

OUR APPROACH COMMUNITY, HEALTH, SAFETY AND ENVIRONMENT



We prepare our financial year (FY) 2019 sustainability reporting in accordance with the Global Reporting Initiative (GRI) Standards (Core) Sustainability Reporting Guidelines, including the Mining and Metals Sector Supplement. We use our website to report on our approach to managing the various sustainability-related areas of our business, as required by GRI-103. This document contains the information which was subject to independent assurance by KPMG in FY19 as outlined in the FY19 GRI Sustainability Reporting Navigator.

COMMUNITY

Our approach

We're a business with a purpose and believe trust and transparency are essential to the way we operate. That means being in touch with the broader community – considering different perspectives and listening to their concerns.

We go through rigorous processes to understand the unique social, cultural and legal contexts we're operating in. We have regular, open and honest conversations to better understand what our stakeholders need and expect. Working together like this assists us to achieve our shared goals.

It's this strong foundation that informs the way we engage with communities and how we work with them. It's what drives us to make a difference to people's lives and unearth a better future for generations to come.

Our community-related data and management approach is subject to both internal and external assurance processes. These processes assist us to evaluate the efficiency and effectiveness of our management approach and we use the findings to further improve existing systems.

Investing in this vision

From providing jobs and business opportunities, to empowering suppliers and supporting community programs, we know we can make a huge contribution to the way people live and work.

That's why we consider community needs. Whether it means hiring and buying locally, or managing the impacts of our operations, we listen to people and act on the issues they raise.

To us, building these relationships is common sense. The stronger our communities are, the better we can work together, thrive together and create a positive legacy together.

Living by this vision

We follow through on what we say, our Sustainability Policy, Code of Business Conduct and adherence to the United Nations Global Compact principles helps us do this. This guides the way we do things internally and helps us assess our work with local communities and development programs.



Community investment

Wherever we operate, we believe we have a responsibility to get behind our communities. More than this, we're proud to do so – backing community programs, supporting new facilities and infrastructure, and promoting local employment and business opportunities.

Our operations are just one part of a bigger picture. We look beyond their life and instead focus on the lives of the people surrounding them, working together to create healthier, stronger and happier communities.

Big numbers for big changes

Operations community investment plans focus on the UN Sustainable Development Goals (SDGs), aiming to tackle the world's greatest sustainability challenges. Our community efforts currently target:

- SDG3 Good health and well-being;
- SDG4 Quality education; and
- SDG8 Decent work and economic growth.

During FY19, we invested US\$17.3 million⁽¹⁾ in community initiatives and activities, from FY19-FY23 we're committed to investing up to US\$125 million.

When our communities face adversity, we're ready to help. That can be through financial assistance to support recovery from natural disasters or, where we can, supporting on-ground response with our equipment and people.

In FY19, we contributed:

- US\$800,000 in response to floods in Townsville Australia;
- US\$250,000 to support the recovery from Cyclone Idai in Mozambique;
- Contributed via our tax, royalties and other payments as reported in our *Tax Transparency and Payments to Governments* report; and
- In addition, we matched the donations which our employees made to these causes.

Supporting the health of our local communities

We are committed to helping reduce the occurrence of communicable diseases such as HIV/AIDS, TB and malaria in our local communities, as well as also providing support for people with other diseases such as Machado-Joseph Disease. Our operations collaborate with relevant government, non-government and community-based organisations to promote good health and hygiene practices to reduce communicable disease.

Matched giving

We support the causes that matter most to our people. One way we do this is through our Australia Employee Matched Giving program, where we match employee contributions to registered charities in Australia.

In FY19 we matched A\$138,000 of employee contributions. Since 2016 more than A\$350,000 of employee contributions have been matched.

Social and Labour Plans

In South Africa, our mining operations have Social and Labour Plans. These plans aim to promote the welfare of local communities surrounding our mines, through economic and socio-economic growth. These include:

- Human Resources Development Programs;
- Mine Community Development Plans;
- Housing and Living Conditions Plans; and
- Employment Equity Plans.

We create our Mine Community Development Plans with the help of a wide range of stakeholders, including the communities surrounding our operations. These plans contribute to their own Integrated Development Plans and we report our progress to the Department of Mineral Resources every year.

Transformation

To transform⁽²⁾ our business in South Africa, we must focus on local interests. That's why in South Africa, we're guided by the legislated Broad-Based Black Economic Empowerment (B-BBEE) measurement framework.

By seeking out local talent, suppliers and new business opportunities, we're driving competitiveness and transformation, and expanding economic growth.

We also have yearly targets to improve our demographic representation across all levels of management in South Africa.

WORKING WITH COMMUNITIES

Understanding our communities

We care about the people and groups who are interested in and have a say in what we do, or who are impacted by our operations.

No matter where we're working we have a rigorous process to understand our communities. We regularly complete and review Social Baseline studies, Social Impact and Opportunity Assessments, Community Perception Surveys and Stakeholder Identification and Analysis to identify and understand who our stakeholders are.

We always aim to build strong, honest and meaningful relationships with local communities, so that we're ready to listen and act on their needs, wants and concerns.

Engaging with our stakeholders

To us, stakeholders are people or groups who are potentially affected by our operations or who have an interest in, or influence on, what we do as a company. When we genuinely understand our stakeholders' unique interests, needs and concerns, we can work together, creating partnerships to achieve common goals. At each of our operations, we do this through our stakeholder identification and analysis process. This process includes ongoing consultation mechanisms for us to engage with our different stakeholder groups and allows us to keep abreast of changing societal expectations.

Our teams on the ground are often employed from local communities. This helps us to work with these local communities to achieve genuine, meaningful engagement.

Our Global Stakeholder Engagement Plan can be accessed [here](#).

(1) Community investment consists of cash, in-kind support and administrative costs and includes donations and investment of funds in the broader community where the target beneficiaries are external to the Company. The amount accounts for actual expenditures in the reporting period, not commitments, prepared on an accruals basis and representing South32's equity share.

(2) Transformation in South Africa refers to change that allows Black people as defined to participate meaningfully into the main streams of the economy, by ways of owning, managing and controlling productive assets.

We listen to all concerns

We want to hear from anyone with an interest in our operations. We listen to and report complaints and grievances which we receive, anonymous or otherwise, and we make it a priority to address them.

We take pride in our complaints and grievances process, aligning it with the Guiding Principles on Business and Human Rights, and using the United Nations' Protect, Respect and Remedy Framework, specifically to:

- Acknowledge, investigate and document all complaints;
- Allow for anonymous reporting of complaints;
- Complete appropriate remedial action;
- Communicate transparently with complainant; and
- Be readily accessible to all members of host communities.

We externally report our recorded complaints and grievances annually as part of our sustainability performance data.

Indigenous Peoples

We recognise the traditional rights and values of Indigenous Peoples and respect their cultural heritage.

We work to obtain free and informed consent before we operate and we engage consistent with the International Council on Mining and Metals (ICMM) Position Statement on Indigenous Peoples and Mining.

THE STEPS WE'VE TAKEN

As a company, we have processes, consistent with legal requirements, to support the preservation of cultural heritage. When our work is located on or near the lands traditionally owned by Indigenous Peoples, we provide cultural awareness and competency training to our people.

Reconciliation in Australia

Because of the work we do, and the impact it has on communities around Australia, we're committed to reconciliation for Aboriginal and Torres Strait Islander Peoples and non-Indigenous Australians.

Our Reconciliation Action Plan (RAP) outlines how we'll do this, and what we'll do to create and sustain meaningful and respectful relationships.

Our RAP can be accessed [here](#).

HUMAN RIGHTS

Our human rights approach

Respect for human rights is fundamental to how we do business at South32 and reflects our values of care, trust, togetherness and excellence. Not only is it the right thing to do, but it is critical to the success and integrity of our business.

We work to create positive social impacts by mitigating human rights related risks, leading improvements and promoting respect for human rights across our operations and beyond.

What are human rights

Human rights recognise the inherent value of each person. They are based on principles of dignity, equality and mutual respect.

"All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood" (Article 1, Universal Declaration of Human Rights).

There are 30 fundamental human rights that are universally protected, almost all of which are relevant to the way we do business.

You can read more information about fundamental human rights, available in over 500 different languages, [here](#).

Our Policies, Our Commitments, Our Practices

Our policies are guided by international human rights principles, including the:

- Universal Declaration of Human Rights;
- United Nations Guiding Principles on Business and Human Rights;
- International Council of Mining and Metals 10 Principles;
- Ten Principles of the United Nations Global Compact;
- Voluntary Principles on Security and Human Rights; and
- International Finance Corporation Performance Standards.

Our commitments to respect human rights are contained within our:

- Sustainability Policy;
- Code of Business Conduct;
- Modern Slavery Statement; and
- Internal standards.

Our policies are put into practice through an integrated set of activities including:

- Regular human rights impact assessments;
- Ongoing human rights due diligence within our operations and supply chains;
- Supporting freedom of association, providing safe and decent work;
- Recognising the traditional rights of Indigenous Peoples;
- Engaging meaningfully with communities;
- Ensuring there are safe and freely accessible grievance and redress mechanisms;
- Working with private security providers to maintain safe and secure operations; and
- Regular human rights training for our employees.

Assessing our human rights impacts

In line with international human rights principles, our internal standards require our operations to conduct human rights impact assessments. We do this so that we appropriately identify, prevent, mitigate and account for potential adverse human rights impacts from our operations.

The level of due diligence required is informed by the human rights risk of country of operation, which we review by reference to external sources.

For medium to high risk countries (as determined by the Maplecroft index), we conduct a human rights impact assessment every three years, or more frequently if a material change has occurred to the operation or community. This assessment is completed by an independent provider, and annually reviewed to assess whether it needs to be updated.

For low risk countries, as a minimum expectation, we require each operation to complete a South32 human rights risk self-assessment, which is annually reviewed. If local concerns or material developments arise, additional human rights impact assessments are conducted.

These assessments include internal and external stakeholder assessments of our human rights practices and the extent to which our company policies, procedures and practices respond to international human rights governance standards. Should impacts be identified, we develop and implement appropriate remedial actions and controls.

Modern Slavery

'Freedom from slavery' is one of the most fundamental freedoms that applies to all people.

Our annual Modern Slavery Statement outlines our commitment to identifying and addressing any modern slavery in our operations and supply chain. Read more about our stance against modern slavery [here](#).

Human Rights and Responsible Sourcing

We require our Suppliers and all those we conduct business with to work in accordance with the same human rights standards and applicable laws as we do.

We are developing a company-wide Responsible Sourcing approach, which includes an integrated set of activities to identify and manage human rights risks in our supply chain.

For further information please read our:

- [FY19 Conflict Minerals Statement](#); and
- [Responsible Sourcing Plan within our FY18 Modern Slavery Statement](#).

Security and Human Rights

Making sure everyone goes home safe and well sits at the forefront of all we do at South32. Read more about our commitment to the Voluntary Principles on Security and Human Rights and our approach to human rights and security practices [here](#).

Speak Up

It goes to the heart of the way we do business, to ensure that any person can safely and freely raise concerns about adverse human rights impacts.

We encourage employees, individuals, suppliers and communities to raise concerns with us directly, through our complaints and grievances mechanisms at every operation.

For confidential concerns, we have an independent external platform "EthicsPoint" for any person to anonymously report concerns regarding potential breaches of our Code of Business Conduct, including concerns related to human rights.

Our Stance against Modern Slavery

'Freedom from slavery' is one of the most fundamental freedoms that applies to all people.

What is Modern Slavery?

Modern slavery refers to situations where one person takes away another person's freedom so that they can be exploited. 'Modern slavery' is an umbrella term, encompassing the offences of slavery, servitude, forced or compulsory labour, forced marriage and human trafficking.

Modern slavery is wholly unacceptable within our company and supply chain, and combatting it is a priority. With an estimated 40 million men, women and children living in modern slavery today (ILO and Walk Free Foundation), it affects almost every region and with increasingly globalised trade and interconnected supply chains, it affects most businesses.

Why do we focus on Modern Slavery?

We recognise the important role South32 can play in addressing modern slavery within our sphere of influence. Modern slavery is extreme criminal behaviour. Yet, why people end up in circumstances of modern slavery is tied to a multitude of complex and interconnected root cause issues such as inequality, discrimination, conflict, corruption, lack of education and inability to access justice.

At South32 we are committed to developing and implementing policies and procedures which aim to reduce the risk of modern slavery at our operations and in our supply chains. This includes providing human rights training and education as well as promoting safe pathways for vulnerable workers to access work opportunities, which can assist in addressing the root causes of modern slavery.

Modern Slavery Act Reporting

South32 actively supported the introduction of an Australian Modern Slavery Act, participating in parliamentary consultative processes and co-signing a letter in support of the proposed Bill to the Prime Minister alongside leading civil society organisations, investors and businesses. South32 has been reporting under the UK Modern Slavery Act 2015 for a number of years.

Addressing modern slavery is a journey of continual improvement at South32. Each year, our statements build upon the depth of our previous modern slavery work. Our annual reporting describes the work we invest in implementing effective systems, processes and capacity within our own organisation and supply chains to prevent modern slavery risks from occurring.

Read our Modern Slavery statements [here](#):

- FY18;
- FY17; and
- FY16.

We will continue to test the effectiveness of our approach, enhancing our actions and responses as we work towards best practice and helping to drive meaningful change for the individuals most affected by modern slavery.

Transparency

Without transparency, we wouldn't have the trust and respect of the communities we've been involved in, or the reputation we've worked so hard to build.

We want people to understand the positive impacts we have on the economies we operate in. That's why we go beyond reporting our annual taxes, royalties and other payments in our Tax Transparency and Payments to Governments report.

We also voluntarily report our commitment in several ways:

- We comply with all transparency requirements to do with our operations, which includes Chapter 10 of the European Union Accounting Directive, as well as the Australian Voluntary Tax Transparency Code and the Global Reporting Initiative (GRI) requirements;
- We financially support the Extractive Industries Transparency Initiative (EITI) through our membership with the ICMM;
- We include all payments to governments in our Tax Transparency report and publish this on our website; and
- We list all our subsidiaries, including their country of tax residency – which can be found in our 2018 Annual Report.

HEALTH

The health of our people and communities is of great importance to us. Governed by our internal standards, we implement and continually improve health controls to help us to avoid, mitigate and manage potential health impacts to our people and communities where we work.

Health risk management

Potential health risks at our workplace include potential exposure to carcinogenic substances (silica, diesel particulate matter, nickel, and coal tar pitch volatiles), other airborne contaminants (coal dust, fluoride, lead and manganese dust) and potential exposure to noise. Musculoskeletal disease and noise-induced hearing loss remain the most commonly reported occupational illnesses by our workers.

Our risk management framework is applied at all of our operations and includes a comprehensive evaluation of exposure risk. Where possible, we implement controls at the project design and equipment selection stages to prevent the introduction of identifiable new hazards. We prioritise implementation of exposure controls to manage health risks and our operations maintain, monitor and verify the effectiveness of exposure controls.

We set internal Occupational Exposure Limits (OELs) for our most prominent potentially harmful agents, and our operations are required to prevent exposure exceeding South32 and legislated OELs. If airborne levels exceed an OEL, respiratory protective equipment is mandated for those affected and we complete fit-testing to ensure the protection is adequate. Our continued focus on reducing the number of people exposed above OELs, by controlling emissions at the source has proven effective.

Fitness for work

We have Fit for Work programs across all operations to support our people physically and mentally perform their work tasks and not adversely impact their own, or their co-workers', health and safety.

Our Fit for Work programs include medical assessment, fatigue management and risk-based drug and alcohol programs. Medical assessments evaluate potential risks with the individual, the environment and their role. Interventions such as functional assessments are used to further define physical capability to safely perform tasks and can identify a need for physical rehabilitation or task redesign.

Our fatigue management plans and drug and alcohol programs are designed to minimise health impacts to our people through risk mitigation by reducing the likelihood of incidents, injury and illness at our operations.

Wellness

We recognise that a person's well-being can be related to factors both internal and external to the workplace. We undertake initiatives to help support our people to manage their own health and well-being so that when they are at work they can be present, alert and engaged. We provide all employees and their family members access to external employee assistance providers. These services support, guide and coach people to manage their own well-being. Mental health awareness and improvement projects are periodically undertaken by operations.

SAFETY

The most important commitment we all make at South32 is that everyone goes home safe and well.

Built on our internal safety standards and risk management system, we provide clear global expectations on how our operations can proactively identify and manage safety risk.

Since our company was created, the core focus for safety at South32 has been the creation of an inclusive workplace. This helps our people to speak up and share any concerns or ideas regarding safety. Our openness contributes to a learning culture and helps us work towards continuous improvement in everything we do.

An inclusive workplace also means all work is well designed, with continuous improvement to our systems and processes at all our operations.

Work is considered well-designed when potential causes of harm have been identified and the work is planned to reliably deliver safe and efficient outcomes. This is based on an assessment of the workplace, tools and equipment, processes and people. Controls are designed, implemented and verified as effective before work is started.

A strong focus on hazard and event reporting provides us with opportunities to learn. Beyond this, we're committed to investigations that identify corrective actions to reduce risk and improve safety performance. This has been demonstrated with increasing, effective use of our global event and risk management system for reporting, investigation and action management.

We promote safety behaviours and leadership through the training of our people. Effective training helps our people to be competent and have the right skills to safely carry out their work.

As a member company of the International Council on Mining and Metals (ICMM) we remain committed to upholding ICMM Principle 4, to implement risk management strategies based on valid data and sound science, and ICMM Principle 5, to seek continual improvement in health and safety performance.

Risk Management

Our risk management system enables us to identify and manage threats and opportunities. We use it to support the delivery of our business goals and act on our commitment to everyone going home safe and well.

We have simple risk processes, fit for purpose tools and intuitive technology. These combine to enable continuous and dynamic risk management activities. Our material risk management outcomes inform the key decisions that support the steady performance of our operations. Our focus on management of health and safety risk exposures helps us manage the wellbeing of our workforce through safe and sustainable practices on our sites.

We operate based on a 'three lines of defence model'. This provides regular assurance over our controls, driving reliable and sustainable risk management results.

Our internal safety standards

Delivering on our internal safety standards requires strong leadership, widespread engagement, effective management systems and a commitment to continuous improvement. Every day, we identify and manage safety risks by applying our principles of well-designed work.

Safety training

Ensuring our people and contractors are trained and competent for the work they do is essential to maintaining strong safety performance. Each of our operations systematically plans and delivers training so that people with the right skills and competencies are engaged in all work. This includes specific safety training so all our people have a strong understanding of the principles of hazard identification and risk management.

Leadership capability

Having leaders with the right skills and capabilities is critical to ensuring safety is effectively managed. Our leadership capability development program was first launched in FY17 and is focused on attracting, developing and retaining exceptional leaders.

Since its launch, more than 1,000 leaders have participated. The program includes:

- Review of individual skills and experience;
- Examining individual values and motivations;
- Delivery of our “Catalyst” inclusive leadership workshops; and
- Development of annual individual development plans.

We also want our leadership to be visible at the frontline. Our visible safety leadership approach requires our leaders, including our Lead Team, to regularly engage with the workforce. This helps set clear expectations and provides greater opportunities for improvement to be shared and acted on.

Emergency preparedness

We have a company-wide policy built into our safety standards to prepare for and respond to emergencies. This includes the development of Crisis and Emergency Management (CEM) Plans.

These plans are designed to help us deliver a well-coordinated emergency response. This includes protecting our people while minimising our impact on the environment and surrounding communities. Business continuity and recovery form part of the plan to mitigate significant operational loss.

We've had a strong focus on improving our standards and procedures for CEM across the business so that our operations, environments and host communities can be prepared for and protected from potential adverse events.

Along with detailed CEM plans, each operation has well-resourced emergency response teams and contingency arrangements to manage potential events.

Security practices

We engage dedicated and professionally trained security teams to protect our people and assets at our operations. By holding these security providers to high standards of conduct, we believe they can have a positive impact on local governance, peace and stability.

Globally, all our private security providers must operate consistently with the Voluntary Principles on Security and Human Rights (VPSHR).

In addition, our Africa-based private security providers must meet the requirements of the International Code of Conduct for Private Security Providers. These requirements are mandated in our internal standards which form part of our company assurance programs.

Our asset protection management standards acknowledge the importance of developing and maintaining good community relations as a part of successful security risk management.

ENVIRONMENT

Our approach

We work hard to be responsible stewards of the environment and treat natural resources with care so that they are available for future generations.

Successful environmental management is essential to our business. We have a comprehensive environmental management system, which includes our internal standards and reporting framework, which is assured through governance processes.

We take our commitment to reduce our emissions seriously and are actively planning and implementing energy efficiency and emission reduction projects. Further information on our Climate Change Strategy can be found in our report, [*Our Approach to Climate Change*](#).

Our environment-related data and management systems are subject to both internal and external assurance processes. These processes assist us to evaluate the efficacy of our management approach and we use findings to continuously improve. Within South32, responsibility for the environment sits in both functional and operational roles.

Water

Water is a valuable resource which requires increasingly careful management to ensure its availability and suitability for use by the whole of society. We all share our water resources and we are all responsible for them.

Biodiversity and land management

We have a fully integrated business planning process designed to protect ecosystems and minimise biodiversity impacts. This includes land management activities such as conservation of high biodiversity value areas, pre-clearance surveys and progressive rehabilitation.

Energy, emissions and air quality

We have a critical role in supplying the resources needed to create a lower carbon economy, in a way that creates and protects value for our stakeholders. This is a significant responsibility and presents opportunities as well as challenges.

Waste and tailings

We manage various waste streams from our operations including waste rock, waste water and tailings. We recognise the potential risks posed to communities, our workforce, the environment and shareholders from tailings and water retaining dams and remain committed to safe and responsible dam management.

Product stewardship

We are committed to implementing the ICMM Sustainable Development Framework, which encourages responsible design, use, reuse, recycling and disposal of our products along the supply chain.

ENERGY, EMISSIONS & AIR QUALITY

Energy

We regularly review our energy supply options to identify sustainable supplies and reduce our Greenhouse Gas emissions wherever possible. Energy costs represent a significant component of operational expenditures and a disruption in energy supply could have a direct impact on our production.

Consistent with the requirements of our environment standards, our business planning process considers energy use and identifies energy efficiency initiatives.

We have invested in energy efficiency initiatives and continue to support viable renewable energy schemes. We purchase hydro-generated electricity for TEMCO in Australia, Cerro Matoso in Colombia and Mozal Aluminium in Mozambique.

At our Metalloys manganese smelter in South Africa we have a co-generation plant that sources its primary energy from furnace off-gas, which is both cost-efficient and reduces our demand from the national grid. At TEMCO, we operate an energy recovery unit which creates efficiency by sourcing energy from furnace off-gas. Eskom is the state-owned power provider in South Africa supplying electricity to all of our Southern African operations (via Motrac for Mozal Aluminium).

Emissions

Our commitment to our Climate Change Strategy and focus on emission reduction continues. We are progressing towards meeting our short-term carbon emission reduction target, to stay below our FY15 Scope 1 emission baseline in FY21⁽³⁾.

We are committed to reviewing and ratcheting our carbon emissions reduction approach every five years from FY21 towards net zero carbon emissions by 2050. Any remaining (residual) emissions will form the basis of our carbon offset planning to reach the net zero goal by 2050.

Our minimum performance requirements for management of our emissions are detailed in our environment standards. These requirements include:

- Monitoring of all emission sources in accordance with applicable regulations or standards;
- Incorporating emission reduction initiatives into our business planning process; and
- Maintaining 'life of operation' emission forecasts that are inclusive of Scope 1 and Scope 2.

Emission reduction targets are included in our Business Scorecard. Performance against these targets is directly linked to all employee remuneration, including the Lead Team.

Air Quality

We continue to monitor and implement controls to minimise the potential impacts of dust, gaseous emissions and noise across our operations to remain within regulatory limits and address community concerns. We frequently conduct internal audits, verifications and assessments against our internal standards and legislation, and address potential non-compliances through action plans.

We regularly review our approach to air emissions to ensure we continue to mitigate potential impacts and manage our performance. We continue to support and actively engage in local airshed (air catchment area) forums and studies near our operations to help reduce the potential impact on our local communities and improve ambient air quality.

Examples of our involvement include the Collie Airshed Study in the south-west of Australia, which is within the airshed of our Worsley Alumina operation.

LAND & BIODIVERSITY

Biodiversity & Land Management

We have a fully integrated business planning process designed to protect ecosystems and minimise biodiversity impacts. This includes land management activities such as conservation of high biodiversity value areas, pre-clearance surveys and progressive rehabilitation. Information on our industry-leading, sustainability framework for land management, Intelligent Land Management, can be found [here](#).

Our business planning process includes biodiversity risk and opportunity analysis which is undertaken at the project planning and implementation phase.

Biodiversity considerations are part of our mine plans and, where possible, we seek to avoid impacts to sensitive features. To manage potential impacts, we collect biodiversity baseline activity and implement controls consistent with the biodiversity mitigation hierarchy (see Diagram 1).

We establish environmental outcome targets for biodiversity, developed on a two-yearly cycle, with the aim of contributing to enduring environmental benefits for important ecosystems.

Our environment standards align with the ICMM principles for sustainable mining and commitments for mining and protected areas, including the commitment to not mine or explore in World Heritage Areas and to respect legally designated protected areas. Our mitigation hierarchy process, illustrated in Diagram 1, aims to achieve no overall negative impacts on biodiversity. We seek to primarily avoid and minimise potential impacts, then rehabilitate areas no longer required for mining or processing operations. Where there are residual adverse impacts, we offset land to ensure that high value biodiversity land is protected from future disturbance.

We report annually on our land and rehabilitation performance, in our Sustainability Data Tables [here](#).

Diagram 1 Our mitigation hierarchy process



(3) The carbon emission reduction target is based on absolute, Scope 1 carbon emissions and in the event of any mergers, acquisitions or divestments the FY15 baseline will be recalculated.

Managing material biodiversity-related risk

For operations with a biodiversity-related material risk, we undertake a detailed biodiversity assessment that includes the potential impact from the disturbance footprint, cumulative impact assessment and climate modelling specific to the risk. Controls are developed and implemented that align with regulatory requirements and reduce the biodiversity risk consistent with the mitigation hierarchy (Diagram 1, above).

Rehabilitation

Through effective rehabilitation programs, we aim to restore similar ecosystem services where we operate, including supporting projects which provide resilience to climate change impacts.

Where possible, to minimise our operational impacts, we perform progressive rehabilitation activities in parallel with our mining activities. We do this by integrating rehabilitation into the mine planning process and ongoing operations.

By including rehabilitation as part of the mine plan we benefit from operating efficiencies, leading to a reduction in costs and improved environmental outcomes. For example, equipment that is not fully utilised for mining can be used to undertake rehabilitation. Progressive rehabilitation ensures a well-planned and tracked process that continually establishes biodiversity values and prevents soil erosion.

We also have extensive programs designed to monitor the performance of our rehabilitation against specific approved performance criteria.

PRODUCT STEWARDSHIP

As our main activities are resource extraction and primary processing, our involvement is at the beginning of the product life cycle.

Through our management systems and internal audit processes, we assess, prevent or mitigate potential environmental, health and safety risks to our people and communities. This ensures that the resources we produce are properly managed when in our control and we work with other stakeholders in the supply chain to promote responsible use of our products after they have left our control.

Safety Data Sheets (SDSs) and labels are used to communicate current, complete and accurate information to all stakeholders in our supply chain. The SDSs outline the products' health, safety and environmental aspects to allow their safe and responsible use. For products where chemical safety assessments are required by law, we also supply exposure scenario information to our customers, which covers risk management measures for the identified uses of our products.

We are engaged across commodity associations relevant to the products we produce.

We contribute to the collection of life cycle data as part of the Nickel Institute's life cycle management program. This data comprises all process inputs and outputs required to assess the environmental performance of our nickel production plants and products. The lifecycle data will measure the improvements made in energy efficiency, reduction of greenhouse gases and emission reduction into both air and water. The data will be shared with our customers who, in turn, can incorporate into their own life cycle assessments to help calculate the environmental performance of their nickel-containing products.

Through our membership of the International Aluminium Institute, we aim to promote the use of aluminium in sustainable applications. Additionally, we are a member of the Manganese International Institute. For products we sell into the European Union under the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulation, we conduct annual REACH regulation training and compliance reviews.

Water

We acknowledge the human right to water access and use a catchment-based approach to our water planning which considers all relevant stakeholders.

Water availability is being affected by a combination of climate change, population growth, infrastructure planning and land use change. We are working with our communities and other stakeholders to achieve water security for our operations and address water issues within the catchments where we operate.

We have a holistic approach towards water management centred on promoting better water use, effective catchment management and improved water security, working towards catchment-level water stewardship. This is achieved by:

- Maintaining water balances for all operations;
- Maintaining water resource forecasts in our business planning process; and
- Undertaking water resource risk and opportunity analyses, which considers both operational and broader catchment aspects.

We recognise the significance of water-related risks to our business and to the community. We are shifting the way we think about water to a long-term, catchment-wide planning approach integrated across all areas of our business.

To achieve water security for our operations, and address potential water issues within the catchments where we operate, each operation is required to carry out a water risk and opportunity analysis process every two years. A pre-screening tool captures water-related information for every operation. A multidisciplinary team then analyses the information to identify any water-related risks and potential opportunities that would benefit the operation and the broader catchment area.

Four of our operations (Mozal, Illawarra Metallurgical Coal, South Africa Aluminium & Worsley Alumina) have water-related material risks which we continue to manage, more information can be found [here](#).

ICMM Position Statement on Water Stewardship

As a member of the International Council on Mining and Metals (ICMM), we were pleased to play a role in the development of the Council's Position Statement on Water Stewardship. We are committed to meeting its goals, and have updated our internal standards & processes strengthening our approach to water stewardship including:

- Strong and transparent corporate water governance;
- Effective water operations management; and
- Working with others to achieve responsible and sustainable water use.

One of the key commitments of the Position Statement is to set context-based targets or objectives. We are committed to establishing these for our operations with material water-related risks. The term 'context-based' acknowledges that local risks and considerations are specific to each water catchment, as are the timeframes to implement actions.

TAILINGS

We recognise the potential risks Tailings Storage Facilities (TSFs) present to our people, our communities, the environment and shareholders and are committed to the safe and responsible management of our TSFs.

Read more [here](#).

WASTE

Waste materials can contain potentially hazardous chemical or physical properties. We are exploring ways to generate value from materials previously classified as waste, while also mitigating potential environmental and financial legacy impacts. We have commenced research to identify the best remediation and rehabilitation strategies at some of our operations. The outcome of this research will be integrated into our operations' planning processes and will inform our [Closure Plans](#).

INTELLIGENT LAND MANAGEMENT

Intelligent Land Management (ILM) is a framework for land management designed to transform land holdings which are currently unused or subject to rehabilitation into areas that increase climate resilience and generate shared financial, social and environmental value.

Our ILM framework below represents a considerable maturity in the way we perceive and generate value for our stakeholders and is an acknowledgment of our industry's accountability for socio-environmental stewardship and landscape level planning for the life of an operation and beyond.

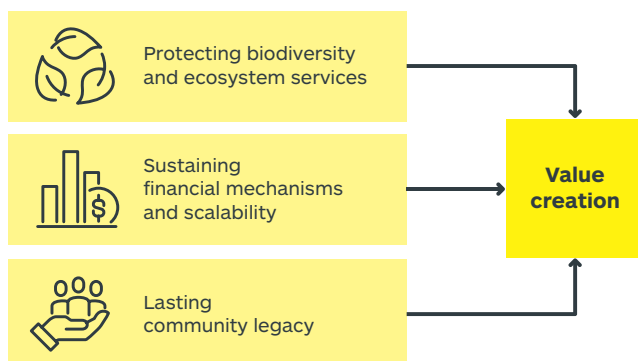
Project selection for ILM initiatives is comprehensive and requires a broad outlook of both internal and external operating environments as well as considerable stakeholder engagement.

Our Strategic Land Assessments (SLAs) form the backbone of project development and include:

- Analysis on land availability and compatibility;
- Opportunity mapping to support the business, the environment and society; and
- Internal and external context analysis.

SLAs will roll out across all of our operations over time.

ILM follows the guiding principles as set out below.



Closure Management

One hundred per cent of our operations have Closure Plans, integrating the ICMM closure toolkit. We regularly review all potential closure risks to retain value for future generations. The guiding principles that support our closure planning are fit for purpose, consistent with regulatory requirements and fully integrated into our business planning cycle.

All Closure Plans include closure criteria and land use options, as well as current and future shared economic, environmental and social value. This includes requirements for rehabilitation of disturbed areas, decommissioning infrastructure, remediation of contaminated sites, disposal of waste and monitoring of effectiveness. Consideration is also given to economic transitions and sustainable communities, especially where we have a significant presence in the region.

Our Closure Plans provide the basis for closure cost estimates and associated financial provisions. Further information on our closure provisions can be found [here](#).

Climate Change

The impacts of climate change are increasingly being felt around the world: weather patterns, regulations and laws and people's expectations are all changing. We're working to manage climate change risks, and we're committed to the effort to reduce carbon emissions to avoid our shared earth warming, as agreed to by nations participating in the Paris Agreement of 2015.

Our climate change [response](#) is fully aligned with the United Nations Framework Convention of Climate Change (UNFCCC) actions, the Intergovernmental Panel on Climate Change (IPCC) scientific reports and national legislation.

Our Climate Change strategy is built on three focus areas:

1. Climate Change Opportunity – We aim to make a difference by developing natural resources, improving people's lives now and for generations to come. So that the commodities we produce, remain in demand, in a world limited to 2 degrees or less of global warming, we:
 - a. Commit to continuing to provide the raw materials that support climate action and enable the transition to a lower carbon future. We have chosen not to develop any new greenfield energy coal basins.
 - b. Work in partnership with green finance providers to create long-term benefits to society and the environment.
2. Climate Resilience – To work toward climate resilience for our host communities and operations, we need to understand and respond to the physical impacts of climate change, including changed weather and temperature. We will:
 - a. Implement Intelligent Land Management (ILM) so that land holdings are used to create enduring social, economic and environmental value through projects such as water and biodiversity conservation.
 - b. Incorporate climate change modelling in our planning and investment decisions to ensure the communities we work in and our operations are more resilient to changes in rainfall, temperature and extreme weather events.

3. Emission Reduction – We must all work to reduce the amount of carbon released to the atmosphere if we are to avoid the worst impacts of climate change.
 - a. Our short-term carbon emission reduction target is to stay below the baseline established in the 2015 financial year, our first full year of operation, through to 2021⁽⁴⁾.
 - b. We will review our emission reduction approach every five years from 2021, in line with IPCC updated scientific reports, to ensure we make a pragmatic and affordable transition toward the global goal of achieving net zero carbon emissions by 2050.

Carbon Pricing

We believe that carbon pricing is an effective mechanism to support global emission reduction. We support carbon pricing that is globally competitive and broad-based, covering all industry sectors and all possible emission sources. We would like to see the revenue raised from carbon pricing used to support the transition to a low carbon future.

Every year we complete a global carbon price forecast, and we apply a regionally specific price on carbon in our valuations, planning and capital expenditure decisions. This ensures that over time we are prepared for carbon pricing and can make decisions today that lower our emission profile long-term.

(4) The carbon emission reduction target is based on absolute, Scope 1 carbon emissions and in the event of any mergers, acquisitions or divestments the FY15 baseline will be recalculated.