

A close-up photograph of a young woman with dark hair, smiling warmly at the camera. She is wearing a red tank top. In the foreground, she is holding a silver aluminum can, which is slightly out of focus compared to her face. The can has a pull-tab lid and some embossed text, including 'REPOSIT' and '13mm'. The background is a blurred outdoor setting with greenery and a paved path.

Sustainability report

2011/2012

Advancing each generation.



Contact information and feedback

For further information or to provide feedback on our 2011 and 2012 Sustainability Report please contact:

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As part of our commitment to reducing waste, our complete sustainability reporting for 2011 and 2012 is only available online.

Alcoa of Australia Limited

ACN 004 879 298

Forward looking statements

Certain statements in this report by Alcoa Inc or Alcoa of Australia Limited (together Alcoa) relate to future events and expectations and, as such, constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (US). Forward-looking statements can be identified by the use of predictive, future-tense, or forward-looking terminology, such as "anticipates," "believes," "estimates," "expects," "forecasts," "hopes," "intends," "may," "outlook," "projects," "should," "targets," "will," or other similar expressions. All statements that reflect Alcoa's expectations, assumptions, or projections about the future other than statements of historical fact are forward-looking statements, including, without limitation, forecasts concerning aluminium industry growth, aluminium end-market demand or other trend projections, anticipated financial results or operating performance, and statements about Alcoa's strategies, objectives, goals, targets, outlook, and business and financial prospects. Forward-looking statements are subject to a number of known and unknown risks, uncertainties, and other factors that may cause Alcoa's actual results to differ materially from those expressed or implied in the forward-looking statements and are not guarantees of future performance. Alcoa disclaims any intention or obligation to update publicly any forward-looking statements, whether in response to new information, future events, or otherwise, except as required by applicable law.

Some of the important factors that could cause actual results to differ materially from those in the forward-looking statements include: (i) material adverse changes in aluminium industry conditions generally, including global supply and demand conditions for aluminium, alumina, and aluminium products; (ii) fluctuations in commodity prices, especially London Metal Exchange-based prices for primary aluminium, alumina, and other products, and fluctuations in index-based and spot prices for alumina; (iii) current global economic and financial market conditions generally, including uncertainties regarding the strength or sustainability of the economic recovery and the effects of government intervention into the markets to address economic conditions; (iv) unfavourable changes in the key markets served by Alcoa, including the automotive and commercial transportation, aerospace, building and construction, distribution, packaging, industrial gas turbine, oil and gas, defence, and other markets; (v) the impact of changes in foreign currency exchange rates on Alcoa's costs and results, particularly the Australian dollar, Brazilian real, Canadian dollar, euro and Norwegian kroner, as some important raw materials are purchased in other currencies while products are generally sold in U.S. dollars; (vi) significant increases in power or energy costs, including electricity, natural gas, and fuel oil, or interruption or unavailability of energy supplies for Alcoa's operations; (vii) significant increases in the costs of other raw materials, including carbon products, caustic soda, and other key inputs, as well as freight costs associated with transportation of raw materials to refining and smelting locations; (viii) Alcoa's inability to achieve the level of revenue growth, cost savings, cash generation, improvement in profitability and margins, fiscal discipline, or strengthening of operations or competitiveness (including moving its alumina refining and aluminium smelting businesses down on the industry cost curves and increasing revenues in its Global Rolled Products and Engineered Products and Solutions segments) anticipated from its restructuring programs and cash sustainability, productivity improvement, technology and other initiatives; (ix) Alcoa's inability to successfully implement or realize expected benefits from its sale of non-core assets, its growth projects in Brazil, China, Russia, and other countries, or its joint ventures and strategic alliances, in each case as planned, within budget and by targeted completion dates, including, without limitation, the Juruti bauxite mine, the São Luis refinery expansion, the hydroelectric power construction projects in Brazil, and the joint venture with Ma'aden for the development, construction, ownership, and operation of an integrated bauxite mine, alumina refinery, aluminium smelter, and rolling mill in Saudi Arabia; (x) further downgrades in Alcoa's credit ratings, material increases in Alcoa's cost of borrowing, an inability to access the credit or capital markets, or the failure of financial institutions to fulfil their commitments to Alcoa under committed credit facilities; (xi) political, economic, and regulatory risks in the countries in which Alcoa operates or sells products, including changes in interest rates, unfavourable changes in laws and governmental policies, civil unrest and other events beyond Alcoa's control; (xii) legal compliance risks, including potential claims relating to product liability, health and safety, environmental matters, intellectual property rights, government contracts, taxes, and compliance with U.S. and foreign export laws, anti-bribery laws, competition laws, and sales and trading practices; (xiii) outcomes of contingencies, including significant legal proceedings or government investigations adverse to Alcoa, and environmental remediation matters; (xiv) changes in tax rates and benefits and tax expense and exposure, including changes in the valuation of deferred tax assets and liabilities; (xv) uncertainties regarding the impact of climate change, climate change regulations, or greenhouse effects; (xvi) changes in relationships with, or in the financial or business condition of, customers, suppliers, and business partners; (xvii) effects of cyber attacks and security breaches on the integrity of Alcoa's information systems, trade secrets and intellectual property, and other company-sensitive data, including potential disruption to Alcoa's business operations or reputational harm; (xviii) changes in competitive conditions, including actions by competitors, developments in technology, and developments in products, including impacts on customer acceptance of aluminium in substitution for competing materials; (xix) declines in the rate used to discount future estimated liabilities and expenses for pensions and other post-retirement benefits or in investment returns on plan assets, or changes in employee workforce assumptions used for such estimates; (xx) Alcoa's inability to attract and retain skilled executives and staff with relevant industry and technical experience, whether due to skills shortages in engineering, technical service, construction or other labour market inadequacies or other reasons; (xxi) factors affecting Alcoa's operations, such as equipment outages, labour disputes, supply disruptions, or other unexpected events; and (xxii) the other risk factors summarized in Alcoa's Annual Report on [Form 10-K](#) for the year ended December 31, 2012 and other SEC reports.

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About this report

SCOPE This is the 10th Sustainability Report for Alcoa of Australia Limited (Alcoa of Australia), which is 60 per cent owned by Alcoa Inc (Alcoa) and 40 per cent owned by Alumina Limited. Alcoa is a publicly listed company on the New York Stock Exchange. Alumina Limited is listed on the Australian Securities Exchange.

Since 1993 the global Alcoa business has been setting sustainability goals and publicly reporting its progress against these goals in order to communicate its performance to stakeholders in an open and transparent way. Alcoa of Australia has been producing corresponding local sustainability reports since 2001. Like the global business, we use the Global Reporting Initiative (GRI) G3 indicators to report our economic, environmental and social performance. We have gained assistance in preparing this report from sustainability consultant Net Balance Management Group Pty Ltd (Net Balance) and self-declare the report to be compliant with the GRI G3 guidelines to a B Level. A GRI Index is provided at the back of this report.

This report covers the activities of Alcoa of Australia for a two year period from 1 January 2011 to 31 December 2012 (24 months). Previous reports have covered a 12 month calendar year period. Where possible, 2011 and 2012 data has been disclosed independently for each 12 month period. We plan to return to an annual reporting cycle in 2013.

Alcoa of Australia sits within the Global Primary Products (GPP) division of Alcoa. The report covers operations where Alcoa of Australia has majority interest and/or management control. Apart from some environmental data, which relates to shared facilities and which cannot be separated, this report does not cover the activities of Alcoa Australia Rolled Products Pty Ltd, Alcoa Wheel Products Australia Pty Ltd or Alcoa Fastening Systems Australia Pty Ltd – all of which are 100 per cent owned by Alcoa.

There have been no significant changes regarding size, structure or ownership of the company during the reporting period.

The report can be read in conjunction with the 2011 and 2012 Alcoa Global Sustainability Reports (<http://www.alcoa.com/sustainability/en/home.asp>). In addition, the information contained in this report is supplemented by other Alcoa reports and documents, including the Alcoa Annual Report and the Alcoa of Australia Environmental Improvement Plans and website (www.alcoa.com.au). Financial figures are in Australian dollars unless otherwise specified.

For further information about Alcoa of Australia and our parent company Alcoa please go to our website at www.alcoa.com.au

Reporting issues

In conjunction with sustainability consultant Net Balance, in 2012 Alcoa of Australia undertook an assessment of material issues using the materiality assessment process outlined by AccountAbility¹. The purpose of the assessment was to identify the sustainability themes and issues most important to our stakeholders and to streamline the content of the 2011 and 2012 Alcoa of Australia Sustainability Report.

Alcoa of Australia defines issues as material if they have the potential to impact our ability to achieve the overarching goals of our business or are of concern to our stakeholders. Material issues were identified through an external sources review undertaken by Net Balance. This process included a peer review; societal review (including media and non-governmental organisation campaigns); a regulatory review through industry sites and a policy and risk review based on available documentation. The external review was complemented with additional information gathered from our Stakeholder Perception Survey (see page 36).

The issues identified were then presented to, and assessed and prioritised by, the senior management group.

Alcoa of Australia has reported against the topics rated as having 'high materiality' throughout this report. Where data is incomplete or does not exist, we will work to determine how we can improve our disclosure in future.

Assurance

In Australia, we continue to explore options to further incorporate data assurance into our sustainability reporting. PricewaterhouseCoopers (PwC) provided a third-party audit of our 2011 and 2012 financial data. In addition the global business continued to work with PwC to obtain limited assurance on our 2011 and 2012 consolidated greenhouse gas emissions data under the American Institute for Certified Practicing Accountants attestation standards, (view PwC's limited assurance report) of which Alcoa of Australia's greenhouse gas data is a subset.

¹ <http://www.accountability.org/about-us/index.html>

Message from the Managing Director

In 2011 and 2012 Alcoa of Australia endured some of the most challenging market and macro-economic conditions of its almost 50 year history. Conditions were even worse than during the 2008 global financial crisis due to the high Australian dollar and low aluminium metal price.

Despite the tough times, our focus remained the same: maintain a safe, successful and sustainable business.

I am enormously proud of what our company achieved and I consider myself privileged to be leading and working with such professional, dedicated and hard-working people.

Pleasingly the long-term future for aluminium is bright with demand expected to grow by 6.5 per cent between 2010 and 2020. This demand is highly correlated to economic growth, particularly in emerging economies, such as Brazil, Russia, India, the Middle East and China, a number of which are key markets for our business.

Because of aluminium's versatility, it plays an important role in the urbanisation of cities, which is expected to increase as a result of global population growth. As such we are supportive of sustainable solutions for its use. This is why in 2012, as part of the Alcoa global group of companies, we launched a new global vision: *Alcoa. Advancing each generation*. We wanted to highlight our commitment to innovation, sustainability and community partnership and how our business helps make the world a better place, not just today but tomorrow and for those who live after us.

In 2012 the Australian Government introduced carbon pricing regulation in Australia in an attempt to reduce greenhouse gas emissions and address climate change and its impacts.

Alcoa of Australia has consistently supported an economy-wide response to the challenge of climate change provided the international competitiveness of Australian industry and jobs is not compromised. So we were pleased the Federal Government saw the need to protect Australian industry by offering assistance to emissions-intensive, trade-exposed industries such as ours. We are firmly committed to reducing our carbon footprint now and in the future; in the last 20 years we have significantly reduced our direct emissions by more than 64 per cent for smelting and 23 per cent for refining.

Our operations in Western Australia face a number of resource challenges. Water supply and drought are significant issues and as such water security continues to be a challenge for our operations. Similarly, we are concerned about access to long-term competitively priced natural gas. Adequate supplies exist within the state but the majority is exported to global markets, in particular Asia. Without certainty of supply, many Western Australian businesses, including Alcoa of Australia, will find it difficult to make further long-term investments.

Our strategic focus continues to be on optimising the efficiency of our plants to maintain a strong bauxite, refining and smelting system, moving down the cost curve and securing reliable resource supplies for the sustainability of the environment, our business and future generations.

Safety is central to the way we do business and we continue to strive for the mindset and behaviours that lead us to a

zero harm workplace. In the past 24 months our safety performance has improved and we will continually strive to further improve that performance.

While 2011 and 2012 were challenging years, there was cause for celebration. In 2011 Victoria's Portland Aluminium Smelter celebrated 25 years of operation and Western Australia's Pinjarra Refinery 40 years. Both contribute significantly to the local community and state in which they reside and their longevity is testament to the commitment of employees today and from past decades.

In 2012 we recognised our 30 year partnership with Greening Australia. We were its founding partner and remain its most important corporate partner today. During celebrations we reflected on the wonderful achievements and memories of the last three decades which saw employees and volunteers transform landscapes and restore and replenish the environment in Western Australia, Victoria and New South Wales.

Our key stakeholders and community partners enrich our operations and help us achieve our goals; without their support we would not be operating today. We welcome all input on this report and our sustainability performance; please email your comments to alcoa.australia@alcoa.com.au.



Alan Cransberg

**CHAIRMAN AND
MANAGING DIRECTOR**

ALCOA OF AUSTRALIA LIMITED

Overview of Australian operations

Alcoa is the world's leading integrated aluminium company; its Australian operations represent the world's largest integrated bauxite mining, alumina refining, aluminium smelting and rolling operations.

Alcoa of Australia is 60 per cent owned by Alcoa and 40 per cent owned by Alumina Limited. Alcoa of Australia owns and operates two bauxite mines and three alumina refineries in Western Australia and two aluminium smelters (holding a 55 per cent share in the Portland Aluminium Smelter), a coal mine and a power station in Victoria.

Alcoa Australia Rolled Products Pty Ltd, which is 100 per cent owned by Alcoa, operates two aluminium rolling mills, one in Victoria and the other in New South Wales, and Australia's largest aluminium recycling facility. Alcoa Fastening Systems Australia Pty Ltd and Alcoa Wheel Products Australia Pty Ltd, both 100 per cent owned by Alcoa, have manufacturing and distribution facilities in Victoria.

Together these businesses provide approximately 5,500 direct jobs and indirectly support some 20,000 additional jobs around Australia.

Alcoa of Australia's Victorian smelters and Western Australian refineries produce approximately 20 per cent of Australia's aluminium and almost 45 per cent of the country's alumina, meeting approximately 10 per cent of world alumina demand. Most of the alumina produced by Alcoa of Australia is exported to key markets, including China and the Middle East. Alcoa businesses also export alumina chemicals and aluminium ingot.

Alcoa Inc operations in Australia

Principal operations within Western Australia

Huntly Mine
Willowdale Mine
Kwinana Refinery/Port
Pinjarra Refinery
Wagerup Refinery
Bunbury Port
Marrinup Nursery
Dampier Bunbury Pipeline (20% ownership)

Principal operations within Victoria

Portland Aluminium Smelter
Anglesea Power Station/Mine
Point Henry Smelter/Rolling mill
Melbourne Alcoa Wheel Products
Oakleigh Alcoa Fastening Systems

Principal operations within New South Wales

Yennora Rolling Mill and recycling facility



Awards

We have received a number of awards in 2011 and 2012 in recognition of our commitment to sustainable business and environmental conservation:

2011

February 2011: Alcoa Best in Class in Covalence Ethical Reputation Ranking
March 2011: Alcoa Employee: Top Woman in Resources
March 2011: Top Employer for 10th consecutive year
April 2011: Two awards for Alcoa Apprentice
August 2011: Top honours for Alcoa innovation
October 2011: Alcoa enters WA Export Hall of Fame

2012

February 2012: Distinguished Service Award for Senior Technologist John Cornell
March 2012: Alcoa: Top Employer for 11th consecutive year
April 2012: Alcoa wins safety innovation award
August 2012: Gold for Australia at emergency service awards

Our sustainability performance

		Mining	Mining	Refining	Refining	Smelting	Smelting	Anglesea Power Station and Mine	Anglesea Power Station and Mine
Units		2011	2012	2011	2012	2011	2012	2011	2012
INPUTS									
Electricity imported	MWh	90,567	97,648	160,016	214,114	6,270,196	6,302,162	590	702
Natural gas	TJ	n/a	n/a	82,842	83,442	897.148	869.863	n/a	n/a
Steam	TJ	n/a	n/a	11,467	12,033	n/a	n/a	n/a	n/a
Diesel and fuel oil	Kl	37,261	37,370	7381	4291	1351	1109	1677	2060
Fresh water	ML	651	1011	20,150	15,615	505	518	4178	4151
Land cleared	Ha	1162	680	n/a	n/a	n/a	n/a	6	0
OUTPUTS									
Smelter grade alumina	Kt	n/a	n/a	8738	8886	n/a	n/a	n/a	n/a
Alumina chemicals (including hydrate as alumina equivalent)	Kt	n/a	n/a	275.2	278.5	n/a	n/a	n/a	n/a
Aluminium	Kt	n/a	n/a	n/a	n/a	356.6 @55% PTD or 491 @100%	357.9 @55% PTD or 492.5 @100%	n/a	n/a
Bauxite produced	Kt	34,432	34,685	n/a	n/a	n/a	n/a	n/a	n/a
Electricity exported	MWh	n/a	n/a	133,938.8	99,369.4	n/a	n/a	1,143,257	1,145,501
Coal produced	T	n/a	n/a	n/a	n/a	n/a	n/a	1,049,479	1,032,424
Land rehabilitated	Ha	682	804	n/a	n/a	n/a	n/a	4.9	0
WASTE OUTPUTS									
CO ₂ emissions (CO ₂ e) – Scope 2	Kt	73	74	622	711	8981	9021	n/a	n/a
CO ₂ emissions (CO ₂ e) – Scope 1	Kt	100	100	4258	4295	917	928	1411	1401
Bauxite residue stored	Kt	n/a	n/a	18,341	18,089	n/a	n/a	n/a	n/a
Bauxite residue used	T	n/a	n/a	338	0	n/a	n/a	n/a	n/a
Fly ash stored	T	n/a	n/a	n/a	n/a	n/a	n/a	16,790	17,997
Oxalate stored	T	n/a	n/a	27,403	25,751	n/a	n/a	n/a	n/a
Spent pot lining to storage	T	n/a	n/a	n/a	n/a	407	1950	n/a	n/a
Spent pot lining recycled	T	n/a	n/a	n/a	n/a	5607	3003	n/a	n/a
Recycled waste	T	641	2161	6655	6175	8214	6465	559	1039
Land filled waste	T	573	745	4539*	4138*	586	515	37.5	17.4

* Does not include refining process waste as reported in the 2010 Sustainability Report.

Stakeholder engagement

Identifying and understanding the issues that matter to our business requires ongoing and meaningful engagement with stakeholders. We engage with a wide variety of stakeholders in different ways, depending on the impact of our operations. Stakeholder engagement and feedback informs how we manage all facets of our business.

Our key stakeholders include our shareholders; our customers, suppliers and employees; the public agencies that regulate our businesses; the non-governmental organisations (NGOs) that are interested in what we are doing; and the people who live in the communities where we operate.

Our Community Framework guides our identification of and communication with key stakeholders, such as local government authorities and other community groups in the areas in which we operate. In many instances, stakeholders are invited to nominate

themselves as participants in consultation forums convened by Alcoa of Australia, including Community Consultation Networks, Environmental Improvement Plan and Working Groups, and Long-Term Residue Management Strategy Stakeholder Reference Groups. For further information about our community engagement see pages 36-40.

The following is a summary of Alcoa of Australia's key stakeholders and their primary interests and concerns.

Stakeholder group	Key interests and concerns	Engagement
Shareholder	Management of business operations, impacts, outcomes and risks; and financial performance of business.	Formalised engagement via briefings and annual meetings; annual financial report; and via major shareholder Alcoa Inc's quarterly results announcements.
Government and regulators	Safety of operations, employees and surrounding communities; economic impacts of operations; adherence to legislation and fulfilment of regulatory obligations, including reporting; industry and operation sustainability; and social, economic and environmental responsibility.	Formalised engagement via participation in parliamentary inquiries and consultation processes; participation in industry forums; individual meetings; and working parties. Informal channels include responding to government and regulatory inquiries via subject-matter experts and/or government relations and corporate affairs teams.
Employees, contractors and trade unions	Health and safety; remuneration and working conditions; employment benefits and career development opportunities; organisational culture and business operations; and community support opportunities.	Formal and informal engagement channels include annual employee survey; team, senior manager and divisional meetings; managing director messages; regular electronic and hard copy newsletters; email alerts from business units; focus groups; performance appraisals and feedback and career development planning; trade union meetings and Enterprise Bargain Agreement negotiations.
Suppliers	Business operations, impacts, outcomes and sustainability; supply opportunities; and business development.	Formal channels include contract negotiations; performance reporting; supplier group meetings; and regular individual meetings. Informal channels include adhoc queries and day-to-day contact.
Customers	Business and industry performance; reliable supply of a quality product; and contractual arrangements.	One-on-one interactions between customer and business.
Industry organisations, non-governmental organisations, educational institutions and community partners	Business operations, impacts and outcomes; industry conditions, risks and opportunities; education development and partnership opportunities; community investment and development opportunities.	Actively engage through industry association membership; board and leadership roles; corporate partnership with industry, community and educational organisations; bi-annual stakeholder perception survey; subject-matter expert meetings; focus groups; and panel discussions.
People residing and working in communities where we operate	Health and safety; business operations, impacts and outcomes; impact of operations on lifestyle and livelihood including economic contributions; employment opportunities; supply opportunities; and community support commitments and opportunities.	Formal engagement channels to allow participation in consultation forums; complaints channels ensuring all feedback is heard, managed and escalated as appropriate; site tours ; research through stakeholder perception survey; one-on-one neighbour relations; and participation in volunteering and community events.
Broader community	Proposed activities or operational issues; health and safety; employment opportunities; volunteering and community events and partnership opportunities; economic contributions to community.	Less formalised engagement on adhoc basis via public forums; site tours; written communication; editorial and advertorial coverage.
Media – local, state and national	Management of business operations; economic, environmental and social impacts; stakeholder relationships; market and industry conditions; Alcoa Inc operations and results; employees; and community commitments and partnerships.	Regular engagement via briefings and face-to-face meetings; proactive and reactive communications in response to media issues and enquiries; and distribution of media releases. Relationships managed by corporate affairs and community relations team.

Targets

Alcoa of Australia reports into global sustainability targets set by Alcoa; these global metrics help drive our continuous performance improvement. Alcoa has been setting global sustainability targets since 1993 and the current targets extend to 2020 or 2030 for some areas. A summary of Alcoa's sustainability targets is provided below or can be viewed at: http://www.alcoa.com/sustainability/en/info_page/vision_targets.asp.

Alcoa strategic sustainability targets

Targets for Alcoa global operations	Progress achieved to year-end 2011	Progress achieved to year-end 2012
From a 2005 baseline, 20% reduction in total (direct and indirect) carbon dioxide equivalent (CO ₂ e) intensity in Global Primary Products (refining and smelting) by 2020; 30% by 2030.	23%	23.2%
From a 2005 baseline, 10% reduction in the energy intensity of Global Primary Products by 2020; 15% by 2030.	2%	2.6%
From a 2005 baseline, 20% reduction in the energy intensity of all other businesses by 2020; 30% by 2030.	Global Rolled Products: 8%	Global Rolled Products: 14.4% Engineered Products & Solutions: 8.4%
From a 2005 baseline, 10% reduction in average freshwater-use intensity in each business by 2020; 25% by 2030.	21%	24%
From a 2005 baseline, 75% reduction in land-filled waste by 2020 and 100% by 2030.	19%	25%
Achieve a rolling five-year corporate-wide ratio of 0.75:1 for new active mining disturbance to rehabilitation; maintain a ratio of 1:1 by 2030 to ensure no net expansion in new disturbance.	Projected 0.86:1 in 2014	Projected 0.95:1 in 2014
Reduce the global footprint for active mining to approximately 4,300 hectares (10,625 acres) by 2020.	Not measured	15,000 hectares (37,065 acres)
Rehabilitate 30% of total residue storage area by 2020; 40% by 2030.	15%	15%
Recycle or reuse 15% of residue generated by 2020; 30% by 2030.	0%	0%
Develop biodiversity plans for key locations by 2015.	0%	0 plans
Increase the used beverage can recycling rate in the United States to 75% by 2015 and the global rate to 90% by 2030.	United States: 58% Global: 73% (2010 data)	United States: 65% Global: 73% (2011 data)
Zero fatalities.	1 contractor fatality in 2011	2 employee fatalities in 2012
A total recordable injury rate of 0.68 by 2020 and 0.19 by 2030.	1.24 total recordable incident rate	1.07 total recordable incident rate
By 2013, achieve the following representation at Alcoa's management level: Global women: 19%	Global women: 17.6%	Global women: 19%
By 2020, 100% of manufacturing locations will have implemented the Alcoa Community Framework.	61%	95%
40% of employees within a business unit or region volunteer in the community through ACTION, Bravo!, or Month of Service.	ACTION: 20% Bravo!: 16% Month of Service: 56%	ACTION: 20% Bravo!: 12% Month of Service: 60%
Debt-to-total capitalisation consistently between 30% and 35%.	35%	34.8%

The representation goals for global women were updated in 2011. In late 2011, Alcoa and Alcoa Foundation raised the standards for compliance with the Alcoa Community Framework and implemented a more comprehensive approach.

Governance

Alcoa's *values* guide our behaviour at Alcoa of Australia and all directors, executives and employees are required to conduct business in compliance with Alcoa's Business Conduct Policies. Alcoa endorses the Business Roundtable Principles of Corporate Governance dated April 2010, which is a comprehensive statement of responsible corporate governance principles. These principles provide the foundation on which Alcoa's Corporate Governance Guidelines, board committee charters, Director Independence Standards, a Code of Ethics for the Chief Executive Officer, Chief Financial Officer and Other Financial Professionals and Related Person Transaction Approval Policy are based.

Board of directors

Alcoa of Australia is an unlisted public company. Its board members at 31 December 2012 are:

- Alan Cransberg, *Chairman and Managing Director*
- Anthony (Tom) Adams, *Executive Director, Finance and Business Services*
- Simon Butterworth, *General Manager, Western Australian Operations*
- John Bevan, *Chief Executive Officer, Alumina Limited*
- Chris Thiris, *Chief Financial Officer, Alumina Limited*

A full list of Australian executives, employed by Alcoa of Australia, is provided at:

http://www.alcoa.com/australia/en/info_page/alcoa_executives.asp

Alcoa's governance structure applies to Alcoa of Australia and includes:

- Business conduct policies which apply to all employees, directors and officers.
- A global ethics and compliance program to ensure all employees understand and comply with our corporate policies and the regulations that govern our business.
- A global ethics and compliance line which provides a channel for employees and others to raise ethical and compliance concerns.
- An independent global audit department which conducts financial, information technology, environmental and health and safety audits.
- A sub-committee of the Alcoa board reviews and ensures compliance with all audit, ethics and compliance protocols.

Further information about Alcoa's corporate governance procedures can be viewed at: http://www.alcoa.com/global/en/about_alcoa/corp_gov/info_page/corp_gov.asp.

Alcoa shareholders can communicate any concerns to Alcoa's Board of Directors through regular mail (care of Alcoa Corporate Secretary, Alcoa Inc, 390 Park Avenue, New York, NY 10022, USA).

Risk Management

Our risk management process is structured around the Integrated Framework for Enterprise Risk Management from the Committee of Sponsoring Organisations of the Treadway Commission in the United States. The framework was designed to help businesses and other entities assess and enhance their internal control systems in accordance with ISO 31000, the international standard of risk management.

Our process is structured using our key business drivers and organisational goals. Our organisational goals include excellence in environmental stewardship, health and safety, consistent and fair representation of financials and organic growth. We aim to cover all aspects of our business including reputation and brand, earnings and operating margins.

Identified risks are grouped into risk areas and presented to management in order to determine their level of prioritisation. Our process is multi-dimensional and focuses on several factors: level of impact, likelihood of occurrence and mitigating risk factors. Each of the factors is considered in accessing and prioritising risk, with more emphasis placed on impact and likelihood.

The collaborative process by which risks are identified, evaluated and managed ensures that senior managers remain vigilant of key risks impacting the business. Alcoa of Australia's senior management maintains oversight of our risk management process. The nature of risk determines the intervals at which senior management reports to the board.

Internal audit

Alcoa's global Internal Audit Group is set up in regional teams to provide the Alcoa Board's Audit Committee and Alcoa leaders with a thorough and objective assessment of the business' system of controls. The audit team verifies compliance with corporate policies and procedures and regulatory requirements. The group also recommends value-adding improvements to the environmental, health and safety, financial business process and information technology management systems and identifies good practices to facilitate the transfer of knowledge.

In 2011 the Australia Asia team conducted thirty two audits/reviews for Alcoa of Australia including 11 Sarbanes-Oxley reviews completed in conjunction with PwC.

In 2012 twenty two audits/reviews were carried out for Alcoa of Australia including seven Sarbanes Oxley reviews completed in conjunction with PwC.

These audits/reviews are conducted to support management in the identification of internal control risks and the implementation of effective procedures.

Sustainability governance and approach

At Alcoa of Australia, sustainability is defined as using our values to build financial success, environmental excellence and social responsibility. We do this in partnership with all stakeholders in order to deliver long term benefits to our shareholders, employees, customers, suppliers and the communities in which we operate.

We integrate sustainability into our business strategy using a multi-layered approach. We also contribute toward the long terms goals and objectives developed by Alcoa's Global Sustainability Steering Team.

Alcoa has a chief sustainability officer, Global Sustainability Steering Team and Global Sustainability Working Committee responsible for integrating strategic sustainability initiatives into business strategies. Alcoa of Australia is guided by the high level strategies set by Alcoa. Various committees and individuals oversee the various aspects of sustainability management.

Our Director Environment and Sustainability is part of the Alcoa of Australia Lead Team and is responsible for integrating strategies

that realise responsible environmental stewardship. Strategic global participation occurs through membership of the Global Environment, Health and Safety Directors Committee and the Global Carbon Managers Committee. In Australia participation occurs via the Alcoa of Australia Carbon Lead Team and senior environmental managers are part of the Western Australia Operations and Victoria Operations Lead Teams.

Specific Alcoa of Australia Lead Team members are accountable for strategic management of employee engagement, training, development and diversity; health and safety; community engagement and social investment; financial performance; and business governance.

Sustainability approach

Alcoa's global sustainability framework and strategy consists of three interdependent parts: sustainability of our products, our resources and our operations. Alcoa of Australia's sustainability approach is aligned with the global priorities as outlined below:

Product sustainability

Aluminium is one of the world's most sustainable materials and is considered the most environmentally-friendly and recyclable automotive, packaging and construction material in today's market. Aluminium is considered a highly sustainable material due to its suitability for recycling. Aluminium offers significant benefits including high strength, light weight and durability.

Resource sustainability

Aluminium production is a resource and energy intensive process that begins with the extraction of bauxite. We treat our bauxite mining operations as a transient land use. Following completion of mining operations, we rehabilitate and restore the land for future land use.

Making aluminium requires significant electricity and substantial amounts of water and other natural resources, so it is imperative we continually seek ways to mitigate our environmental footprint and work towards more sustainable operations.

Operational sustainability

We identify sustainability challenges and opportunities on an ongoing basis and ensure we are operating in the most sustainable manner possible. This approach helps us earn and maintain our license to operate.

Operational sustainability for our mining, refining and smelting operations focuses principally on managing our environmental footprint and maintaining our social licence to operate.

We have strong ties with the communities in which we operate and engage regularly with all interest groups to build relationships and understand key issues. We strive to optimise the benefits to those communities through the jobs we create, the economic development our facilities derive and the benefits employee volunteering provides.

To ensure the integration of sustainability into our core business strategies, pay for performance KPIs are established annually in relation to sustainability objectives. In 2012, 20 per cent of our variable compensation was dependent on achieving significant aspects of our sustainability targets. Our sustainability targets focus on safety and carbon dioxide emission reductions through process improvements and improved energy efficiency. Managers also have a diversity target.

We are committed to regularly reviewing our sustainability performance and have been setting goals and publicly reporting against them since 2001. Our objective is to be fully transparent with respect to our sustainability issues and progress and to provide significant information to all of our stakeholders.

Ethics and business conduct

Alcoa of Australia's reputation is underpinned by Alcoa's global ethics and compliance program. The program demands consistency of operations and behaviour around the world to ensure all employees understand and are committed to complying with all applicable laws, living Alcoa's [values](#) and adhering to policies and procedures.

Alcoa of Australia is also required to comply with the Alcoa Anti-Corruption Policy. It applies to all directors, officers and employees of the company. For further information go to:

http://www.alcoa.com/global/en/about_alcoa/corp_gov/info_page/policy_anti_corruption.asp

Each year Alcoa conducts a Business Conduct and Conflict of Interest Survey Certification (BCSC) process which monitors compliance with Alcoa's Business Conduct Policies. In 2012, the survey population was expanded by 5900 participants (50 per cent) globally, to reflect the enrolment criteria listed below. The same enrolment criteria are now used to determine who is included in Alcoa's online ethics training. These guidelines apply worldwide to Alcoa and all of its US and international subsidiaries, affiliates, partnerships, ventures and other business associations that are effectively controlled by Alcoa, directly or indirectly.

Employee BCSC and online training enrolment criteria:

Employees included in the BCSC and the online ethics training population are salaried company employees at job grade 13 and above; salaried administrative assistants at all job grades; and salaried supervisors at all job grades.

Salaried employees not meeting the criteria above will still be included if they meet any one or more of these supplemental inclusion criteria:

- Have access to sensitive information belonging to the Company or other third parties.
- Have significant freedom to act on Alcoa's behalf with government representatives, customers, suppliers, members of the public or other third parties.
- Are responsible for negotiating, approving, issuing or allocating customer or supplier orders, contracts or other commitments.
- Establish specifications for materials or services being purchased.
- Make or supervise entries in the company's books and records of orders, contracts or other commitments.
- Deal with political candidates or parties.
- Are responsible for obtaining approvals from or business with any governmental unit or agency.

In some cases, additional employees may also be included to accommodate the technical capabilities of the various human resource systems that supply data during the enrolment process.

Alcoa of Australia employees that meet the above criteria are required to complete ethics and compliance training annually, either online or via internal systems accessible at all sites. We reinforce key messages among employees via 'PinPoints'. Distributed via email, these three-minute animated reminders address our core values and standards.

In 2012 the legal team provided face-to-face anti-corruption training to the Alcoa of Australia Lead Team, Western Australian and Victorian Operations Lead Teams (and various location Lead Teams), Alcoa Materials Management and the Corporate Affairs and Procurement teams. At induction all employees are expected to complete 'Do What's Right!' training, which contains anti-corruption elements and each new employee receives the company's new anti-corruption policy in their starter pack.

Ethics in procurement

To ensure adherence to our values, a Global Procurement Procedures Manual (GPPM) has been produced outlining procedures and controls within the procurement process. All global procurement personnel, including temporary employees and contractors, must follow the GPPM procedures.

Regular training is conducted to ensure all global procurement personnel are aware and understand our values.

Alcoa Self Assessment Tool testing

Alcoa Self Assessment Tool (ASAT) testing allows us to identify risks, assess the adequacy of existing controls and processes, identify improvement opportunities and transfer best practices.

The use of ASAT is mandatory for all Alcoa business units and is a key enabler for compliance with the Sarbanes Oxley (SOX) legislation.

Compliance with our Global Procurement Procedures Manual, regulatory standards, corporate policies and procedures including environment, health, safety, finance and information technology are assessed annually through ASAT.



Economic

As one of Australia's leading exporters and employers, Alcoa of Australia is a major contributor to local, state and national economies. We share our success with employees, customers, government and communities through jobs, business opportunities, taxes, dividends and partnerships.

Our indirect economic contributions are significant and benefit the communities in which our mines, refineries and smelters are located. As a neighbour we have an obligation to contribute positively each day; this approach helps us build a reputation as an organisation facilitating economic growth. In turn, this helps earn us our social license to operate. We do not measure indirect economic contributions but flow-on benefits include:

- Employees spending their wages locally on a diverse range of goods and services.
- Payments for services and supplies supporting local business operators and industry.
- Charitable contributions, sponsorships and partnerships, both financially and in-kind, by the business, employees and Alcoa Foundation.
- Education, health care, environment and recreation programs delivery by community organisations.
- Income tax expense: 2011 - \$230.7 million; 2012 - \$44.1 million.

Through our Western Australian and Victorian operations, Alcoa of Australia produces approximately 20 per cent of Australia's aluminium and almost 45 per cent of Australia's alumina, satisfying approximately 10 per cent of world alumina demand (refer to the sustainability performance data summary on page 6).

Our sales presence for smelter grade alumina has increased in both China and the Middle East where their economies

continue to grow. We also focus our efforts to increase sales of our non-metallurgical alumina from Kwinana Refinery in response to increasing Asian demand.

Point Henry Smelter review

In early 2012 Alcoa of Australia announced a review of its Point Henry Smelter in Geelong, Victoria due to the smelter facing substantial losses resulting from a combination of factors including challenging global conditions, a low aluminium price and high Australian dollar.

As a result of the efforts of our workforce, the support received by the Federal and Victorian Governments in the provision of more than \$40 million in assistance and support from unions, contractors and suppliers, Alcoa of Australia announced in June 2012 that it expects to operate the smelter until at least mid 2014.

The Victorian State Government also announced it would provide a further \$4 million to a local industry fund to help Alcoa's contractors and suppliers, and those of other Geelong manufacturers facing hardship, improve efficiencies and productivity.

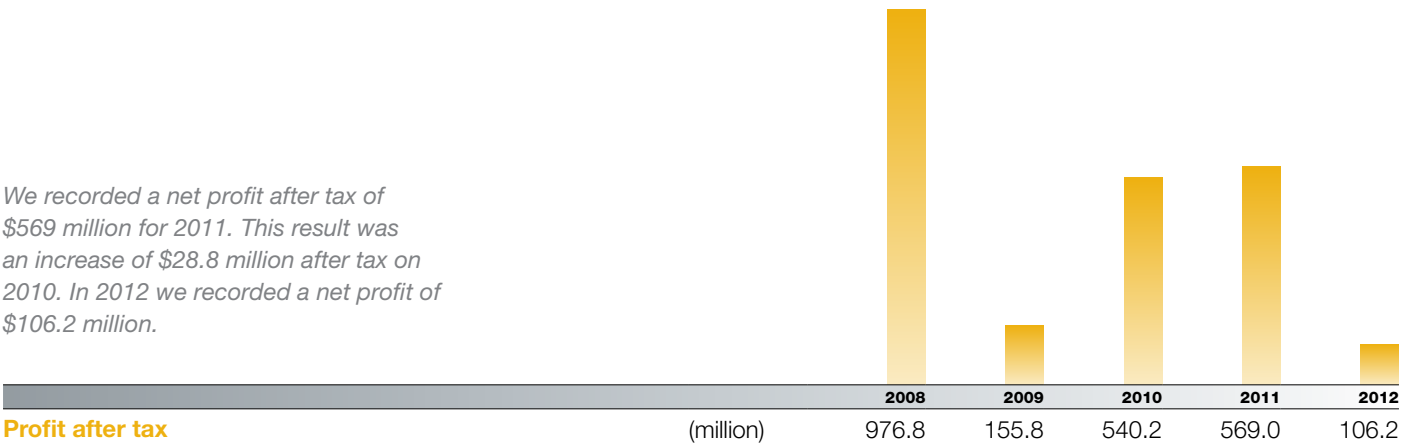
Our Point Henry operations contribute more than \$300 million a year to the Australian economy, including more than \$100 million into Geelong and the surrounding areas through wages, salaries and the purchase of goods and services. The government assistance was welcomed by Alcoa of Australia, employees, unions and the local Geelong community.

Our financial performance


This financial performance resulted in the face of significant challenges in both national and international operating environments including: the high value of the Australian dollar against the US dollar; low aluminium prices, in Australian dollar terms; and increasing raw material input costs. Despite these challenges, we achieved our overall productivity improvement targets for the year.

Our performance highlights include:

We recorded a net profit after tax of \$569 million for 2011. This result was an increase of \$28.8 million after tax on 2010. In 2012 we recorded a net profit of \$106.2 million.




Sales revenue for 2011 was \$3758.6 million which was \$206.3 million higher than in 2010. In 2012 sales revenue was \$3263.9 million. The export component for 2011 was \$3383 million which was \$114.9 million higher than in 2010. In 2012 it was \$3006.7 million.



		2008	2009	2010	2011	2012
Revenue	(million)	4629.5	3276.3	3552.3	3758.6	3263.9
Export component	(million)	4137.4	2991.0	3268.1	3383.0	3006.7

Return on capital for 2011 and 2012 was 9.47 per cent and 3.05 per cent respectively.




		2008	2009	2010	2011	2012
Return of capital	(%)	15.20	8.63	13.30	9.47	3.05


During 2011 Alcoa paid shareholders fully franked dividends of \$565.0 million. In 2012 fully franked dividends of \$207.8 million were paid to shareholders.



		2008	2009	2010	2011	2012
Dividends paid to shareholders	(millions)	890.0	440.0	635.0	565.0	207.8



		2008	2009	2010	2011	2012
Employee wages and benefits	(million)	676.7	748.7	732.6	686.5	767.9



		2008	2009	2010	2011	2012
Community investment	(million)	4.82	3.90	3.00	3.11	2.89

For further information refer to the global Alcoa financial reports for 2011 and 2012.

Challenging market conditions

Alcoa of Australia is exposed to cyclical fluctuations in the global economy as well as economic conditions in aluminium end-use markets. 2011 and 2012 were turbulent years in global markets and demand for our products and revenue fluctuated as a result.

The combination of a high Australian dollar and low aluminium price made 2011 and 2012 more challenging economically than the conditions we experienced during the 2008 global financial crisis.

We have had to make some tough decisions, maintaining a focus on generating cash, reducing costs, delivering productivity and at the same time keeping our people engaged and motivated.

Despite the challenging times, our focus for 2013 and beyond continues to be on creating long term stability and sustainability for our business and our industry.

The following outlines the global conditions that have impacted our operations during 2011 and 2012.

Global aluminium demand remains strong

We believe the long-term future for aluminium, globally, is positive and we expect a 6.5 per cent compound annual demand growth rate between 2010 and 2020, however aluminium demand is highly correlated to economic growth and in particular emerging economies, such as Brazil, Russia, India, the Middle East and China.

Approximately 70 per cent of Alcoa of Australia's aluminium production is exported to North and South East Asia. In 2011 demand was strong with the company estimating a growth rate of 10 per cent over 2010. By comparison, the 2012 global demand growth rate was impacted by mixed economic conditions and was lower at six per cent. All end markets are expected to exhibit positive growth in 2013, driven by global megatrends, new uses and penetration of aluminium.

Aluminium price volatile and depressed

In 2011, the London Metal Exchange (LME) price reached a high in excess of US\$2700 per tonne but by the end of the year it had declined to below \$2000 per tonne. This price decline negatively impacted on Alcoa of Australia's results in the second half of 2011.

Aluminium prices in 2012 were the lowest in the past 25 years, averaging around \$2000 per tonne for 2012. The sustained weak price adversely impacted our financial performance leading to extensive efficiency and cash sustainability measures being implemented to protect our future viability.

To help counter depressed metal prices we have adopted a new pricing mechanism for alumina sales. The new pricing methodology, called an Alumina Price Index, was introduced by Alcoa of Australia in 2010. It replaces the historical method of pricing alumina as a percentage of the aluminium price. This change is designed to allow us to realise the true value of alumina by pricing sales off the prevailing market fundamentals.

Managing raw material cost changes

Alcoa of Australia's financial performance has been affected by changes to the cost of raw materials and key inputs, such as energy, carbon products and caustic soda.

Energy prices in Australia have risen considerably and are expected to continue increasing. Although we expect to source the bulk of our energy requirements through internal generation or from long term contracts, significant price increases or the inability to extend or negotiate new energy contracts at competitive rates may impact profitability.

In Western Australia, Alcoa of Australia is supporting new entrants into the Western Australian domestic gas market in order to diversify supply and promote competition. In the last five years we have spent more than \$100 million with companies including Buru Energy, Transerv and Empire Oil and Gas to support their search for onshore gas fields and help secure long-term competitive energy supplies for our Western Australian operations. Alcoa of Australia currently consumes approximately 25 per cent of Western Australia's total domestic gas supply.

In Victoria our smelters at Point Henry and Portland use electricity generated from brown coal, as do most industries and residents in the state.

Energy will always be a critical strategic issue for us in Australia. Reliable, secure energy supplies, at a competitive price, have been and always will be essential to our business success.

Global carbon product prices (green coke, calcined petroleum coke and coal tar pitch) increased substantially in 2011 but then dropped by more than 20 per cent in 2012 as aluminium costs reduced and overall coke demand declined.

Our Australian smelters have been proactive in managing their calcined coke supply sources using coke sourced from both the US West Coast and China. We have increased the blending rate to take advantage of competitive pricing in lower cost regions such as China.

Alcoa Inc is one of the largest single buyers of caustic soda in the world. Caustic prices in 2011 almost doubled compared to 2010 due to the tsunami in Japan in early 2011 and further disruptions following an explosion at the Japanese production plant in late 2011.

Alcoa of Australia has been sourcing a significant proportion of caustic soda from China but costs and market volatility in this region are increasing. We are working on sourcing from lower cost regions such as the Middle East where they have world class port facilities and the lowest production costs in the world. Furthermore, we expect the overall supply/demand situation to improve as both the US and Chinese economies start to improve.

Currency fluctuations

Our operations are impacted by currency fluctuations. This currency factor meant it was crucial for Alcoa of Australia to work innovatively to achieve both production efficiencies and financial targets to remain sustainable for the long term.

Clean energy legislation

To help address the impact of climate change, the Federal Government introduced legislation that imposes a cost on companies emitting large amounts of carbon.

A carbon pricing mechanism (CPM) commenced operation in Australia from 1 July 2012 under the *Clean Energy Act 2011*. It applies to Australia's largest producers of carbon emissions. Alcoa of Australia operates facilities that exceed the threshold for emissions and therefore is subject to the CPM. Due to the government's recognition of the risks faced by emissions-intensive trade-exposed industries such as ours, we receive assistance in the form of free carbon permits.

To confront the critically strategic issue of carbon, in the 1990s Alcoa of Australia acted to develop a long term vision and strategy to significantly reduce carbon emissions.

We set time-based reduction targets and implemented strategies

to ensure we achieved our goals of direct emission reductions and energy efficiency improvements to deliver carbon and cost savings.

During the course of the last 20 years we have significantly reduced our direct emissions by more than 40 per cent. Our Australian smelters now emit 64 per cent less greenhouse gases per tonne of product than in the 1990s.

Our Australian refineries have less than half the carbon footprint of many of our competitors in Asia, yet they have still reduced their emissions per tonne of product by more than 23 per cent since 1990.

A Carbon Steering Team comprising senior managers from different disciplines was formed soon after the CPM was enacted through legislation. On a monthly basis the Carbon Manager informs the steering team of Alcoa of Australia's position in relation to permits and further regulatory issues relating to the CPM. The Carbon Steering Team is responsible for deciding how best to manage our carbon permit position to ensure Alcoa of Australia is compliant with all regulatory requirements.

Sustainability in our supply chain

Our suppliers play an integral role in helping us achieve our sustainability goals and we seek to build relationships with suppliers who are aligned to our values and behave in a responsible and sustainable manner (that is, they consider the environmental, social and economic impact when evaluating total cost). We also ensure our interactions with suppliers are carried out with high standards of integrity and in compliance with relevant laws and regulations.

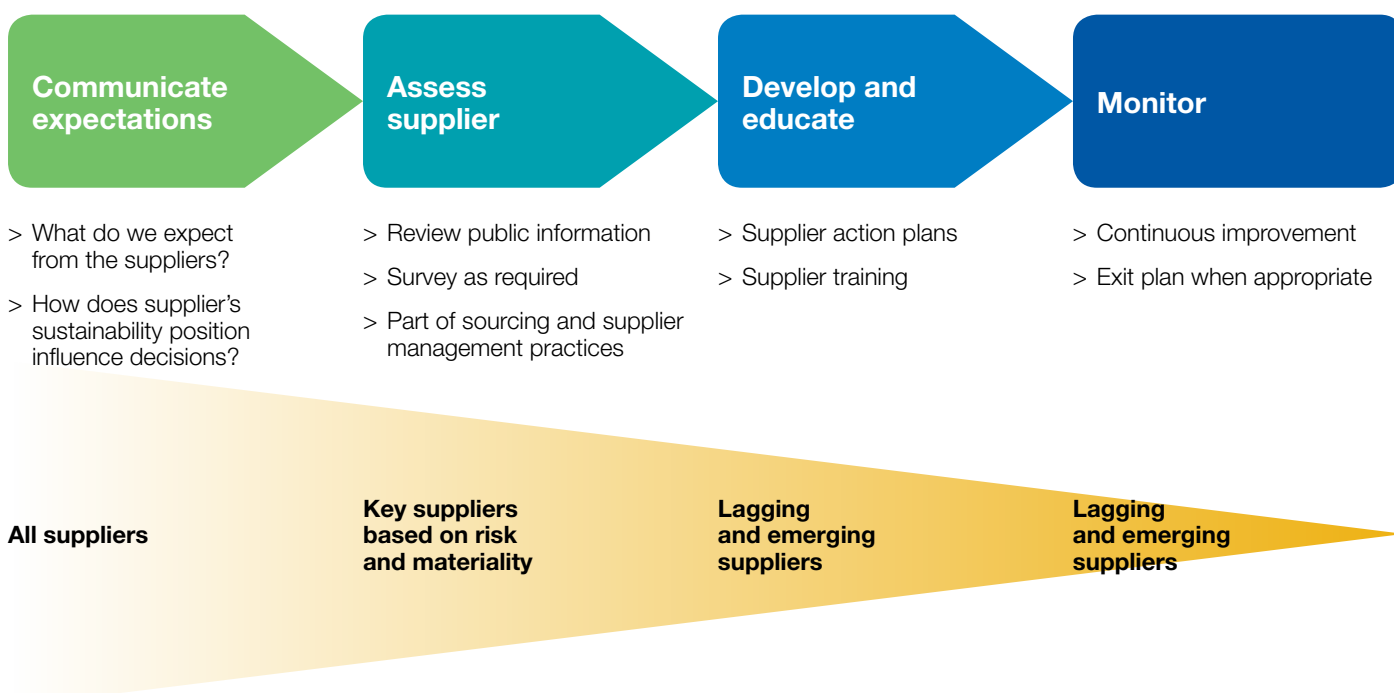
To this end resources have been invested in Alcoa's global and our Australian suppliers' sustainability programs, human rights policies and disclosures and anti-corruption monitoring and due diligence processes.

Global supplier sustainability program

The Alcoa Global Supplier Sustainability Program, which Alcoa of Australia participates in, focuses on key suppliers that pose

the greatest sustainability opportunities and risks. Some of the sustainability risks considered include: suppliers of commodities that contribute most to the company's carbon footprint; sole sources of supply; suppliers located in emerging or high-risk countries; and suppliers providing regulated commodities.

The following diagram represents the Global Supplier Sustainability Program, which consists of four components:



Communicating our expectations to all our suppliers is a critical component of the program. We clearly define sustainability expectations in our supplier sourcing, qualification and management activities. Our supplier standards document sets out our expectations of suppliers, contractors and others with whom we conduct business with respect to sound and responsible environmental, social, economic and ethical business practices.

We conduct assessments of our key suppliers to evaluate the maturity of their sustainability programs and to determine where improvements are needed. In 2011, 68 per cent of Alcoa's key global suppliers, some of which supply Australia, were rated as 'leading' or 'active' in their own sustainability programs. For suppliers who present a risk to our business, due diligence includes onsite audit, material inspection, production acceptance tests, safety prequalification and customer qualification requirements.

For suppliers that fall into the emerging or lagging areas, we educate them regarding our sustainability expectations and provide them with access to tools to develop and improve their programs.

Suppliers in the emerging and lagging categories are reassessed on an annual basis so that program progress can be measured and monitored. Suppliers that don't demonstrate annual improvements face the risk of losing our business.

Australian supplier sustainability initiatives

In addition to the global program, in Australia we are focused on helping develop and grow sustainable local communities in the areas where we operate. As part of this, and in accordance with Alcoa's values and focus on safety and value for money, we are committed to providing local businesses with the opportunity to compete for our business.

To ensure we are inclusive, we established a local community procurement policy. The goal of our policy is to add value to local economies by:

- Working with local business-interest groups to identify local suppliers and spread awareness of business opportunities.
- Inviting capable suppliers to bid on locally supplied or locally manufactured good or service.
- Structuring bid packages to enable local supplier participation, where possible.
- Giving preference to local businesses in competitive situations.

Furthermore, for major initiatives where we have identified local supplier participation, a cross-functional team determines bid strategies and award decisions.

Additionally, we encourage national and global suppliers to connect and partner with local suppliers wherever appropriate.

Some of the overall benefits provided to local businesses include the award of short and long-term contracts and downstream benefits from our extensive apprentice training programs and traineeships.

In 2012 Alcoa of Australia spent approximately \$138 million, up \$18 million on 2011, with local community suppliers (excluding energy).

Our Australian smelters now emit 64 per cent less greenhouse gases per tonne of product than in the 1990s.

Freshwater use intensity has reduced by 21 per cent against our 2005 baseline.

HIGHLIGHTS

Environment

A young boy wearing a red cap and a yellow life vest is fishing from a boat. He is holding a fishing rod and a fish is jumping out of the water in the background. The boat has a blue and white logo on its side. The water is blue and the sky is clear.

GHG emissions

The production of primary aluminium is a significant contributor to greenhouse gas (GHG) emissions due to relatively high energy consumption, particularly in the smelting stage. Alcoa of Australia is committed to investigating the most energy-efficient and low-emission ways of doing business. We are proactive in managing the carbon intensity of our operations.

Our approach

Alcoa of Australia's internal Carbon Steering Team oversees the measurement of emissions and energy consumption and provides guidance in relation to policy development, regulations and our management of the carbon pricing mechanism.

In line with our global strategy Alcoa of Australia is required to set targets for energy intensity and carbon dioxide (CO₂) intensity. These targets are based on 2005 data for refining and smelting. In order to highlight its significance and increase energy efficiency throughout the organisation, Alcoa of Australia has added energy efficiency to the key performance indicators associated with senior management remuneration. The following efficiency targets apply:

Alcoa of Australia energy intensity and CO ₂ intensity targets for 2020 and 2030 (percentage decrease based upon 2005 baseline)			
		Energy intensity	CO ₂ intensity
2010	Refining	5.8%	6.9%
	Smelting	1.1%	6.3%
2020	Refining	10%	20%
	Smelting	10%	20%
2030	Refining	15%	30%
	Smelting	15%	30%

A global measurement tool, the Global Primary Products GHG system, is used to measure emissions at all of Alcoa of Australia's facilities. Reports are compiled on a monthly basis and benchmarked against other Alcoa facilities around the world. Best practice processes and initiatives are then shared throughout the group.

In 2011 we conducted a voluntary audit of our National Greenhouse and Energy Reporting Scheme (NGERS) data which involved greenhouse and energy data from each of Alcoa of Australia's facilities. Recommendations resulting from the audit were addressed during 2012 resulting in more accurate greenhouse and energy data.

Key initiatives

Zero perfluorocarbons (PFC) pot starts: As an industry first, Portland Aluminium Smelter has documented quantitative proof of the ability to start smelting pots with zero PFCs (a greenhouse gas).

This new approach to pot starts has the potential to reduce total plant PFC emissions by more than 12 per cent annually and significantly extend pot life. Portland Aluminium was recognised in 2011 as the best performer in Alcoa's 1 Million Tonne Challenge and Solution Performance Awards. The approach is currently being integrated into our Point Henry Smelter and shared as a best practice within Alcoa globally.

Carbon capture in residue: Bauxite residue is a by-product of alumina refining. It consists primarily of sand, mud and some residual caustic soda from the alumina refining process. Alcoa of Australia has recently researched and tested methods to sequester CO₂ in an inert mineral form into bauxite residue. The process, which reduces the alkalinity of bauxite residue, is operated on a full scale at the Kwinana Refinery using waste CO₂ from neighbouring industry. This process won the National

Engineers Australia Award for Environmental Engineering Excellence in 2005 and we continue to work on methods to deploy the technology to other refineries.

Our performance

Since 2008, Alcoa of Australia has publicly reported its emissions and energy consumption under the National Greenhouse and Energy Reporting System (NGERS).

	2010/11	2011/12
Scope 1	6,404,763.30	6,383,906.50
Scope 2	7,363,779.50	7,345,755.65

* Figures do not include both Alinta Cogeneration facilities at Pinjarra and Wagerup and only include 55% of Portland Aluminium's emissions due to Alcoa of Australia's ownership ratio.

In 2010/11 Alcoa of Australia's scope 1 emissions totalled 6,404,763.30 tCO₂e and scope 2 emissions totalled 7,363,779.50 tCO₂e. In 2011/12 Alcoa of Australia's scope 1 emissions decreased to 6,383,906.50 tCO₂e and scope 2 emissions decreased to 7,345,755.65. Our emissions are primarily the result of the consumption of natural gas, diesel and electricity and PFC's created from aluminium smelting.

While Alcoa of Australia increased production during 2011 and 2012, our overall emissions decreased. This is attributed to increased production efficiencies at our operations.

Since 1990 our Victorian smelters have achieved a direct emissions reduction of 64 per cent per tonne of aluminium produced. In the same time period our alumina refineries in Western Australia achieved a reduction of more than 23 per cent per tonne of alumina produced.

Energy

Energy is a key issue for Alcoa of Australia, both from a supply and cost perspective. Energy represents between 20-30 per cent of our operating costs and reliable, secure, long-term energy supplies at a competitive price remain essential to our business success.

Despite Western Australia having large reserves of natural gas (relative to the size of its domestic market) and unprecedented expansion of the Liquefied Natural Gas (LNG) processing capacity, the availability and price of long-term natural gas continues to be a concern. Our operations in Western Australia predominantly use natural gas, along with some diesel and grid power, and currently consume approximately 25 per cent of Western Australia's total domestic gas supply.

Western Australia is a major exporter of LNG and local companies such as Alcoa of Australia compete for gas supplies with some Asian customers who pay a significant premium for natural gas.

Our approach

In order to diversify supply and promote competition, we are providing support to new entrants into the Western Australian gas market. To date we have committed more than \$100 million towards projects that help secure long term supplies of gas including the Warro Joint Venture with Transerv, Buru Energy and Empire Oil and Gas.

We also own a 20 per cent share in the Dampier to Bunbury Natural Gas Pipeline which transports natural gas from the gas fields in north-west Australia to the south-west.

Alcoa of Australia is a founding member of the DomGas Alliance, an alliance of gas users lobbying and communicating their concerns within government and publicly advocating for secure access to competitively priced domestic gas supplies.

In Victoria our smelters at Point Henry and Portland use electricity generated from brown coal, as do most industries and residents in the state.

An energy analysis of the Victorian smelters was conducted in 2012 utilising Alcoa's Technology and Innovation Center of Expertise. Both plants are now in the process of implementing the actions identified through the analysis.

Energy efficiency

Alcoa of Australia complies with the energy use policy developed by Alcoa. The policy states that 'Alcoa will promote the efficient use of energy to produce and deliver the most cost effective products and services to its customers'.

Alcoa has established a medium term target of a 10 per cent reduction in the energy intensity of primary operations by 2020 (from a 2005 baseline). In order to assist with this target and improve the energy efficiency of operations, Alcoa of Australia is required to develop independent energy intensity reduction targets and plans.

Alcoa of Australia is also required to perform assessments and report under the Energy Efficiency Opportunities (EEO) Act. 2012 was a transition year between the first and second stages of the EEO program; Alcoa of Australia will be submitting a transition report in January 2013.

EEO assessment teams comprised of plant managers, technical managers, electrical engineers, process engineers, operations personnel and financial controllers are being established at individual sites to ensure energy is managed and reduced.

The EEO process identifies opportunities that potentially have a four year payback or better, for implementation or further investigation. All energy efficiency opportunities are documented and analysed appropriate to the size of investment and consistent with core business evaluation methodologies.

During the first EEO assessment stage, 27 projects were identified. Of these projects ten (37 per cent) have either been implemented or are near completion, eight (30 per cent) are still under investigation and nine (33 per cent) will not be implemented, due to either capital constraints or lack of a business case. The implemented projects have the potential to save approximately 1.4PJ energy.

We have recently entered the second EEO assessment cycle. Energy assessments were completed at Point Henry and Portland Aluminium smelters in December 2012 and assessments are planned for Pinjarra and Wagerup refineries in May 2013. Our remaining locations will be assessed during 2014 and 2015.

Our performance

Energy consumption 2011 and 2012				
	Western Australia		Victoria	
	2011	2012	2011	2012
Electricity (MWh)	250,583	311,762	6,270,786	6,302,864
Natural gas (TJ)	82,842	83,442	891	865
Steam (Tj)	11,467	12,033	n/a	n/a
Diesel and fuel oil (Kl)	44,642	41,661	3028	3169

In 2012, we had a slight increase in energy use compared to the previous year due to increased production across our Australia operations. Because our operations are energy-intensive, we are committed to investigating the most energy-efficient ways of doing business.

Our refining operations realised a one per cent reduction in energy intensity over the two years since 2010. The following key initiatives have been implemented:

- An energy management program that assesses performance against theoretical limits and execution of action plans to close performance gaps.
- A focus on refinery management to improve stability.
- Implementation of control technologies to improve production performance.

CASE STUDY

Targeted energy analysis set to save \$8 million

Together, our Point Henry and Portland Aluminium smelters have identified a potential saving of \$8 million to be achieved by 2015, through activities to improve energy efficiency. The potential savings were identified during targeted energy analysis (TEA) workshops at each site in December 2012.

With energy, including electricity and gas, making up a large portion of each smelter's operational costs, the TEAs were organised to assist on-going efforts to reduce costs, improve efficiency knowledge and help achieve long term sustainability at each site.

The TEAs were coordinated by Technical Managers and attended by area managers from each site's pot-rooms, electrode and engineering departments, along with three global experts from Alcoa's Technology and Innovation Centre of Excellence.

Water and wastewater management

Water is essential to our operations; it is also a scarce resource in many parts of Australia, including the southwest of Western Australia where we have operations.

Significant drought conditions occurred in recent years and at the beginning of 2011 all three Western Australia refineries and associated mining operations had record low levels for stored water. Due to the extreme conditions and as a consequence of 2010's low rainfall we had to purchase an additional 400 megalitres (ML) of groundwater for Pinjarra Refinery and 4 gigalitres (GL) for Wagerup Refinery to continue operations in 2011. Water from both these sources was unsuitable for potable use.

At a global level, Alcoa's corporate goal has been set to reduce freshwater use across all operations to reduce competition for water between communities and the environment. To meet this goal we have implemented initiatives to improve heat exchange efficiency, which reduces the evaporation of production process water in our refineries, makes better use of water for dust control and explores increased reuse of wastewater and fit-for-purpose, lower-quality water. For example, Portland Aluminium Smelter has reduced potable water use by eight per cent after switching to recycled water for its cooling system equipment.

Our approach

The majority of our water needs are met by collecting surface water runoff from our own and adjacent properties, streams and catchments, groundwater accessed via licenced bores, recycled water from local wastewater treatment plants and freshwater purchased from water-service providers. While groundwater and recycled water sources have been reliable and consistent, our surface water sources have been reduced by as much as 90 per cent in some areas due to low rainfall averages over the last few years, hence the requirement to purchase water in 2011. We continuously recycle and reuse a high proportion of all onsite water at our refineries with approximately 15 per cent of the water flow coming from freshwater sources.

In Western Australia we improved our capture efficiency from licenced surface water supplies and made better use of water storage facilities by ensuring that more of the stored water is available for recovery. We are also exploring how to utilise more secondary treated sources of wastewater in our processes and still meet product-quality requirements. Potential recycled water sources from as far away as the Perth metropolitan area are periodically assessed to identify viable water sources for our Western Australian refineries.

We are supportive of the WA State Government's commitment given in December 2012, to undertake a feasibility study into the development of a commercially viable, recycled water supply in the Peel Region. If proven beneficial, the scheme will use treated wastewater for the purposes of industry, mining and agriculture in the South-West region.

Our Western Australian refineries have zero process water discharge environmental licences and recycle water continuously. While the majority of process water is cycled continuously through the plant, fresh water is only used to make up for evaporation and for applications where high quality water is required or when lower quality water is not available. Mining operations are licenced to release excess rainfall runoff according to permit conditions.

Each Western Australian location has a Water Lead Team that reviews water consumption and reduction initiatives on a regular basis. In addition, these locations have a state legislative requirement to develop and implement a Water Efficiency Management Plan (WEMP). This plan is reviewed annually by the Water Corporation as the appointed government agency.

During 2011 and 2012 significant work was undertaken to understand the feasibility of introducing large scale bauxite residue filter presses in Western Australia in order to significantly reduce water use at the refineries and in residue management.

All sites in Victoria are permitted to discharge wastewater from site in adherence with their licenced discharge water quality limits. Where possible they aim to recycle or reuse water throughout their processes.

During 2011 and 2012 Anglesea Power Station had planned (licenced) releases of 1369 ML² and 1335 ML of wastewater, made up predominantly of cooling water, stormwater and overflow from boiler ash ponds. After meeting release conditions, all site water is discharged to the Anglesea River under Victorian Environment Protection Authority (EPA) license.

Our Victorian sites are required to develop and implement an Environment and Resource Efficiency Plan (EREP), outlining water reduction actions that can be achieved in a relatively short timeframe. The plan is reviewed by the EPA on an annual basis.

Portland Aluminium also has a lead team that reviews water consumption and reduction initiatives on a regular basis and Anglesea has a Bore Lead Team that monitors groundwater extraction quarterly. The EPA conducts sporadic audits of these monitoring programs.

Each of our locations has an ISO14001 accredited Environmental Management System, which evaluates the potential for our operations to impact on water quality and consumption for example. Third party audits are conducted annually to determine the effectiveness of our systems.

Our mining operations can alter rainfall runoff patterns and surface and groundwater hydrology. We continuously monitor and manage these practices to preserve stream ecology and biodiversity. For further information see 'Biodiversity and Land Management' page 24.

Our performance

Source	Total withdrawal 2010 (m ³ per year)	Total withdrawal 2011 (m ³ per year)	Total withdrawal 2012 (m ³ per year)
Surface water	2,150,500	3,691,500	3,143,100
Ground water	11,684,746	13,489,061	13,003,114
Municipal water supply	3,478,181	3,553,059	2,064,619
Other (water provider)	2,507,000	4,409,000	2,834,500
Freshwater total	19,820,427	25,142,620	21,045,333
Rainwater collected	5,438,893	9,765,369	8,167,853
Wastewater from third party	209,492	248,359	281,876

In 2011 our total freshwater use increased to more than 2010 levels but decreased again in 2012. The variance was due primarily to variability in rainfall conditions impacting surface-water runoff and direct rainfall collection from refinery and bauxite residue areas. Thankfully there was an improvement in rainfall and water capture during the winters of 2011 and 2012 compared to winter 2010.

External water sources are not significantly affected by our water withdrawal. The Kwinana and Pinjarra refineries have completed investigations which have demonstrated the availability of additional water to support their applications for increased groundwater licences. These increased licence allocations will

provide additional water supply capacity in the event of reduced rainfall periods in the future. The responsible agency has approved Pinjarra Refinery's application and the Kwinana application is still awaiting approval.

Our Anglesea Power Station in Victoria operates with an extraction licence for groundwater. Extraction occurs from the upper aquifer with the local water authority, Southern Rural Water, extracting from the lower aquifer. Southern Rural Water manages water allocation and our Anglesea operation reports extraction rates quarterly.

Our Point Henry and Portland Aluminium smelters do not extract groundwater.

Waste management

We focus our waste efforts on what we consider to be our most important issues - land-filled waste and bauxite residue.

We have set a target to reduce waste to landfill by 75 per cent by 2020 and 100 per cent by 2030 from a 2005 baseline. This excludes certain process waste streams from refining and power generation because the larger volumes of these materials, which include bauxite residue and fly ash, would mask our progress on reducing the land-filling of all other waste streams. We have separate programs to address these large-volume wastes. During 2011 and 2012 all sites reduced the volume of landfill waste compared to our 2005 baseline.

Bauxite residue

Bauxite residue is a by-product of alumina refining. It consists primarily of sand, mud and some residual caustic soda from the alumina refining process. Much of the sand is reused to construct residue drying areas (often called residue storage areas) which are eventually capped and re-vegetated.

We continue to explore opportunities to use bauxite residue as a source material for a variety of applications. Our Technology Delivery Group has identified a number of possible sustainable

² Estimated for 2011 due to equipment logging failure.

uses for bauxite residue including ReadyGrit™ (formerly known as Red Sand™), a product that can be developed as a filler for industrial land development, for turf top dressing, as bunker sand or as a material suitable for use in road base construction. ReadyGrit™ has the potential to reduce our global bauxite residue volume by twenty per cent and at the same time provide an environmentally sound solution to Western Australia's declining sand supplies.

Our long-term strategic targets for bauxite residue include:

- A 15 per cent reduction in bauxite residue land requirements per unit of alumina produced by 2020 and 30 per cent by 2030, from a 2005 baseline.
- Rehabilitate 30 per cent of total residue storage area by 2020 and 40 per cent by 2030.
- Recycle or reuse 15 per cent of residue generated by 2020 and 30 per cent by 2030.

In 2011, Alcoa of Australia signed a memorandum of understanding with a potential joint venture partner to explore constructing a full-scale ReadyGrit™ plant. The first demonstration trials using sand from the pilot plant at Kwinana Refinery commenced in 2011 and continued into 2012. The potential joint venture partners are planning to conduct further reviews and assessments in 2013.

During 2011 and 2012, we undertook significant work to understand the feasibility of introducing large-scale filter presses for bauxite residue in Western Australia. The filter presses essentially work by forcing the moisture out of the bauxite residue, leaving behind a dry filter cake.

If this technology proves a viable option, it could have the following advantages:

- Residue operations that could be sustained in excess of 10 years within the current footprint.
- Significant reduction in water use at the refinery and in residue management.
- Reduced potential to produce dust from the residue drying areas.
- Reduced potential to impact ground water.

In 2012, Alcoa's Manufacturing and Technology Council endorsed continued investigation of the technology, including potential supplier assessments and full-scale design work. We will also continue our work to understand the full implications of residue filtration on the refining process, including the management of process impurities that will be directed back into the alumina refining process stream.

Alumina refining oxalate

Our Technology Delivery Group developed a process that uses naturally occurring bacteria to consume an impurity called oxalate in the alumina refining process. The process reduces carbon dioxide emissions and energy use and saves millions of dollars compared to conventional destruction technologies. It earned the Technology Delivery Group the inaugural Australasian Industrial Research Group Medal in 2011.

Following completion of the oxalate bioremoval facility at Kwinana Refinery in 2009, a similar plant was built at Pinjarra Refinery across 2011 and 2012.

Spent pot lining

We continue to make progress in converting spent pot lining (SPL), a hazardous waste, from our smelting process into an energy and mineraliser resource for cement kilns. SPL is generated when the carbon and refractory lining of a smelting pot reaches the end of its serviceable life. In 2011 and 2012, 5607 and 3003 tonnes of SPL were recycled respectively. We engaged a contractor to process SPL at our Point Henry operations to produce mineral products and a fuel that has reduced emissions for the cement industry.

Spent pot lining						
Year	SPL generated	SPL to storage	Total recycled	Recycled domestically		Recycled overseas
				Cement industry	Brick industry	Cement industry
2011	6014	407 (7%)	5607 (93%)	3777	806	1024
2012	4953	1950 (39%)	3003 (61%)	2095	908	0

Long-Term Residue Management Strategies

Alcoa of Australia has a Long Term Residue Management Strategy (LTRMS) for each of its alumina refineries. These documents are designed to inform local and state governments and the wider community of our long term management strategies and commitments for a sustainable future in residue management.

In particular it outlines the current short term (five to seven year), mid-term (25 year) and life of mine (2045) management strategies for residue at each refinery, including:

- Where future residue infrastructure areas will be located.
- The proposed height requirements for the residue drying areas.
- How environmental risks associated with residue storage will be managed.

The LTRMS addresses current plans for closure of the residue area, future land use options for the residue area (post-closure) and current research into residue management, re-use and revegetation.

The LTRMS is developed and reviewed by the company in collaboration with a Stakeholder Reference Group which includes representatives from the community, local and state government, and Alcoa of Australia. The transparency of the process ensures local and state government departments and community members

have access to the same information and can better understand each other's issues and perspectives. The independently facilitated group works together to provide the company with a series of guiding principles, or recommendations, for Alcoa of Australia's consideration in the development of the LTRMS for each refinery.

During 2011 and 2012, the LTRMS for each of our three Australian refineries was reviewed.

Biodiversity and land management

Our operations can affect biodiversity in several ways. Our activities, although often limited to relatively small pits where bauxite exists, can impact on wildlife, vegetation cover and the quality and quantity of surface and ground water.

Note: All vegetation clearing for mining in ML1SA commences with salvage logging operations undertaken by the Forest Products Commission (FPC) under contract to the Department of Environment and Conservation (DEC). Once the FPC's operations are complete (which have a substantial impact on the vegetation) the areas are handed over to Alcoa for mining operations.

Our approach

Consistent with our environmental policy and our position on sustainable development, we operate in a manner that minimises effects on natural habitats and biological resources. More broadly, we endorse the concept of multiple land use where possible. Our mining rehabilitation standard operates on the principle that mining is a transient land use and has the objective of ensuring mined areas remain suitable for future use and maintaining biodiversity values.

Our basic approach is ensure sensitive areas are avoided where possible, minimise the disturbance of the original habitat and work closely with community and regulatory stakeholders to restore lands to the most productive use possible, including where feasible, re-establishing original conditions.

Biodiversity conservation is a key consideration in planning for new or expanded operations, divestment of assets no longer operating and day-to-day management of lands we own. Prior to mining in a new location within the jarrah forest of Western Australian we undertake detailed monitoring of the flora, fauna and indigenous heritage.

The flora monitoring looks for rare species but it is also used as a baseline for the rehabilitation program. Our ultimate objective is to restore the plant species richness of the location, so we conduct pre-mining surveys to calculate and determine target species richness values.

For land disturbed by mining or the construction of residue storage areas, we have programs in place to track and minimise damage.

During 2011 and 2012 we continued to develop a means of consistently identifying, measuring and recording which of our sites worldwide have substantive biodiversity values. In conjunction with this inventory we are refining our definition of substantive biodiversity values and developing specific criteria to better screen site locations. Once identified, we aim to develop biodiversity management plans for these locations by 2015 and implement plans by 2030. These plans seek to:

- Identify the biodiversity values of the land, including sensitive habitats and the presence of threatened species.
- Identify potential impacts (positive and negative).
- Develop a management plan based on the hierarchy of biodiversity mitigation measures—avoid > minimise > rectify > compensate.
- Identify the means to communicate with and inform our employees and the communities in which we operate about the importance of biodiversity protection, and encourage their participation in developing and implementing mitigation plans.
- Measure and report performance against site-specific targets.

Our performance

In addition to our mineral lease covering parts of the northern jarrah forest in Western Australia's Darling Range Plateau, other areas of high biodiversity value include:

Areas of high biodiversity value		
Location of land	Status	Size
The Spectacles wetlands, Mandogalup, WA	Co-owned by Alcoa of Australia and Department of Planning. Jointly managed by Department of Environment and Conservation and Alcoa of Australia	145 hectares (79 Ha owned by Alcoa of Australia)
Mount Brown, part of the Beeliar Regional Park, WA	The greater Mount Brown area has a number of owners: Landcorp, Landgate, Alcoa of Australia (northern section) and other private owners	35 hectares owned by Alcoa of Australia (includes tank farm and social club)
Anglesea Heathlands, VIC	Mining Lease Alcoa of Australia, Parks Victoria, the Victorian Department of Sustainability and Environment and the local community are working together to manage and protect the Anglesea Heathland's values	7200 hectares

Alcoa of Australia works collaboratively with local and state government and interest groups to ensure the ongoing health and sustainability of these important natural resources.

Conservation and sustainability partnerships

One of Alcoa of Australia's longest and most successful sustainability partnerships involves Greening Australia (see Community Partnerships section for partnership overview) and the management of 575 hectares of land surrounding our Point Henry operations. This award-winning project, given the local Indigenous name Moolapio, which means sandy place of trees, has been running since 2005.

Alcoa of Australia owns and operates this significant parcel of land which is home to diverse land uses and values including farmland, woodland, salt marsh, sand dune, coastal salt water wetlands and fresh water wetlands.

In conjunction with community stakeholders from Deakin University, The Gordon Institute, the Wathaurong Cooperative, Geelong Environment Council and the Geelong Field Naturalists Club, Greening Australia developed the land management plan for this significant area.

Read more about the Moolapio project at:

<http://www.greeningaustralia.org.au/our-projects/water/moolapio>

Species protection

While not necessarily affected by our operations, surveys have identified that a number of important plant and animal species are within the footprint of our operations. As such, appropriate protection measures are undertaken.

In 2010 Alcoa of Australia developed a Threatened Fauna Species Management Plan for its bauxite mining operations. It identifies species that typically occur within Mineral Lease 1SA that are listed under either State (WA Conservation Act 1950) or federal (Environment Protection and Biodiversity Conservation Act 1999) legislation as endangered, vulnerable and/or requiring special protection. The document summarises the known biology and ecological threats to these species and lists actions and timeframes for:

- Gathering information about threatened species populations, distribution and habitat requirements.
- Mapping information for use in mine planning.
- Understanding mining impacts through monitoring and research.
- Mitigating impacts through informed mine planning to protect sensitive forested areas/habitat.
- Improvements to restoration to enhance its value as habitat for threatened species.

In 2012 further recommendations were implemented including pre-mine surveys of threatened species and the development of formalised procedures and standards for threatened species management.

IUCN Red List and Australian conservation list species within our footprint

Extinction risk	Species
Critically endangered	Orange-bellied Parrot.
Endangered	Baudin's Black Cockatoo, Carnaby's Cockatoo, Spotted-tailed Quoll, Southern Brown Bandicoot (Victorian sub-species), Mellbloms Spider Orchid, Growling Grass Frog, Australian Bittern.
Vulnerable	Quokka, Red-tailed Black Cockatoo, Western Quoll, White-footed Dunnart, Anglesea Grevillea, Dense-leek Orchid, Spiral Sun Orchid, Fairy Tern.
Near threatened	Brush-tailed Phascogale, Heath Mouse, Common Bent Wing Bat.
Least concern	Carpet Python, Peregrine Falcon, Rufous Treecreeper, Powerful Owl, Rufous Bristlebird, Swamp Antechinus, Eastern Pygmy Possum, Southern Toadlet, Lesser Sand Plover, Greater Sand Plover, Ruddy Turnstone, Broadbilled Sandpiper, White Throated Needletail, Fork Tailed Swift, Baillons Crane, Black Falcon, Brolga, Common Sandpiper, Grey Haired Tattler, Latham's Snipe, Lewins Rail, Little Tern, Banded Stilt, Sharp-tailed Sandpiper, Swamp Antechinus, Southern Brown Bandicoot, Australasian Gannet, Short-tailed Shearwater, Magpie Goose, White-bellied Sea-eagle, Fairy Prion.

Impacts of fluoride emissions on kangaroos

Despite near best-in-world performance in relation to fluoride emissions, a research program in partnership with the University of Melbourne has identified that some kangaroos living within the Portland Aluminium Smelter buffer zone are affected by emissions resulting in fluorosis, an arthritic and lameness causing condition.

This finding has resulted in the development and implementation of a comprehensive management plan for the kangaroos, in collaboration with external specialists. The plan aims to reduce the consumption of vegetation and water containing high fluoride content. To reduce emissions, a detailed review of smelter equipment and operating procedures has also been undertaken.

Additional research will be conducted to better understand the susceptibility of kangaroos to fluoride, identify safe levels of consumption and monitor the health of animals relocated from areas of higher exposure.

CASE STUDY

Black Cockatoos

Recognising that Black Cockatoo nest habitat is particularly slow in forming and difficult to replace and restore, in 2012 we developed a procedure to identify, map and protect high value habitat for black cockatoos that may be affected by our mining operations in Western Australia.

Prior to seeking approval for clearing within our mining footprint, the areas are surveyed for the presence of old-growth trees that provide actual or potential nest habitat. In 2012, survey findings resulted in four haul road realignments and the shifting of three sumps and two stockpiles to avoid the clearing of old-growth nest trees. To date, nine nest trees and 16 habitat trees (that have the potential to provide nest habitat in the future) have been protected

Mine closure and rehabilitation

Alcoa of Australia's mining operations occur within areas of high biodiversity value such as the jarrah forest on the Western Australian Darling Range Plateau and the Anglesea Heath in Victoria. Our mine rehabilitation standard, bauxite residue closure guidance and site-specific rehabilitation and closure plans require recognition of the unique biodiversity qualities at each of our operations. Additionally we develop each site's rehabilitation program accordingly.

Alcoa is recognised as a world leader in mine rehabilitation and is a recipient of awards including:

- Alcoa's Western Australian Operations listed on United Nations Environment Programme's Global 500 Roll of Honour (1990).
- Western Australian Government Golden Gecko Award for Environmental Excellence (2002).
- Society for Ecological Restoration International (SERI) Award for Outstanding Contribution to the Field of Ecological Restoration (2003).

During 2011, Alcoa revised and updated mine rehabilitation standards and supplemental documentation across global operations to ensure consistency of strategic sustainability targets and to build industry best practice.

Highlights of the revision included expanded terminology, clarification of the applicability of the standard and emphasis on environmental protection during the exploration phase.

Our overall objective is to reduce our collective mining footprint to the minimum required for efficient resource recovery. In so doing, we will reduce or eliminate legacy mined areas, identify minimum footprints for active mining and work to reduce our active mining footprints to these levels. To drive progress we have established quantifiable goals relating to mining disturbance and rehabilitation. Progress against these targets is tracked by an internal compliance team which checks mine plans and reporting processes.

Monitoring of rehabilitated areas is carried out to:

- Assess the success of rehabilitation.
- Identify areas where re-work is required.
- Allow improvements to rehabilitation techniques.
- Determine the long-term sustainability of rehabilitation and its ability to be integrated into normal forestry management practices.

Completion criteria outlined in Department of Environment and Conservation Working Arrangements prescribe the mine rehabilitation standards Alcoa of Australia must achieve in order for the Western Australian State Government to accept management responsibility for the rehabilitated areas. Monitoring provides an indication of whether these standards have been attained.

Our performance

The following table lists the amount of land disturbed or rehabilitated in hectares.

Rehabilitation status	Anglesea 2011	Anglesea 2012	Huntly 2011	Huntly 2012	Willowdale 2011	Willowdale 2012
Total land disturbed and not yet rehabilitated – opening balance (A) including long term infrastructure	216	217	2833	3294*	1061	1080
Total amount of land newly disturbed within the reporting period (B)	6	0	956*	477	206	203
Total amount of land newly rehabilitated within the reporting period to the agreed end use (C)	5	0	495	630	187	174
Total land disturbed and not yet rehabilitated (D=A+B+C)	217	217	3294	3141	1080	1109

* New crusher under construction

Our long-term goal is to rehabilitate an equal amount of land that we disturb for mining annually.

Our most advanced mine rehabilitation and biodiversity management program is at our Western Australia bauxite mines where our key biodiversity performance target is to re-establish the same level of plant species richness in rehabilitated areas as exists in the un-mined jarrah forest. To measure our progress, we monitor the number of indigenous plant species present when the rehabilitated areas are 15 months old. The 2007 rehabilitated areas returned the best-ever results, with the average number of species in rehabilitated areas exceeding the forest average by eight per cent, that is 108 per cent of the average species richness found in this region of unmined forest. In 2010, the most recent year's data available, the average was 80.4 per cent. This reduced performance is due to a variety of factors, including reduced rainfall and some operational limitations. Restoring species richness to the 100 per cent target remains a high priority.

The amount of rehabilitated land in Western Australia is aligned with the area being cleared at Willowdale mine, however Huntly mine has a larger area of cleared land due to the construction of the new Myara crusher site and associated infrastructure.

Compliance

Alcoa of Australia's operations are subject to significant environmental regulation. The Western Australian refining operations are licensed under the Environmental Protection Act 1986 (WA) (WA EPA Act). The Victorian Operations are licensed under the Victorian Environment Protection Act 1970 (Victorian EP Act) and are regulated by the State Environmental Protection Authority (EPA) with the Point Henry Smelter and Portland Aluminium Smelter being recipients of accredited licences under Victoria's environmental licensing system.

All Alcoa of Australia locations are required to operate in compliance with all applicable environmental laws and regulations and we have a goal of zero non-compliance incidents. Our corporate compliance function tracks actual or potential issues and ensures matters of non-compliance are addressed.

An Alcoa audit team undertakes corporate audits using protocols based on the company's mandated environmental standards. At an Australian level, audits are undertaken on a continual basis and are an important component of our business. All of our sites have Environmental Management Systems which are ISO 14001 accredited, involving a yearly surveillance audit and a three yearly recertification audit.

Performance in relation to environmental regulation

During 2011 we noted 11 incidences and items of non-compliance with the WA EP Act and three incidences and items of non-compliance under Victoria's environmental licensing system (Victorian EP Act and EPA).

During 2012, we noted 13 incidences and items of non-compliance with the WA EP Act and three incidences and items of non-compliance under Victoria's environmental licensing system (Victorian EP Act and EPA).

None of these incidents resulted in significant environmental damage.

During 2011 we finalised all outstanding enterprise bargain agreement negotiations for our operations in Western Australia and Victoria.

Our safety performance improved across all key metrics.

We launched an Inclusion Steering Committee to enhance our diversity and inclusion commitments.

We invested \$8.27 million in local, state and national community partnerships during 2011 and 2012.

Each year our employees donate more than 90,000 hours through volunteering programs.

HIGHLIGHTS

Our people

A full-page background image of a male cyclist in a yellow jersey, black shorts, and a blue helmet, riding a silver mountain bike on a wooden track. The cyclist is wearing white gloves and sunglasses, and is captured in a dynamic pose as if leaning into a turn. The background is a blurred mix of blue and green, suggesting a natural setting. The overall image conveys a sense of motion and outdoor activity.

Employee engagement

Alcoa of Australia aims to be a high performing organisation and integral to that is having a highly engaged workforce where systems, structure and capabilities align with our strategic direction.

To attract, motivate and retain the best people, we provide a work environment that encourages continuous learning and emphasises integrity, respect, excellence, health and safety. We aim to be an employer of choice, essential for competing in Western Australia's tight labour market.

At the end of 2012, Alcoa of Australia had a workforce of 5234 employees, the majority of which were employed full time.

We remain committed to attracting and retaining the best people; to ensure we do that we provide numerous programs, resources and tools, including:

- **Compensation** - Our 'pay for performance' philosophy is designed to reward behaviours that deliver against business goals. Our total compensation package includes pay and benefit programs that are competitive within each region and labour market.
- **Performance review and recognition** - Our talent management process helps employees work with their managers to review performance, define career interests and build individual development plans. The annual global and Australia-wide people review process ensures comprehensive succession planning and career and development plans and actions for individuals. Individual and team efforts are rewarded through a variety of location and corporate recognition programs.
- **Employee development and leadership** - We support employee career growth through on-going learning and development. We are committed to developing our current and future leaders through management and supervisor development programs.

To further support our human resource (HR) policies and processes, we initiated a global Human Capital Management project in 2011. The project aims to put into place the necessary information systems to globalise our performance management, compensation, HR business metrics and HR records management system.

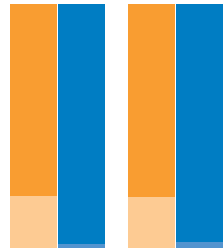
In 2012 Alcoa announced a new global vision, '*Alcoa. Advancing each Generation*' and refreshed the company's global values to capture what we expect of ourselves; what our customers and communities expect of our partnership; and what our shareholders expect of the business.

Employee feedback

We actively seek feedback and ideas from our employees on a regular basis. Our annual Global Voices Survey provides insights into what is and isn't working well, allows us to gauge levels of understanding and provides constructive feedback to managers in areas such as employee engagement, supervisor effectiveness, trust in leadership, environment, health and safety commitment, the availability of learning and development opportunities and diversity/inclusion.

The 2012 results for Alcoa of Australia showed an overall improvement of at least four per cent in all areas of the survey. At location and department level however, scores were lower than in 2011. Specific actions are currently being developed to better target these areas in 2013.

Our performance



		2011	2012
Employees by region	WA	4004	4044
	VIC/NSW	1224	1190
Employees by contract type	Full-time (permanent term)	5032	4994
	Part-time (permanent term)	152	176
	Full-time (limited term)	38	62
	Part-time (limited term)	6	2
Alcoa of Australia turnover rate (%)³	Western Australian operations	4.16	3.88
	Victorian operations	2.86	1.99
	Corporate	9.15	6.62
	WA unionised workforce	2.67	2.36
	Victorian unionised workforce	1.66	1.35
	Females	6.14	6.84
	Males	3.74	3.09

³ These figures reflect voluntary turnover.

Local employment

We endeavour to support the local community throughout our recruiting process for all Alcoa of Australia locations. In operations roles we generally utilise local advertising, and where possible we give preference to local candidates. We attend local community recruitment and careers expos, facilitate career presentations at local schools and provide traineeships and work experience to local school students.

In senior management roles, we try to give preference to local candidates where we can. In 2011 and 2012 all senior management roles (filled with external candidates) came from the local state of operation.

Labour relations

We are committed to working with labour unions and our Enterprise Bargain Agreements (EBAs) reflect the commitment of the company, unions and the workforce to maximise productivity, efficiencies, business benefits and supply to customers.

In Australia, 68 per cent of our employees are covered by an EBA. During 2011 we finalised six outstanding EBA negotiations for our Western Australian and Victorian operations. In 2012, we commenced negotiation of the Western Australian Operations Agreement with the Australian Manufacturing Workers Union. This agreement covers 580 employees and expires in June 2013.

As part of a program to improve productivity in the Global Primary Products division of Alcoa, Western Australia's Pinjarra Refinery undertook a restructure program during 2011. Following extensive employee and union consultation, the refinery offered 75 separation packages selected from employees' expressions of interest and commenced a redeployment program for directly impacted employees who elected to stay with the organisation.

During 2012 the company undertook a review of the Point Henry smelting operations to identify cost efficiencies to counteract the cost pressures faced by the aluminium industry. An outcome of the review was our collaborative efforts with employees and unions to identify a reduction of approximately 10 per cent of the workforce, through a voluntary redundancy program.

Training and development

Retaining and up-skilling our people are key strategic priorities and we recognise the importance of building skills, providing opportunities for personal development and career growth.

We take a broad approach to learning and development and offer a number of programs and development opportunities to employees at various levels. During 2011 and 2012, we invested more than \$5.6 million in external training across Australia.

Our leadership development program provides for the continued development of leadership skills with each level of the program building on the previous. For example, our Advancing Supervisory Excellence program was designed specifically to prepare those in our first levels of leadership for the ever changing needs of the business. It supports the often challenging transition from a production role to a leadership role.

In the production areas of our business, on the job training is provided by peers and leaders experienced in our production processes. Standardised training materials are provided to ensure a consistent approach to on-the-job training and to ensure relevant safety and process standards are met.

Our membership in professional training organisations such as the Australian Institute of Management and Engineers Australia enables employees to access and receive funding for programs suited to specific business roles and access learning materials and libraries. Funding for external education is provided through our Education Tuition Aid process.

Any employees made redundant are provided with a suitable career transition program through a recognised outplacement consulting organisation.

Development programs

The Advancing Supervisory Excellence program (ASE), introduced in 2011, offers a common global curriculum adapted to the specific

requirements of Australian operations. The program is delivered by trained location facilitators and supported by the attendance of participants' direct managers.

The ASE program aims to provide supervisors with the skills to focus on continuous improvement and shift away from a reactive approach. There are currently in excess of 800 people participating in the program, representing around 50 per cent of our employees not covered by an EBA.

The Human Performance program (HP) complements other learning and development programs, in particular the ASE program, through building leadership skills and a 'common language'. The HP is a new way of engaging people in the importance of safety in the workplace and is currently being delivered to every employee. It differs from traditional safety training programs because it focuses on helping all of us to understand the things that actually cause human error (recognised as the leading cause of safety incidents).

The AlcoaLearn online learning management system, deployed in May 2012, provides employee development programs with a mixture of allocated and optional training to meet both organisational requirements and individual development needs. This is a global program coordinated through our Learning and Development Centre of Expertise.

The Alcoa Applied Management Program continued to be deployed in 2011 and 2012 with the following improvements to the curriculum:

- Accreditation of an Advanced Diploma of Business.
- Increased levels of executive participation.
- Training in key business processes such as performance assessment and change management.

To support our formal training processes listed above, we have an individual development resources guide. The guide was developed as a resource to assist employees and their managers determine individual employee development needs. It links development needs with opportunities, not just online and classroom training, but also activities such as project management lead roles, short term and stretch assignments, involvement in community support programs and access to educational resources such as books, articles and external courses. Support to individuals seeking external education has also continued through our tuition aid program.

Graduate and school leaver opportunities

The Alcoa of Australia *Graduate Development Program* is a three year program providing professional (functional discipline) and personal (generic skill and knowledge) development to graduates.

Graduates are offered opportunities across a range of disciplines in both Western Australia and Victoria. These include but are not limited to engineering, mining, science, commerce, human resources, environment and health and safety. At the end of 2012, we had 40 graduates employed across the business.

Each year we offer a variety of trade-based apprentice positions. While a large number of our apprentices are employed directly from schools within our local communities, we also offer a number of mature aged apprentice opportunities. At the end of 2012, 119 apprentices were employed.

Alcoa traineeships aim to improve employment prospects and widen participants' career options. Our traineeship programs are nationally accredited under the Australian Qualifications Framework and provide synchronous and asynchronous learning opportunities. At completion, participants receive a certificate of competency. In 2012 we took on another 26 trainees, taking the total number to 96.

Diversity

Alcoa of Australia has promoted the importance of a diverse workforce for many years and received external recognition for its diversity commitment by being named an Employer of Choice for Women by the Equal Opportunity for Women in the Workplace Agency for the 11th consecutive year.

We aim to create a workplace where people, no matter what their background, gender, marital status, age, beliefs, impairments, ethnicity, sexual preference or religion, feel valued and part of our team. From a business perspective, we believe this helps improve employee engagement, commitment and productivity.

In 2012 we launched an Inclusion Steering Committee, headed by our managing director, to lead and grow the company's commitment to employee equality, respect and diversity. The Committee is charged with:

- Developing Alcoa of Australia's strategic direction around inclusion.
- Sponsoring and supporting initiatives that promote inclusion.
- Providing examples of best practice behaviours.
- Helping to embed a flexible and inclusive workplace culture that embraces change, new ideas, respect for the individual and creates equal opportunity to succeed.

From time to time the committee also seeks advice from experts and advisory groups, including the Alcoa Women's Network (AWN) and Employees at Alcoa for Gay and Lesbian Equality (EAGLE) network.

Our diversity strategy includes initiatives to address:

- **Recruitment** – We are focusing on attracting female candidates by increasing the diversity of interview panels and aligning selection processes with our overarching goal.
- **Leadership development programs** – In addition to including a module on diversity, we ensure there is an equitable representation of females participating in all levels of the program.

- **Talent management** – A key undertaking as part of our annual people review process is to review the representation of women in different job grade classifications and discuss opportunities for the promotion of women within the organisation.
- **Supporting female networking and mentoring** - Through HR initiatives and support of the AWN, Alcoa of Australia's Managing Director personally supports and promotes the AWN through attendance at events, provision of funding and promotion within the business. Other senior executives also demonstrate support by attending site AWN events and speaking on a range of career development topics.
- **A flexible work arrangement policy** – We provide options including part time work, job share, modified start and finish times and the ability to request other modifications to working arrangements.
- **Scholarships and programs for the education of females at secondary and tertiary level.** Alcoa of Australia supports programs to encourage women to consider careers in non-traditional roles. Examples include the Chantelle Carter Memorial Fund (Science) and the Bev Corless Memorial Scholarship (Engineering).

More information on Alcoa of Australia's status as 'Employer of Choice', our diversity and flexibility offering, employee benefits and our work environment is available at: http://www.alcoa.com/australia/en/info_page/employer_of_choice.asp

Our performance

Females comprise 11.7 per cent of our total workforce with the majority working in administrative roles and only a relatively small proportion working in production roles. This is an average representation in a sector which has traditionally been dominated by males.

Females take up 13.8 per cent of senior roles (senior management and lead team). While we continue to encourage and support more women moving into these senior roles,

this current figure is representative of our female participation in our total workforce and therefore balanced.

Like many other Australian organisations, our workforce is an ageing one. We are proactively engaged in succession planning and allowing employees nearing retirement the opportunity to work part-time and assist in skills transfer. We invest in a number of programs to increase our attraction of younger employees such as engaging trainee operators, apprentices, graduates and vacation students.

Workforce by job classification, gender and age for 2012							
Job classification	Total	Gender		Age			
		Female	Male	<30 yrs	31-40 yrs	41-50 yrs	51+ yrs
Administration	392	214	178	69	57	124	142
Senior management	44	6	38	0	3	19	22
Production	4110	190	3920	378	790	1443	1499
Lead team	14	2	12	0	2	4	8
Middle management	193	33	160	0	49	66	78
Professional	479	169	310	84	143	134	118
Total	5234	614	4620	531	1044	1790	1869

Workplace health and safety

At Alcoa of Australia we stress the importance of maintaining a safe workplace and promote staff wellness through comprehensive health and safety programs focused on prevention.

We are committed to improving our safety record by 20 per cent each year toward a zero rate across our four key health and safety metrics: Lost Workday Incident Rates; Days Away, Restricted or Transferred Rate (DART); Total Recordable Incident Rate (TR) and All Injury Incident Rate. Our safety system is supported through the following actions:

- Identifying hazards and assessing the risks associated with our operations.
- Developing and implementing controls to mitigate those risks.
- Continual auditing of our hazard recognition and risk management activities.
- Reacting to correct gaps and continuously improve our system stability.

While we expect all of our employees to contribute to maintaining a safe workplace, we have formal health and safety committees at each worksite comprised of management and operations staff. In 2012 we commenced a formal in-house training program for members of these committees addressing:

- Risk management
- Hygiene
- Men's health
- Ergonomic risk
- Medical rehabilitation
- Environment awareness and impact minimisation
- Incident investigation
- Stored energy management
- Conflict resolution

All enterprise bargain agreements include clauses relating to safety commitment and responsibilities and in 2011 the Western Australian employees' agreements featured Fitness for Work, a program which addresses the abuse or misuse of alcohol and other drugs.

Key initiatives

During 2011 and 2012 we rolled out a new safety training program across the business called *Human Performance* (HP). This program is designed around the interactions between people, processes, programs, equipment and environment. HP develops our employees' and contractors' skills and knowledge of how their behaviour influences safety in the work environment. As a result, error-likely situations are addressed before they become problems.

We continued to use the *High Risks Tasks of the Day* initiative, introduced in 2010. The program addresses our most pressing health and safety issues by asking work groups to identify one task each day that may have the potential to cause significant harm. Once identified, the groups conduct a systematic work method review and targeted observation to ensure adequate controls and supervision are in place to manage safety.

The identification of risks in our workplace through Risk Notifications has been a key area of focus. During the last two years, the number of risk notifications entered into the health and safety system by employees and contractors has doubled each month.

This is due to the concerted effort of management to encourage employees to identify both minor and major hazards that may lead to serious incident or harm; employee participation in managing and eliminating risks; and implementing controls to prevent harm.

In 2012, at our Point Henry Smelter, we implemented a sustainable safety improvement program which resulted in the doubling of risk notifications, all employees being trained in HP, and an increase in the HP participation rate. Compared to 2011, the smelter's TR rate dropped by 51 per cent, the DART rate declined 69 per cent and workers compensation costs fell significantly. These achievements occurred while the future of the facility was under review.

Continuing on from previous years we also completed nearly 200 fatality prevention projects across Australia. We continue to work through our fatality prevention program with each location having a fatality prevention team. The fatality prevention program encourages greater risk awareness, involvement and safety commitment to prevent serious and fatal incidents.

Our performance

Employee participation in our health and safety programs has increased significantly over the past two years and this is reflected in our improved safety performance. We have improved in all four of our safety metrics since 2010. While in 2011 we fell short of our goal to improve our record by 20 per cent, in 2012 we exceeded this target.

Year	LWI rate		DART rate		TR Rate		AI Rate		Occupational disease		Fatalities	
	VIC	WA	VIC	WA	VIC	WA	VIC	WA	VIC	WA	VIC	WA
2008	0.15	0.40	1.70	1.42	3.18	3.71	26.43	16.09	0.59	0.67	0	0
2009	0.08	0.09	1.17	0.58	3.12	2.35	19.45	14.31	0.78	0.51	0	0
2010	0.45	0.48	2.49	1.39	4.45	3.10	24.72	16.33	0.44	0.80	0	0
2011	0.43	0.44	2.69	1.27	4.42	2.93	21.16	13.56	0.61	0.32	0	0
2012	0.09	0.50	1.08	1.25	2.70	2.20	19.91	11.37	0.36	0.28	0	0

Definitions: Lost Workday Incident (LWI) Rates – number of injuries and illnesses resulting in one or more days away per 100 full-time workers

Days Away and Restricted or Transferred (DART) Rate - when an injury prevents or restricts an employee from completing their regular work requirements per 100 full-time workers

Total Recordable Incident Rate (TR) – 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

All Injury Incident Rate (AI) - measurement that includes all first aid cases per 100 full-time workers

Since 2010 Alcoa of Australia's DART rate has fallen 25 per cent, our TR rate by 32 per cent and our LWI and AI rates by 13 per cent and 27 per cent respectively.

More than 50 per cent of employee injuries are musculoskeletal. We are developing ways to better manage our employees and the way they do their work in order that we further reduce their exposure to this type of injury.

Site ergonomists regularly visit crews in the workplace to assess and correct workplace behaviour with the aim of reducing musculoskeletal injuries. An example of this is the installation of pipe valves which can be opened and closed mechanically rather than manually, reducing harm from manual 'twisting and turning' labour.

Our safety data shows there is a marked increase in work-related injuries at work during the summer months. Each summer for the past four years we have run a summer safety campaign featuring a new topic each week to give quick, regular, high impact reminders of how to avoid some common injuries. Topics include avoiding heat stress, hand injuries and skin cancer prevention.

Employee wellbeing

In addition to core safety programs, we run a number of health and wellbeing programs that are focused on the prevention of health issues and the creation of a healthy workforce. These initiatives include:

- Employee Assistance Program
- Occupational Medicine Program focusing on:
 - Emergency treatment
 - Fitness for work
 - Health promotion and surveillance (also linked to the global Alcoa Wellness program)
 - Rehabilitation
 - Travel medicine
- Ergonomics
- Occupational hygiene (prevention of hearing loss)

At Alcoa of Australia we have seen a significant reduction in frequency of occupational diseases in the past five years, mainly due to reductions in work-related hearing loss. An award-winning Hearing Loss Prevention program, first introduced across Western Australia Operations in 2006 and then Victorian Operations in 2007, aims to educate employees and ensure high hearing protection compliance. In 2012, only 15 recordable occupational hearing shifts⁴ occurred, in comparison to 37 recorded in 2009. This is a significant reduction and we hope to continue this reduction going forward.

More information on health and safety at Alcoa of Australia is available at: <http://www.alcoa.com.au/healthandwellbeing>

CASE STUDY

Safety innovation award win

Our Pinjarra Refinery was awarded for its program to reduce occupational noise exposure and prevent hearing loss at the 2012 Western Australian Chamber of Minerals and Energy's Safety and Health Innovation Awards.

The Road to Silence hearing conservation program, first introduced across Western Australian Operations in 2006 and Victorian Operations in 2007, was established as hearing loss was being reported at an increasing rate and made up a notable amount of injuries.

A number of best practice ideas and equipment were incorporated to enhance the existing program.

Alcoa introduced a combination of controls which include a program to ensure ear plugs are fitted correctly, noise badges and the tracking of noise exposure occurs in real time, enhanced walkway signage, hand-tool labelling, noise task controls, a 'Buy Quiet' program and various educational initiatives including our Road to Silence DVD.

During a five year period, hearing exposure during 12 hour shifts was reduced to less than one per cent of the workforce population.

The ingenuity of our occupational hygienists and technicians will prevent hearing damage in operators for decades to come.

⁴ A work-related 10 dB shift in hearing threshold.



Our community

Community engagement

Alcoa of Australia's operations bring a range of benefits to the communities in which we operate. Likewise they have the potential to prompt interest and questions among local community members and stakeholders. To earn and maintain our social licence to operate we must conduct our business to the highest possible standards and engage with our stakeholders in ways that are meaningful, open and transparent. While those stakeholders with a business relationship with our business (ie our customers, suppliers and employees) have formal and informal channels for engagement, our community stakeholder groups are also provided the opportunity to engage and provide input on a range of subjects relevant to both Alcoa of Australia and the community.

The Alcoa Community Framework articulates our expectation for open, transparent two-way dialogue with most stakeholders. It outlines our internal standards for managing our interactions and provides consistent direction to site leadership teams about business expectations.

The framework also provides guidance on processes for determining which stakeholder groups should be engaged

and identifies best practice tools and approaches to engagement. Some key tools outlined in the framework and actively used by Alcoa of Australia locations include regular consultation forums, subject specific working groups and a 24-hour complaints response service to ensure our neighbours' concerns are responded to in a timely and consistent manner.

Community stakeholder engagement 2011		
Stakeholder group and engagement	Issue	Response
Kwinana Long-term Residue Management Strategy (LTRMS) Stakeholder Reference Group (SRG) and the Wagerup LTRMS SRG, comprising of local landholders, business owners and local and state government representatives; seven working group meetings were held with each group.	Alcoa has a LTRMS for each refinery. These are designed to inform both government and community about Alcoa's short-term (5 to 7 years), mid-term (25 years) and life-of-mine (~2045) residue planning and management strategies including the location of future residue drying areas; the proposed final land form for the residue drying areas; and how environmental risks associated with residue storage will be managed.	Responded to a range of guiding principles identified by the working groups. The latest revised strategy documents are published on our website .
Mining Environmental Improvement Plan (EIP) Stakeholder Steering Committee, comprising Alcoa of Australia employees, non-governmental organisations and university and government representatives; workshop and annual review meetings held.	EIPs represent Alcoa of Australia's public commitment to continuously improve environmental performance, reduce environmental impacts and develop more sustainable operating practices. Potential environmental issues from mining include: <ul style="list-style-type: none"> • Rehabilitation and biodiversity. • Dieback management. • Noise management. • Water management and conservation. 	Improvement targets were agreed by Alcoa of Australia and the community and are currently being progressed. A document outlining the targets is available on our website .

Community stakeholder engagement 2012		
Stakeholder group and engagement	Issue	Response
Local government authorities (Shires) of Waroona and Harvey; in addition to on-going consultation, several meetings were conducted during 2011 and 2012 to resolve the Deeds of Agreement for the Wagerup Sustainability Fund.	The continued operation of the Wagerup Sustainability Fund; created in 2008 as part of commitments linked to the Wagerup Unit Three expansion (currently on hold). The former Trustee for the fund, the Western Australian Community Foundation, went into receivership in 2010.	Finalising Deeds of Agreement to allow the funds to be held in Trust by the Shires of Waroona and Harvey and ensure continued operation of the Wagerup Sustainability Fund.
Mining and Management Program Liaison Group (MMPLG), comprising representatives from relevant government departments, is responsible for reviewing and providing input to our Five Year Mine Plan and associated activities. The group also provides advice to the Minister for State Development. Meetings held twice annually, with special meetings convened as needed.	Five Year Mine Plan review. Issues raised included Western Australia's declining rainfall and the impact of our mine rehabilitation prescription on rainfall run-off, ground water levels and hydrology stream zone ecology.	Worked cooperatively with the group to develop the plan. MMPLG agreed with Alcoa's request to treat the rehabilitated mine pits in the Banksiadale catchment. Agreement in principle also given to Alcoa to harvest water from rehabilitated mine pits.

Community stakeholder engagement 2012

Stakeholder group and engagement	Issue	Response
Portland Community Advisory Network (CAN), including invitees from local government, regulating bodies, industry stakeholders, and community groups. Members of the public were invited via advertisements in the local paper. Quarterly meetings are held to allow dialogue and to keep stakeholders informed of activities and issues associated with the Portland smelter.	Impacts of low level fluoride emissions on the local kangaroo population.	Research is being undertaken with the University of Melbourne. Implementation of a management plan is underway.
Keysbrook Hills Community Group (KHCG); bi-monthly meetings held.	Community concerns about potential impacts of bauxite mining, including noise, traffic, water, dust and loss of black cockatoo habitat.	Proposed a tailored mine plan aimed at reducing the potential impacts of mining on members of the KHCG.
Wagerup Long-term Residue Management Strategy (LTRMS) Stakeholder Reference Group; seven working group meetings held.	Bauxite residue management, including the height and location of future residue areas and how environmental risks associated with residue storage will be managed.	A range of guiding principles were identified by the working group. A revised strategy document is awaiting approval from the Minister for State Development and is due for publication in 2013.

The following is a summary of specific concerns raised at individual sites in 2011 and 2012.

Wagerup Refinery

In 2012 we worked with stakeholder groups to develop a proposal to gain an increase of the annual production limit in the Wagerup Refinery environmental licence. A new environmental licence, with an increased production limit of 2.65 million metric tonnes, was issued in August 2012 (subject to an appeals process), based on the installation of a volatile organic compound (VOC) emission offset project. A subsequent increase to 2.8 million metric tonnes per year will be granted upon completion and verification of the emissions reduction project.

Pinjarra Refinery

In 2011 a number of potentially significant Aboriginal archaeological sites were identified to the north, west and east of the refinery's current residue storage area. Subsequent investigations in 2012 determined the sites to be of low archaeological significance. Throughout the investigations, we worked collaboratively with local Aboriginal families and the Western Australia Department of Aboriginal Affairs (formerly Indigenous Affairs) to obtain a Section 18 approval from the Minister to allow an extension of the residue storage area north (impacting a portion of one of the heritage sites identified). A second submission through the Section 18 approval process was made to the Department of Aboriginal Affairs at the end of 2012 regarding sites located to the east and west of the current residue storage area. Assessment of this application will not be finalised until the beginning of 2013.

In order to mitigate potential impacts to Aboriginal heritage sites, we developed a Cultural Heritage Management Plan for the Pinjarra Refinery in consultation with both the local Aboriginal families and our other refineries and mine sites. The plan requires heritage sites be avoided wherever practicable. Where sites cannot be avoided, we will apply for consent to impact the sites through the Section 18 process, in consultation with the local families.

We have committed to annually update the community on proposed developments with the potential to impact heritage sites.

Kwinana Refinery

In 2011, the Western Australian Planning Commission announced an extension to the existing Kwinana Industrial Buffer, in an area adjacent to the Kwinana Refinery's residue storage area. The extension, which includes a one kilometre area restricting residential development and a further 500 metres restricting development of sensitive land uses, prompted concern about land values and questions regarding health and amenity among some landowners and property developers.

We responded to questions from the media and a small number of neighbour letters in writing. One-on-one briefings were offered and, in some instances, taken up by neighbours. Information was also shared through an Alcoa convened community stakeholder reference group.

In September 2011, a petition relating to the matter, containing 434 signatures, was lodged with the Standing Committee on Environment and Public Affairs. The committee released its [findings](#) in November 2012.

Anglesea Power Station

Renewal of lease agreement – the successful renewal of the Anglesea coal mining lease for a further 50-year term caused concern among some local stakeholder groups, particularly those opposed to further mining in the Anglesea Heath. The lease was originally granted by a State Agreement and ratified by the *Mines (Aluminium Agreement) Act 1961 (MAAA)*. During the renewal process we maintained open lines of communication with all key stakeholders in an attempt to address local community concerns. The amended MAAA passed through parliament with overwhelming support. It ensures that more than 90 per cent of our Anglesea mine lease will remain protected and managed similar to a national park.

Impacts to fauna in the Anglesea River – during 2010 and 2011 concerns were raised that emissions and effluents from Alcoa of Australia's Anglesea Power Station (along with other factors) were contributing to fish deaths in the Anglesea River. In late 2011, a Victorian government parliamentary review of the health of Anglesea River concluded that naturally-occurring acid sulphate soils in the area caused a low pH in Salt Creek and Marshy Creek, causing the fish death event. Following the review we engaged an external consultant to undertake an environmental risk assessment of surface water discharge and groundwater from our Anglesea operations. This work found discharges into Anglesea River were generally consistent with natural variations seen in the river's water quality.

Sulphur dioxide emissions - we continually monitor ambient sulphur dioxide (SO₂) levels in Anglesea and the results of this monitoring are reported on our website. The Anglesea Power Station's air emissions are compliant with national and Victorian Environmental Protection Authority limits. A draft Health Risk Assessment produced in 2008 is currently being updated using new data from both the power station and the mine and we have committed to making the final report publicly available on completion in 2013.

Point Henry Smelter

Faced with difficult global economic conditions for the aluminium smelting industry, in early 2012 we commenced a review of the Point Henry Smelter in Geelong, Victoria. The review involved a comprehensive engagement process with stakeholders including employees, community partners, suppliers and government representatives.

As a result of the efforts of our workforce and the support received by the Federal and Victorian Governments, unions, contractors and suppliers, Alcoa of Australia announced in June 2012 that it expects to operate the smelter until at least mid 2014.

Portland Aluminium Smelter

University of Melbourne research published in 2006 indicated that kangaroos inhabiting parkland surrounding the Portland Aluminium Smelter may have been affected by low level fluoride emissions, causing arthritic conditions and lameness. Alcoa has continued the research in partnership with the university to better understand and manage the effects of low level fluoride emissions on the local kangaroo population.

During 2011 and 2012 Portland Aluminium continued to implement a comprehensive management plan to minimise the potentially negative health impacts on the kangaroo population. The plan was developed in 2010 in conjunction with fauna and flora experts from the Department of Sustainability and Environment, the University of Melbourne, Greening Australia and an international environmental specialist with experience in smelters. The plan focuses on five key areas: exclusion, habitat modification, population management, water management and continued research. The smelter has also focused on minimising fluoride emissions from its operations and remains one of the lowest fluoride-emitting smelters in the world.

The local community is kept informed of these activities via the Portland Aluminium Community Advisory Network and progress updates are issued to other key stakeholders on a regular basis.

CASE STUDY

Stakeholder perception survey

In 2012, Alcoa of Australia partnered with the Australian Centre for Corporate Social Responsibility to conduct its third bi-annual stakeholder perception survey. The survey measures stakeholder views and perceptions about relationship quality, interactional justice (the degree to which stakeholders feel respected and satisfied with the explanations we provide them), satisfaction with procedural justice (perceived fairness of our decision making procedures), communication effectiveness and reputation.

The survey indicated Alcoa of Australia's level of acceptance by stakeholders (social licence to operate), has improved at most locations since 2010. The average score for social licence to operate was 3.96 out of a possible 5.0. We believe this result reflects the application of consistent and fair processes, good quality interpersonal engagement and significant work building trust and developing shared goals with stakeholders.

The survey also highlighted that we need to continue to work hard on our relationships with our close neighbours who generally granted the lowest levels of social licence to operate and feel the most impacted by our operations.

Community partnerships

During 2011 and 2012 Alcoa of Australia continued to regionalise its Community Investment Program to better deliver shared value in the communities where we operate. Our partnerships support not-for-profit and community-based organisations that deliver proven long term community benefits.

In 2011 and 2012, we invested more than \$4.37 million and \$3.9⁵ million respectively (including Alcoa Foundation grants) in partnerships across five focus areas:

- **Sustainable environment** - addressing current and future environmental sustainability changes.
- **Community health and safety** - providing children and families with the knowledge, tools and services they need to remain healthy and safe.
- **Tomorrow's workforce and leaders** - providing opportunities for people from diverse backgrounds to reach their full potential.
- **Community capacity and resilience** - helping to build and sustain community services and capability community services, arts and culture.
- **Volunteering** - supporting and encouraging employee volunteering in the community.

In addition to aligning with one of the five focus areas, our partnerships are rigorously assessed against a defined criteria.

National partnerships

In assessing national partnerships, Alcoa of Australia looks for not-for-profit organisations that can deliver programs in communities central to our operations in Western Australia and Victoria.

Greening Australia is our signature environmental partner, chosen due to its national and regional presence and its ability to tackle critical issues such as declining water quality, soil degradation, climate change and biodiversity loss.

In 2012 we celebrated the 30th anniversary of our partnership with Greening Australia, one of the longest corporate and environmental non-governmental organisation partnerships in Australian history. Greening Australia is committed to protecting and restoring the health, diversity and productivity of Australia's unique landscape. With Alcoa, Greening Australia has delivered a suite of sustained, integrated, community-oriented environmental initiatives that have had a major impact on environmental management in Australia. The partnership has been instrumental in educating, supporting and facilitating regional communities to take care of their environments.

In 2011 and 2012, Alcoa of Australia and the Alcoa Foundation supported various landscape transformation projects with Greening Australia, focused on restoring degraded rural land in the Peel Region of Western Australia and across Habitat 141 in Victoria.

As part of a global environmental research commitment, the Alcoa Foundation Advancing Sustainability Initiative supports the following signature projects through Greening Australia,

both of which have been awarded Australian Research Council linkage grants to further their research:

- [The Phosphorous Management Research Program](#) in Western Australia undertakes research to develop widely applicable approaches to reduce the loss of phosphorus from farms into waterways and estuaries in the Peel Harvey catchment. In 2012, soil and hydrological data were collected and analysed to provide greater awareness and understanding of nutrient overload issues in the local landscape.
- [The Biochar and Energy from Trees Research Project](#) in Victoria aims to harness the opportunity provided by emerging carbon markets to re-vegetate land within Australia's nationally recognised biodiversity hotspots. The project has grown out of the loss of biodiversity and elevated levels of carbon dioxide, as a result of widespread clearing of land for agriculture. New market opportunities to counter these problems are emerging, including carbon markets for bioenergy and biosequestration.

A critical component of the continued success of this partnership is the direct involvement of the community and our employees. In 2011, 1200 volunteers planted more than 150,000 seedlings across 335 hectares (827 acres) of land. In 2012, 100,000 seedlings were planted across 295 hectares (729 acres) of land by 1700 volunteers. The community also continued to participate in Make an Impact, an environmental and behavioural change program initiated by Alcoa of Australia in 2006.

For further information on Greening Australia go to:

www.greeningaustralia.org.au/get-involved/partner-with-us

or to watch our 30 year celebration movie visit:

www.alcoa.com/australia/en/news/alcoa_video.asp?videoid=154

State partnerships

State partnerships deliver iconic programs aligned with community needs. These partnerships are often also supported by government.

In 2011 we announced a three year commitment to The Deakin Centre for Rural Emergency Medicine (CREM) in Victoria. This facility is a joint initiative between Alcoa of Australia and the Deakin Medical School, the Victorian Government, Portland District Health and the South West Healthcare (Warrnambool).

Based in Warrnambool (South West Healthcare) and Portland (Portland District Health), the CREM addresses emergency medical shortages in Victoria's south-west, enhances the quality of regional medical care and provides clinical leadership as well as research and training in emergency rural medicine. Additionally, it contributes to teaching programs and provides emergency medical training for junior and senior medical staff, as well as regional medical practitioners and General Practitioners.

For further information on the Centre for Rural Emergency Medicine (CREM), go to www.deakin.edu.au/hmnbs/medicine/research/crem.php

⁵ These amounts do not include ACTION, Bravo! or Alcoa's In Motion volunteering grants. In-kind values for volunteering, goods and services are also not included as we do not record or use external benchmarking initiatives such as the London Benchmarking Group to record this data.

Site partnerships

In 2012 Alcoa of Australia partnered with St John Ambulance in Western Australia to provide free first aid training in schools as both organisations believe it is never too early to learn the importance of first aid. The Alcoa First Aid in Focus program uses specifically designed first aid courses to introduce the notion of first aid at an early age to help equip children with the confidence and ability to assist in an emergency. The program plans to provide training to 20,000 kindergarten to year 12 students from schools in Kwinana, south of Perth, to Harvey in the south-west of Western Australia.

Examples of our community partnerships are available on our website at http://www.alcoa.com/australia/en/info_page/PART_home.asp.

Alcoa Foundation

Alcoa Foundation is one of the largest corporate foundations in the US with assets of approximately US\$446 million. Founded in 1952, Alcoa Foundation has invested more than US\$550 million globally. In 2011, Alcoa and Alcoa Foundation contributed \$38 million to non-profit organisations throughout the world, focusing on environment and education.

Strategic partnerships are chosen with organisations in the community who align with our community investment strategy and comply with the Foundation's criteria. The assessment, approval and management of grants need to comply with the US laws governing the Foundation.

During 2011 and 2012, Foundation grant recipients included Greening Australia, Barwon Regional Waste Management Group, South West Regional Waste Group, Millenium Kids, Scitech, Western Australian Museum, Youth Focus, Planet Ark and South East Regional Centre of Urban Landcare.

Employee volunteering

Each year, Alcoa of Australia employees volunteer their personal time to help build stronger communities. Volunteering and community engagement are a crucial aspect of our business and integral to how we live the company values outside of the workplace.

Our employees continue to support Alcoa's global volunteering programs ACTION and Bravo! to fund numerous community initiatives, from emergency services and health care, to the environment, conservation projects and schools.

ACTION (Alcoans Coming Together In Our Neighbourhoods) recognises the team effort of at least five Alcoa employees who each spend a minimum of four hours on a community service project for a local not-for-profit or community organisation. In recognition of the team's effort a financial contribution of up to US\$3,000 is made to the employee supported organisation.

Bravo! recognises individual employees who volunteer 50 hours of personal time during the course of a year, to a not-for-profit or community organisation. Every employee in Australia is entitled to one Bravo! grant per year of US\$250.

In 2011 and 2012 more than 40 per cent of our employees donated more than 90,000 hours through our volunteering programs (similar to 43 people working full-time for a year). In 2011, the Alcoa Foundation awarded 81 ACTION grants totalling US\$171,000 and 1210 Bravo! grants totalling US\$302,500 to Australian community organisations. In 2012, 71 ACTION grants totalling US\$175,500 and 932 Bravo! grants totalling US\$233,000 were awarded across Australia.

Employee volunteer hours	
2008	90,976
2009	94,407
2010	107,707
2011	97,088
2012	92,864

Data applies to Alcoa of Australia and Alcoa Australia Rolled Products Pty Ltd.

CASE STUDY

Month of Service

More than 10,000 volunteer hours were contributed by Alcoa of Australia employees to community projects and not-for-profit organisations during Alcoa Foundation's sixth annual Worldwide Month of Service in October 2012.

Employees volunteered on a wide range of activities such as assisting Greening Australia with key sustainability projects; cooking dinner for 30 families staying at Perth's Ronald McDonald House; selling merchandise and fundraising for breast cancer research; performing odd jobs at local schools; planting trees; and painting surf clubs and community facilities.

As part of Month of Service, the company pledged 10,000 volunteer hours to the Give 1 Project, launched by Alcoa of Australia and five other companies through the Corporate Volunteer Council (CVC) of Western Australia (WA).

Give 1 is a call-to-action campaign for corporate giving in WA. The CVC challenges WA corporations to get their workforce more engaged in volunteering by establishing a strategy around regular volunteering opportunities for staff.

The Give 1 Project is centred on the concept of giving one day, one person, one hour or one per cent of staffing hours to volunteering and corporate giving.

In total more than 32,000 hours were pledged to Give 1 by WA companies, Alcoa being the largest donor of volunteer hours pledging 10,000.

Public policy

The following table provides an overview of our participation in public policy and our position in relation to these matters.

Federal	
Clean Energy Future Policy and Clean Energy Act	Alcoa of Australia supported the introduction of carbon pricing provided it did not jeopardise the international competitiveness of our Australian operations.
Review of Renewable Energy Target legislation	Alcoa of Australia sought specific amendments to the renewable energy legislation.
Prime Minister's Manufacturing Taskforce	Alcoa of Australia provided a view to the Taskforce, particularly in relation to domestic gas public policy.
Minerals Resource Rent Tax legislation (MRRT)	Alcoa of Australia provided comment on specific drafting elements of the MRRT.
Expansion of Petroleum Resource Rent Tax (PRRT)	Alcoa of Australia expressed concern that expansion of the PRRT to on-shore operations could reduce the competitiveness and supply of domestic gas.
State	
WA Strategic Energy Initiative (SEI)	Alcoa of Australia supports the intent of the SEI and has argued for measures to increase the supply of competitively priced domestic gas.
WA inquiry into domestic gas pricing	Alcoa of Australia supported the inquiry and proposed measures to increase the supply of competitively priced domestic gas.

Alcoa of Australia funds, property, services and things of value may not be used to support or oppose any political party or candidate for public office. For further information refer to: http://www.alcoa.com/global/en/about_alcoa/corp_gov/info_page/political_contributions.asp

Memberships

Alcoa of Australia was a member of the following associations and/or advocacy organisations during 2011 and/or 2012:

- American Chamber of Commerce (Western Australia)
- Australia Aluminium Council
- Australian Business Arts Foundation
- Australian Industry Greenhouse Network
- Australian Industry Group
- Australian Institute of Management (AIM)
- Australian Mines and Metals Association
- Bunbury Wellington Economic Alliance
- Business Council of Australia
- Committee for Economic Development Australia (Western Australia)
- Committee for Perth
- Committee for Geelong
- Committee for Portland
- DomGas Alliance
- G21 Alliance (Geelong 21 Alliance)
- Geelong Chamber of Commerce
- Geelong Manufacturing Council
- International Aluminium Institute
- Mandurah Chamber of Commerce and Industry
- Peel Chamber of Commerce and Industry
- Pride in Diversity
- Rockingham Kwinana Chamber of Commerce
- Waroona Districts Chamber of Commerce and Industry
- Western Australia Chamber of Commerce and Industry
- Western Australia Chamber of Minerals and Energy

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Disclosure	Description	Level of Reporting	Location
Profile Disclosures			
1.1	Statement from the senior decision-maker	Fully	Managing Director's Message p4
1.2	Key impacts, risks, and opportunities.	Partially	Throughout report
2.1	Name of the organisation.	Fully	Alcoa of Australia Limited
2.2	Primary brands, products, and/or services.	Fully	Overview of Australian operations p5 and website
2.3	Operational structure of the organisation	Fully	Overview of Australian operations p5 and http://www.alcoa.com/australia/en/info_page/australia_overview.asp
2.4	Location of organisation's headquarters	Fully	Contact information p2
2.5	Number of countries where the organisation operates, and countries with major operations or relevant to the sustainability issues covered in the report.	Fully	Australia
2.6	Nature of ownership and legal form.	Fully	Overview of Australian operations p5
2.7	Markets served and types of customers/beneficiaries	Fully	Overview of operations p5 and http://www.alcoa.com/ingot/en/home.asp
2.8	Scale of the reporting organisation.	Fully	Sustainability performance summary p6, Financial performance p13, Employee engagement p29
2.9	Significant changes during the reporting period	Fully	About this report - scope p3 There have been no significant changes regarding size, structure or ownership in the reporting period.
2.1	Awards received	Fully	Awards p5 www.alcoa.com.au/awards
3.1	Reporting period	Fully	About this report - scope p3
3.2	Date of most recent previous report	Fully	1 January - 31 December 2010
3.3	Reporting cycle (annual, biennial, etc.)	Fully	Normally annual, but biennial for this report; plan to return to annual in 2013.
3.4	Contact point	Fully	Communications Manager, see contact information
3.5	Process for defining report content.	Fully	Reporting issues p3
3.6	Boundary of the report	Fully	About this report - scope p3 There have been no significant changes regarding size, structure or ownership in the reporting period.
3.7	Specific limitations on the scope or boundary of the report	Fully	About this report - scope p3 There have been no significant changes regarding size, structure or ownership in the reporting period.
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, etc.	Fully	About this report - scope p3 Data in this reporting is drawn from those operations where Alcoa of Australia has majority interest and/or management control.
3.9	Data measurement techniques and the bases of calculations	Fully	Throughout report
3.1	Explanation of the effect of any re-statements of information provided in earlier reports	Fully	Throughout report
3.11	Significant changes from previous reporting periods	Fully	Alcoa Australia Rolled Products Pty Ltd (AARP) was included in the boundary of the previous 2010 report. AARP is not included in this report unless specified.
3.12	Table identifying the location of the Standard Disclosures in the report	Fully	GRI content index
3.13	Policy and current practice with regard to seeking external assurance for the report	Fully	Assurance p3
4.1	Governance structure of the organisation	Fully	Board of Directors p9 and Overview of Australian operations p5
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	Fully	The Chairman of the Board is an Executive Officer; he (Alan Cransberg) is the Managing Director.
4.3	The number of members of the highest governance body that are independent and/or non-executive members.	Fully	There are five members of Alcoa of Australia's Board of Directors. Three are nominated by Alcoa and two by Alumina Limited (our shareholder).
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	Fully	Board of Directors p9
4.5	Linkage between compensation for members of the senior management and the organisation's performance	Fully	Sustainability governance p9
4.6	Processes to ensure conflicts of interest are avoided	Fully	Governance p9 and Ethics and business conduct p11 See http://www.alcoa.com/global/en/about_alcoa/corp_gov/info_page/policy_bus_conduct.asp
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organisation's strategy on economic, environmental, and social topics.	Partially	See http://www.alcoa.com/global/en/about_alcoa/corp_gov/info_page/guidelines.asp
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance	Fully	Risk management p9, Sustainability governance p9, Ethics and business conduct p11 See http://www.alcoa.com/global/en/about_alcoa/corp_gov/info_page/corp_gov.asp
4.9	Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental, and social performance	Fully	Risk management p9, Sustainability governance p9, Ethics and business conduct p11 See http://www.alcoa.com/global/en/about_alcoa/corp_gov/info_page/corp_gov.asp
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	Partially	http://www.alcoa.com/global/en/about_alcoa/corp_gov/Nominating_Committee.asp http://www.alcoa.com/global/en/about_alcoa/corp_gov/info_page/guidelines.asp
4.11	Precautionary principle approach	Fully	Alcoa and its subsidiaries, including Alcoa of Australia, support the precautionary principle under the UN Global Compact. Consistent with that principle, we advocate a risk-based approach to our operations through our extensive management systems. http://www.alcoa.com/global/en/about_alcoa/un_global_compact.asp
4.12	Externally developed economic, environmental, and social charters, principles	Fully	Governance p9 We subscribe to or endorse the following externally developed principles or initiatives: • Global Reporting Initiative • Carbon Disclosure Program

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Disclosure	Description	Level of Reporting	Location
4.13	Memberships	Fully	Memberships p41
4.14	List of stakeholder groups engaged	Fully	Stakeholders p36-37
4.15	Basis for identification and selection of stakeholders with whom to engage.	Partially	Stakeholder engagement p36-37
4.16	Approaches to stakeholder engagement	Fully	Stakeholder engagement p7 and community engagement p36-37
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns	Fully	Stakeholder engagement p7 and community engagement p36-37
Management approach			
Economic	Economic performance	Fully	Our financial performance p13
	Market presence	Fully	Overview of Australian operations p5
	Indirect economic impacts	Partially	Economic overview p13
Environment	Materials	Partially	Waste management p22
	Energy	Fully	Energy p20
	Water	Fully	Water and wastewater management p21
	Biodiversity	Fully	Biodiversity and land management p24
	Emissions, effluents and waste	Fully	GHG emissions p19, Water and wastewater management p21, Waste management p22
	Products and services	Fully	Waste management p22
	Compliance	Fully	Compliance p27
	Transport	Not	Not material
	Overall	Fully	Environment section
Labour	Employment	Fully	Employee engagement p29
	Labour/management relations	Fully	Labour relations p30
	Occupational health and safety	Fully	Workplace health and safety p32
	Training and education	Fully	Training and development p30
	Diversity and equal opportunity	Fully	Diversity p31
Human Rights	Investment and procurement practices	Fully	Sustainability in our supply chain p16 and Ethics in procurement p11
	Non-discrimination	Partially	Diversity p31
	Freedom of association and collective bargaining	Fully	Labour relations p30
	Child labour	Not	Not applicable or material for Alcoa of Australia
	Forced and compulsory labour	Not	Not applicable or material for Alcoa of Australia
	Security practices	Not	Not applicable or material for Alcoa of Australia
	Indigenous rights	Not	Not applicable or material for Alcoa of Australia
Society	Community	Fully	Our community p35-41
	Corruption	Fully	Ethics and business conduct p11
	Public policy	Fully	Public policy p41
	Anti-competitive behaviour	Not	Not applicable or material for Alcoa of Australia
	Compliance	Not	Not applicable or material for Alcoa of Australia
Product Responsibility	Customer health and safety	Not	Not applicable or material for Alcoa of Australia
	Product and service labelling	Not	Not applicable or material for Alcoa of Australia
	Marketing communications	Not	Not applicable or material for Alcoa of Australia
	Customer privacy	Not	Not applicable or material for Alcoa of Australia
	Compliance	Not	Not applicable or material for Alcoa of Australia
Performance indicators			
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	Fully	Our financial performance p13 and Community partnerships p39
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	Fully	Managing Director's message p4, Clean Energy Legislation p16, GHG emissions p19
EC4	Significant financial assistance received from government.	Fully	Government assistance p13
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	Fully	Sustainability in our supply chain - Australian supplier sustainability initiatives p17
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	Fully	Employee engagement - Local employment
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	Partially	Community partnerships p39
EN3	Direct energy consumption by primary energy source.	Fully	Our sustainability performance p6 and Energy p20
EN5	Energy saved due to conservation and efficiency improvements.	Partially	Energy p20
EN8	Total water withdrawal by source.	Fully	Our sustainability performance p6 and Water and wastewater management p21
EN9	Water sources significantly affected by withdrawal of water.	Fully	Water and wastewater management p21
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	Fully	Biodiversity and land management p24
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	Fully	Biodiversity and land management p24 and Mine closure and rehabilitation p26

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Disclosure	Description	Level of Reporting	Location
EN13	Habitats protected or restored.	Fully	Biodiversity and land management p24 and Mine closure and rehabilitation p26
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	Fully	Biodiversity and land management p24
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	Fully	Biodiversity and land management p24
EN16	Total direct and indirect greenhouse gas emissions by weight.	Fully	Our sustainability performance p6 and GHG emissions p19
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	Partially	GHG emissions p19
EN21	Total water discharge by quality and destination.	Fully	Water and wastewater management p21
EN22	Total weight of waste by type and disposal method.	Fully	Our sustainability performance p6 and Spent pot lining p23
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	Fully	Waste management p22 and Environment section
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	Fully	Compliance p27
LA1	Total workforce by employment type, employment contract, and region.	Fully	Employee engagement p29
LA2	Total number and rate of employee turnover by age group, gender, and region.	Fully	Employee engagement p29
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	Partially	See http://www.alcoa.com/australia/en/info_page/employer_of_choice.asp
LA4	Percentage of employees covered by collective bargaining agreements.	Fully	Labour relations p30
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	Fully	Under the EBA the minimum notice period for a shift change of a temporary nature is 96 hours. For permanent changes a consultation provision must be followed which can take several months. Manning changes can be made at the company's discretion provided any manning minimum numbers (described in some agreements but not all) are being met. Contractors may be utilised at the company's sole discretion. Where a redundancy situation occurs, the company may offer employees a Voluntary Early Retirement Package. No termination of employment can occur unless the employee concerned has voluntarily accepted such an offer. A minimum of four week notice period applies. Where a redundancy situation occurs, the company may offer employees a Voluntary Early Retirement Package. Notice periods will comply with Australian legislation requirements.
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	Fully	Safety performance p33
LA8	Education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	Fully	Safety performance p33
LA9	Health and safety topics covered in formal agreements with trade unions.	Fully	All enterprise bargain agreements include clauses relating to safety commitment and responsibilities. These include: <ul style="list-style-type: none"> • A condition that employees comply with relevant safety and environmental regulations prescribed by Alcoa of Australia and regulatory bodies. • Dispute resolution processes that support co-operative resolution to health and safety (and other) issues. • A commitment that employees will be issued with protective clothing, footwear, safety equipment and tools to ensure work is carried out in a safe and comfortable manner. In 2011 the Western Australian employees' agreements featured Fitness for Work, a program which addresses the abuse or misuse of alcohol and other drugs. Our Drug and Alcohol Policy, which includes drug and alcohol testing, commenced in January 2013. A fatigue management policy that clarifies expectations and obligations if employees are fatigued in the workplace has also been finalised.
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	Fully	Training and development p30
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	Fully	Diversity p31
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	Partially	Ethics and business conduct p11
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	Fully	Environment and Community sections and Mine closure and rehabilitation p26
SO5	Public policy positions and participation in public policy development and lobbying.	Fully	Public policy p41
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	Fully	Alcoa of Australia funds, property, services and things of value may not be used to support or oppose any political party or candidate for public office. For further information refer to: http://www.alcoa.com/global/en/about_alcoa/corp_gov/info_page/political_contributions.asp
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	Partially	Waste management p22, Biodiversity and land management p24, Mine closure and rehabilitation p26