ALUMINA LIMITED

SUSTAINABILITY

Update 2017

Contents

Welcome to Alumina Limited's 2017 Sustainability Update. This report is prepared to provide the reader with a description of the economic, social and environmental performance of Alumina Limited's joint venture investment in AWAC (Alcoa World Alumina and Chemicals), our global joint venture with Alcoa, the manager/operator of the AWAC operations.

This update supports Alumina Limited's commitment to report on non-financial performance as outlined in our sustainability policy and our commitment to high-levels of transparent disclosure. It is designed for review by all stakeholders in Alumina Limited though more especially for the investment community including institutional and retail shareholders who are interested in the long-term sustainability of Alumina Limited.

The report concentrates on the sustainability impacts of the AWAC business. The aim of the report is to give easy access to consolidated information about AWAC's sustainability performance and lead to greater understanding about the quality and value of these assets.

About this Report

REPORT'S SCOPE

The bulk of this Report focuses on Alumina Limited's 40 per cent interest in the AWAC enterprise. However, this update includes full facility results from the AWAC operations (unless indicated otherwise) to provide readers with a more meaningful overview of AWAC's assets.

The performance data in this report covers Alumina Limited and AWAC's operations for the calendar year to 31 December 2017. All financial data is expressed in US ($US) dollars and environmental data is metric.

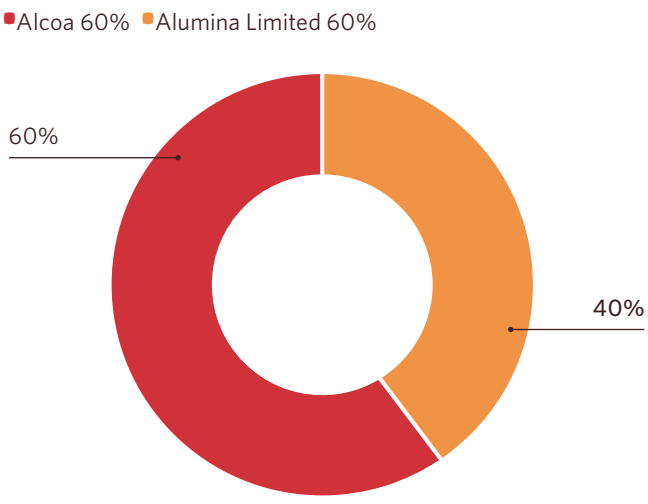
To aid understanding and comparability with Alcoa's Sustainability Report, as well as those of other resources companies and associated industries, the report's content is informed by Global Reporting Initiative's Standards (GRI - G4).

The report contains Standard Disclosures from the GRI Sustainability Reporting Guidelines.

ALCOA'S SUSTAINABILITY REPORTS

More information on sustainability at Alcoa's integrated aluminium operations is available through Alcoa's range of sustainability reports.

AWAC OWNERSHIP



GUIDE TO ENTITY REFERENCES

Three main entities are mentioned throughout this sustainability report - Alumina Limited, AWAC and Alcoa Corporation. To aid the reader's understanding, we have described each entity's role below as well as the rationale for when these entities are referred to in the report.

Alumina Limited is the non-operating partner in the AWAC joint venture of which it owns 40 per cent. As this is an Alumina Limited's sustainability report to stakeholders, the organisation is sometimes referred to in the first person (we, ours).

AWAC (Alcoa World Alumina and Chemicals) is the joint venture enterprise owned jointly by Alumina Limited (40 per cent) and Alcoa Corporation (60 per cent). This enterprise includes global bauxite, alumina and selected aluminium assets. AWAC references are used to describe:

- The physical assets, interests and operations that form the basis of the joint venture (e.g. AWAC's Huntly bauxite mine).
- The outcomes and performance levels from the operation of these assets (e.g. AWAC's production levels, AWAC's revenue, emissions, resource usage, market position).
- The governance procedures and frameworks that determine the strategic directions, investments and acquisitions of the enterprise (e.g. the AWAC Strategic Council).
- Legally the joint venture is conceived as an unincorporated joint venture based on Agreements between Alumina Limited and Alcoa Corporation. Alumina Limited holds direct ownership in some operating entities of the AWAC enterprise.

AWAC produces and sells alumina, bauxite and aluminium into the global market. Refer to the operations map on page 10.

Alcoa Corporation (Alcoa) owns 60 per cent of the AWAC joint venture and is the operating manager of the enterprise. Based on this role, references to Alcoa are used in relation to joint venture partner undertakings as well as actual on-site management of AWAC facilities, including:

- The management team and employees who carry out day-to-day activities.
- Policies, procedures and processes that are applied to everyday activities at AWAC operations.

MEASUREMENT TECHNIQUES

Alumina Limited, as a non-operating joint venture partner relies on the data measurement techniques and bases of calculations employed by AWAC's manager/operator, Alcoa. Alcoa uses a variety of internal standards and data collection systems, as well as a rigorous internal and external audit process. Alcoa conform to external data reporting standards, such as the Carbon Disclosure Project, and comply with government statutes like the US Sarbanes-Oxley Act.

Alcoa as manager/operator of the AWAC enterprise, are responsible for the data management, data collection and calculation of sustainability metrics such as CO2 emissions. Alcoa engaged First Environment Limited to provide limited assurance on their consolidated Scope 1, and Scope 2 greenhouse gas (CO2, CH4, N2O, FPC's and SF6) emissions data (that includes AWAC operations) under ISO 14064, Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions. Limited assurance was also provided for Scope 3 emissions in relation to purchased goods and services; fuels and energy related activities and processing of intermediate products sold to customers. In 2018, Alumina Limited submitted an Investor CDP (Climate Change) report and also a CDP Water Information report in respect of Alumina Limited's equity interest in AWAC for the 2017 operation year. It is Alcoa's intent to provide future water data assurance.

FEEDBACK

Your comments on Alumina Limited's sustainability reporting are welcome, including feedback on areas for improvement such as:

- Information quality, quantity and relevance
- Visual representation
- Report format and
- Report accessibility.

You can provide your comments via email or through contacting:

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Assistant Company Secretary

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Chairman and CEO's Overview

The entire world is challenged in regards to its response to the climate change impacts of global warming and moving to a lower carbon-based economy and society.

The 2016 Paris Agreement on Climate Change, initially signed by countries responsible for emitting over 88 per cent of the World's Greenhouse Gas emissions, involves efforts towards a long-term goal of keeping the increase in global average temperature to well below 2°C above pre-industrial levels, ideally aiming to limit the increase to 1.5°C.

The signing of that Agreement has been a catalyst for increased disclosure of climate related risks and opportunities, climate related financial reporting and increased scrutiny of corporate environmental, social and governance reporting. In Australia, corporate regulators are proposing to introduce enhanced standards and reporting on matters concerning the environment, sustainability and/or governance.

It is with this backdrop of change that Alumina Limited and its interest in the AWAC joint venture are reporting metrics on key material aspects of the business in this, the 2017 Sustainability Update. Both Alumina Limited and Alcoa have been reporting for several years, metrics on key matters such as energy, emissions, water, waste and land management. This year we are pleased to include Scope 3 emissions for the first time. Also, this report covers aspects of Health and Safety and engagement with local community.

Alcoa, manager/operator of the AWAC operations is in the process of redefining sustainability strategic long-term goals for 2018 and onwards and where applicable to AWAC, these will be reflected in the 2018 Sustainability Update.

At Alumina Limited we believe that all stakeholders in the Company and the AWAC business are entitled to high quality reporting where possible on sustainability matters and we are committed to that goal. Alumina will review the scope of its reporting and any changes will appear in the 2018 Sustainability Update.

In 2017 the economic, market and operational dynamics were favourable resulting in the best cash returns for AWAC since 2007 with the AWAC refinery assets operating in the lowest quartile on the cost curve. A number of the alumina refineries achieved production records as did the bauxite mines in Australia and Brazil. The gains are in response to AWAC's strategy to actively manage its asset portfolio making the assets more sustainable to withstand challenging business conditions.

The planned introduction of new technology such as the pressure filtration at the Kwinana alumina refinery has reduced freshwater consumption and reduced the footprint of the residue storage areas. Pleasingly, many of the metrics indicate improvement over prior year performance. However, it is with deep regret that we report two fatalities involving contractors occurred in 2017. AWAC responded quickly to assist the families of the workers and to reassess safety procedures with the goal for zero fatalities.

For further information on sustainability matters, please refer to the detailed content of the 2017 Sustainability Update. We also welcome your feedback regarding the content and detail of information provided.

Mike Ferraro Chief Executive Officer

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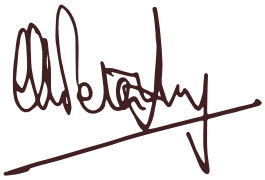

Peter Day Chairman

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Materiality

The report's framework and content is shaped by four factors:

1. Alumina Limited's role as a 40 per cent non-operating participant in the AWAC joint venture and the role we take in ensuring long-term value from the enterprise for shareholders.
2. The nature of AWAC's operations, which largely focuses on bauxite and alumina segments of the aluminium industry.
3. The interests and requirements of our stakeholders
4. Consideration of the businesses economic, environmental and social impacts

Consequently, this report supports rather than duplicates that of Alcoa, (Alcoa Sustainability Report), which is a detailed and far ranging discussion into their fully integrated aluminium operations.

Using this framework, Alumina's executive management undertook an internal assessment of issues that were considered of significance to Alumina Limited and our stakeholders. Alumina Limited also recognised the assessment of substantive materiality conducted by Alcoa as manager/operator of the AWAC operations and conducted a four-step analysis that incorporated: 1) analysis of their value chain, 2) consultation with stakeholders, 3) the impact on business strategy and 4) utilised a matrix to establish priorities. The following priorities resulted from both assessments:

- Energy (usage, efficiency and security)
- Water management (and security)
- Emissions
- Land management (and rehabilitation)
- Safety and health (of AWAC's workforce)
- Waste
- Local communities
- Economic contribution

This sustainability update provides a basis for future discussions with stakeholders on issues of greatest interest and concern. This feedback will help refine future content and reporting approaches.

BOUNDARIES

MATERIAL ASPECT	EXTERNAL BOUNDARY
Energy	Communities surrounding AWAC operating locations and NGOs
Water Management	Communities surrounding AWAC operating locations and NGOs
Emissions	All communities in which AWAC operates, especially those surrounding its refineries and smelter
Land Management	Government agencies, communities surrounding our operating locations and NGOs
Safety and Health	Government agencies focused on health and safety in each country in which AWAC operate
Local Communities	Communities surrounding AWAC operating locations and NGOs
Economic	Shareholders, lenders, and financial analysts globally

Stakeholders

For the purposes of this report Alumina Limited has identified the investment community and government as direct stakeholders i.e., they either hold a direct interest in the Company or influence over the operation of AWAC business that is Alumina Limited's principal interest.

Investment community	▪ Institutional investors ▪ Retail shareholders ▪ Fund managers and analysts ▪ Ratings agencies ▪ Financial markets
Government	▪ Various governments in whose jurisdiction AWAC operates.

We also recognise that local communities living near the AWAC operations, managed directly by Alcoa, as well as interest groups and not-for-profit organisations may also be interested in this update.

ENGAGEMENT WITH STAKEHOLDERS

Alumina Limited engages with stakeholders through:

- Investment roadshows in Australia and overseas
- Meetings with institutional investors
- Results presentations and our Annual General Meeting (available on our website)
- Program of shareholder communication, including opportunities for feedback
- Communicating, responding via ESG agencies their assessments.

Through these engagement opportunities, we will seek feedback on the usefulness of this sustainability update and tailor future reporting accordingly.

AWAC can be considered an investor in bauxite and alumina market via AWAC. Alumina Limited's only investment is its 40 percent interest in AWAC. Alumina Limited's stakeholders are those groups that have a direct relationship with the Company. Stakeholders in the AWAC business are identified by Alcoa, the manager/operator of AWAC.

FREQUENCY OF ENGAGEMENT WITH STAKEHOLDERS

Alumina Limited representatives meet regularly with major shareholders and market analysts. Alumina Limited has a two-way communication strategy with its shareholders to interact.

AWAC STAKEHOLDER ENGAGEMENT

In relation to AWAC, Alcoa identified as stakeholders, suppliers, employees; lenders; the people who live in the communities where AWAC operate; the public agencies that regulate the businesses; and the non-governmental organisation (NGOs) that are interested in AWAC's activities. Formalised channels of engagement exist for contracted parties e.g. customers, suppliers, employees, lenders and shareholders. Community Groups and NGOs require a more informal engagement and requires a structured approach, Alcoa have developed a Community Framework that has been adopted at all AWAC locations.

About Alumina Limited & AWAC

Alumina Limited invests in global bauxite mining, alumina refining and selected aluminium operations through our AWAC (Alcoa World Alumina and Chemicals) joint venture with Alcoa.

Alumina Limited is a publicly listed company, one of Australia's top 100 Australian Securities Exchange (ASX) listed companies and is also traded on the OTC Market in the US as an American Depositary Receipt. The Company is focussed on delivering value to shareholders through our strategic participation in AWAC.

Alumina Limited's offices are located on Level 12, IBM Centre, 60 City Road, Southbank (Melbourne) Victoria 3006 Australia. The Company is a non-operating partner in AWAC and has 11 employees.

For more about Alumina Limited visit 'Who We Are'

AWAC JOINT VENTURE

Alumina Limited owns 40 per cent of AWAC, one of the world's largest alumina businesses with approximately 10per cent of world production capacity. Our joint venture partner, Alcoa, owns 60 per cent.

While we have a 40 per cent interest in AWAC, Alcoa is responsible for AWAC's day-to-day management. Approximately 5,100 (2016: 5,150) people worldwide are employed in AWAC's operations which in 2017 included ownership or interest in six bauxite mines, seven alumina refineries and an aluminium smelter as well as a shipping operation that transports alumina, aluminium and raw materials around the world.

Map of Operations

BAUXITE PRODUCTION (million BDT#)

	2017	2016
Huntly & Willowdale	33.2	35.9
Juruti	5.6	5.9
MRN* & CBG*	4.6	5.2
Total	43.4	47

* AWAC equity share of production.
MRN - Mineração Rio do Norte S.A.; CBG – Compagnie des Bauxites de Guinée are non-AWAC operated mines
Bone dry tonnes (BDT): Tonnes are reported on a zero moisture basis, "bone dry".
The Ma'aden joint venture mine is not included

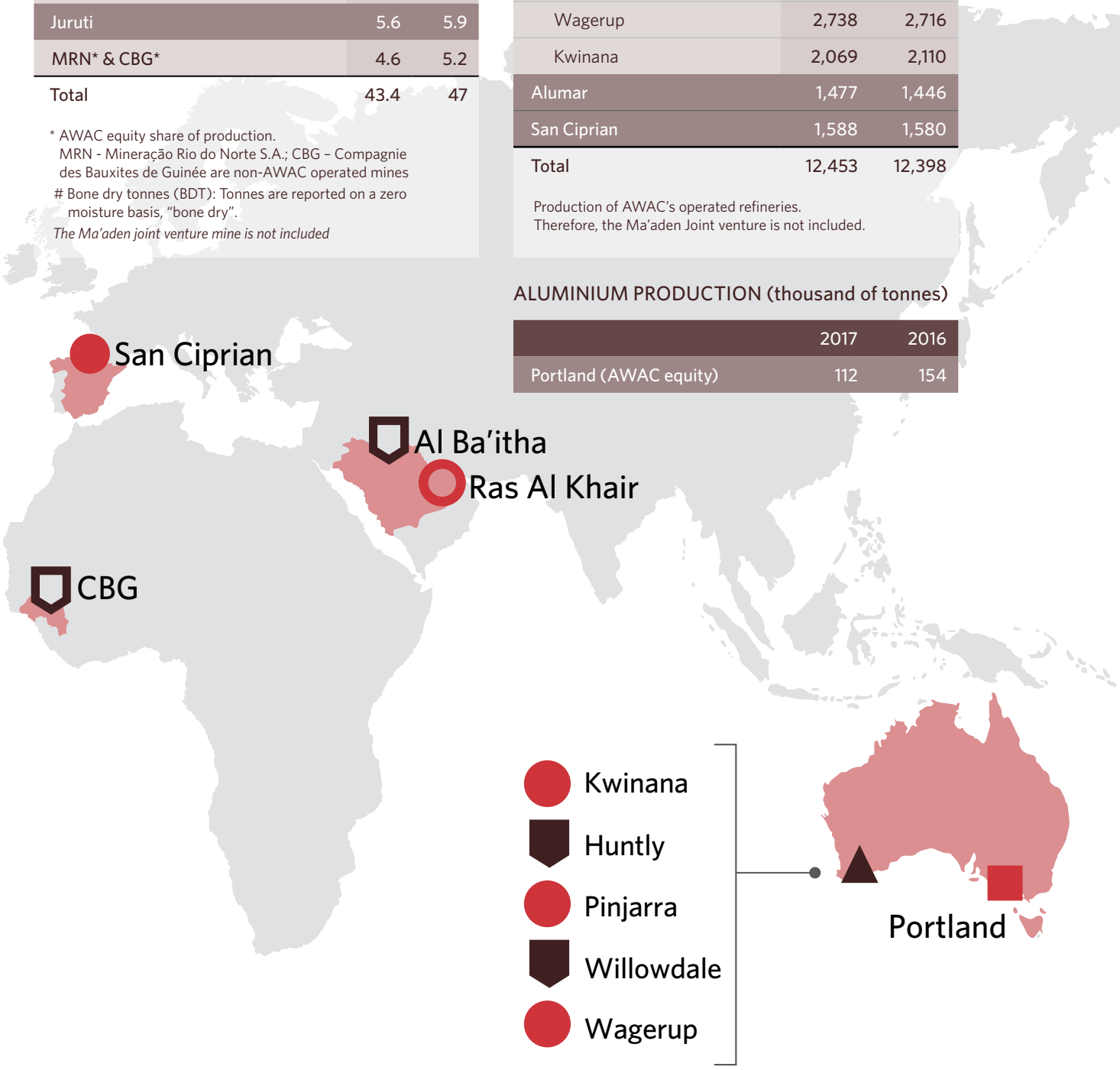
ALUMINA PRODUCTION (thousand of tonnes)

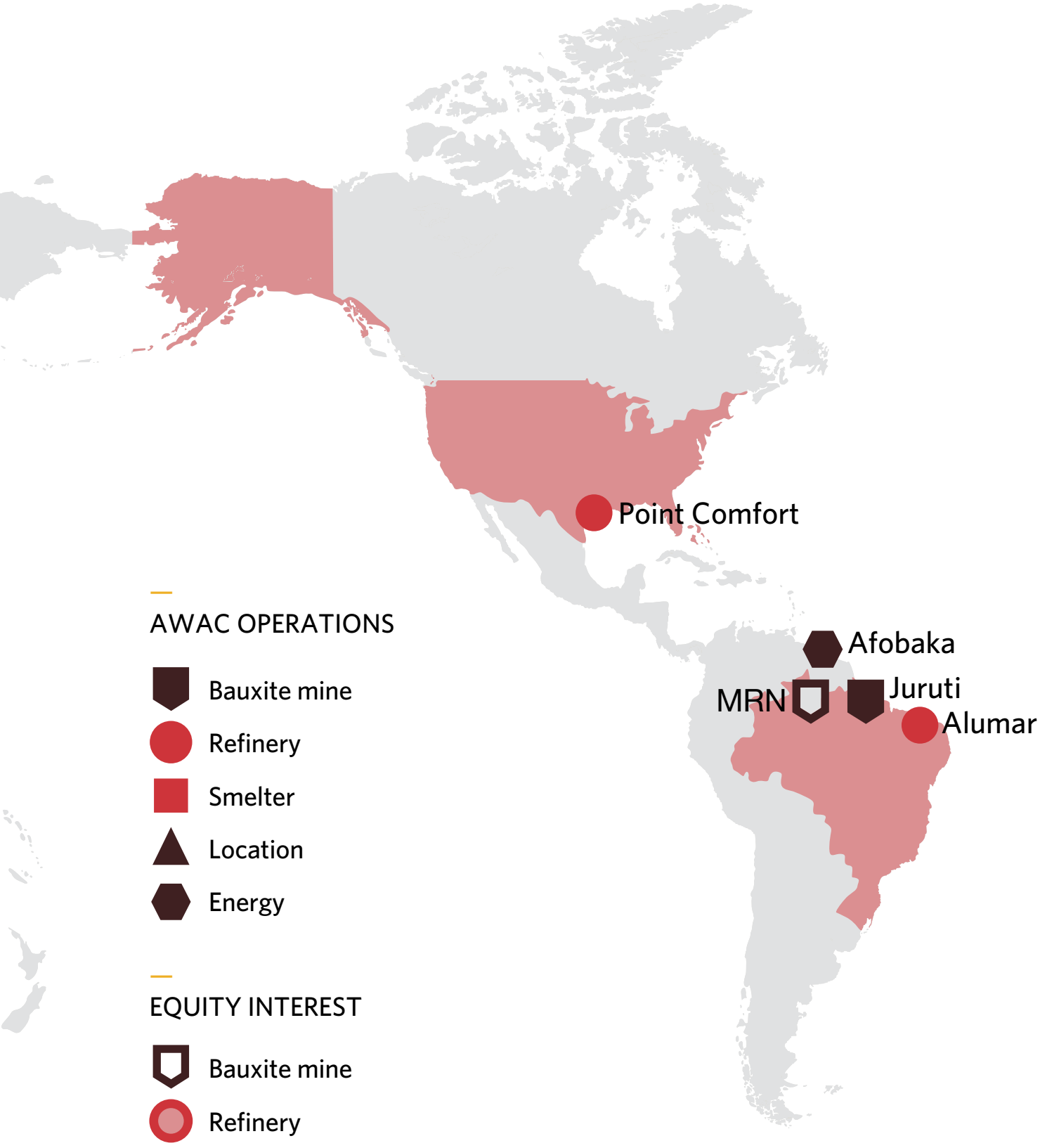
Western Australia Operations	2017	2016
Pinjarra	4,581	4,546
Wagerup	2,738	2,716
Kwinana	2,069	2,110
Alumar	1,477	1,446
San Ciprian	1,588	1,580
Total	12,453	12,398

Production of AWAC's operated refineries.
Therefore, the Ma'aden Joint venture is not included.

ALUMINIUM PRODUCTION (thousand of tonnes)

	2017	2016
Portland (AWAC equity)	112	154




Point Comfort
AWAC OPERATIONS
Bauxite mine
Refinery
Smelter
Location
Energy
EQUITY INTEREST
Bauxite mine
Refinery
Afobaka
MRN
Juruti
Alumar

Bauxite to Aluminium: The Process

01

ACQUISITION OF BAUXITE RESERVES

Aluminium ore, most commonly bauxite, is plentiful and occurs mainly in tropical and sub-tropical areas – Africa, West Indies, South America and Australia – with some deposits in Europe. Although plentiful, bauxite quality is diminishing, is often not readily accessible and is becoming harder to gain approvals for expansions or new mines. AWAC is the world's largest bauxite miner. AWAC operates mines integrated with alumina refineries in Western Australia and Brazil with interests in non-AWAC operated mines in Brazil and Guinea.

AWAC Sustainability Approach – AWAC's licence to operate is based on its recognised ability to successfully restore mining sites to their pre-mining condition, re-establishing eco-systems and biodiversity values or, where appropriate, following consultation with local communities and the relevant Government, rehabilitate the land for other productive purposes such as agriculture, commercial, residential or recreational use. Before expanding or commencing a new mine, external consultants are engaged to conduct comprehensive environmental impact assessments to determine the impact the project would have on the environment. The ecosystem and species diversity are thoroughly analysed with special emphasis on threatened species, critical habitats and unique flora and fauna. Engagement with the local communities and stakeholders is also a priority to identify and evaluate specific sustainability issues, environmental, economic and social.

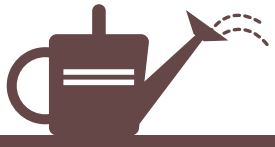
02

BAUXITE MINING

AWAC's bauxite deposits are generally extracted by open cut mining from strata, typically some 4–6 metres thick under a shallow covering of topsoil and vegetation. The topsoil is removed and stored for later use in restoration of the forest. Generally there is a layer of capstone that is removed to expose the bauxite ore which is extracted, broken up and transported to refineries for further processing. AWAC is the world's largest bauxite miner and is well positioned with long life mines. AWAC's Huntly mine is the world's largest bauxite mine, supplying bauxite ore to Pinjarra and Kwinana Refineries.

AWAC Sustainability Approach – Mining is generally limited to relatively small pits and haul roads or infrastructure such as conveyors and railways are constructed to enable transportation of the ore. Particular care is taken in building roads etc to avoid isolation of wildlife, disruption of streams and critical habitats. For example in Australia, haul roads were repositioned to protect nesting areas for threatened bird species. Mining operations can alter rainfall runoff patterns and surface and ground water hydrology which can have impacts on stream ecolog and biodiversity. These are monitored and manage to preserve biodiversity.

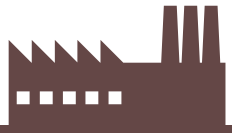
03



MINE REHABILITATION

Rehabilitation is one of the most important parts of the mining process. AWAC supports the objective of returning mined areas to a sustainable future use. In most cases this means returning disturbed land to the pre-existing flora and fauna condition. Preservation of biodiversity of plant species and fauna species is an important focus and is a major consideration for rehabilitation plans or future use decisions. Typically rehabilitation efforts include returning collected and fresh topsoil, spreading collected and treated seeds and planting of nursery established plants.

AWAC Sustainability Approach – A key objective at AWAC's mines and bauxite residue areas is to minimise the footprint of disturbed land by implementing a program of progressive land rehabilitation. In the Western Australian mines AWAC has achieved 100 per cent of plant species richness in AWAC's rehabilitated mining areas, the first mining company in the world to achieve that goal.



04

REFINING

Aluminium does not occur naturally as a metal, but must first be refined from bauxite in its oxide form. Bauxite is generally washed, ground and dissolved in caustic soda (sodium hydroxide) at high pressure and temperatur at an alumina refinery. Four tonnes of bauxite produces approximately two tonnes of alumina which produces approximately one tonne of aluminium. AWAC is one of the world's largest alumina businesses operating six alumina refineries in several countries, Australia, Brazil, Spain, Suriname (closed 2015) and the USA (curtailed in 2016). AWAC is a low cost alumina producer with global alumina production capacity of 14.7 million tonnes per year.

AWAC Sustainability Approach – Refining alumina is an energy intensive operation therefore key AWAC sustainability targets involve improving energy efficiency and reducing GHG emissions. A strategy is to source operating locations with low carbon based power. In 2015 the San Ciprian refinery was converted from fuel oil as an energy source to natural gas. AWAC's refineries form part of Alcoa's Global business. Alcoa has a long-term goal of reducing GHG emission compared to 2005 levels by 30% by 2020 and 35% by 2030. Also, for each tonne of alumina produced approximately 2 tonnes of bauxite residue results. The goal is to reduce bauxite residue land requirements per unit of alumina by 15% by 2020 and 30% by 2030 and recycle or reuse 15% of residue generated by 2020 and 30% by 2030.

05

SMELTING

Alumina is converted into aluminium by dissolving it in an electrolytic bath of molten cryolite (sodium aluminium fluoride) within a large carbon or graphite lined steel container known as a "pot". An electric current is passed through the electrolyte at low voltage, but very high current. Molten aluminium is deposited at the bottom of the pot and is siphoned off periodically. It can be blended to an alloy specification, cleaned and then generally cast. AWAC operates one aluminium smelter located at Portland in Australia with an equity capacity of 197,000 tonnes of metal.

AWAC Sustainability Approach – The process of aluminium smelting requires significant amounts of electricity resulting in GHG emissions. Process efforts have been focussed on reducing direct emissions associated with perflurorcarbons (PFCs) in the smelting process and also opportunities to reduce energy intensity.

06

RECYCLING

First produced in 1888, aluminium has become the second most-used metal in the world after iron. Nearly three-quarters of all aluminium ever made remains in use today, representing a growing 'energy and resource bank', and the metal can be recycled and reused endlessly. While AWAC is not involved in recycling of aluminium, it is important to appreciate that end product from AWAC's business can be easily recycled. Examples of areas where aluminium helps people and the economy to operate effectively and efficiently include air, road, rail and sea transport; food and medicine; packaging; construction; electronics and electricity transmission.

Governance

The Alumina Limited Board is the organisation's highest governing body. In 2017 it comprised one executive and five non-executive (four independent) directors who meet regularly throughout the year. Alumina Limited's executive team, headed by the Chief Executive Officer, Mike Ferraro, reports directly to the Board.

Assisting the Board in its oversight responsibility are 3 Board Committees comprised of only independent, non-executive directors. The Board Committees are: Audit & Risk Management Committee (statutory reporting and risk management), Nomination Committee (succession planning and appointment of CEO) and the Compensation Committee (remuneration matters).

Governance policies and practices ensure that all regulatory requirements are met and ethical standards maintained.

In 2017 the composition of the Board and its Committees were:

DIRECTOR	BOARD	AUDIT & RISK MANAGEMENT	NOMINATION	COMPENSATION
Mr John Pizzey (Part year – retired 31 March 2018)	Chair Independent, Non-Executive Director	Member	Member	Member
Ms Emma Stein	Member Independent, Non-Executive Director	Member	Member	Chair
Mr Peter Wasow (Part year – retired 31 May 2017)	Member Executive Director	n/a	n/a	n/a
Mr Chen Zeng	Member	Member	Member	Member
Mr Peter Day (appointed Chair on 1 April 2018)	Member Independent, Non-Executive Director	Chair	Member	Member
Mr Michael Ferraro	Member Independent, Non-Executive Director (resigned 31 May 2017)	Member	Chair	Member
	Member Executive Director – (appointed 1 June 2017)	n/a	n/a	n/a
Ms Deb O'Toole	Member Independent, Non-Executive Director	Member	Member	Member

A full description of Alumina Limited's governance principles and practices including details about Alumina Limited's three Board Committees, policies, director independence and remuneration is available in the governance section and Alumina Limited's 2017 Governance Statement on our website.

SUSTAINABILITY GOVERNANCE

In terms of sustainability governance for AWAC, Alumina Limited's principal interest is the integration of sound environmental, social and governance practices alongside sustainable financial performance.

We do this through:

- discussing AWAC's long term strategies and objectives with managing partner Alcoa
- supporting the policies and practices that are implemented in AWAC companies to ensure sustainable operations
- reviewing reports of non-compliances including for environmental and labour matters.

Alumina Limited assesses potential sustainability risks and opportunities for shareholders. We do this through our Risk Management Framework's processes that are reviewed and updated through the Audit and Risk Management Committee.

RISK

Central to the Board's role is risk management and mitigation. Alumina Limited's Risk Management Framework identifies and describes the risks identified by Alumina Limited as potentially significant for the current operations and profitability and/or the long-term value of the Company. The Risk Management Framework makes explicit the strategies and actions in place by the Company to manage each identified risk. Included are risks identified associated with the AWAC enterprise.

In terms of the AWAC joint venture, Alcoa Corporation is the manager/operator and has a key risk management role over the operations and administrative and marketing functions. Alumina Limited reviews the management and mitigation of AWAC risks through participation on the AWAC Strategic Council and Boards of the key operating entities.

Ultimately, Alumina Limited's directors oversee risk identification and management through the Audit & Risk Management Committee. It is also the direct responsibility of the Audit & Risk Management Committee to review business risk assessments to ensure appropriate coverage in the internal audit plans.

Alumina Limited's Values and Code of Conduct directs and guides the Board, management and employees in their daily activities. The code outlines ethical behaviour and ensures the rule and intent of all relevant governmental laws, regulatory and professional rules and guidelines are upheld.

The code is fundamental to our business policies and practices, including:

- Anti-Corruption and Money Laundering Policy
- Human Rights Policy
- International Business Conduct Policy
- Environment, Health and Safety Policy
- Equal Opportunity and Non-discrimination Policy
- Due Diligence Review Process for Intermediaries;
- Diversity Policy

Alumina Limited has a series of policies that drive the manner in which it conducts business. These include an Anti-Corruption and Money Laundering Policy and an International Business Conduct Policy that provides principles and procedures on conducting business internationally and complying with the requirements of various laws including prohibition of bribery and related conduct.

Alumina Limited has a Whistleblower Policy that encourages and offers protection for staff to report, in good faith, any behaviour, practice, or activity that they have reasonable grounds to believe involves:

- unethical or improper conduct
- financial malpractice, impropriety or fraud
- contravention or suspected contravention of legal or regulatory provisions
- auditing non-disclosure or manipulation of the internal or external audit process.

All of Alumina Limited's **policies** are available for review in the Governance section of the Company website.

Alumina Limited employees are required to annually complete training in the above Policies and practices and other relevant governance policies. Alumina Limited's policies are developed specifically to meet the needs of our organisation and the environment in which we operate. Where appropriate, these policies align with Alcoa's to ensure effective partnership in governing the AWAC joint venture.

The AWAC business operates in various regions in the world and interacts with customers around the globe. Alcoa has policies and procedures in place for AWAC employees to adhere to in their dealings third parties. In the field at AWAC operations, employees are subject to Alcoa's Anti-Corruption Policy. Alcoa's Anti-Corruption Policy reflects its strong commitment to conducting operations around the globe ethically and in compliance with all applicable laws. Alcoa's directors and management believe that the way to achieve results is as important as the results themselves. Vigilance in complying with anti-corruption and anti-bribery laws, including those based upon the OECD Convention, the U.S. Foreign Corrupt Practices Act, and other local anti-corruption laws, is critical for a global company.

POLITICAL DONATIONS AND MEMBERSHIPS

In line with our Code of Conduct and Anti-Corruption Policy, Alumina Limited does not donate to any political party or aligned interest group. No political donations were made during 2017.During 2017, Alumina Limited was a member of the following organisations:

- Australian Aluminium Council
- International Aluminium Institute
- Business Council of Australia

and via AWAC/Alcoa

- Australian Industry Greenhouse Network
- Brazilian Aluminium Association

COMPLIANCE

In 2017 there were no significant non-compliances or fines on environmental, human rights, labour or product grounds arising from either Alumina Limited's activities or through AWAC's worldwide operations.

While the details of all non-compliances are investigated and reviewed, for reporting purposes 'significant' non-compliances are regarded as those incurring fines of $100,000 or more. This is in line with the U.S. Securities and Exchange Commission's (SEC) guidelines.

PUBLIC AND INDUSTRY POLICY

Alumina Limited contributes to the industry locally and internationally through memberships of the Australian Aluminium Council (AAC) as well as the International Aluminium Institute (IAI) a global forum of the world's aluminium producers. Alumina also has direct representation on the IAI Environment and Communications Committees and on the AAC Greenhouse Committee.

BUSINESS CONDUCT POLICY

Alumina Limited has developed Anti-Corruption and Money Laundering Policies that prohibit bribery and corruption in all business dealings.

CLIMATE CHANGE LEGISLATION

In 2017, AWAC's alumina refinery in Spain was operating under Phase 3 of the European Union's (EU) Emissions Trading Scheme.

Since the inclusion in the EU Emissions Trading Scheme, relatively modest payments have been incurred for purchasing allowances under the scheme. It is anticipated that Phase 4 of the EU Trading Scheme, covering the period 2021 – 2030, will directly impact both carbon and energy pricing.

Energy costs and supply of electricity may be impacted by emerging mandatory renewable energy targets and/or energy taxes in Australia, Brazil, the US and potentially other regions in the world where AWAC has operating facilities.

The Australian Federal Government committed to the Paris climate change conference with a target to reduce emissions to 26-28 per cent on 2005 levels by 2030. The current Government has as its deliverable, its Direct Action policies and at its core, the Emissions Reduction Fund and Renewable Energy Target, energy efficiency improvements, phasing out very potent synthetic greenhouse gases, and direct support for investment in low emissions technologies and practices. The Renewable Energy Targets (RET) had the potential to increase cost of production however, in June 2015 the Australian Government passed a regulation that provided a full exemption from RET for aluminium smelters and for alumina refineries. While this is a present outcome, it has the potential to change with a change of government or could be introduced at other AWAC operations in countries other than Australia.

AWAC'S GOVERNANCE FRAMEWORK

AWAC has a clearly defined governance and management framework which relies on informal and formal mechanisms. Alcoa as manager of the joint venture has key operating responsibility. Regular contact between Alumina Limited and Alcoa, is the most effective and immediate way for the joint venture to operate in a dynamic global environment. Senior managers and board members hold regular face-to-face meetings and site visits, which is supported through online communications. Formal governance is based on the AWAC Agreements (the Formation Agreement and the Charter of the Strategic Council) and includes Alumina Limited's participation in:

- AWAC's Strategic Council and
- AWA LLC Board
- the Alcoa of Australia (AofA) Board
- the AWA of Brazil SA Advisory Board (effective late 2011).

AWAC'S STRATEGIC COUNCIL

The Strategic Council is AWAC's formal governing body. It has five members, three appointed by Alcoa (of which one is Chairman) and two by Alumina (of which one is Deputy Chairman). In 2017 those representatives were the Chief Executive Officer, Peter Wasow (until retirement on 31 May 2017) and Mike Ferraro (commencing 1 June 2017), and Chief Financial Officer, Chris Thiris.

The Strategic Council meets to consider:

- AWAC's long-term strategy
- Development, acquisition and disposal of assets
- Sustainability matters
- Capital and operating budgets of AWAC companies
- Industry and market outlook.

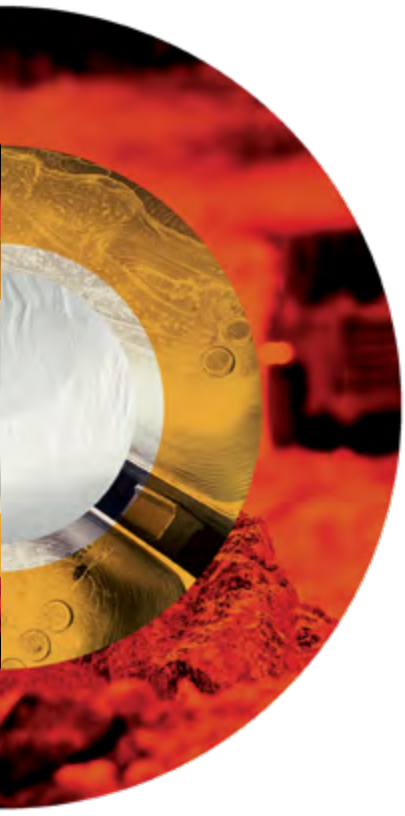
While meetings are usually held twice a year, this can vary depending on business requirements. The Council receives detailed reports of AWAC's sustainability performance against targets and key indicators.

AWAC SITE VISITS

Alumina runs a program of site visits and industry updates for Board and senior management.

Site visits include:

- Discussions with site operational managers,
- Site operational tours,
- Discussion with industry experts, and
- Meetings with representatives of local communities.



Sustainability & Alumina

Alumina Limited understands the fundamental link between long-term profitability and the sustainability of AWAC's operating performance. Decisions and actions we make today influence future economic, environmental and social outcomes, and determine long-term profitability and returns for our shareholders.

Sustainable development and growth is fundamental to AWAC, and we recognise our joint venture partner, Alcoa, as a world leader in corporate sustainable development.

SUSTAINABILITY APPROACH

Alumina Limited's role is to support Alcoa in managing AWAC to achieve best practice in environment, safety, community and financial performance through strong, collaborative and informed governance.

We do this through:

- reviewing AWAC's long-term sustainability strategies and objectives with managing partner Alcoa
- supporting the sustainability policies and practices that Alcoa implement in AWAC to ensure sustainable operations
- reviewing reports of non-compliances on human rights, environmental, labour or anti-corruption grounds.

Alumina Limited's Board assesses any potential risks and opportunities for shareholders from AWAC's sustainability performance. We do this through using our own risk assessment processes that are reviewed and updated through the Board of Directors.

ALUMINA LIMITED'S OPERATIONS

Alumina Limited is also committed to sound corporate and social policies within our business activities and strategy, the results of which are included throughout this report. Our activities are informed and guided by our Sustainability Policy.

AWAC SUSTAINABILITY OVERSIGHT

Alcoa integrate sustainability into core business strategy using a multi-layered structure:

The CEO of Alcoa has the ultimate responsibility for economic, environmental and social topics. The CFO is responsible for the economic topics and the vice presidents for sustainability and human resources have responsibility for environmental and social topics.

From a governance and board perspective, responsibility for oversight of Alcoa's corporate and social responsibility, including but not limited to safety and health, good corporate citizenship, environmental sustainability and social issues, policies and practices rest with its Safety, Sustainability and Public Issues Committee. Responsibility includes providing oversight of the Alcoa's risk management policies and procedures relating to aforementioned topics.

The Safety, Sustainability and Public Issues Committee meets at least twice per annum and reports as appropriate on, current and emerging safety and health, environmental and sustainability, social and political trends, major global legislative and regulatory developments or other government relations, trade or public policy issues that may affect the business operations, performance of Alcoa. Also, the Committee advises the Alcoa Board on Alcoa's progress against its key environmental sustainability targets and related initiatives including advice on how to improve its performance against targets and stakeholder concerns on those matters. Alcoa's Board of Directors and its committees review impacts, risks and opportunities at regularly scheduled board/committee meetings five to six times a year.

Alcoa are committed to regularly reviewing its strategy and performance and have been setting goals and publicly reporting results against them since 1993. Their objective is to be transparent with respect to their sustainability issues and progress and to provide significant information to all of their stakeholders. In 2009, they developed a new set of long-term goals and objectives to drive progress in the businesses by 2020 and, for some areas, by 2025 or 2030. These strategic sustainability targets are used to monitor progress against key focus areas, which include energy efficiency, emissions, and waste.

The Alumina Limited Board is the organisation's highest governing body. In 2017, Alumina Limited's executive team, reported directly to the board. Annually the Board receives a report on the progress of sustainability initiatives.

Direct reporting is courtesy of Alumina Limited's joint venture partner Alcoa. Alcoa is the manager/operator of AWAC's global facilities. AWAC is governed by a Strategic Council which comprises 2 representatives from Alumina Limited and 3 representatives from Alcoa. The Strategic Council meets twice per annum and metrics on progress to sustainability targets are reviewed. Sustainability targets are established by Alcoa for various sustainability matters including GHG emissions and water usage that include the joint venture (AWAC) assets.

Once the internal processes are completed by Alcoa, including gathering data and analysing performance against targets, the sustainability aspects that relate to the AWAC joint venture operations are separately reported to AWAC's governing body the Strategic Council. Alumina Limited's two representatives on the Strategic Council review and analyse the material and have opportunity to provide input. Sustainability information received at the Strategic Council is reported to the Alumina Limited Board.

Alumina Limited's management is updated on sustainability objectives, measures and performance via the Strategic Council and the various AWAC entity boards of which Alumina's CEO and CFO sit as directors. Management is responsible for the preparation of the sustainability update and report sustainability matters to the Board.

In 2017, for AWAC employees, up to 20% of their variable compensation plan was tied to achieving significant aspects of sustainability targets. Those targets included safety, diversity representation in our workforce, and reductions in carbon dioxide (CO2) emissions due to process improvements and improved energy efficiency. These targets were represented by the following percentages at the corporate level, Safety 5%, Diversity 10% and Carbon dioxide reductions 5%. 2017 payouts were 11.4% for diversity and 0% for safety due to two contractor fatalities and meeting carbon dioxide emissions targets. The target for carbon emissions was not achieved due to lower raw material quality impacting some refinery performance and interrupted power supply at the Portland aluminium smelter.

The AWAC facilities have implemented the scorecard processes which are reviewed by Alcoa's executive management at Quarterly Business Reviews.

We full support this approach, which will embed sustainability deeper into AWAC and its everyday activities.

SUSTAINABILITY CHALLENGES

The processes used in the aluminium industry are energy and resource intensive and that presents sustainability challenges. AWAC is predominantly involved in the refining of alumina from bauxite and also has interests in an aluminium smelter. Refining alumina from bauxite requires significant energy in the form of heat and steam. Aluminium smelting requires significant amount of electricity to convert alumina into aluminium metal via a process of electrolysis.

While the production of alumina and aluminium generate substantial economic and social benefits, we are mindful of the need to balance these activities with responsible environmental stewardship to minimise negative impacts on local environments and neighbouring communities. In 2017 some of the major operational sustainability challenges for AWAC were:

- Eliminating employee and contractor fatalities and abating risks of injury or operational sickness
- Cleaner energy sources for an energy intensive business (experts are assessing the potential to harness solar energy)
- Improving energy efficiency - to conserve energy and reduce associated emissions
- Bauxite residue and storages – to reduce footprint and move towards alternative uses for residue (new filtration technology has been introduced)
- Carbon emission reductions – to improve the emissions intensity and reduce absolute emissions
- Improve water management – to reduce freshwater usage
- Minimising impacts to the land and biodiversity.

Challenges also arise due to actual and potential regulatory changes as various regions in the world consider and respond to climate related risks by implementing measures such as carbon taxing or pricing.

SUSTAINABILITY COMMITMENTS

Alumina Limited's commitments for improving sustainability performance include:

- Supporting Alcoa's approach to drive sustainability practice throughout the operations using Sustainability Scorecard and Business unit Roadmap initiatives
- Transitioning to cleaner energy sources

Continue to investigate opportunities for new technologies for reducing greenhouse gas emissions and developing cleaner energy sources for discussion with Alcoa.

Environment

Alumina Limited believes that business sustainability is dependent on the integration into the business plan of, relevant and meaningful sustainability objectives that, among other things, result in sensible management of the environment.

This is emphasised by the resource and energy intensive business of alumina refining and smelting so minimising the end-to-end life-cycle impact of alumina and aluminium production is essential.

Resources	AWAC's core business of producing alumina (the raw material used to produce aluminium) requires the mining of bauxite, the ore that contains alumina from ecologically sensitive forested regions in Western Australia and the Amazon in Brazil. As a result, a strong sustainability focus is placed on land management, land rehabilitation and biodiversity and water management.
Energy	The refining of bauxite ore into alumina and the subsequent smelting of aluminium require significant energy resources resulting in the significant stewardship issues of energy efficiency and emissions management.

The aim is, responsible resource management that minimises the impact on the immediate natural environment and communities in which AWAC operates and products that are beneficial to the environment.

We believe that through demonstrating effective and responsible environmental stewardship, AWAC will be will continue to be granted a licence to operate. We focus attention on areas with the greatest material impact including land management and rehabilitation, energy, water, waste and emissions.

Alcoa is an experienced and internationally recognised environmental manager, with a sophisticated system for managing, monitoring and mitigating environmental impacts through new technology and evolving operational processes.

In 2017 there were no major environmental incidents to report. There were numerous small spills exceeding 20 litres however, none of the spills it resulted in a significant financial impact and did not constitute a significant environmental non-compliance either from Alumina Limited's activities or AWAC's global operations ie. potential to cause significant harm to the environment.


GROWN BY
ALCOA

Energy

Energy is a key resource in the production of both alumina and aluminium.

Production of alumina and aluminium are energy intensive processes using approximately 2.5MWh per tonne of alumina and 15.75 MWh per tonne of aluminium. In 2017 the transformation of AWAC's asset portfolio which commenced in 2014 is essentially complete. During that period AWAC actively managed its portfolio of assets resulting in the closure or sale of high cost assets and concentrating on low cost production facilities. This transformation process included the challenge of replacing reliance on more expensive and inefficient fuel sources at existing operations such as the alumina refinery located at San Ciprian in Spain. In 2017, energy represents approximately 23% of the cash cost of production for alumina and 24% for aluminium.

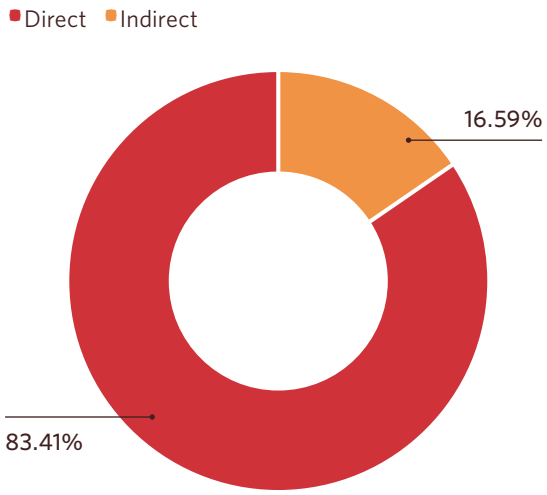
FACILITY	MAIN SOURCE OF ENERGY	DIRECT OR INDIRECT CONSUMPTION
Pinjarra	Natural gas	Direct
Kwinana	Natural gas	Direct
Wagerup	Natural gas	Direct
San Ciprian	Natural gas	Direct
Pt Comfort (curtailed)	Natural gas	Direct
Alumar (39% AWAC)	Fuel oil/coal	Direct
Portland smelter (55% AWAC)	Purchased electricity (mainly coal generated)	Indirect

Comparatively small amounts of petrol/gasoline and LPG are used, while biodiesel fuels power some mobile equipment and industrial vehicles on site.

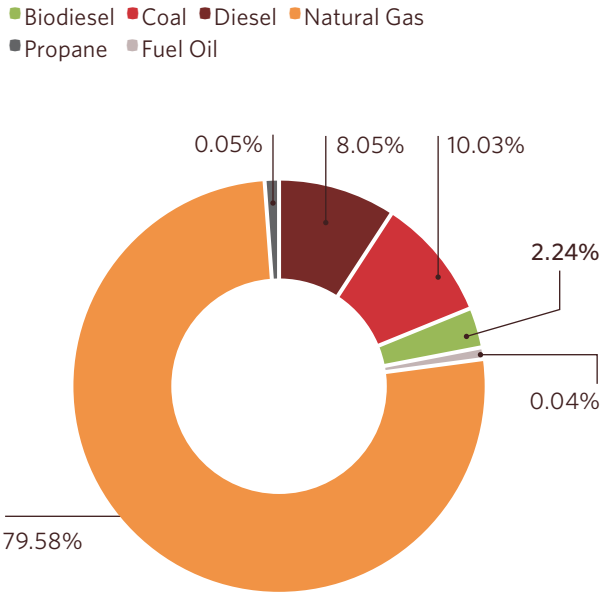
In recent years the availability and rising cost of energy has been a driver for a shift in the geographical location of alumina/aluminium facilities. Energy rich regions such as the Middle East witnessed an increase in investment in aluminium production facilities. AWAC has a 25.1 per cent interest with Saudi company Ma'aden in the development of a bauxite mine and a low-cost alumina refinery.

Energy efficiency is a key factor in sustainable business and environmental performance. AWAC has achieved success in technology and process advancements that have resulted in improved energy consumption and reduced GHG emissions.

2017 AWAC DIRECT AND INDIRECT ENERGY CONSUMPTION



AWAC DIRECT ENERGY CONSUMPTION BY FUEL SOURCE



RESULTS - ENERGY UTILISATION

Energy security is vital to maintaining a sustainable business. AWAC's operations are highly dependent on the availability to base load energy. In 2017 energy consumption for all of AWAC's operations globally on a full facility basis was approximately 41 million MWh (2016: 42.8 million MWh). The decrease in year-on-year energy usage is largely attributable to the curtailment of production at the Point Comfort alumina refinery and the power outage at the Portland smelter in December 2016 and resultant partial curtailment of production that took approximately six months to rectify.

AWAC's alumina refineries total energy intensity (energy per tonne of production) in 2017 was 2.25MWh per tonne of production, a 0.9% improvement compared to 2016. Direct energy intensity for alumina production remained static year on year.

Total energy intensity at AWAC's Portland aluminium smelter in 2017 declined by approximately 3.1% in comparison to 2016 due to the impact of recovery from the December 2016 power outage and subsequent loss of production and production restart.

ENERGY SECURITY

In Western Australia, AWAC's three alumina refineries - Kwinana, Pinjarra and Wagerup - are currently powered on gas sourced primarily from the North West Shelf and have two gas-fired cogeneration units. More than 90 per cent of the gas supply to the three refineries in Western Australia is secured under long-term contracts until 2020. In 2015, Alcoa of Australia secured approximately 75 per cent of its gas supplies to 2032.

It was announced in 2017 that an agreement was reached to supply electricity to the Portland aluminium smelter for a period of four years.

RESULTS AND GOALS

Alcoa's long-term strategic target for its global business (that includes AWAC's alumina refineries and the Portland smelter) was a 10 per cent reduction in energy intensity from a 2005 baseline by 2020 and 15 per cent by 2030. For the AWAC assets, the refineries have achieved a 3.7 per cent improvement compared to base and the smelter a 4.1 per cent improvement to base measure in 2017 however the major power disruption in December 2016 and the subsequent loss of production and production restart resulted in 0.5 per cent decline measured to the base year.

In 2017 experts were investigating whether the use of solar energy to power the calcination process and solar gas reforming (using solar energy to increase a gas streams energy by up to 20 – 30%) in the refining process.

AWAC's Australian refineries and the Portland smelter utilise energy demand management which allows for reduction in its demand for electricity at peak demand for electricity (generally the hottest days of the year). This provides support for the stability of electrical infrastructure and avoids additional costs of electricity generation on those extreme days.

AWAC FULL FACILITY DIRECT ENERGY CONSUMPTION BY SOURCE (MINES, REFINERIES AND SMELTER)

AWAC DIRECT ENERGY SOURCE	PURCHASED OR PRODUCED	2013GJ	2014GJ	2015GJ	2016GJ	2017GJ
Natural gas	Purchased	101,177,459	102,505,492	113,987,709	98,858,338	96,937,976
Diesel	Purchased	2,141,941	2,742,985	2,548,161	2,563,766	2,728,504
Petrol/gasoline	Purchased	9,050	86,909	65,862	52,422	54,094
Propane	Purchased	9,180	15,949	11,049	9,676	7,380
Coal	Purchased/ Produced	24,097,546*	13,406,757**	11,232,338	12,717,307	12,222,105
Residual fuel oil	Purchased	42,758,746	38,482,698	17,297,114	9,908,159	9,808,686
Pitch	Purchased	1,581,617	-	-	-	-
Biodiesel	Purchased	0	25,924	29,802	30,058	58,444

*Coal energy usage is higher due to the application of a higher energy content factor (14.5 actual) compared to an estimate of 10.2 applied in previous years.
** Reliance on coal declined with the closure of the Pt. Henry aluminium smelter located in Victoria in August 2014 and the subsequent closure in 2015 of the Anglesea (coal fired) power station.

AWAC INDIRECT ENERGY CONSUMPTION BY SOURCE (MINES, REFINERIES AND SMELTERS)

		FULL FACILITY 2013GJ	FULL FACILITY 2014GJ	FULL FACILITY 2015GJ	FULL FACILITY 2016GJ	FULL FACILITY 2017GJ
Electricity	(Non-renewable)	30,438,462	24,459,261	18,374,903	16,580,489	12,151,429
Electricity	(Renewable)	3,617,250	3,715,457	3,149,789	1,359,424	2,129,291
Total electricity		**34,059,870**	**28,174,718**	**21,524,692**	**17,939,913**	**14,280,720**
Steam		12,226,907	11,983,716	12,954,290	13,499,481	13,067,325

The decrease in electricity usage between 2017 and 2016 is due largely to the reduction in electricity used at the Portland smelter resulting from production loss due to the December 2016 power outage. Production of one potline was lost for several months.

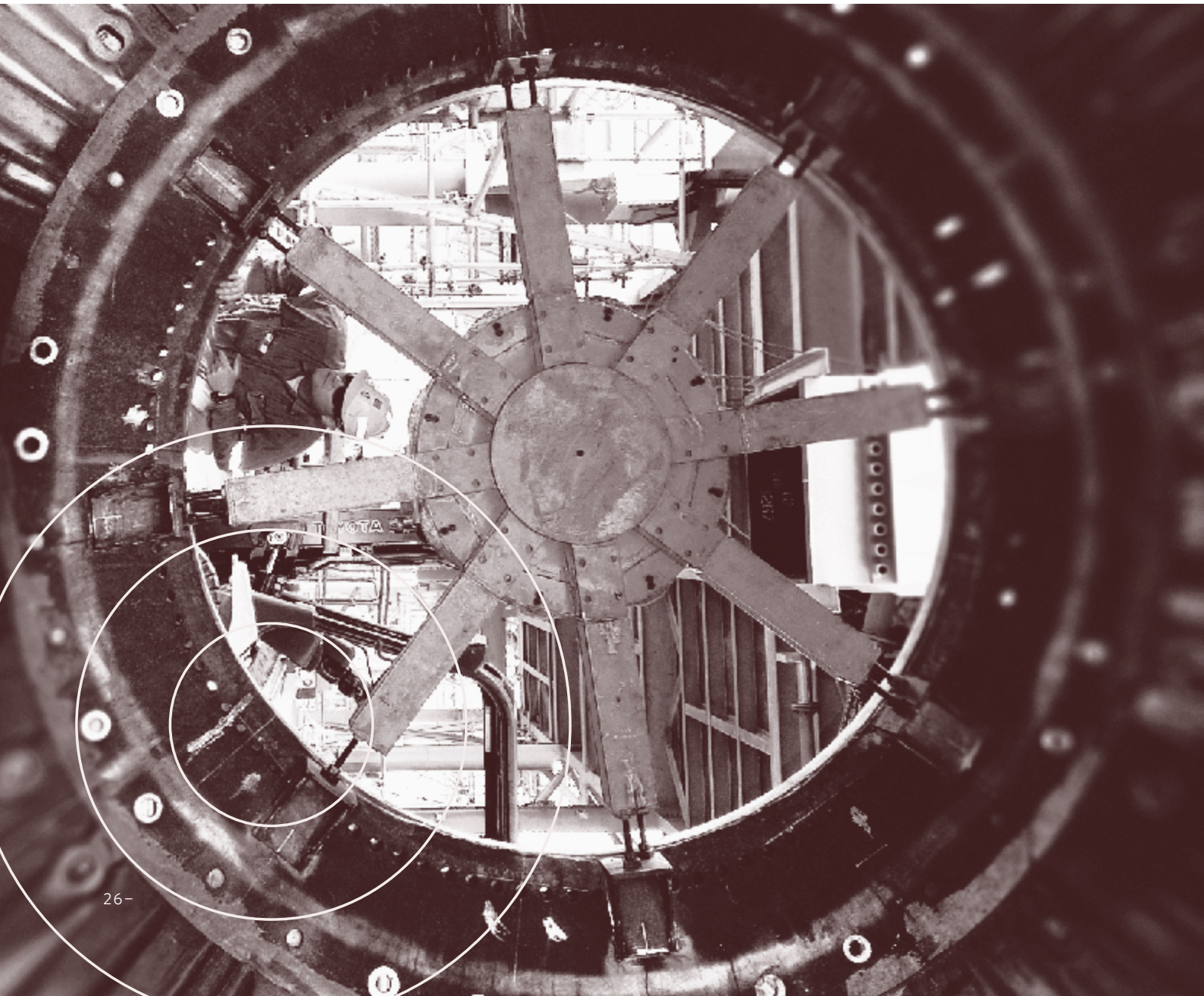
Climate Change Impacts

The AWAC business is actively working to manage climate change risks, adapt to changing climate and seize opportunities to produce shareholder value.

Alumina Limited recognises the scientific basis that climate change, represented by global warming, presents potential risks and challenges for business, the environment and society. However, working towards a satisfactory result of preventing continued global warming also opens opportunities. We acknowledge that AWAC's operations of transforming an ore into a commodity are energy intensive and energy and process efficiency gains are important to reducing carbon emissions.

Alcoa have prepared a business strategy that incorporates goals to reduce;

- energy intensity of its processes
- carbon and other GHG emissions from its operations.



CLIMATE CHANGE RISK.

Climate change risk is assessed in Alumina Limited's Risk Management Framework, which assesses risk levels and identifies strategies to minimise impact and maximise opportunity. Through our role on AWAC's Strategic Council and other relevant AWAC boards, we support Alcoa's efforts in managing risks such as described in the following table:

RISK AREAS	RISK DESCRIPTIONS	ACTIONS
Physical: Increased physical events such as more extreme weather events and systemic climactic changes	Increased risks to personnel, business continuity, production and facilities. Climate factors like extreme weather events are likely to have an impact on AWAC's global mining operations, access to freshwater (an important raw material), supply chain efficiencies, and the transportation of raw materials. Climactic changes leading to changes in rainfall and sea levels	To minimise the potential impact of changing climate conditions, they have included additional considerations into the design criteria for new facilities and expansions/upgrades of existing operations.
Regulatory responses (current and emerging) from governments worldwide to control greenhouse gas emissions	The increased scrutiny by governments on GHG emissions and the establishment of carbon pricing mechanisms, emissions trading schemes, carbon taxes etc present a challenge and a financial risk to the business.	Alcoa uses financial modelling to quantitatively assess the economic impact of enacted and proposed cap & trade and other climate/energy measures.
	The increased scrutiny by governments on GHG emissions and the establishment of carbon pricing mechanisms, emissions trading schemes, carbon taxes etc present a challenge and a financial risk to the business. and AWAC incurred modest costs (<US$10,000) associated with purchasing required permit allowances for Scope 1 emissions for its alumina refinery in Europe under Phase 3 of the EU Emissions Trading Scheme.	Also, to reduce the financial risk of cap & trade schemes, Alcoa has adopted aggressive annual, incentive based targets and long term CO2e & energy targets for all its operating facilities which include the AWAC operations.
Market changes and perceptions	Consumer demand for the end product of aluminium may change or the markets preference for greener products and energy could impact on access to finance and social licence.	Continual monitoring of markets and community trends. Seize on opportunities of utilising aluminium in reducing the carbon footprint in the transport and construction industries.
Changed financial performance as a result of regulatory pressures, increased energy costs and depressed market prices	Energy, is a significant input in a number of AWAC's operations, making AWAC an emitter of greenhouse gases. The introduction of regulatory change by governments in response to greenhouse gas emissions may represent an increased cost to AWAC and may affect Alumina Limited's profitability.	Securing low-cost, low-environmental-impact and long-term energy is an important focus and adopting developing technological advances.

On the upside, AWAC's end product – aluminium - offers a climate change solution through numerous lightweight applications of the metal that substantially reduce fuel consumption and emissions. It can also be endlessly recycled, using only five per cent of the energy required to make the original metal.

Emissions

The processes required to refine alumina from bauxite ore and to smelt aluminium from alumina require significant amounts of energy and depending on the energy source, significant emissions invariably result.

Our focus and importantly, that of operating partner Alcoa, is on decreasing GHG intensity via:

- increasing energy efficiency through process and technology improvements
- investigating alternative energy sources from low or no carbon-based generation, (renewable options to meet large volume energy requirements are limited in many regions)
- advancing technological solutions for GHG abatement.

A major challenge is balancing the need to ensure energy security with energy diversification. Opportunities to switch energy sources are restricted by:

- long-term energy contracts that exist at AWAC's Western Australian refineries
- the need for base load electricity supply at the Portland smelter.

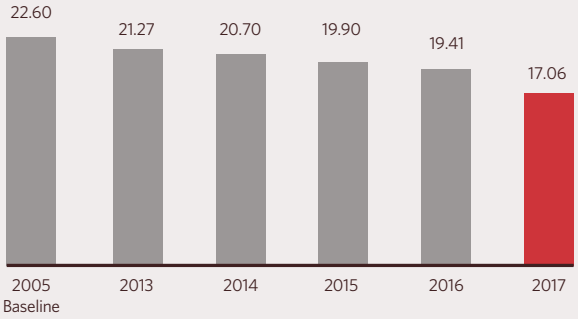
Despite these hurdles, Alcoa continue to pursue opportunities to reduce the carbon intensity of AWAC's purchased electricity. Research is ongoing into whether using solar energy to assist power the calcination process is feasible and has the potential to reduce non-renewable energy consumption at the refineries and therefore reduce GHG emissions.

RESULTS AND GOALS

In 2017 AWAC's total (on a full facility basis) absolute greenhouse gas emissions from AWAC's operations declined by approximately 15.4% to 11.3 million tonnes from 13.4 million tonnes of CO2 registered in 2016. Approximately 91 per cent of the reduction in absolute GHG emissions compared to the 2016 result was due to the impact of the 2016 power outage at the Portland aluminium smelter and the subsequent loss of production.

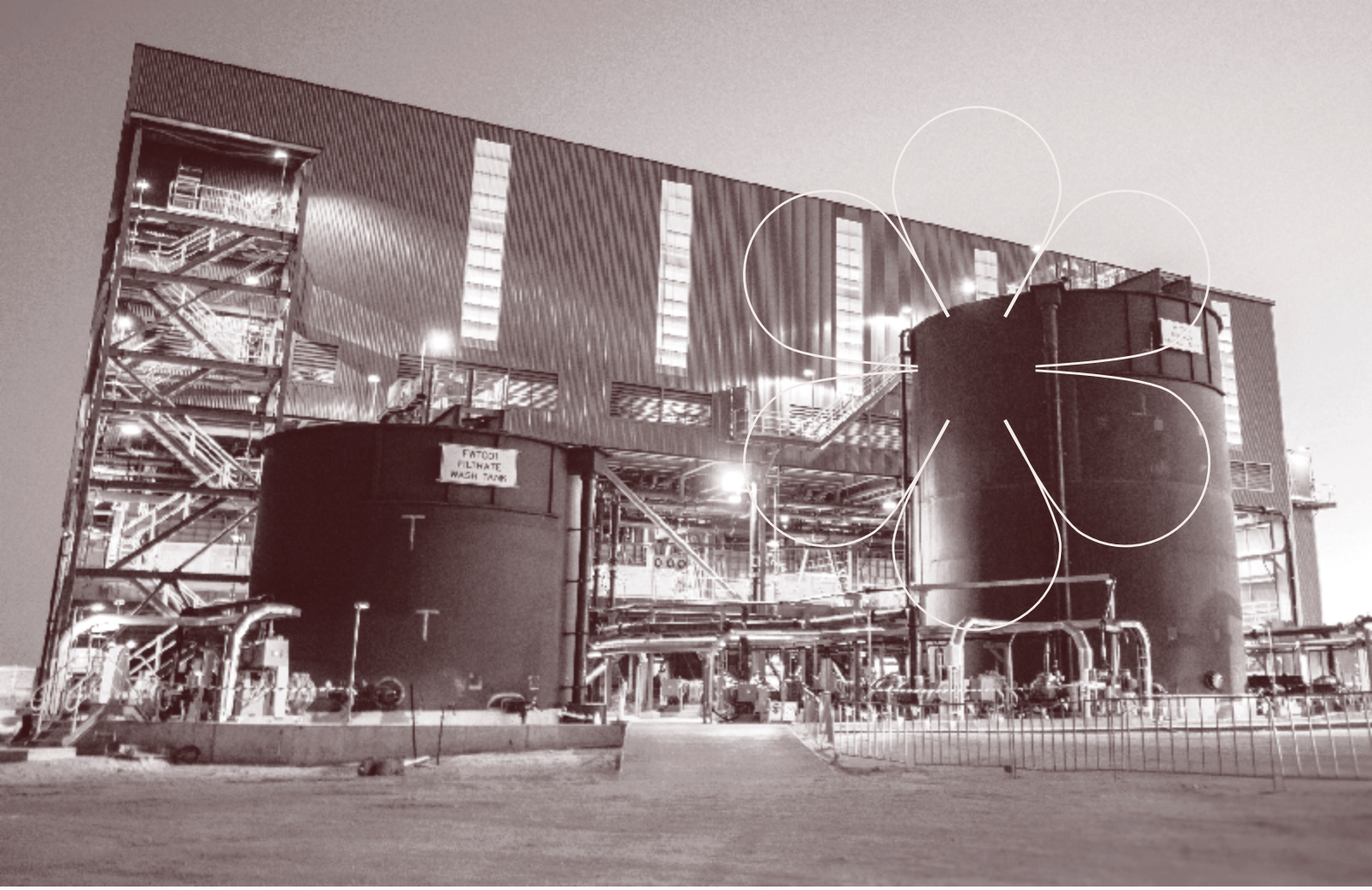
COMBINED SMELTER AND REFINERY GHG INTENSITY

Metric ton per tonne of production



GREENHOUSE GAS EMISSIONS – FULL FACILITY (TONNES OF CO2 EQUIVALENTS)

GHG	2013	2014	2015	2016	2017
Direct (Scope 1)	10,535,150	10,330,772	8,986,055	7,788,387	7,575,617
Indirect (Scope 2)	9,645,096	8,123,143	6,180,774	5,588,770	3,741,416
Total (Scope 1 & 2)	**20,180,246**	**18,453,915**	**15,166,829**	**13,377,157**	**11,317,033**
(Scope 3)	-	-	-	-	34,468,831



Scope 1 (direct GHG) emissions are those released directly by AWACs' sites through direct use of energy sources onsite such as natural gas. Scope 2 or indirect emissions are those from electricity generated by external energy suppliers that supply energy to AWAC's sites and also associated with the generation of steam at the co-generation facilities located at the Pinjarra refinery.

In 2017 Scope 3 emissions have been calculated for the first time and encompasses;

- Purchased goods and services
- Fuel and energy related activity, and
- Processing of sold goods.

The major contributor to the value of Scope 3 emissions is, processing of sold goods. Sales of alumina is the main product of AWAC. Alumina is used downstream by customers in the production of aluminium which is an energy intensive activity.

EMISSIONS CALCULATION METHODOLOGY

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), Australia - National Greenhouse and Energy Reporting Act, Brazil GHG Protocol Programme and The Climate Registry: General Reporting Protocol. Emission per source calculated by applying WRI Calculation Tool.

Water

Water is one of the most important elements for sustaining life therefore water management is a critical process.

Water forms an essential raw material for AWAC and is used in:

- bauxite ore refining into alumina
- dust suppression, road watering and vehicle and equipment cleaning throughout mining operations
- ingot-casting process during smelting.

AWAC's management of water resources is vital to its:

1. licence to operate which is granted by local communities, governments and environmental agencies, and
2. mitigation of business risks by ensuring business continuity.

The global water challenge is becoming more complex due to stress applied from:

- changing weather patterns
- growing populations
- expanding urbanisation
- increasing agricultural and industrial sectors.

Global water management issues require future technology advances combined with full community, government and business involvement and cooperation.

WATER SECURITY

Water scarcity has the potential to impact AWAC's costs, production volume and financial performance. In AWAC the largest water users are the alumina refineries. Most material to Alumina Limited are AWAC's operations in Western Australia, which is recognised as a region subject to water-stress, having experienced changing rainfall patterns in recent years leading to a drying climate.

Alcoa of Australia (AofA) has undertaken several initiatives to conserve water, increase water efficiency and reduce water quality requirements, which include:

- Bauxite residue filtration
- Pursuing secondary sources of water as an alternative to fresh water used in several refining processes.
- Projects aimed at recycling water already used in processing to reduce total water withdrawals.
- Projects evaluating applications to slow evaporation of stored water.
- Increasing pasture coverage on and around bauxite residue areas to supress dust and remove need for water sprinklers.

INITIATIVES

Alcoa has focussed on developing and implementing innovative and low-cost management technologies. AWAC's Kwinana alumina refinery in Western Australia reduced its freshwater use by 1.2 giglitres annually after investing in the innovative technology of residue filtration. The residue filtration system forces bauxite residue through very large filters that squeeze out water that can be reused in the refining process. The filtration residue processing is being replicated at Pinjarra, the largest refinery in AWAC's system.

RESULTS AND GOALS

In 2017, AWAC operations worldwide withdrew 29.6 million cubic metres of freshwater compared to 31.4 million cubic metres in 2016.

Freshwater intensity measured by cubic metre/tonne of production (refining and smelting combined)

	2005 BASE	2013	2014	2015	2016	2017
Refining	1.40	1.74	1.75	1.66	1.83	1.62
Smelting	1.67	1.12	1.26	1.17	1.05	1.26
Total intensity	4.47	4.43	4.58	4.32	4.52	4.34

2017 Freshwater[1] withdrawal by source (millions of cubic metres). Full facility basis.

SOURCE	2013	2014	2015	2016	2017
Surface water	-	-	-	-	19.6
Groundwater	-	-	-	-	8.6
Wastewater	-	-	-	-	0.1
Municipal water	-	-	-	-	1.3
Total	34.4	36.2	34.4	31.4	29.6

[1] Freshwater sources include:

- Groundwater pumped from or derived from wells, springs, or bores that is used for process/potable purpose
- Water purchased from a municipal water authority or other provider (including the output from a desalination plant)
- Water pumped from rivers, streams or lakes that is used for process/potable purpose; and
- Water produced from onsite and/or offsite, third party desalination systems
- Freshwater does not include:
- Water pumped from or derived from saline sources, (i.e., oceans, seas, & saline aquifers) and used as is for process water;
- Fresh water that is supplied to local users (communities, adjacent industrial users) by the facility;
- Fresh water that is extracted from ground water for purposes of lowering the ground water table and is not used for process/potable use;
- Water derived from recycled sources that is being reused as process water.

Commencing in 2018, Alcoa is setting a new strategic target to define and implement a program focussed on enhancing water-use efficiency in water-scarce areas such as the Western Australian operations by 2020 and define specific water-use reduction targets for 2015 and 2030. This will be based on the results of a global water-risk survey being conducted in 2018.

Land and Biodiversity

AWAC has an aim of minimising environmental impacts and promote sustainable use of land mined.

BIODIVERSITY

Biodiversity management is a major part of the mine rehabilitation process. It is an essential practice for operations near regions where there are significant flora and fauna species (such as the jarrah forest Darling Range of Western Australia, and at Juruti near the Amazon in Brazil) areas recognised as sensitive eco-systems.

Decisions on future land use and preparation of rehabilitation plans are contingent on determining and maintaining the biodiversity of the area. In assessing the reconstruction of biodiversity in rehabilitated areas tree establishment and growth are regularly monitored. This includes reviewing the concentration of undergrowth and diversity. Regular reviews are also undertaken on establishment of birds, mammals, reptiles and insect life. Ground and surface water levels and quality is also monitored.

AWAC's mining activities, although often limited to relatively small pits where bauxite exists, can affect a region because the pits must be connected by haul roads or conveyors. We work successfully to prevent the isolation of wildlife and the disruption of stream flows. We also maintain vegetation cover and the quality and quantity of both surface and groundwater. Our Western Australia operations have extensive programs around the management of soil erosion, weeds, feral animals, and forest pathogens to minimize impacts on biodiversity.

Alcoa have also committed to avoiding legally designated protected areas where strict nature conservation is the management objective. Prior to developing an area, Alcoa conducts extensive evaluations of the areas biodiversity to determine future rehabilitation programs. Evaluations include monitoring plant growth, density and diversity. A review is also conducted of birds, mammals, reptiles and including insects.

AWAC's Western Australian mining operations, the Juruti mine in Brazil and the Portland aluminium smelter in Australia have developed and implemented biodiversity action plans that will serve as models for other locations.

LAND DISTURBANCE AND REHABILITATION

In regards to mining operations, AWAC operates under the mandate that mining is a temporary use of the land and it supports returning mined land to a sustainable future. In most cases that means returning the land to its pre-mining condition with the same diversity of plant and animal species.

Bauxite mining is done in relatively shallow pits accounts for the majority of land that is disturbed as a result of AWACs operations. As the joint venture is committed to minimising the disturbance of the original habitat and work closely with community and regulatory stakeholders to restore those lands we do impact to the most productive use possible, including, where feasible, re-establishing pre-operating conditions.

Some AWAC operations are within or adjacent to protected areas or sensitive bio diverse areas.

OPERATIONAL SITE	SITE LOCATION & SIZE	POSITION	BIODIVERSITY VALUE
Huntly and Willowdale bauxite mines (active)	Jarrah Forest, Western Australia - 712,900 hectares (1,761,614 acres)	Within protected area	Recognised by Conservation International as an international biodiversity hotpost; threatened species and ecological communities (International Union for Conservation of Nature - IUCN- and federal government listed)
Anglesea Power station (coal mine and power station closed in August 2015)	Anglesea, Victoria Australia - 787 hectares (1,945 acres)	Within and adjacent to protected area	Adjacent land zoned for conservation and listed on the National Estate Register; threatened species and ecological communities (IUCN and federal government listed)
Wagerup alumina refinery	Wagerup, Western Australia - 6,000 hectares (14,826 acres)	Contains portions of area of biodiversity value	Ramsar listed wetlands adjacent; threatened species and ecological communities (International Union for Conservation of Nature (IUCN) and federal government listed)
Portland aluminium smelter	Portland, Victoria Australia - 500 hectares (1,236 acres)	Adjacent to protected area	Threatened species and ecological communities (International Union for Conservation of Nature (IUCN) and federal government listed)
Juruti bauxite mine (active)	Juruti, Brazil - 29,426 hectares (72,713 acres) that will be mined	Within protected area	Amazon rainforest and river; threatened species and ecological communities (IUCN listed)
Coermotibo bauxite mine (bauxite mine that ceased operation in October 2015)	Marowijne District, Suriname - 32,800 hectares (81,051 acres)	Adjacent to protected area	Adjacent to IUCN protected area; threatened species (IUCN listed)
Point Comfort alumina refinery (alumina refinery that was curtailed in 2016)	Point Comfort, Texas USA - 1,417 hectares (3,501 acres)	Adjacent to protected area	Native grassland and intertidal emergent marsh (protected under the Clean Water Act); threatened species (IUCN and federal government listed)

RESULTS AND GOALS 2017

The goal going forward is to maintain a corporate-wide running five-year average ratio of 1:1 or better for active mining disturbance (excluding long-term infrastructure) to mine rehabilitation. This will manage net expansion in land disturbed.

The ratio for the 2013 to 2017 period was 1.01:1. It is expected the ratio to decrease as more areas at AWAC's closed mines in Suriname are progressively returned to the Suriname government after rehabilitation.

MINING LAND DISTURBED/LAND REHABILITATED

	2013	2014	2015	2016	2017
Open mine area	13,863	14,371	13,702	14,155	14,380
Area disturbed (Annual)	1,169	1,235	1,086	977	1,123
Area rehabilitated (Annual)	1,029	1,008	1,293	646	898

*expressed in hectares

The values in this table include some for Alcoa's South American operations that do not form part of AWAC operations. However, the vast majority of disturbance and subsequent rehabilitation is the result of AWAC's mining and infrastructure activities.

AREA DISTURBED FOR MINING AND ASSOCIATED INFRASTRUCTURE (HECTARES)

	AUSTRALIA	SOUTH AMERICA	TOTAL
2013	890	279	1,169
2014	818	417	1,235
2015	756	330	1,086
2016	631	346	977
2017	675	448	1,123

*expressed in hectares

Area disturbed means annual land used in each reported year for mining or for mining infrastructure (eg. roads, shops, crushing equipment, conveyors). In Brazil, the area disturbed increased in 2017 due to additional clearing necessary for long-term infrastructure associated with the expansion of our Juruti mine. In Australia, the small increase in 2017 was due to slightly higher clearing for active mine areas at both the Huntly and Willowdale mines.

AREA REHABILITATED (HECTARES)

	AUSTRALIA	SOUTH AMERICA
2013	796	233
2014	576	266
2015	550	564
2016	290	242
2017	412	486

*Annual figures. Area rehabilitated means annual land returned to natural conditions or to productive use (such as farming) after mining or decommissioning of mine infrastructure in each reported year. The reduction in area rehabilitated in 2016 was mainly due to a range of operational constraints at the Huntly mine in Australia and reduced areas returned to the Government of Suriname during 2016

THE REHABILITATION PROCESS

Mining of the bauxite ore results in relatively shallow open pits and requires excavating through several layers of soil and sub-soil. The top soil which is rich with seed and nutrient reserves is removed and retained for return to the mined area to re-establish native vegetation.

The overburden is then removed to expose the bauxite ore. The overburden may also contain valuable nutrients and microbes necessary to assist with regeneration. Generally, the overburden and any rock removed together with the topsoil is returned immediately to the mine pit (progressive rehabilitation) however in some cases that is not immediately possible or practical and those materials are stored for later use.

Also, the topsoil can be treated with specially grown seeds and nursery-grown vegetation or, where the plant species are not prone to produce a viable seed bank, to supplement with cuttings and tissue culture propagation.

The rehabilitation process also includes creating an environment for native wildlife to return. This may involve creating habitats from tree trunks and stumps that were removed during mining. These habitats provide protection and an area to recolonise.

Continual review and research is conducted at rehabilitation sites to judge the success of techniques and processes. Research conducted at the Western Australian sites discovered that the establishment and longer-term survival of some species could be improved by reducing the rate of fertiliser applied.

Different rehabilitation processes are also employed at specific sites due to local conditions. At the Juruti bauxite mine in Brazil a nucleation technique is used which relies on locally adapted plants and animals colonising micro-environments using small mounds of topsoil to create an undulating land scape. This technique is used to help trap surface water and control water runoff during the wet season (300mm of rainfall).

Waste

Alumina and aluminium processing create a range of waste products, the most significant being

- bauxite residue, a sand and mud (almost in equal parts) slurry that contains some residual caustic soda.
- mercury emissions, which occur through refining operations.
- spent pot lining (SPL), the waste produced from aluminium smelting process when the carbon and refractory lining of smelting pots reaches the end of its serviceable life.

Bauxite residue: Every metric tonne of alumina produced, results in approximately 1.5 metric tons of bauxite residue (depending on bauxite quality). Residue is stored in impoundments that are capped and re-vegetated when full.

Minimising waste through innovative processes and alternative uses for waste products are priorities that will reduce AWAC's environmental footprint. In 2016 AWAC commissioned at the Kwinana alumina refinery in Western Australia, a residue filtration processes that uses very large filters to extract water from bauxite residue. The water obtained via the process is recycled back into the refinery process. Application of this technology has deferred the need to construct another 30-hectare residue storage area for at least 20 years compared to every five years previously. This technology reduces freshwater use by 1.2 gigalitres per annum and importantly, contributes to directly reducing the footprint of the residue storage areas.

RESULTS AND GOALS 2017

In 2017 AWAC produced approximately 22.8 million tonnes of bauxite residue as a result of its global bauxite mining activities. This represents a marginal decrease of 0.1 million tonnes compared to 2016.

AWAC improved its bauxite residue storage efficiency (measured by square metres of land required per thousand tonnes of alumina produced) in 2017 by approximately 4 per cent compared to 2015 after achieving the 2020 goal of a 15% reduction in bauxite residue land requirements per unit of alumina 7 years ahead of schedule.

In reducing the overall footprint, three long-term strategic targets for bauxite residue had been established:

- a 15% reduction in bauxite residue land requirements per tonne of alumina produced by 2020; 30% by 2030 from a 2005 baseline,
- rehabilitate 30% of total bauxite residue storage are by 2020; 40% by 2030, and
- reuse 15% of bauxite residue generated by 2020; 30% by 2030

Looking forward from 2018, Alcoa have established a new goal for bauxite residue management, to reduce bauxite residue land requirements per metric ton of alumina produced by 15 per cent by 2030 using 2015 as the baseline.

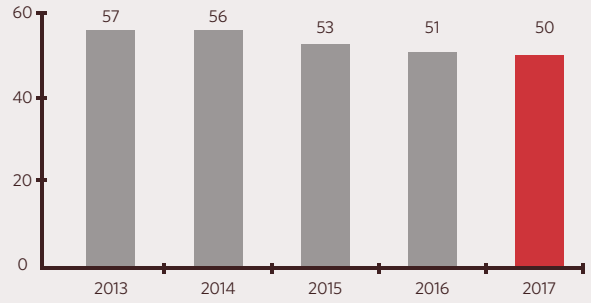
*From a 2005 baseline

As of 2016, a 23.9% improvement achieved towards the 2020 target of 30% reduction

*Although predominantly AWAC bauxite residue storage areas, the results against targets does include non-AWAC bauxite storage at Alcoa's Pocos de Caldas refinery in Brazil

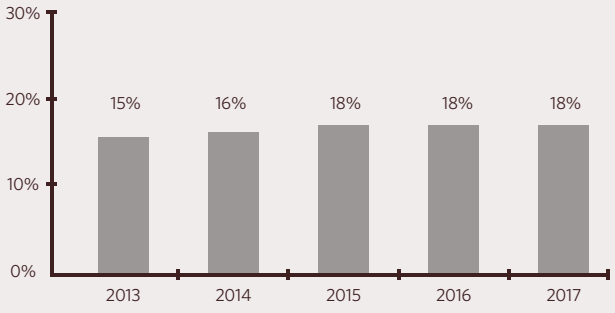
BAUXITE RESIDUE STORAGE EFFICIENCY

Square metres of land residue per thousand tonnes of alumina produced

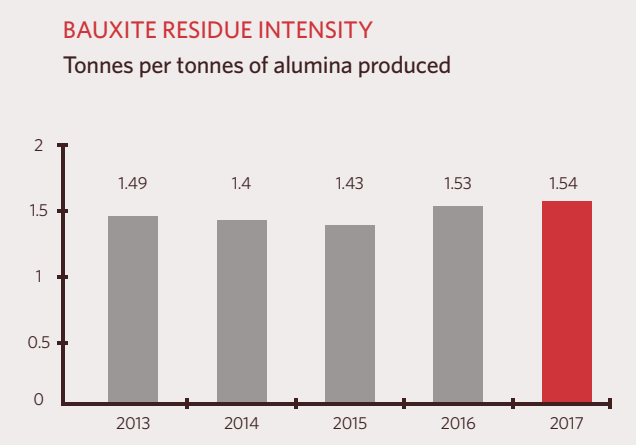


BAUXITE RESIDUE STORAGE AREA REHABILITATION

Percent of total area rehabilitated



The increase in bauxite residue intensity from 2016 was due to the curtailing of refineries that had lower residue-to-alumina ratios.

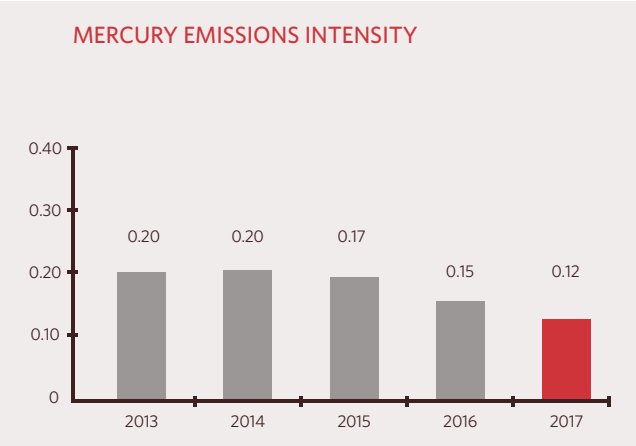


BAUXITE RESIDUE REUSE

Due to the high volume of residue produced each year, the per cent recycled or reused in comparison is minimal and is insufficient to disclose in graphic form.

MERCURY EMISSIONS

Mercury is a naturally occurring element found in bauxite. Mercury concentrations vary along with bauxite quality and location, and this variability adds to the challenge of reducing emissions. Alcoa will continue to research technology and operational solutions to achieve improved outcomes. In 2017, AWAC reduced the intensity to approximately 0.12 grams per metric ton of alumina produced.



OTHER EMISSIONS

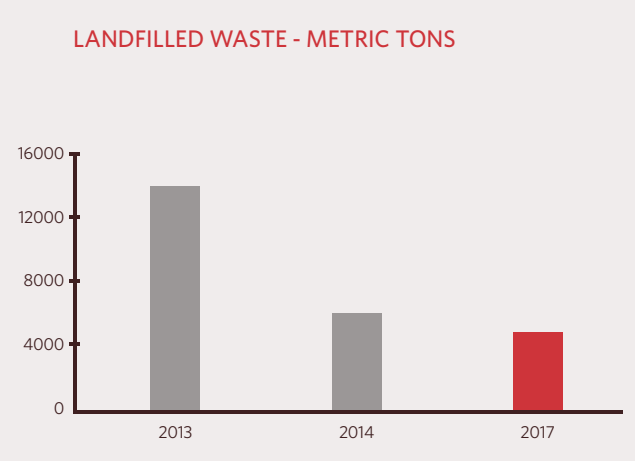
METRIC TONS

	SO2 Emissions	NOX Emissions	HG Emissions
2017 Total AWAC	10,879	11,186	1,819

WASTE TO LANDFILL

AWAC operations have significantly reduced landfill waste.

The reductions reflect increasingly efficient production processes along with the increase of re-use and recycling. This has been the result of waste separation and recycling programs at site as well as initiatives that recycle printer toner cartridges, batteries and mobile phones. Definitive data on the waste to landfill from all of AWAC's operations only became available from 2014.



Employees & Community

Alumina recognises that genuine community engagement and relationship building is essential to AWAC's future business success.

The AWAC joint venture receives its licence to operate as well as its license to grow, from local communities, their representatives and the broader society.

It is also the source of one of AWAC's most important stakeholders – its 5,107 employees who run operations worldwide. Finding, employing, developing and retaining skilled people is crucial to AWAC's future competitiveness and success.

The safety and wellbeing of employees at work is a fundamental human entitlement as is the right to collectively bargain and freely associate. Alcoa works to strengthen a culture that promotes safety as the priority concern in all work activity and supports employee dignity and labour rights worldwide.

We recognise that not all impacts from AWAC's activities are positive, which strengthens the importance of sustainability governance.

No significant non-compliances or fines on human rights or labour grounds arising from either Alumina Limited's activities or through AWAC's worldwide operations were recorded in 2017.

Approximately 75 per cent of AWAC employees are based at AWAC's Australian operations.

Most of AWAC's employees are covered by enterprise bargaining agreements. Alumina Limited and Alcoa both support the rights of employees to collectively bargain and freely associate.

In Australia, approximately 66 percent of employees are covered by enterprise bargaining agreements.

In Brazil, there are eight standalone labour agreements that cover 100 per cent of AWAC's union-represented workforce. Typically, these are renegotiated on an annual basis.

AWAC WORKFORCE

AWAC OPERATIONS	2013	2014	2015	2016	2017
Alumina & bauxite	6,841	6,289	6,128	4,866	4,834
Aluminium	876	403	301	274	266
Chemicals & steamships	10	7	9	6	7

ALUMINA LIMITED'S EMPLOYEES

In 2017, Alumina Limited had a small professional management team of 11 members to manage our interest in the AWAC joint venture. While all employees have individually negotiated contracts, they have the right to freely associate and collectively bargain in line with our Human Rights policy.

Local Community

AWAC is a global enterprise that conducts operations at a community level. The communities in which AWAC operates are diverse in nature, each with their unique issues, values and customs. It is important that interactions are conducted in a way that respects local communities and human rights, are open and transparent and also fosters positive long term relationships for mutual benefit.

To this end Alcoa has detailed policies and codes of conduct to guide employees. It is also signatory to the UN Global Compact with respect to human rights and the other principles relating to labour, environment, and anti-corruption.

ANTI-CORRUPTION PROGRAM

AWAC's Anti-Corruption Policy reflects Alcoa's strong commitment to conducting its operations around the globe ethically and in compliance with all applicable laws. Our directors and management believe that the way results are achieved is as important as the results themselves. Vigilance in complying with anti-corruption and anti-bribery including those based upon the OECD Convention, the U.S. Foreign Corrupt Practices Act, and other local anti-corruption laws, is critical for a global company.

The Anti-Corruption Program includes:

- Anti-Corruption Policy
- Due Diligence Review Process for Intermediaries
- Gifts and Hospitality Procedure
- In person and web-based trainings
- investigations and 24/7 Reporting Line
- Monitoring, audit and assessment.

Alumina Limited supports Alcoa's position and has developed similar policies and practices to protect both employees and stakeholder groups.

Annually, Alumina Limited employees are trained on the Human Rights and Anti-corruption Policies.

COMMUNITY ENGAGEMENT

Community engagement requires a community approach. AWAC operations, follow a framework developed by Alcoa to guide stakeholder engagement. The framework provides a systematic process to first identify appropriate stakeholders and then engage with them in the most effective manner. Many of the AWAC locations have community advisory boards that include representatives from stakeholder groups. Engagement is also made with stakeholders, primarily local communities and non-governmental organisations through the Alcoa Foundation. The method of engagement varies by location. Some do so through their community advisory board, while others consult with employees or local leaders and institutions.

In 2017 there were several key stakeholder issues involving AWAC operations that were raised by or discussed with stakeholders, a summary of which follows. for more detailed information use this link.

LOCATION	ISSUE	ACTION
Alcoa of Australia, Perth	Inaccurate media reports that Alcoa Australian companies did not pay tax in 2015-2016.	Alcoa of Australia operations paid corporate income taxes at an effective tax rate of 29.5%.
Anglesea (closed operation), Australia	Required to submit a revised closure plan for the Anglesea coal mine.	Community feedback and technical studies were key inputs into the draft Anglesea Mine Rehabilitation and Closure Plan. Also, a final concept master plan was provided in March 2018 to the Department of Environment.
Kwinana, Australia	Ongoing litigation and questions relative to the legitimacy of an air-quality buffer and land uses in the area.	Maintain that there needs to be adequate separation between industry and residential development and agree that the 1.5 kilometre buffer adopted by the Western Australian Planning Commission should be upheld.
Point Henry (closed operation), Australia	Engagement related to the decommissioning and environmental assessment of the site.	Point Henry 575 Concept Master Plan released in September 2017 following extensive community consultation.
Portland, Australia	December 2016 significant power outage and expiration of 32-year electricity supply agreement.	January 2017 announced a 4 year agreement for the supply of electricity and recovery from power outage. Engaged with all stakeholders.
Western Australia mining operations	Sought approval to ship bauxite from the Port of Bunbury. Approval received.	Engaged with Port operators, governments, and other stakeholders.
Western Australia mining operations	Assessment of viability of mining around Dweeingup.	Engaged with local landholders, tenants, government representatives and interested neighbours.
Juruti, Brazil	Information on the Positive Agenda requested by Juruti City Council.	Clarified items and invited Council members to visit the mining operations.
Sao Luis, Brazil	Local residents expressed concern that they were impacted by dust from the Alumar refinery.	Met with the community and intensified dust control measures.
Point Comfort (fully curtailed), USA	Concern expressed about dust coming from bauxite storage areas.	Met with the local Citizens Panel and Texas Commission on Environmental Quality. Experts engaged and new measures taken.

INDIGENOUS PEOPLES - LOCAL PARTNERSHIPS

Currently AWAC operates in areas home to indigenous peoples including:

- Australia
- Suriname and
- Juruti, Brazil.

Many of AWAC's Australian operations engage with local communities to develop an environmental improvement plan, which is a public commitment to continuously improve environmental performance, reduce environmental impacts, and develop more sustainable practices.

In 2017, The Nature Conservancy, with support from Alcoa Foundation, is working in Australia and Brazil to strengthen the role of indigenous and local communities in managing lands to help mitigate global climate change. The projects have the potential to reduce greenhouse gas emissions by approximately 13.5 million tonnes.

During 2017 there were no reported human rights non-compliances through AWAC or Alumina Limited.

Safety

As a non-operating partner in AWAC, Alumina Limited views workplace safety as a key performance indicator because:

- It is a fundamental right for employees, contractors and visitors to be safe at work.
- It demonstrates the level of management control and expertise that Alcoa brings to operating the AWAC joint venture.
- A safe work environment encourages work participation and attendance, which drives productivity and performance.

Managing safety in AWAC's complex mining and manufacturing environment requires strong systems as well as a focussed safety culture committed to continuous improvement. As the operator Alcoa has invested substantial intellectual, financial and system resources over several decades to understand the key drivers behind safety behaviour with the sole aim of eliminating fatalities and serious injuries from AWAC's operations. Alcoa's stated goal for a healthy workplace is to eliminate all health hazards that could potentially affect employees, contractors, and other individuals within their managed facilities which includes AWAC's global operations. If elimination is not feasible, Alcoa reduce the risk to the fullest extent possible.

With that said, it is with deep regret that two experienced contractors were fatally injured in 2017.

- At AWAC's Juruti mine in Brazil, a 14 metre tree snapped and struck a drilling contractor.
- At the Alumar refinery in Brazil, a contractor working on a pneumatic-activated valve sustained chemical and thermal burns.

Following thorough investigations, action plans were developed for short and long-term risk reduction.

APPROACH TO SAFETY

In 2017, Alcoa focussed on preventing and/or mitigating fatalities and life-altering injuries. This involved understanding how work is conducted and the associated hazards and risks.

INITIATIVES INCLUDED:

- Critical risk assessment – registering at each site, all safety hazards, eliminating the hazards or implementing controls to prevent or mitigate the risk
- Critical 6 plus 1: -

RESULTS AND GOALS 2017

Alcoa Corporation as operator/manager of the AWAC operations, revised strategy focusses on two key areas:

- Preventing and mitigating fatalities and life-altering injuries and,
- Implementing more transparent, accessible and inclusive reporting.

PREVENTION AND MITIGATION

This is structured around understanding work processes and their associated risks as opposed to assuming how the work is performed.

Alcoa in refocusing its fatality prevention process and improving safety, directed their effort on plant floor and operational work areas including:

- Critical risk management – each location develops a registry of all safety hazards
- Critical 6 plus 1 – six most critical hazard categories – mobile equipment, crane, confined space, fall control, lock/tag/verify and electrical plus a critical hazard for each production process – mining (haul trucks), refining (chemical burns), smelting (molten metal)
- Risk based assessment – to identify high risks from an on the plant-floor evaluation
- Worker on foot initiative – people on foot cannot be in the same area as vehicle
- Human performance – work towards certification in a core operating standard based on human performance. Teaches employees how to anticipate and recognise error and error-likely situations to predict, reduce, manage and prevent fatalities and injuries from occurring.
- Skill builders – training sessions on a critical safety topic. Topics rotate.
- Environment, health and safety (EHS) onboarding system – to acclimatise new EHS employees, plant managers and vice presidents of operations to the EHS culture.
- Contractor safety process – within the alumina business unit, rolled out a new contractor safety process in 2017

Also, all of AWAC employees are authorised to stop their work or that of a colleague if they consider the situation is unsafe or if they are unsure of the potential outcome.

REPORTING

In 2017, Alcoa recalibrated the collection of health and safety data across all operations including the AWAC assets. This realigning of measures resulted in a significant increase in the rates year-on-year. The reporting of safety rates including employees, temporary workers and supervised and non-supervised contractors providing greater transparency of reporting and improve safety investigations and will drive ownership of safety to include all persons at AWAC sites.

Other new metrics that will be monitored are closing-out actions on high-risk findings from the risk-based assessment as well as the completion rates of putting controls in place for the critical 6 plus 1.

FATALITIES

Employees and supervised contractors

	GLOBAL	AUSTRALIA	EUROPE	NORTH AMERICA	SOUTH AMERICA
2017	2	0	0	0	2

FATALITIES BY GENDER

Employees/contractors

	MALE	FEMALE
2013	0	0
2014	0/1	0
2015	0/1	0
2016	0/0	0
2017	0/2	0

LOST WORKDAY RATE

Employees and supervised contractors

	GLOBAL	AUSTRALIA	EUROPE	NORTH AMERICA	SOUTH AMERICA
2013	0.20	0.50	0	0.25	0.05
2014	0.17	0.42	0	0.50	0.06
2015	0.16	0.2	0	0.23	0.09
2016	0.31	0.41	0	0	0.14
2017	0.315	0.458	0.141	1.042	0.169

Lost workday rate represents the number of injuries and illnesses resulting in one or more days away from work per 100 full-time workers

LOST WORKDAY INCIDENTS BY GENDER

Employees and supervised contractors

	MALE	FEMALE	TOTAL
2013	26	1	27
2014	22	1	23
2015	11	0	11
2016	20	0	20
2017	32	2	34

DAYS AWAY, RESTRICTED AND TRANSFER RATE

Employees and supervised contractors

	GLOBAL	AUSTRALIA	EUROPE	NORTH AMERICA	SOUTH AMERICA
2013	0.56	1.19	0	1.11	0.08
2014	0.51	0.86	0.12	1.01	0.09
2015	.039	0.42	0.12	0.92	0.09
2016	0.16	0.23	0	0	0
2017	0.575	0.859	0.562	3.127	0.211

DAYS AWAY, RESTRICTED AND TRANSFER INCIDENTS BY GENDER

Employees and supervised contractors

	MALE	FEMALE	TOTAL
2013	66	4	67
2014	46	1	47
2015	23	0	23
2016	9	1	10
2017	59	3	62

TOTAL RECORDABLE INCIDENT RATE

Employees and supervised contractors

	GLOBAL	AUSTRALIA	EUROPE	NORTH AMERICA	SOUTH AMERICA
2013		2.39	0.11	3.19	0.23
2014		2.06	0.46	4.36	0.40
2015		1.0	0.36	4.72	0.09
2016	1.49	1.60	0.91	4.49	0.57
2017	1.299	2.082	0.703	4.169	0.465

Total recordable incident rate represents the number of injuries and illnesses resulting in days away from work, job transfer or restriction, medical treatment or other recordables per 100 full-time workers.

TOTAL RECORDABLE INCIDENTS BY GENDER

	MALE	FEMALE	TOTAL
2013	141	5	146
2014	127	6	133
2015	81	2	83
2016	84	6	90
2017	132	8	140

OCCUPATIONAL DISEASE RATE

Employees/supervised contractors

	GLOBAL	AUSTRALIA	EUROPE	NORTH AMERICA	SOUTH AMERICA
2017	0.213	0.420	0.0	0.0	0.021

The occupational disease rate represents the number of reported illnesses per 100 full-time workers. This rate is heavily influenced by the inclusion of non-instantaneous hearing-loss incidents, which represent a substantial contribution to the overall occupational disease rate.

OCCUPATIONAL DISEASE RATE

Non-supervised contractors

	GLOBAL	AUSTRALIA	EUROPE	NORTH AMERICA	SOUTH AMERICA
2017	0.009	0.0	0.0	0.0	0.021

Regional rates may fluctuate significantly year-over-year because of the relatively small number of disease cases identified overall.

ALUMINA LIMITED'S RESULTS

While Alumina Limited has a relatively small operational footprint, we focus on our safety performance through training. There were no recordable injuries for the year or Lost Work Days as a result of incidents.

Economic Contribution

Alumina Limited's fundamental purpose is to generate long-term value for our approximate 50,000 shareholders through the 40 per cent ownership of the AWAC joint venture, which leads the global alumina market.

The sustainable economic performance of AWAC is vital to our future success and this is predicated on its ongoing ability to secure access to land, natural resources, employees, community support, financial capital and future market demand.

AWAC produced its best cash returns since 2007. AWAC's full year net profit after tax was US$901 million (USGAAP). AWAC's realised alumina prices averaged $335 per tonne in 2017 and its position in the lowest quartile on the cost curve produced alumina margins of $137 per tonne in 2017, compared with $51 per tonne in 2016. AWAC's high quality refineries at Pinjarra and Wagerup in Australia achieved production records in 2017. Total AWAC alumina production was 12.5 million tonnes in 2017. AWAC's bauxite mines in Australia and Brazil also achieved production records for 2017. AWAC's cost of alumina production increased to $198 per tonne in 2017, a 3.7 percent increase year on year mainly driven by an increase in caustic soda prices – a key production input. During 2017 Ma'aden's Saudi Arabian alumina refinery (in which AWAC holds a 25.1 per cent interest) produced 1.5 million tonnes of alumina (AWAC's share was 0.4 million tonnes), representing a 7.1% improvement compared to 2016. The Ma'aden refinery has recently operated near its full production capacity of 1.8 million mtpa in 2017.

With higher alumina prices and margins in 2017, AWAC's cash from operations increased to $1,105 million. The changes to the AWAC Agreements on distributions agreed in September 2016 ensured that the benefits of strong cash flow were quickly distributed to Alumina Limited.

For more on Alumina Limited's financial performance visit:

- Full year results 2017

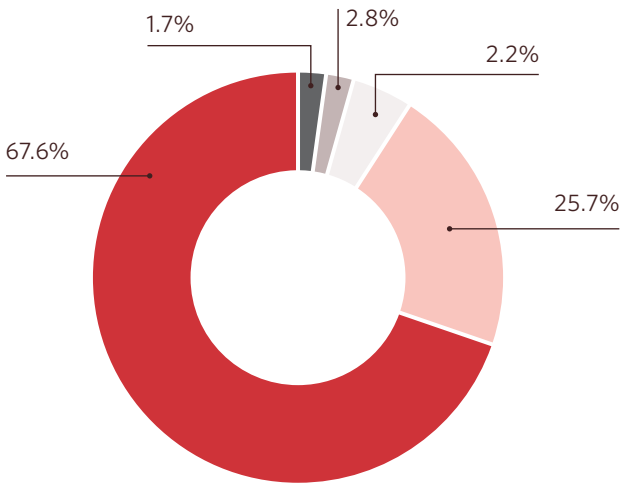
INVESTING IN AWAC FOR SUSTAINABLE GROWTH

AWAC's bauxite mining business unit consolidated its position during 2017. AWAC supplied 6.6 million bone dry tonnes (BDT) to the third-party bauxite market in 2017. The Juruti mine in Brazil has undergone two separate expansions from 2016, which will increase production capacity to 5.7 million BDT. These expansions have been made at a very low capital investment by utilising existing infrastructure. AWAC is also supplying bauxite from its Huntly mine in Western Australia to China. This is an important step forward in leveraging the existing resource and infrastructure of the Western Australian bauxite operations. AWAC has committed to a capital project to provide increased bauxite export capability through Western Australia. The project includes bauxite unloading facilities, a new rail loop and a train unloading facility.

BROADER ECONOMIC CONTRIBUTION

Alumina Limited directly contributes economic value through dividends to shareholders as well as payments to employees, suppliers and service providers.

In 2017 Alumina Limited distributed a final dividend of US9.3 cents per share, bringing the total declared dividend for the year to US13.5 cents per share ($388.7 million). This is a substantial increase on the US6.0 cents per share ($135.3 million) for 2016. Actual dividends paid the 2017 calender gear ammounted to $210.2 million. During 2017, Alumina Limited general and administrative expenses were $12.1 million compared to $26.3 million in 2016. The decrease was due to approximately $14.0 million of costs incurred in 2016 arising from the Company's actions in relation to Alcoa's corporate separation and included approximately $1 million associated with the previous CEO's retirement.



DISTRIBUTION OF ALUMINA LIMITED ECONOMIC CONTRIBUTION 2017

- Dividends paid $210.2 million (67.6%)
- Payments to suppliers $5.2 million (1.7%)
- Employee benefits $6.9 million (2.2%)
- Net Financing costs $8.6 million (2.8%)
- Payments for investments in associates $80 million (25.7%)

In 2017 AWAC employed 5,107 people, contributing directly to the economy of the many communities and seven countries in which it operates. In the normal course of its operations, AWAC also supports regional economic growth through paying taxes and royalties. Local communities benefit from grants and financial assistance offered in community projects and infrastructure development.

ALUMINA LIMITED DIVIDENDS

Generally the Board intends, on an annual basis, to distribute cash from operations after debt servicing and corporate costs commitments have been met. The Board will also consider the capital structure of Alumina Limited, the capital requirements for the AWAC business and market conditions. Dividends paid will be fully franked for the foreseeable future.

PAYMENT DATE	TYPE	PAYMENT AMOUNT $A	A CENTS	FRANKING TAX RATE %	FRANKED AMOUNT	DRP PRICE PER SHARE A$
15-Mar-18	2017 FINAL	US$0.093	11.93	30	FULL	DRP SUSPENDED
14-Sep-17	2017 INTERIM	US$0.042	5.2774	30	FULL	DRP SUSPENDED
22-Mar-17	2016 FINAL	US$0.031	4.0362	30	FULL	DRP SUSPENDED
15-Sep-16	2016 INTERIM	US$0.029	3.8543	30	FULL	DRP SUSPENDED
23-Mar-16	2015 FINAL	US$0.018	2.4705	30	FULL	DRP SUSPENDED
28-Sep-15	2015 INTERIM	US$0.045	6.4185	30	FULL	$1.22
25-Mar-15	2014 FINAL	US$0.016	2.047	30	FULL	DRP SUSPENDED
21-Aug-14	2014 INTERIM	NIL	NIL	N/A	N/A	DRP SUSPENDED
20-Feb-14	2013 FINAL	NIL	NIL	N/A	N/A	DRP SUSPENDED
22-Aug-13	2013 INTERIM	NIL	NIL	N/A	N/A	DRP SUSPENDED
21-Feb-13	2012 FINAL	NIL	NIL	N/A	N/A	DRP SUSPENDED
16-Aug-12	2012 INTERIM	NIL	NIL	N/A	N/A	DRP SUSPENDED

Product Contribution & Quality

Aluminium is a core component to many global industries and alumina, which is refined from bauxite ore, is the feedstock that makes aluminium metal.

The production of aluminium is an energy intensive process however, it is a material that has light weighting properties that contributes to more fuel-efficient transportation, energy efficient buildings and packaging. It is durable and conductive for engineering applications and is infinitely recyclable reducing energy and resource consumption compared to its original manufacture. These properties make aluminium fundamentally sustainable and appropriate to meeting the challenges of future generations facing increasing resource scarcity, urbanisation and climate change. Aluminium is set to play a key role in the transition to electric vehicles.

AWAC is one of the world's leading bauxite producers and leading producer of alumina. AWAC concentrates on responsible mining of bauxite that helps reduce supply chain risk for any down-stream user. The sustainability of mining operations commences with the development of a rehabilitation plans in consultation with stakeholders, before mining begins. For more detailed information on mining and rehabilitation practices see the section on Land Management and Biodiversity.

Supply Chain

SUPPLY CHAIN MANAGEMENT

AWAC's supply chain and procurement management is the responsibility of Alcoa as AWAC's manager/operator. Alumina Limited believes that the processes used by Alcoa are robust and designed to require responsible and sustainable behaviour based on the highest standards of integrity and compliance with all relevant laws and regulations.

GLOBAL SUPPLIER SUSTAINABILITY PROGRAM

Alcoa use their Global Supplier Sustainability Program to assess and help improve sustainability of AWAC's key suppliers that present the biggest sustainability risk to the business. These include companies that contribute the most to AWAC's carbon footprint, possess preferred status, are sole sources of supply, are located in emerging or high-risk countries, or provide regulated commodities.

The program consists of four components:

- Communicate expectations: Clearly define our sustainability expectations and communicate them through discussions and Alcoa's Supplier Standards.
- Assess supplier: formally assess the performance of key suppliers to evaluate the maturity of their sustainability programs and determine where improvements are needed.
- Develop and educate: For suppliers that fall into the emerging and lagging categories, provide education and tools to develop and improve their programs. Also require action plans and demonstrated improvements in the development of their sustainability programs.
- Monitor: reassess suppliers in the emerging and lagging categories annually. Those that do not demonstrate annual improvements face the risk of losing AWAC's business.

SUPPLIER ASSESSMENT CRITERIA

SUPPLIER SUSTAINABILITY FOCUS AREAS	ASSESSMENT TOPICS
Suppliers develop and implement a sustainability program that includes environmental, social, economic, and ethical aspects; such programs publicly published; suppliers cascade same to their supply base	• Labour practices • Health and safety programs • Business ethics policies • Community commitment programs • Risk management • Financial management • Security of supply • Publicly disclosed policies and procedures • Cascade principles and policies to supply base
Suppliers integrate sustainability into their business strategy and support it through their values and culture.	• Value systems • Participation in sustainability indexes or reporting frameworks • Incorporation of sustainability into market strategy • Life cycle advantages/disadvantages of key products
Suppliers measure performance and establish quantifiable environmental goals; progress on environmental goals publicly disclosed.	• Environmental goals and metrics • Recycling programs • Measurement systems • Public disclosure/third-party assurance

In 2017, Alcoa continued implementing a third-party supplier due diligence program with the supplier base. This program helps Alcoa manage risk in the supply chain related to the areas of anti-bribery and corruption, trade compliance, child and slave labour, criminal history, human trafficking, and conflict minerals.

GRI Index

STRATEGY AND ANALYSIS

ID	DESCRIPTION	
G4.1	Statement from the most senior decision-maker about the relevance of sustainability to the organisation and the organisation's strategy for addressing sustainability.	
	View (Boundary and Scope)	P4
	View (Chairman and CEO Overview)	P6
G4.2	**Description of key impacts, risks, and opportunities**	
	Chairman & CEO Overview	P6
	Sustainability and Alumina	P18
	Climate Change Impacts	P26

ORGANISATIONAL PROFILE

ID	DESCRIPTION	
G4.3	Name of the organisation	
	About This Report	P4
G4.4	Primary brands, products, and/or services	
	View (Products)	P48
	View (About Alumina)	
G4.5	Location of organisation's headquarters	
	View	P9
G4.6	Report the number of countries where the organisation operates, and names of countries where either the organisation has significant operations or that are specifically relevant to the sustainability topics covered in the report.	
	About Alumina Limited	P10
G4.7	Nature of ownership and legal form	
	About Alumina Limited	P9
	About this Report	P4
G4.8	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	
	View (Global Business)	
	View (Profile)	
	View (About Alumina)	P9
G4.9	Report the scale of the reporting organisation	
	View (Performance)	
	View (Profile)	
	View (About Alumina)	P9

ID	DESCRIPTION	
G4.10	Report the total number of employees by employment contract and gender	
	View (Employee profile)	P39
G4.11	Report the percentage of total employees covered by collective bargaining agreements.	
	View (Employee profile)	P38
G4.12	Describe the organisation's supply chain	
	View (Supply Chain)	P50
G4.13	Significant changes during the reporting period regarding size, structure, ownership or supply chain	
	No changes (N/A)	
G4.14	Report whether and how the precautionary approach or principle is addressed by the organisation	
G4.15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or which it endorses	
	View (Values, Policy and Practice)	P15
G4.16	List of memberships of associations (such as industry associations) and national or international advocacy organisations	
	View (Memberships)	P15

IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES

ID	DESCRIPTION	
G4.17	List all entities included in the organisation's consolidated financial statements	
	View (Annual Report)	P72
G4.18	Explain the process for defining the report content and the Aspect Boundaries	
	View (About this report)	P4
	View (Materiality)	P7
G4.19	List all the material aspects identified in the process for defining report content	
	View (Materiality)	P7
G4.20	For each material aspect, report the Aspect Boundary within the organisation	
	View (Materiality)	P7
G4.21	For each material Aspect, report the Aspect Boundary outside the organisation	
	View (Materiality)	P7
G4.22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	
	No restatements apply	
G4.23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries	
	Not applicable	

STAKEHOLDER ENGAGEMENT

ID	DESCRIPTION	
G4.24	Provide a list of stakeholder groups engaged by the organisation	
	View (Stakeholders)	P8
G4.25	Report the basis for identification and selection of stakeholders with whom to engage	
	View (Stakeholders)	P8
G4.26	Report the organisation's approach to stakeholder engagement	
	View (Stakeholders)	
G4.27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns.	
	View (Stakeholders)	P41

REPORT PROFILE

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G4.29	Date of most recent previous report	
	(2016 Update)	
G4.30	Reporting cycle	
	View	
G4.31	Contact point for questions regarding the report or its contents	
	View	P5
G4.32	Report on the 'in accordance ' option the organisation has chosen	
	View (about-this-report)	P4
G4.33	Report the organisation's policy and current practice with regard to seeking external assurance for the report.	
	View (about this report)	P5

GOVERNANCE

ID	DESCRIPTION	
G4.34	Report on the governance structure of the organisation, including committees of the highest governance body	
	View (Governance Sustainability)	
	View (Governance 2017)	
	View (AWAC governance framework)	P14
G4.35	Report the process for delegating authority for economic, environmental and social topics form the highest governance body to senior executives and employees	
	AWAC governance framework	P16
G4.36	Report whether the organisation has appointed an executive -level position or positions with responsibility for economic, environmental and social topics	
	View (AWAC governance framework)	P16

GOVERNANCE

ID	DESCRIPTION
G4.37	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body. View View (complaints) P15
G4.38	Report the composition of the highest governance body and its committees View (Governance 2017) P14
G4.39	Report whether the chair of the highest governance body is also an executive officer View (Governance sustainability) P14
G4.40	Report the nomination and selection processes for the highest governance body and its committees. View (Governance 2017)
G4.41	Report processes in place for the highest governance body to ensure conflicts of interest are avoided and managed. View (Values) View(Nomination Committee)
G4.42	Report the highest governance body's and senior executives role in the development, approval, and updating of the organisation's purpose, value or mission statements, strategies, policies and goals relate to economic, environmental and social impacts. View (Governance 2017) P14 View (AWAC governance)
G4.43	Report the measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics View (AWAC governance framework) P14
G4.44	Report the processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social topics View (Board performance evaluation) P15
G4.45	Report the highest governance body's role in the identification and management of economic, environmental, and social impacts, risks and opportunities View P15 View (Risk management)
G4.46	Report the highest governance body's role in reviewing the effectiveness of the organisations risk management processes for economic, environmental and social topics View (Risk Management) P14
G4.47	Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks and opportunities View (Audit and Risk Committee Role) View (Board and Committee Meetings 2017)
G4.48	Report the highest committee or position that formally reviews and approves the organisations sustainability report and ensures that all material aspects are covered In 2017 the Board reviewed the structure of the Report and the material aspects and the CEO signed-off on the final content
G4.49	Report the process for communicating critical concerns to the highest governance body View (Communication Strategy) P18 View (Whistleblower)

ID	DESCRIPTION
G4.50	Report the nature and total number of critical concerns that were communicated to the highest governance body and the mechanism used to address and resolve them View (2017 Stakeholder issues) P41
G4.51	Report the remuneration policies for the highest governance body and senior executives View (Remuneration 2017)
G4.52	Report the process for determining remuneration. View (Remuneration 2017)
G4.53	Report how stakeholders views are sought and taken into account regarding remuneration, including the results of votes on remuneration policies and proposals, if applicable. View (Remuneration 2017)
G4.54	Report the ratio of the annual total compensation for the organisations highest paid individual in each country of significant operations to the median annual total compensation for all employees in the same country Information not available for AWAC
G4.55	Report the ratio of percentage increase in annual total compensation for the organisations highest paid individual in each country of significant operations Information not on hand for AWAC
G4.56	Describe the organisations values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics View (Code of Conduct) P15
G4.57	Report the internal and external mechanisms for seeking advice on ethical and lawful behaviour and matters related to organisational integrity such as helplines or advice lines. View (Values, Policy and Practice) P15
G4.58	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behaviour and matters related to organisational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines. View (Values, Policy and Practice) P15
G4.18	Percentage of employees covered by collective bargaining agreements View P38

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G4.EC2	Financial implications and other risks and/or opportunities due to climate change	
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	View	P33
G4.EN15	Direct Greenhouse Gas (GHG) emissions	
	View (Emissions)	
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G4.EN18	Greenhouse Gas (GHG) emissions intensity	
	View (Emissions)	P28
G4.EN19	Reduction of Greenhouse Gas (GHG) emissions	
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G4.EN23	Total weight of waste by type & disposal method	
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ID	DESCRIPTION	
G4.LA6	Type of injury, injury rate, occupational diseases, lost days, absenteeism, work related fatalities by region and gender	
	View (Safety)	P43-45
	View (Employees)	

SOCIETY

ID	DESCRIPTION
G4.SO1	Percentage of operations with implemented local community engagement & development programs View P40-41
G4.SO4	Percentage of employees trained in anti-corruption policies View
G4.SO8	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations View (Values) View (Employees & Community)

HUMAN RIGHTS

ID	DESCRIPTION
G4.HR2	Total hours of employee training on human rights policies or procedures View
G4.HR8	Total number of incidents of violations involving rights of indigenous peoples View (Values, Policy & Practice) View (Employees & Community)

PRODUCT RESPONSIBILITY

ID	DESCRIPTION
G4.PR3	Type of product and service information required by procedures View
G4.PR9	Monetary value of significant fines for non-compliance View

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