

ENVIRONMENT AT SOUTH32

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Metrics describing health, safety, environment and community (HSEC) performance apply to "operated assets" that have been wholly owned and operated by South32, or that have been operated by South32 in a joint venture operation, from 1 July 2016 to 30 June 2017 (FY17). South32 aligns to the International Council on Mining and Metals (ICMM) Sustainable Development Framework and we report our sustainability information in accordance with the Global Reporting Initiative (GRI) G4 'Core', including the GRI Mining and Metals Sector Disclosures. The GRI Navigator and Sustainability data tables are available on the South32 website at <u>www.south32.net</u>. KPMG has provided independent assurance on South32's sustainability information, as presented on South32's <u>website</u>.

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ENVIRONMENT

We strive to be a responsible steward of the environment and treat natural resources with care so they are available for future generations.

Successful environment management is essential to our business. We have a comprehensive environmental management system and our Sustainability Policy states our commitment to sustainable development, which includes our internal standards and reporting methods and is assured through our governance processes. Our Climate Change Strategy addresses three avenues: opportunity, mitigation and resilience. Our emission reduction projects and energy studies will help reduce our emissions contribution to climate change. Our Intelligent Land Management (ILM) initiatives are integrated projects that deliver economic, social and environmental value to stakeholders, including future generations, and the natural environment. Further information on our Climate Change Strategy can be found in our report, 'Our Approach to Climate Change', which is located at <u>www.south32.net</u>.

WATER

Water is a shared and valuable resource that needs to be managed responsibly at the catchment level. Changing weather patterns linked to climate change, in addition to population growth and land use change, may have the potential to affect water availability for all users in susceptible catchment areas. Other water catchments may experience water variability and oversupply. We are working to achieve water security for our operations, in consultation with our stakeholders, to address water issues within the catchments where we operate.





South32 supports the United Nations (UN) Sustainable Development Goals (SDGs). The United Nations 2030 Agenda for Sustainable Development defined 17 SDGs in September 2015 that seek to address the world's greatest challenges. The SDGs build on the work undertaken through the Millennium Development Goals but have a greater focus on the involvement of the private sector. South32 plans align with the SDGs. The key to a successful result is working with stakeholders to develop and implement actions that contribute to sustainable development.

Our stewardship of the environment contributes to several Sustainable Development Goals.

6 CLEAN WATER AND SANIFATION	SDG6: Clean Water and Sanitation	13 CLIMATE	SDG13: Climate Action
7 AFFORDABLE AND CLEANENERGY	SDG7: Affordable and Clean Energy	15 UFE ON LAND	SDG15: Life on Land
11 SUSTAINABLE CITIES	SDG11: Sustainable Cities and Communities	17 PARTNERSHIPS FOR THE GOALS	SDG17: Partnerships for the Goals
12 RESPONSELE CONSUMPTION AND PRODUCTION	SDG12: Responsible Consumption and Production		

ICMM POSITION STATEMENT ON WATER STEWARDSHIP

In January 2017, the International Council on Mining and Metals (ICMM) released a position statement outlining additional water stewardship commitments for all member companies, including:

- Apply strong and transparent corporate water governance
- Manage water at operations effectively
- Collaborate to achieve responsible and sustainable water use

As a member company, we contributed to the development of this position statement and are committed to its implementation at our operations.

We have completed a gap analysis to identify opportunities to improve our water management practices across our operations. This analysis has led to the implementation of several improvement initiatives, including updating our company standards and processes to further strengthen our approach to water stewardship.

MANAGING MATERIAL WATER-RELATED RISKS

The assessment of impacts and water-related risks are managed through our risk management framework and we work to reduce these risks through planning and capital allocation processes.

Our planning process screens our operations for potential exposure to water supply and variability risks using the World Resources Institute (WRI) Aqueduct Tool. Operations assessed as potentially being at risk of either water availability or variability are being scenario tested using climate change modelling to better understand the risk and to determine the long-term implications for the business and the wider catchment.

Worsley Alumina in Australia has experienced a water shortage due to significant changes in precipitation patterns in recent years. In response, in FY17 we completed construction of a new water supply pipeline to a local third party surface water (non-potable) source to secure an adequate water supply in the short to medium-term. Long-term water supply solutions continue to be investigated. At our Hillside aluminium smelter in South Africa we constructed a desalination plant to address water shortages resulting from drought. With access to water through this plant, we no longer need to rely on the shared community water resources. The construction of this plant was supported by the local community, municipality and other stakeholders within the Richards Bay industrial zone, as well as the local water authority and the Department of Water and Sanitation. The plant is also able to supplement the municipal water supply in times of critical shortage.

Mozal Aluminium in Mozambique experienced water shortages during FY17. As a short to medium-term solution we have leased a desalination plant. A study to investigate alternative long-term water supply options has commenced.









At Illawarra Metallurgical Coal in Australia, we continue to work with stakeholders to better understand and manage potential impacts on the local water catchment area from our underground mining activities. We recognise the value of the catchment area and its role in the region's water supply network. We have undertaken comprehensive environmental assessments and made predictions of impact based on longitudinal scientific data, which we share with our stakeholders. We will continue to operate in accordance with the Sydney water authority approved management plans that are designed to mitigate all potential impacts.

WATER PERFORMANCE

South32 reports its water data according to the Minerals Council of Australia's Water Accounting Framework (WAF). The WAF is the accepted industry water accounting standard and aims to improve data integrity and comparability across the sector to ensure the continuous improvement of water reporting.

Under the WAF, water is categorised as Type 1 (close to drinking water standards), Type 2 (suitable for some purposes), and Type 3 (unsuitable for most purposes). In FY17, our Type 1 water input increased by 9%, compared with FY16.

In FY17 we paid two fines, totalling US\$128, for minor water quality breaches in the Africa region. These events were investigated and further controls were implemented to prevent recurrence. No further action was taken by regulators.

CASE STUDY

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Desalination plant at Hillside aluminium smelter, South Africa

In FY16, the Department of Water and Sanitation placed a requirement for industry to reduce water consumption by 15 per cent within the municipality of uMhlathuze. Water supply was identified as a material risk and solutions to mitigate this risk were investigated. The desalination of seawater was identified as the preferred alternative as it will not only supply adequate water to Hillside operations, it will also be able to supplement the municipal water supply in times of critical shortage.

The ZAR75-million plant, which was completed in FY17, is a fully containerised modular desalination plant using membrane technology to produce process water for the Hillside aluminium smelter.

The plant draws water from an existing abstraction point in the Richards Bay Harbour. A 2.3km long High Density Polyethylene (HDPE) pipeline delivers the seawater to the plant at the smelter. The plant has an output capacity of two megalitres per day of process water, which is enough water to supply our operation.

With the collaboration from the Department of Economic Development, Tourism and Environmental Affairs, Foskor, uMhlathuze Water and the Municipality, the project was completed within 28 weeks from inception and concept to final delivery.



South32 has a fully integrated business planning process, which includes land management activities from pre-clearance to rehabilitation. The aim of this approach is to minimise biodiversity impacts. Through effective rehabilitation programs, we aim to restore similar ecosystem services where we operate, including supporting projects which provide resilience to climate change impacts.

Land disturbance from the extraction of minerals, processing and management of waste have the potential to impact biodiversity and ecosystems. To manage this potential impact, we have created standards which require the collection of biodiversity baseline activity and put in place controls that are consistent with the biodiversity mitigation hierarchy. Our hierarchy process aims to avoid first, minimise second, rehabilitate third and, lastly, to offset residual environmental impacts. Biodiversity considerations are part of our mine plan and, where possible, we seek to avoid impacts to sensitive features. We also undertake biodiversity off-setting to ensure high biodiversity land is protected from disturbance.

In accordance with our ICMM Mining and Protected Areas position statement, we have committed to respect legally designated protected areas and not mine or explore in World Heritage Areas.

REHABILITATION

In FY17, we cumulatively rehabilitated 40 per cent of the land we have disturbed. To minimise our operational impacts and footprint we perform our progressive rehabilitation activities at the same time as our mining activities. We do this by integrating rehabilitation into the mine planning process. By treating rehabilitation as part of the mine plan, rather than a separate activity, 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, instead of sitting idle, can be used to undertake rehabilitation. Progressively rehabilitating the environment at the same time as we mine establishes biodiversity value and prevents soil erosion.



We also have extensive monitoring programs to ensure that the performance of our rehabilitation meets approved completion criteria, which is developed in conjunction with regulators.

LAND AND REHABILITATION PERFORMANCE

In FY17, we rehabilitated a total of 729 hectares, increasing our total rehabilitated area to 15,144 hectares. This is compared to a total disturbed footprint of 23,028 hectares. We also continue to support conservation, with a total of 2,107 hectares of our land currently set aside for conservation.

CASE STUDY

Update on wetland offsetting in South Africa

Wetlands are the link between land and water and are some of the most productive ecosystems in the world. They are important because they protect and improve water quality, provide wildlife habitats, store floodwaters and maintain surface water flow during dry periods.

The conservation of wetlands is an important part of our South African mining projects. As part of our recent mining applications for the Klipspruit Life Extension Project, we developed a wetland offset strategy. Detailed designs have been developed to mitigate any wetland losses that may result from the project during the first five years of mining. The designs focus on remediation efforts that could enhance flow within the remaining wetlands onsite, mitigate erosion and remove invasive species. This contributes to the overall conservation target, which is selected through assessments on biodiversity and wetland health.



CASE STUDY

Technology enabling better rehabilitation performance

During FY17, we commenced field trials using drones to collect rehabilitation performance information at Worsley Alumina. By combining remote sensing techniques with traditional survey methods we have been able to increase the frequency of data collection, which provides a more accurate picture of our activities. This will enable us to plan our rehabilitation performance on a landscape-wide basis and develop an integrated rehabilitation monitoring program.

We have also progressed reviews of the rehabilitation completion criteria at both Worsley Alumina and GEMCO to ensure rehabilitation works are aligned with legal and closure commitments. The outcomes from the drone trials will form part of the reviews, which are due to be completed in FY18.



INTELLIGENT LAND MANAGEMENT

Intelligent Land Management (ILM) is a complete land management program designed to transform land into areas that increase climate resilience and generate shared financial, social and environmental value. As a large land-holder we are in a unique position to use this land intelligently to create climate change resilience. This has benefits for our host communities, for biodiversity and for our operations in the long-term. In FY17, two ILM projects were initiated across South32.

" ILM is designed to transform land into areas that increase climate resilience and generate value."

CASE STUDY

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ILM at the Chrissiesmeer Project in Mpumalanga, South Africa

South32 provided ZAR1 million to the Endangered Wildlife Trust (EWT) so that they could continue their work within the Chrissiesmeer area in South Africa. The funds help farmers and land owners manage the wetlands by controlling the introduction of invasive species. EWT provide broader education and awareness programs to ensure the importance of wetlands is understood.

In FY17, the South32 and EWT partnership undertook the following initiatives:

- South32 staff volunteers assisted in completing wildlife surveys and supported annual tourism events such as the local Crane Festival
- Established and maintained a number of community and school vegetable gardens in the Chrissiesmeer and Lothair areas
- Hosted seventeen Grade 6 students from Chrissiesmeer Primary School at one of the Chrissiesmeer Protected Environment (CPE) farms on World Wetlands Day, where they were taught the role wetlands play in our ecosystem as well as how we can secure and protect them.



CASE STUDY

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ILM at Illawarra, New South Wales, Australia

A bio-banking scheme was developed by the government of New South Wales to address the loss of biodiversity values, including threatened species from habitat degradation and loss. Land managed under this scheme generates credits. These credits can be sold to offset impacts or invested in conservation.

In FY17, we contributed 84 hectares of our land that contains critically endangered ecological communities and species, such as the koala, to conservation in perpetuity. As part of the bio-banking scheme, biodiversity credits were established through a market based incentive to provide financial security for conservation of the property in perpetuity.

This is the first step across 163 hectares of our land that is earmarked for conservation in the Illawarra region. This will help re-establish threatened ecosystems and assist in protecting endangered populations of species across the southern Sydney Catchment of New South Wales.



EMISSIONS

We are focused on reducing our emissions as part of our climate change strategy. Our short-term emission reduction target is to stay below our FY15 Scope 1 emission baseline in FY21. We will review our emission reduction approach every five years from 2021, with a view to increasing ambition in keeping with Intergovernmental Panel on Climate Change (IPCC) updated scientific reports, technological advances and national regulatory changes. In line with the Paris agreement ratchet mechanism, whereby signatories to the agreement submit new emission reduction targets every five years, we intend to make a pragmatic and affordable transition toward the global goal of achieving net zero emissions by 2050.

Our emission reduction targets are linked to all employee bonus payments and incentives, including at an executive level. We commit to meet any gaps between our actual emissions in FY21 and our stated targets by purchasing carbon offsets.

During FY17, we continued to explore and implement abatement initiatives across the Australia and Africa regions.

GREENHOUSE GAS EMISSIONS PERFORMANCE

Our emissions are from within our boundaries (Scope 1), indirectly from energy purchased (Scope 2) and indirectly from our value chain (Scope 3). We monitor and report on our Scope 1 and 2 emissions as per our reporting standard, operation specific atmospheric emissions licences, as well as countryspecific regulatory requirements, for example the National Atmospheric Emissions Inventory System (NAEIS) in South Africa and the National Greenhouse and Energy Reporting Act 2007 (NGER) in Australia. In FY17, our Scope 1 and Scope 2 emissions totalled 22.6 million tonnes of carbon dioxide equivalent (CO₂-e). This is a reduction in emissions of three per cent or 748 kilotonnes (kt) of CO₂-e compared to FY16, which is better than target within our Sustainability Key Performance Indicators (KPIs). Emissions decreased due to improved consistency of operations at Mozal aluminium smelter, a greater proportion of renewable energy in the national grid at Cerro Matoso, and reduced production at Illawarra Metallurgical Coal.

Our Scope 1 greenhouse gas emissions decreased by four per cent in FY17, to 10,601 ktCO₂-e. We, therefore, continue to progress towards our target of staying below our FY15 Scope 1 emission baseline in FY21.

We have calculated the indirect emissions from certain sources in our value chain (Scope 3) for the first time in FY17, which equates to 125 million tonnes of CO_2 -e. A detailed breakdown of our emissions performance, including the Scope 3 calculation methodology, is published at <u>www.south32.net</u>.

CASE STUDY

Cerro Matoso reducing emissions

At our Cerro Matoso operation, we implemented a series of projects aimed at reducing the consumption of fossil fuels. Initiatives have included improved efficiency of the kilns and dryers resulting in reduced gas consumption and energy requirements, vehicle fleet optimisation which has reduced gasoline consumption, and optimisation of coal consumption in the kilns which has reduced coal consumption. These improvements have resulted in a four per cent reduction in Scope 1 emissions at the operation, equating to approximately 25kt CO₂-e.



AIR QUALITY

We continue to monitor and implement controls to minimise the 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 standards and legislation. Action plans are developed to address potential non-compliances. We did not receive any fines in relation to noise, gaseous or dust emissions during FY17.

We also support and actively engage in local airshed (air catchment area) forums and studies near our operations to help reduce the 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 catchment of our Worsley Alumina operations.

In FY17, we emitted 39kt of oxides of sulphur, a six per cent increase compared to FY16, and 10kt of oxides of nitrogen, a three per cent increase compared to FY16.



CARBON PRICING

We believe that carbon pricing is an effective mechanism to efficiently reduce carbon emissions. We support carbon pricing that is globally competitive and broad-based, covering all industry sectors and all possible carbon emission sources. We would like to see the revenue raised from carbon pricing used to support the transition to a low carbon future. We review our forecast of the global carbon price annually and apply specific regional carbon prices in our valuations, planning and capital expenditure decisions. This ensures that over time, we make decisions that help us avoid carbon pricing risks. We recognise that policies need to be introduced to address climate change. We support policy that helps us meaningfully transition to a low carbon economy because sharp policy change to avoid climate change and the cost of inaction is likely to impact greater value for shareholders in the long-term.

In FY17, we participated in the South Africa Carbon Budget Pilot Study as part of progress towards the introduction of a carbon tax. The Study involves defining a consistent and robust process for the continuous improvement of energy and greenhouse gas emission reductions at the operations, as well as reporting for benchmarking purposes.

Colombia implemented a carbon tax in FY17 which included our Cerro Matoso operation. We support this mechanism and have recently purchased offsets through its implementation.

ENERGY

We regularly review our energy supply options to identify sustainable supplies and to 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.

We have invested in energy efficiency initiatives and continue to support viable renewable energy schemes. We purchase hydro-generated electricity for TEMCO in Tasmania, Australia, Cerro Matoso in Colombia and for Mozal Aluminium in Mozambique. At our Metalloys operation in South Africa, we have a co-generation facility that sources its primary energy from furnace off-gas, which increases energy efficiency.

In South Africa, we have participated in industry-wide energy efficiency initiatives such as the National Energy Efficiency Accord. The Accord aims to improve industrial energy efficiency and voluntarily reduce load demand in peak periods. Eskom is the state-owned power provider in South Africa supplying electricity to all our operations. The FY17 power supply has been stable, with minimal load-shedding events and no voluntary reductions in power usage.

ENERGY PERFORMANCE

In FY17, 37 petajoules of energy were generated from renewable sources, which equates to 21 per cent of our total energy use of 174 petajoules.

CASE STUDY

Reducing emissions at Illawarra

At our Illawarra Metallurgical Coal operations, a third party utilises our excess gas for energy generation. Excess methane that is unable to be consumed by this facility is directed through four flaring units which reduces the global warming potential of the gas by 25 times. The flaring units are registered under the Australian Government's Emissions Reduction Fund and has resulted in a gross emissions abatement of 321 ktCO₂-e during FY17.

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CASE STUDY

Alternative energy sources

At Worsley Alumina, we developed a plan to use biomass as an alternate energy fuel for the Multi Co-generation Facility (MFC), which is located at our refinery. A trial will commence in FY18 to determine the feasibility of integrating biomass as a permanent addition into the operational fuel mix. Outcomes of the trial will be analysed during FY18. If viable, we would look at how to implement energy produced from biomass on a permanent basis. We are seeking accreditation under the Renewable Energy Target Scheme (RET) by the Clean Energy Regulator. This will allow Worsley Alumina to create and sell Large-scale Generation Certificates (LGCs).



CLOSURE

To ensure value is retained for future generations, we make decisions today that contribute to a better tomorrow. The guiding principles that support our closure planning are fit for purpose, consistent with regulatory requirements and fully integrated into our business planning cycle.

Closure Plans are maintained for each operation which address closure criteria and land use, 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, treatment and disposal of wastes, land use options, and post closure monitoring and management. Consideration is also given to economic transitions and sustainable communities, especially where we have a significant presence in the region.

These closure plans provide the basis for the closure cost estimates and associated financial provision. Further information on our closure provision can be found in note 15 on page 132 of the financial statements in the 2017 Annual Report, which is on our <u>website</u>.



WASTE

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We manage various waste streams from our operations including waste rock, waste water and tailings. Waste materials can contain potentially hazardous chemical or physical properties. We manage and report our performance on waste in accordance with company standards and applicable legislation. We are exploring ways to generate value from materials previously classified as waste, while also mitigating 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 provide information for our closure plans.

CASE STUDY

Cerro Matoso creating value from waste

Cerro Matoso in Colombia has identified that there will be insufficient topsoil to rehabilitate the final disturbed footprint at the end of the operation's life. To mitigate the requirement of increasing disturbance areas in the sourcing of suitable material, Cerro Matoso has partnered with Cordoba University to investigate alternatives. The partnership has resulted in an innovative approach of mixing previously classified waste materials from the mine, refinery and smelter, and developing this into a soil substitute. Following 15 years of rehabilitation research, in-field trials commenced in 2015 and have already yielded positive results with plant growth and stabilisation of slopes, with further expansion ongoing. The results of this study will inform the life of operations plan, the closure plan, and the rehabilitation strategy.



CASE STUDY

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Metalloys creating value from stockpiled material

After many years of studies and working with international experts from the International Manganese Institute (IMnI), Metalloys alloy smelter in South Africa began to further beneficiate downstream slag material in FY17. We have commenced a 12-month trial to test the market for the use of the slag material and the first few months have demonstrated potential in brick-making and related industries. This creates value through remediating slag stockpiles, as well as community job creation and industry diversification.



TAILINGS

We own, construct and operate dams, including tailings dams, at most of our operations. We assess the risks for each dam, taking into consideration the materials contained, the location, and other factors. We identify and put in place the most appropriate failure prevention mechanisms and controls required to manage the risk for each dam. We actively monitor and manage our tailings dams.

Controls include monitoring and maintenance. This involves regular checks of any monitoring equipment to ensure it is functioning as designed, monitoring the nature of the tailings deposition and the liquid levels, as well as monitoring the integrity of the tailings dam structure itself. Maintenance includes keeping tailings pipelines and water reclamation systems in good repair, and monitoring water levels in embankments' fill and foundation, to make sure they meet safety and environmental requirements.

We regularly audit the governance frameworks of our dam structures to confirm the correct monitoring and maintenance activities take place and that regulatory requirements are being met. The results of these audits and reviews are reported to the Sustainability Committee of our Board as part of our material risk management processes. All our dams are carefully managed and monitored. Our large tailings dams are located at:

- Worsley Alumina refinery in Australia
- GEMCO in Australia
- Cannington in Australia

Our voluntary reviews in FY17 confirmed that the management of our dam structures is adequate.

During FY17, ICMM released their position statement on preventing catastrophic failure of tailings storage facilities. In response, we developed an internal standard that implements the position statement aspects such as competencies, planning, construction requirements, emergency preparedness and governance. This will ensure that all our tailings dams and water holding structures are operated in accordance with the position statement.



CASE STUDY

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South32 part of ICMM's tailings position statement development

South32, as a member company of the ICMM tailings working group, has endorsed and fully supports the position statement on *preventing catastrophic failure of tailings storage facilities*, which was released in December 2016. This includes committing to:

- Clear accountabilities, responsibilities and competencies to support the identification and management of tailings risks
- An appropriate level of planning and resourcing to support management of, and governance over, the tailings footprint over the facilities life cycle
- Robust risk assessment, change management and emergency response processes in place
- Assurance mechanisms in place to ensure that tailings risk are comprehensively assessed and continually improved

PRODUCT STEWARDSHIP

As an ICMM member, we have committed to implementing the ICMM Sustainable Development Framework, which encourages responsible design, use, reuse, recycling and disposal of our products along the supply chain.

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 (SDS) and labels are used to communicate current, complete and accurate information to all stakeholders in our supply chain. The SDS 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, that covers risk management measures for the identified uses of our products.

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

In FY17, as part of the Nickel Institute's working group to promote and support the use of nickel in appropriate applications, stakeholders from South32 contributed to creating a Life Cycle Inventory (LCI) for the Nickel production process. This process identifies all relevant inputs and outputs per unit of production and is the first and essential step in the Life Cycle Assessment. The nickel LCI data will be incorporated into life cycle assessments of products which contain nickel. This will allow any potential impact on environments and human health to be assessed and managed.

Through its membership of the International Aluminium Institute (IAI), South32 aims to promote the use of aluminium in sustainable applications and through recycling. Additionally, we are an active member of the Manganese International Institute (IMnI).

We have conducted annual training and a full compliance review for the products we sell into the European Union under the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulation. The outcomes of this included ensuring all REACH communication is stored and that SDS are provided to customers biennially.

CASE STUDY

Improving commodity shipping

Our Marketing team based in Singapore regularly participate in the International Maritime Organisation sub-committee meetings on carriage of cargoes and containers. To address the safety of the ship, seafarers and the cargo, the International Convention for the Safety of Life at Sea (SOLAS) requires that packed containers' gross mass is verified prior to stowage on board the ship. This SOLAS amendment came into effect on 1 July 2016. South32 operations using containers to export product are all compliant to SOLAS, adhering to the national standards identified by the competent authority for weighing device accuracy. The verified gross mass information is included in the shipping documents used by the ship's captain or their representatives in preparing the ship's stowage plan.

We are part of a global industry initiative aiming to develop a new transportable moisture limit test method for bauxite. This considers the physical and chemical properties of the product, ensuring safer transportation.

For shipping, failure to comply with the International Maritime Solid Bulk Cargoes (IMSBC) code for the safe transportation of solid bulk cargoes which have a potential to liquefy, is a material risk because if a product changes consistency when on board, the vessels' stability can be compromised. To mitigate this risk, we conduct an annual assessment of our moisture management procedures to implement controls and provide assurance that our products will not liquefy when on board a vessel. During FY17 we completed a thorough risk review to understand the controls we have in place and ensure we are compliant.



Our purpose

Our purpose is to make a difference by developing natural resources, improving people's lives now and for generations to come. We are trusted by our owners and partners to realise the potential of their resources.

Our strategy

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Our business strategy is to invest in high-quality metals and mining operations that allow our distinctive capabilities and regional model to stretch performance in a sustainable way. By maintaining financial discipline, we will deliver sector leading total shareholder returns.

We will continue to:

- Optimise the performance of our existing operations
- Unlock their potential by converting high value resource into reserve
- Identify new opportunities to compete for capital

Our values

Care

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Trust

We care about people, the communities we're a part of and the world we depend on.

We deliver on our commitments and rely on each other to do the right thing.

Togetherness

We value difference and we openly listen and share, knowing that together we are better.

Excellence

We are courageous and challenge ourselves to be the best in what matters.



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