8	13	19	23	16
Medical treatment injury frequency rate (MTIFR)	2.9	1.4	1.9	2.2	1.6
First aid (FA) and minor injuries upgraded to restricted work case (RWC) injuries	3	4	5	6	6
Total recordable injuries	12	26	34	30	27
Total recordable injury frequency rate (TRIFR)	4.4	2.8	3.5	2.9	2.8
Severity – number of days lost	3	899	184**	25**	145
Severity rate	1.1	97.1	18.8**	2.4**	14.8
Serious potential incidents	13	60	47	76	61

\* 2016 excludes Sierra Rutile (pre-acquisition, December 2016)

\*\* Changes to calculation of days lost implemented from 1st January 2019. Days lost capped at 180 days per injury. 2018 recalculated with updated definition to align with OSHA reporting requirements and general industry standards.

## HEALTH

	2016	2017	2018	2019	2020
Workplace fatality (illness)	0	0	1	0	0
TROIFR	N/A	N/A	N/A	2.0	2.2
Confirmed occupational illness*	2	5	10	21	22
Occupational exposure level exceedances (Australia only)	83	84	33	37	35

\* occupational illness includes employee malaria or typhoid cases (recorded as work related if employee contracted illness while undertaking short-term assignments at international locations other than their usual place of work)

## SOCIAL PERFORMANCE

	2016	2017	2018	2019	2020
<b>Public complaints (number)</b>					
Sierra Rutile	n/a	30	52	85	87
All other Iluka sites	27	9	17	10	6
<b>Total public complaints received</b>	<b>27</b>	<b>39</b>	<b>69</b>	<b>95</b>	<b>96</b>
<b>Social incidents (number)</b>					
Level 3 social incidents	n/a	n/a	10	3	7
Level 4 social incidents	n/a	n/a	4	4	5
Level 5 social incidents	n/a	n/a	0	0	0
<b>Total Level 3-5 social incidents</b>	<b>n/a</b>	<b>n/a</b>	<b>14</b>	<b>7</b>	<b>12</b>



## ENVIRONMENT

	2016 <sup>#</sup>	2017 <sup>#</sup>	2018	2019	2020
<b>Environmental incidents</b>					
Level 3 environmental Incidents (number)	8	6	20	10	15
Level 4 environmental incidents (number)	3	1	0	3	0
Level 5 environmental incidents (number)	0	0	0	0	0
Total Level 3-5 environmental incidents (number)	11	27	20	13	15
Fines and prosecutions (number)	-	0	0	0	0
<b>Land footprint</b>					
Land disturbed (hectares)	125	20	888	322	563
Land rehabilitated (hectares)	832	230	970	686	584*
<b>Greenhouse gas emissions</b>					
Scope 1 and 2 emissions (ktCO <sub>2</sub> e)	386	348	495	504	589
<b>Energy use and resources used</b>					
Energy use (terajoules)	4,415	4,475	6,899	7,054	7,101
Coal (%)	60.2	66	46.4	42.1	37
Electricity (%)	19.3	11	7.5	8.6	6
Natural gas (%)	15.7	15	9.9	8.5	8
LPG (%)	0	0	0	0	0
Diesel (%)	12.4	7.5	36	40.6	37
Petrol (%)	0.2	0.1	0.08	0.05	0.1
Fuel, oil and greases (%)	0	0.2	0.21	0.21	12
<b>Mineral waste volumes</b>					
Overburden (kilotonnes)	1,387	981	3,698	10,059 <sup>^</sup>	28,269
Rock (kilotonnes)	298	110	1,839	1,966	2,584
Tailings, includes mine and processing tailings, as well as clay fines (kilotonnes)	4,228	1,880	12,997	20,653	24,886

# excludes Sierra Rutile.

\* increase from 2020 Annual Report figure of 576ha following data reconciliation.

<sup>^</sup> reporting error from 2019 originally reported as 4,134 kT. Increased overburden in 2019 and 2020 relates to Cataby operations.

	2016	2017	2018	2019	2020
<b>Water resource<sup>^</sup></b>					
Total water used (megalitres)	6,518	5,862	10,784	13,632	12,252
Total water discharged (megalitres)	4,386	1,869	1,876	1,442	1,647
Total water reused and recycled (megalitres)	129	593	6,018	12,827	38,232
Surface water withdrawn (megalitres)	25	16	0.04	0.26	0
Groundwater withdrawn (megalitres)	5,033	4,404	9,548	12,658	11,437
Rainwater collected directly and stored (megalitres)	905	1,032	688	437	359
Municipal water supplies or other water utilities (megalitres)	555	410	549	538	429.7

<sup>^</sup> Water resource values exclude Sierra Rutile.

## ENVIRONMENT

2020 mineral waste disposal locations				
	Eucla Basin	Mid West	Sierra Rutile	Total
<b>Mining</b>				
<b>Overburden</b>				
Volume (tonnes)	5,225,637	22,586,980	456,783	28,269,400
Disposal location	Returned to mine void	Returned to the mine void	Mined out pit void	
<b>Oversize (rock)</b>				
Volume (tonnes)	1,130,531	321,418	1,131,734	2,583,683
Disposal location	Returned to mine void	Off-path stockpiles and return to mine void	Mined out pit voids	
<b>Clay fines, sand tails, co-disposal material (sand and clay)</b>				
Volume (tonnes)	8,544,866	9,121,884	7,219,339	24,886,089
Disposal location	Co-disposal in TSF cells within mine void	Co-disposal in TSF cells within mine void	Tailings storage facilities	
<b>Processing</b>				
<b>Mineral separation plan tailings</b>				
Volume (tonnes)	-	21,325	104,757	128,927
Disposal location	-	Tailings storage facilities	Tailings storage facilities and then returned to mine void	
<b>Synthetic rutile plant tailings</b>				
Volume (tonnes)	-	-	N/A	11,555
Disposal location	-	-	N/A	

## MATERIAL TOPIC BOUNDARIES

Strategy Pillars	Boundary	Material Topics	Description
<b>Governance and Integrity</b>	Internal and external	Corporate governance, ethics and conduct	Corporate governance, ethics and conduct.
		Transparency and disclosure	Public reporting and transparent disclosures on performance including tax transparency.
		Risk and crisis management	Risks are systematically identified and appropriately treated including crisis/emergency management.
<b>Value Creation</b>	Internal and external	Financial performance and productivity	Economic benefits delivered to local and regional economies through jobs created, taxes paid and collected, social investment and procurement spend.
		Economic contribution and social value creation	Managing our financial performance, productivity and economic sustainability. Delivering financial performance in accordance to the Iluka plan and continue to maintain, grow returns over time.
		Responsible supply chain	Responsible procurement of goods and services that considers health, safety, environmental, social and economic impacts/benefits.
<b>Health and Safety</b>	Internal	Occupational Health and Safety	Managing our risks that have the potential to result in a fatality or permanent disabling injury/illness (life-changing) and minimisation of the severity and frequency of work related injuries.
		Workforce Health and Wellbeing	Managing workforce health and well being.
<b>Our People</b>	Internal	Workforce engagement, capability and development	Workforce engagement, talent attraction and retention, human capital development and succession planning.
		Diversity and Inclusion	Diverse and inclusive workforce
<b>Our Communities</b>	Internal and external	Community Relationships	Communicating with and engaging stakeholders to build and maintain support for our presence. Includes how we manage grievances and ensure stakeholder views are considered in decision making processes.
		Human Rights and modern Slavery	Upholding fundamental human rights of employees, host communities and others who are affected by Iluka's activities. This includes a commitment to work towards ensuring no forms of slavery are present in our business or supply chain as will be reported upon in a publicly available Modern Slavery Statement.
		Cultural Heritage and Indigenous Relations	Acknowledgement of Indigenous peoples' connections to lands and waters. Engagement with and appropriate inclusion of Aboriginal Australians in opportunities created by Iluka. Respect for the culture and traditions of all communities where Iluka is present.
<b>Environmental Stewardship</b>	Internal and external	Climate Change, energy and emissions	Assessing, adapting and managing the risks and opportunities of a variable and changing climate. Minimising energy consumption and improving efficiency to reduce GHG emissions contributing to climate change impacts.
		Closure and Rehabilitation	Process of planning for and undertaking rehabilitation and closure activities including land use design and planning, provisioning, rehabilitation execution and land relinquishment.
		Waste, materials and tailings management	Managing waste and product materials generated through mining and processing operations to ensure they are handled, stored and disposed of accordingly. Mineral waste are those materials removed from the mine void and separated from valuable minerals over various process stages including tailings, overburden and rock.
		Product Stewardship	Promoting the safe and responsible production, use, reuse, recycling and disposal of products and co-products including informing on potential product related health or environmental issues. Improving understanding of products/co-products specific properties and life cycles to encourage better environmental and health outcomes (including minimising and reuse of waste).



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