alcoa in australia

2003 SUSTAINABILITY REPORT

australia's aluminium
since 1963

ALUMINIUM'S DURABILITY, STRENGTH AND LIGHT WEIGHT MAKE IT A POPULAR AND PRACTICAL CHOICE FOR PARENTS WHEN CHOOSING A PRAM.

Alcoa of Australia Limited

ACN 004 879 298

Alcoa World Alumina Australia is the trading name of Alcoa of Australia Limited. Alcoa of Australia Limited is owned by Alcoa Inc. (60%) and Alumina Ltd (40%).

Alcoa Australia Rolled Products Pty Limited

ACN 069 853 229

Alcoa Inc. acquired 100% ownership of Alcoa Australia Rolled Products on October 1, 2003.

Report scope

Contact person

Dr Vanessa Guthrie

To provide feedback on this report, please send an e-mail to vanessa.guthrie@alcoa.com.au

or write to: Dr Vanessa Guthrie
Alcoa World
Alumina Australia
PO Box 252
Applecross WA 6953

Reporting period

January 1 through December 31, 2003. Where significant events occurred in early 2004, they have been included in this report. This is Alcoa in Australia's second sustainability report. However we have been reporting publicly at a global level on our environment, health and safety performance for 11 years and community involvement for four years. Within Australia, we have been reporting publicly for five years, although individual operations have been making their annual regulatory reports available to community consultation groups for a longer period.

Boundaries of report

The report refers to all Alcoa's operations in Australia but deals with only Alcoa World Alumina Australia and Alcoa Australia Rolled Products' operations. The report encapsulates these organisations under the headings of either 'Alcoa in Australia', 'Alcoa' or 'Alcoa ARP'. References to the US-based organisation are made as Alcoa Inc.

Data contained in this report are mainly for Alcoa World Alumina Australia, but in some instances Alcoa ARP data has been included. All amounts are in Australian dollars (AUD) unless specified.

Alcoa Inc.
2003 Sustainability Report

The 2003 Alcoa in Australia Sustainability Report is the Australian chapter of Alcoa's global sustainability report. The global report outlines Alcoa's 2020 Sustainable Development Framework and performance indicators. The global sustainability report is available at www.alcoa.com

Further information

Copies of this report, or further information, can be obtained from Alcoa's Corporate Affairs Department.

Telephone: (61 8) 9316 5290
Facsimile: (61 8) 9316 5662
e-mail: pr@alcoa.com.au

Websites

Alcoa World Alumina Australia:
www.alcoa.com.au

Alcoa Inc.:
www.alcoa.com

Alumina Ltd:
www.aluminalimited.com

ALCOA AND AUSTRALIA 2003

marking an enduring partnership in sustainable growth

2003 marked the 40th Anniversary of Alcoa alumina and aluminium production in Australia.

Turning 40 is a significant milestone in any life.

This has been a wonderful opportunity to take stock of and gain a new perspective on the journey we have taken as a company in growing through those years and an excellent vantage point from which to contemplate continuing this growth into the future.

It has allowed us to pause to appreciate and express our great thanks to the people who have made this all possible – past and present – since Alcoa commenced operations in Australia.

It has been an opportunity to celebrate the partnerships we have been privileged to be part of and have been able to build with our communities across the country, with governments and a broad group of stakeholders.

Our neighbours, with whom we have lived and worked through these years and who have shared in events and achievements over the past 40 years, joined us in the many occasions held across Alcoa locations during 2003 to relax, remember and celebrate the achievements which led to this milestone.

The journey Alcoa World Alumina Australia has taken during this period is indeed a remarkable one.

We have a great deal to thank those who founded the operation back in 1963. We have all benefited from the vision, imagination, tenacity, generosity of spirit and the sheer hard work which they applied to their endeavours. It is the shared efforts of our people which have enabled this success.

People like Bob Paulen, Neville Stalio, Hank Egberts, Peter Rankin, Morgan Quick and Kaye Eckersley at Point Henry, and Joe Fulgaro, Ivor Stockwell and Ben Farrell at Kwinana are some of the employees that have been with us throughout that period who recall the excitement of the early groundbreaking years, the good times and the lean times of economic downturn.

Their effort and the success brought has built a company which has been a major contributor to Australia's economic fabric – at national, state and local level, with a strong corporate culture of responsibility and commitment to contributing to sustainability in everything we do.

Alcoa's contribution to regional Australia has been distinctive.

As a value adding business, we have contributed to and enabled critical energy infrastructure in both Victoria and Western Australia. We've been responsible for significant job creation – direct and indirect employment – bringing training and skills through our presence. Our operations have provided opportunities for other businesses to establish, grow and provide employment and services in regional Australia.

We are committed to ensuring that our presence makes a positive and sustainable contribution to the communities where we operate. Here challenges remain. We have tried to frankly describe these in this report. Of particular note is the effort we have underway to meet community concerns over health and environmental issues at our refinery at Wagerup.

At Wagerup, we have continued our focus on emissions reduction and monitoring of the results achieved to date whilst working with the local community to address their concerns.

We are committed to ensuring that our presence makes a positive and sustainable contribution to the communities where we operate.

The history of events and the adverse public focus on the refinery and the immediately adjacent townships has given rise to a complex set of community circumstances and there are a variety of efforts underway both by Alcoa and by the relevant government agencies to positively address sustainable community and planning needs. The Alcoa Research Centre for Stronger Communities which is part of our partnership with Curtin University was launched in 2003 and is now operational in assisting us with building our understanding. Whilst significant issues remain, there are constructive steps underway to provide a pathway for defining a positive future.

This year was one in which we have had the opportunity to pause with our business partners and our stakeholders and partners across the community to reflect and share recognition for our joint achievements:

Our 21 year partnership with Greening Australia, as part of Alcoa's Landcare commitment received the Special Award for Longevity at the Prime Minister's Awards for Excellence in Community Business Partnerships in December 2003.

The Society for Ecological Restoration International (SERI) presented us with the prestigious Model Project Award at a special ceremony in Austin, Texas for our mining rehabilitation work successfully restoring the botanical richness of the Darling Range jarrah forest.

We were awarded the Caliburn Partnership Strategy Award in the 2003 Australian Business Arts Foundation (AbaF) Awards in recognition of our long term commitment to the arts and strategy based on community partnerships.

We were also pleased to congratulate Gerald Roach, Senior Research Scientist at our Alumina Technology Research and Development facility at Kwinana, who received the prestigious Alcoa Chairman's Award in 2003 for his outstanding research contribution. Our Kwinana research facility accounts for $16 million of our $23 million annual research and development effort in Australia.

Kwinana is the world's largest alumina refining research and development group and one of the largest industry employers of research scientists in Australia.

During the year a new Alcoa entity was created in Australia. In August Alcoa Inc and Kobe Steel Ltd announced that they intended to discontinue both of their 50/50 joint ventures that produce aluminium can stock used in making beverage cans. As part of the agreement Kobe acquired control of the Kaal Japan joint venture from Alcoa. In exchange, Alcoa received Kobe's interest in the Kaal Australia joint venture. This new company made up of two rolling mills one in each of Victoria and NSW is known as Alcoa Australia Rolled Products (Alcoa ARP).

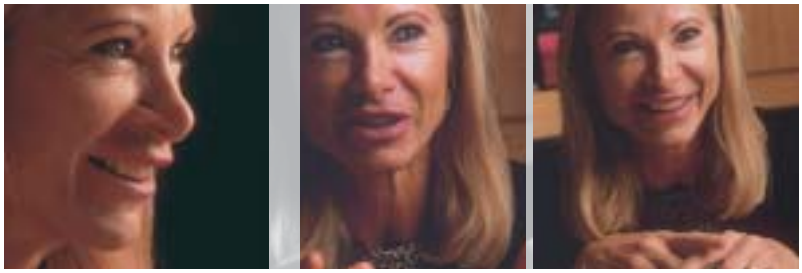
During 2003 we took even further steps in our continuing commitment to ensuring sustainability underpins all elements of our business. We strongly endorsed the International Aluminium Institute's (IAI) Global Aluminium Sustainable Development Initiative, which was launched during 2003. A key focus of the Initiative is the recyclability and sustainable life cycle benefits of aluminium.

Alcoa ARP is the largest recycler of aluminium cans in Australia and one of largest in the southern hemisphere, responsible for recycling about two billion cans each year. Maintaining high rates of recycling is a significant challenge for our industry and one which has our full commitment into the future.

2003 has been a year in which demand conditions for alumina, particularly growth in China, provided a solid base from which we look to the future. World consumption of commodities, including alumina and aluminium is forecast to increase in 2004 supported by higher growth in global industrial activity.

Expansion opportunities in Australia will ensure Alcoa is ready to meet this growing demand. The environmental approval of the $440 million Pinjarra Upgrade is an excellent demonstration. This investment will increase production by about 600,000 tonnes per annum, increasing export revenue by about $160 million each year. This has been a model project, using our Sustainability Principles in a comprehensive community engagement and consultation process through a Stakeholder Reference Group to examine and make recommendations on the environment, economic and social aspects of the refinery upgrade.

Maintaining high rates of recycling is a significant challenge for our industry and one which has our full commitment into the future.

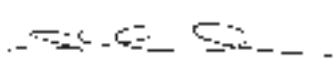


Continued buoyant economic conditions has set the scene for future growth in Australia, with opportunities at Wagerup in Western Australia and Portland in Victoria.

With the right conditions, we can confidently look forward to the next 40 years of Alcoa in Australia as the company matures and grows, continuing our close regional and community partnerships and a sustainable, enduring contribution to Australia's and Alcoa's future prosperity and well being.

Wayne Osborn

MANAGING DIRECTOR
ALCOA WORLD ALUMINA AUSTRALIA



Shirley In't Veld

MANAGING DIRECTOR
ALCOA AUSTRALIA ROLLED PRODUCTS
(ALCOA ARP)

04

organisational profile

Alcoa's integrated industry

Alcoa World Alumina Australia is one of 25 Alcoa Inc. business units, and is the trading name of the unlisted public company Alcoa of Australia Limited. Alcoa of Australia Limited has established a world-class integrated aluminium industry in Australia. Our primary focus as an alumina and aluminium producer is complemented by Alcoa Australia Rolled Products' (Alcoa ARP) manufacturing and marketing of rolled products. Alcoa Wheel Products Australia and Alcoa Fastening Systems Australia are our Australian distribution centres for aluminium truck wheels and fastening systems.

Alcoa of Australia Limited

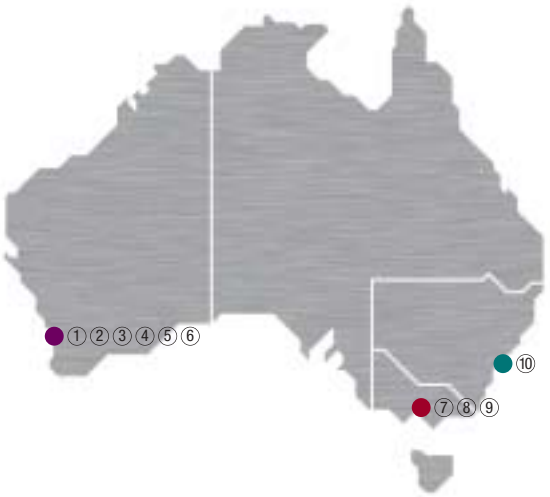
Alcoa of Australia Limited's headquarters are at Booragoon in Perth, Western Australia. It produces aluminium from two smelters in Victoria, and alumina at three refineries in Western Australia.

The company operates a brown coal mine and power station in Victoria to supply power to the Point Henry smelter and mines bauxite in Western Australia to supply the refineries.

Alcoa employs about 6,500 people at its operations. In Western Australia, we operate in the Kwinana, Peel and South West regions south of Perth. In Victoria, the principal locations of operations are Geelong and Portland.

In Western Australia, Alcoa owns and operates alumina refineries at Kwinana, Pinjarra and Wagerup with a combined capacity of 7.8 million tonnes per year. Bauxite is supplied to these refineries from our mines at Huntly and Willowdale in the Darling Range.

In Victoria, Alcoa owns the Point Henry smelter and is the operator of the Portland smelter, in which it has a 55% interest. The combined capacity of these smelters is 537,000 tonnes a year.



PRINCIPAL OPERATIONS WITHIN AUSTRALIA

WESTERN AUSTRALIA

1 **HUNTLY** MINE
2 **WILLOWDALE** MINE
3 **KWINANA** REFINERY/PORT
4 **PINJARRA** REFINERY
5 **WAGERUP** REFINERY
6 **BUNBURY** PORT

VICTORIA

7 **PORTLAND** SMELTER
8 **ANGLESEA** POWER STATION
9 **POINT HENRY** SMELTER/ROLLING MILL

NEW SOUTH WALES

10 **YENNORA** ROLLING MILL

Alcoa Australia Rolled Products

Alcoa ARP's headquarters are at Point Henry in Victoria. It produces rolled products at Point Henry in Victoria and Yennora in New South Wales and has 860 employees. Alcoa ARP is the only manufacturer of aluminium rolled products in Australia and produces around 164,000 tonnes of rolled products including rigid container sheet for beverage cans, aluminium foil and common alloy sheet for building and marine applications.

Alcoa Wheel Products Australia and Alcoa Fastening Systems Australia

Alcoa Wheel Products is based in Melbourne, Victoria and is Australia's largest distributor of aluminium truck wheels. It has a turnover of about $35 million and employs 26 people. Alcoa Fastening Systems Australia employs about 60 people Australia wide with sales offices in Sydney, Brisbane and Perth. The head office and manufacturing facility is situated in Oakleigh, Victoria. The company manufactures and distributes specialist fasteners and engineering inserts throughout Australasia.

As at December 31, 2003
Alcoa in Australia included:

- Alcoa of Australia Limited, trading as Alcoa World Alumina Australia (60% owned by Alcoa International Holdings Company, a wholly owned subsidiary of Alcoa Inc., 39.25% by Alumina Ltd and 0.75% by QBE Nominees Pty Ltd and QBE Investments Pty Ltd.)*

  * *On 15 December 2003, QBE Nominees Pty Ltd and QBE Investments Pty Ltd agreed to sell their 0.75% share in Alcoa of Australia Limited to Alumina Limited.*

- Alcoa Australia Rolled Products*

  * *Previously known as KAAL Australia Pty Limited. It was 50% owned by Alcoa Inc. and 50% owned by Kobe Steel Pty Ltd. Alcoa Inc. acquired 100% ownership on October 1, 2003.*

- Alcoa Wheel Products Australia
- Australian Fused Materials Pty Ltd – a joint venture producing alumina chemicals (33.3% ownership)*

  * *Alcoa Inc. sold its share in Australian Fused Materials Pty Ltd on February 27, 2004.*

- Alcoa Fastening Systems Australia

Production data summary

		Mining	Alumina refining	Aluminium smelting	Anglesea power	Alcoa ARP *(23)*
Inputs						
electricity – imported *(1)*	MWh		*(12)* 24,292	8,254,483		187,242
natural gas	TJ		85,640	958		2,091
diesel and fuel oil	kl	28,207	*(13)* 17,943	1,040	2,371	584
LPG *(22)*	kl			62		344
coal – as mined	kt				1,058	
bauxite dry	kt		26,311			
alumina *(24)*	kt			1,038		
molten alumina *(25)*	kt					107
other raw materials *(2)*	kt		911	246	1	
water – fresh *(3)*	ML	762	10,536	769	23	318
water – poorer quality	ML	53	13,994		4,118	
land cleared for bauxite	ha	*(14)* 637.3				
Product outputs						
smelter grade alumina	kt		7,625			
alumina chemicals	kt		236			
aluminium	kt			545		164
bauxite produced *(26)*	kt	28,840				
electricity – exported *(4)*	MWh		*(15)* 173,953		1,194,679	
land rehabilitated	ha	*(16)* 429.4	18		2	
Waste outputs						
CO_2 equiv – indirect *(5) (7)*	kt		27	10,681		206
CO_2 equiv – direct *(6)*	kt	77	4,627	1,073	1,443	110
bauxite residue stored *(8)*	kt		*(21)* 15,038			
bauxite residue used	t		2,753			
fly ash stored	t				22,000	
oxalate stored	t		*(20)* 8,096			
spent pot lining *(9)*	t			*(17)* 6,590		
recycled waste *(10)*	t	968	32,634	31,954	*(18)* 656	14,520
landfilled waste *(11)*	t	*(19)* 5,542	78,894	1,787	237	8,445

Notes

1 Imported electricity to the reporting unit. Includes electricity from Anglesea but not transferred within the Alcoa reporting unit (eg WA refineries).

2 Other major raw materials – caustic soda and lime for refineries and coke and pitch for smelters.

3 Fresh water is defined here as water that would be suitable for human consumption after primary treatment.

4 Includes electricity exported from the refineries to external users and from Anglesea Power Station to Point Henry Smelter.

5 CO_2 equivalent emissions associated with electricity imported into the Alcoa reporting unit (World Business Council for Sustainable Development and World Resources Institute (WBCSD/WRI) Scope 2).

6 Includes PFC and anode consumption emissions from smelters, emissions from use of fuels (including fuel used by contractors operating heavy equipment on site) and explosives. Does not include net emissions from vegetation clearing, soil disturbance and mine rehabilitation. (WBCSD/WRI Scope 1).

7 Greenhouse emissions are reported on the basis of the WBCSD/WRI accounting and reporting protocol. For further information refer to the greenhouse story located on page 6 of this report.

8 Bauxite residue quantity expressed as dry tonnes.

9 Spent pot lining includes pot lining treated during developmental trials of Portland Smelter's SPL Treatment Facility.

10 Recycled waste includes materials re-used on or off site.

11 Includes all non-recycled general and process wastes other than those identified separately.

Significant changes from 2002 report

12 Not reported in 2002 Sustainability Report.

13 Increase from 2002 due to construction at Kwinana and the significant use of diesel in the powerhouses due to interruption of natural gas supply.

14 Increase clearing as a result of the opening of a new mining region.

15 Increase from 2002 due to electricity exported from the refineries to the local power grid.

16 Decrease from 2002 as a result of the opening of a new mining region.

17 Decrease from 2002 due to a reduced number of pots rebuilt in 2003 compared to 2002.

18 Decrease from 2002 due to reduced waste streams available for recycle.

19 Increase from 2002 due to a change in recording of data.

20 Data only available for Wagerup for 2003.

21 Includes oxalate in the residue stream at Pinjarra and Kwinana.

22 LPG not reported in 2002.

23 Alcoa ARP not reported in 2002.

24, 25 and 26 Not reported in 2002 Sustainability Report.

06

towards a sustainable future

In 2003, Alcoa celebrated 40 years of operation in Australia. Our successful history is built on partnerships and relationships with our community, government and employees. Alcoa has established a globally recognised reputation for environmental stewardship and corporate responsibility.

Alcoa defines sustainability as using our values to build financial success, environmental excellence and social responsibility through partnerships to deliver net long-term benefits to our employees, customers, suppliers and the communities in which we operate.

We want stakeholders to remain confident in us as a values-based organisation which thrives financially, socially and which is fully environmentally responsible. To achieve this, Alcoa works in true partnership.

In 2003 we focused on what sustainability means to our business, and how to practically apply to this to our business. We applied our framework and principles to key areas including growth projects such as the Pinjarra refinery efficiency upgrade, in our approach to key external purchasing areas and our community partnerships.

Global Aluminium Sustainable Development Initiative

Our future in Australia is founded on our increased participation on the global stage, by actively embracing sustainable development principles across our business. The International Aluminium Institute's (IAI) Global Aluminium Sustainable Development Initiative is a key vehicle for this. The IAI is a global forum of aluminium producers dedicated to the development and wider use of aluminium as a competitive and uniquely valuable material.

The Initiative is unprecedented in the resources sector. It addresses the sustainability of the aluminium industry both in terms of how it operates and where its products are used. Fundamental to this Initiative, is continuing to reduce the international aluminium industry's environmental footprint, while growing its ability to supply a material integral to people's needs.

This Initiative was developed under the vision and leadership of then Institute chairman G. John Pizzey, former President Alcoa Primary Metals business and Chair of Alcoa of Australia. Alcoa embraced the Initiative, committing to its eight voluntary objectives encompassing emissions reduction, climate change, the efficient use of energy and other resources, the recyclability and sustainability of aluminium, employee health and safety, and management accountability.

Performance on these key objectives, such as greenhouse, will be monitored and measured annually on a global basis against a set of 22 key performance indicators. Performance on these time-specific targets will be publicly and regularly reported. Full details of the objectives and performance indicators are at **www.world-aluminium.org**

Greenhouse

In line with the objectives of the International Aluminium Institute's (IAI) Global Aluminium Sustainable Development Initiative, Alcoa Inc. has a global target to reduce direct global greenhouse gas emissions by 25% by 2010 from a base year of 1990. In Australia we focus on improving our energy and greenhouse intensity. Greenhouse gas emissions intensity at our Victorian smelters decreased in 2003 resulting from integrated greenhouse and energy improvements. By the end of 2003 the on-site emission intensity of our two smelters was at an all-time low – more than nine per cent below 2000, and more than 61% below 1990. In a year of record aluminium production (up eight per cent on 1990), total direct emissions in 2003, were more than 58% below 1990, while indirect emissions associated with electricity used increased by 4.3% – about half the eight per cent increase in production.

Part of these results were supported by energy audits submitted to the Victorian Environmental Protection Authority (EPA). A partnership between the Sustainable Energy Authority of Victoria and the Point Henry smelter was commissioned in 2003. This collaborative project was based in the electrode department and was primarily focused on examining combustion efficiency in the anode baking process.

Greenhouse gas emission intensity of the Anglesea power station continues to hold steady at about 14% below the 1990 level. The station operates better than the Australian Greenhouse Office's Generator Efficiency Standard benchmark producing about 13% more power in 2003 compared to 1990, for about the same amount of greenhouse gas.

Greenhouse gas emissions intensity at our Western Australian alumina refineries has reduced steadily over the past few years. The direct greenhouse gas emissions intensity has decreased from 630 $kgCO_2/t$ in 1990 to 588 $kgCO_2/t$ in 2003, representing a 6.7% improvement. Total direct CO_2 emissions from refining have increased some 36% since 1990, while alumina production increased by 45%.

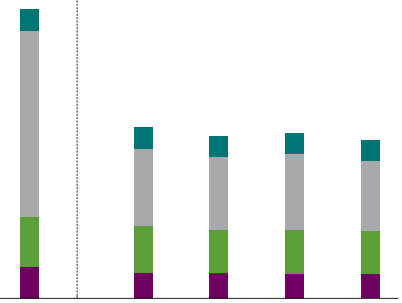
We completed two of three abatement projects identified in the 2002 Greenhouse Challenge Report. Improvements have been made through bauxite mill optimisation at Kwinana and improved liquor yield at Wagerup. We are still working on the third project to improve steam use efficiency and reduce steam demand at Kwinana.

Plans which will continue to reduce emissions intensity through the implementation of two major new projects; the commissioning of stage one of the Pinjarra refinery cogeneration power plant with Alinta Limited, and the Pinjarra refinery efficiency upgrade project.

Alcoa Australia Rolled Products greenhouse intensity has improved by about 24% since 1990 through energy savings and productivity improvements while finished aluminium production increased by 22% on 1990. Total direct emissions in 2003 were more than six per cent below 1990. Indirect emissions associated with electricity used were about three per cent below 1990.

Internal tonnes of greenhouse gas per unit of production

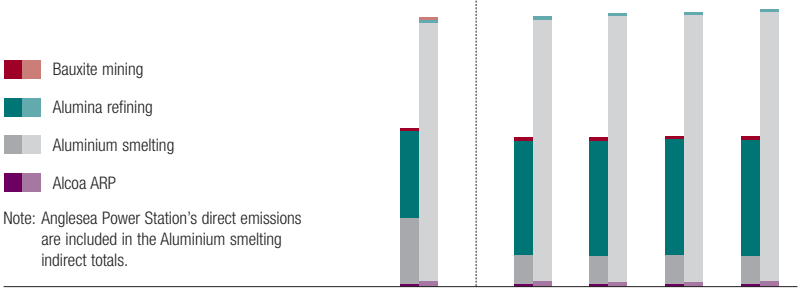
Year	1990	2000	2001	2002	2003
Alumina refining*	0.630	0.592	0.591	0.591	0.588
Aluminium smelting	5.210	2.190	2.050	2.140	1.980
Anglesea power	1.410	1.300	1.200	1.220	1.210
Alcoa ARP (Point Henry plus Yennora)	0.878	0.715	0.712	0.689	0.671



* Alumina refineries direct emissions include emissions for power exported to the mines and sold to the WA power grid. Conversley, direct emissions do not include emissions associated with purchased power – (see p. 5).

Total greenhouse gas emissions kt CO_2e

Year	1990	2000	2001	2002	2003
Direct greenhouse gas emissions *(kt CO_2e)*	6,185	5,844	5,846	5,912	5,887
Indirect greenhouse gas emissions *(kt CO_2e)*	10,487	10,653	10,772	10,817	10,914



Note: Anglesea Power Station's direct emissions are included in the Aluminium smelting indirect totals.

Recyclability and sustainability of aluminium

An essential element in the sustainability of aluminium and a key objective of the International Aluminium Institute's (IAI) Global Aluminium Sustainable Development Initiative is recyclability and its life cycle.

Alcoa Australia Rolled Products is the largest recycler of aluminium cans in Australia with its remelting facility at Yennora in New South Wales, recycling about 55,000 tonnes of aluminium each year.

Aluminium is a common and essential element in everyday life with its uses ranging from the beverage can to commuter trains and planes. It is produced on every continent, in both developed and developing economies and its flexibility and durability have made it one of the most used metals in the world. It can be reused over and over, to such a level that of the 680 million tonnes manufactured since 1886, 440 million tonnes (two thirds) are still in use today.

The value of aluminium is in its recyclability and its sustainability credentials throughout its life cycle. We continue to encourage all of society to contribute to the improved environmental performance of aluminium by participating in recycling. One of Alcoa's corporate sustainability goals is that by 2020, 50% of Alcoa products, except raw ingot that is sold to others directly, will be made from recycled aluminium.

By recycling material and getting others to do the same, we can save the energy and resources expended in the mining, alumina refining and smelting processes. Saving energy and recycling is better for the environment in terms of reducing emissions and cutting costs. Using recycled scrap at our rolling mills saves up to 95% of the energy required for primary production.

The life cycle approach includes implementing measures to assess and address the impact on the environment throughout the use of the product or material. For example, the use of aluminium in the transport industry decreases the weight of the vehicle and reduces energy consumption. High aluminium content vehicles can be up to 50% lighter than conventional vehicles.

Alcoa Wheel Products Australia has a key role in these energy savings, being the biggest distributor of aluminium truck wheel rims in Australia.

Packaging is another area in our future economy and lifestyle that plays a key role in sustainability. A 2003 aluminium can is nearly half the weight of a 1980 can, but the packaging still performs just as effectively. Technology which developed thinner rolled aluminium foil (0.006 mm) than previously, makes it possible to protect goods with a more light-weight, energy efficient product – aluminium. Lighter packaging also translates into lower fuel intensity and reduced emissions in the transport sector.

08

corporate governance

australia's aluminium
since 1963

10

corporate governance

Alcoa's operations in Australia span a number of Alcoa Inc. business units, each with a separate corporate governance structure.

The operations wholly owned by Alcoa Inc. – Alcoa Australia Rolled Products, Alcoa Wheel Products Australia and Alcoa Fasteners Australia – are governed by Alcoa Inc.

Alcoa of Australia Limited follows the corporate governance principles established by its major shareholder Alcoa Inc. and acts in accordance with Australia's company laws. Alumina Limited contributes to governance with the inclusion of two of its senior management team on the Board of Directors of Alcoa of Australia Limited.

Alcoa of Australia Limited's shareholders

Alcoa World Alumina Australia is one of 25 Alcoa Inc. business units, and is the trading name of the unlisted public company Alcoa of Australia Limited. The three shareholders of Alcoa of Australia Limited in 2003 were:

- Alcoa International Holdings Company, a wholly owned subsidiary of Alcoa Inc., (60%);
- Alumina Limited (39.25%); and
- QBE Nominees Pty Ltd and QBE Investments Pty Ltd (0.75%)*

* *On 15 December 2003, QBE Nominees Pty Ltd and QBE Investments Pty Ltd agreed to sell their 0.75% share in Alcoa of Australia Limited to Alumina Limited.*

Alcoa of Australia Limited Board of Directors

Alcoa of Australia Limited has a Board of Directors consisting of leading Australian and US business people dedicated to responsibly managing the company on behalf of its two shareholders. In 2003, the members of the Board were:

- G. John Pizzey, Alcoa of Australia Limited Chair, Executive Vice President Alcoa Inc.; Group President Primary Products *
- Wayne Osborn, Managing Director, Alcoa of Australia Limited
- Bill Reid, Executive Director Finance and Business Services and Company Secretary, Alcoa of Australia Limited
- John Marlay, Chief Executive Officer, Alumina Limited
- Bob Davies, Chief Financial Officer, Alumina Limited

* *G. John Pizzey retired from Alcoa Inc. and the Alcoa of Australia Limited Chair position on 31 December 2003. Mr Pizzey had been responsible for the strategic and technical management of Alcoa's alumina refineries and primary aluminium smelters worldwide and associated business, such as metal purchasing, trading and transportation since 2000.*

The Board meets quarterly in Australia and manages and monitors financial performance, internal and external audits, environmental compliance and safety and health issues.

Bernt Reitan was appointed to the position of Alcoa of Australia Limited Chair, Executive Vice President Alcoa Inc.; Group President Primary Products on January 22, 2004. This appointment has seen him acquire responsibility for the company's smelting facilities worldwide. Bernt joined Alcoa in 2000 as general manager of Alcoa World Chemicals Europe, and was appointed president of Alcoa World Chemicals on January 1, 2001. He was appointed president of Alcoa World Alumina and Chemicals and elected a vice president of Alcoa in July 2001 when he assumed global accountability for Alcoa's alumina business.

Major shareholders

Alcoa Inc.

Alcoa Inc. is headquartered in Pittsburgh and is the world's leading producer of primary aluminium, fabricated aluminium, and alumina. Alcoa Inc. is a diversified, fully integrated producer, active in all major aspects of the industry – technology, mining, refining, smelting, fabricating and recycling.

Alcoa Inc. is the second largest mining and metals company in the world, and ranks in the top 100 of the Fortune 500 companies. At the end of 2003, Alcoa Inc. operated in 41 countries around the world and had 120,000 employees.

Total shareholder return for 2003 was more than 71%, meaning that US$100 invested (with dividends reinvested) at the beginning of the year would be worth more than US$171 as of December 31, 2003. In comparison, the Dow Jones Industrial Average, of which Alcoa Inc. is a component, returned approximately 28% during the same period.

Alcoa Inc. endorses The Business Roundtable Principles of Corporate Governance, which is a comprehensive statement of responsible corporate governance principles dated 2002. These principles provide the foundation on which Alcoa's Corporate Governance Guidelines and Board Committee Charters are based.

Alumina Limited

Alumina Limited is an ASX50 company also listed on the NYSE. Alumina Limited's name changed from WMC Limited on December 11, 2002 when it demerged its nickel, copper and fertiliser assets held by its then subsidiary, WMC Resources Ltd.

Alumina Limited owns 40% of Alcoa of Australia and 40% of the Alcoa World Alumina and Chemicals (AWAC) enterprise, an international network of integrated alumina refineries in the United States, Brazil, Suriname, Jamaica, Spain and Australia.

Ethics and Compliance Program

Alcoa Inc.'s Ethics and Compliance program helps to ensure the actions of every Alcoa employee align with the company's values. Alcoa's Ethics, Compliance and Advisory Services provided overview training sessions for all employees called 'Do What's Right' and published the Alcoa Guide to Business Conduct.

In 2003, online training geared to educating employees about key subjects was deployed to a group of 10,000 employees with plans to expand the program in the future. In addition to corporate officers and business unit leaders, employees selected to participate in the initial training were generally those who negotiate with customers and suppliers, can contractually commit the company, or have access to confidential information. This training program will be expanded in 2004.

In conjunction with the provisions of the US Sarbanes-Oxley Law we have developed and deployed a financial investigation process under the leadership of Alcoa Inc's chief compliance officer. The existence of this process will ensure consistent handling, proper communication, thorough investigation, and timely action when issues relating to accounting, internal accounting controls, or auditing matters are brought to the attention of management.

Vision and values

At Alcoa, our vision is to be the best company in the world – in the eyes of our customers, shareholders, communities and people. We expect and demand the best we have to offer by always keeping Alcoa's values top of mind:

Integrity *Alcoa's foundation is our integrity. We are open, honest and trustworthy in dealing with customers, suppliers, coworkers, shareholders and the communities where we have an impact.*

Environment, Health and Safety *We work safely in a manner that protects and promotes the health and well-being of the individual and the environment.*

Customer *We support our customers' success by creating exceptional value through innovative product and service solutions.*

Excellence *We relentlessly pursue excellence in everything we do, every day.*

People *We work in an inclusive environment that embraces change, new ideas, respect for the individual and equal opportunity to succeed.*

Profitability *We earn sustainable financial results that enable profitable growth and superior shareholder value.*

Accountability *We are accountable – individually and in teams – for our behaviours, actions and results.*

We live our Values and measure our success by the success of our customers, shareholders, communities and people.

The Compliance Advisory Council continues to meet on a regular basis to review program effectiveness, assess strategic direction, and provide tactical support for this process. Members include the chief executive officer, chief financial officer, general counsel, director of global compliance, and director of ethics and compliance.

Alcoa employees used its anonymous ethics and compliance phone line in 2003 to ask questions, express concerns and raise issues about workplace activities and business practices. Employees also used a newly established ethics and compliance e-mail address and a postal mail address for written inquiries.

Stakeholder engagement

A stakeholder is defined as any group or individual affected by Alcoa's operations or that has the capacity to influence our operations or future prospects.

Each operation is expected to engage the local community in the most appropriate means for that community. These include forums, workshops, advisory panels, published reports and projects. The stakeholder consultation process for the Pinjarra refinery efficiency upgrade represents the future direction we will take with projects. Other examples of the type of information and initiatives that result from stakeholder engagements are contained throughout this report.

Audit process

Alcoa Inc. has long had an independent, global Internal Audit Department (IAD). The IAD is responsible for providing financial, information technology, environmental, and health and safety audits in all Alcoa locations across the world.

IAD is also charged with monitoring the implementation of the Alcoa Self Assessment Tool, a type of self-audit that is required to be performed at least once every 18 months by every Alcoa location and administrative process worldwide.

PricewaterhouseCoopers, our external auditor, verifies our financial statements on an annual basis.

Alcoa Business System

Alcoa's overarching operating system is known as the Alcoa Business System (ABS). It provides the most efficient way for eliminating waste and enables us to supply customers, on demand, with defect-free products at the lowest cost and with the highest degree of safety. More information about ABS can be found at **www.alcoa.com**

Certification

The International Standards Organisation has developed a series of environmental management system standards which are contained in the 14000 series. The ISO14001 standard requires an environment management system be put in place which contains such elements as commitment and policy, planning, implementation and operation, checking and corrective action and management review. All of Alcoa's mining, refining and smelting operations in Australia have received ISO14001 certification. Alcoa Australia Rolled Products does not yet have ISO14001 certification at its two sites.

Memberships

Alcoa is a member of numerous organisations. These include major aluminium associations and metal councils like the Pew Centre for Global Climate Change, World Business Council for Sustainable Development, World Resources Institute Green Power Market Development Group, International Aluminium Institute, International Council for Mining and Metals and Australian Aluminium Council.

Commitment to voluntary codes and initiatives

We also implement several voluntary codes such as the Australian Minerals Industry Code for Environmental Management, Australian Greenhouse Challenge, EcoRecycle Victoria's Waste-Wise Business Program, Western Australia Cleaner Production Statement and National Packaging Covenant.

Directory

Alcoa World Alumina Australia

Executive Management in 2003

ALCOA OF AUSTRALIA LIMITED CHAIR EXECUTIVE VICE PRESIDENT ALCOA INC., GROUP PRESIDENT PRIMARY PRODUCTS
G. John Pizzey (outgoing)

MANAGING DIRECTOR
Wayne Osborn

EXECUTIVE DIRECTOR AND COMPANY SECRETARY
FINANCE AND BUSINESS SERVICES
Bill Reid

DIRECTOR
WESTERN AUSTRALIAN OPERATIONS
Giulio Casello

DIRECTOR
VICTORIAN OPERATIONS
Paul Hallam

GENERAL COUNSEL
Tom Trempus

GENERAL MANAGER
HUMAN RESOURCES AND ENVIRONMENT, HEALTH AND SAFETY
David Willett

GENERAL MANAGER
CORPORATE AFFAIRS
Meg McDonald

GENERAL MANAGER
MINING
Russell Williams

GENERAL MANAGERS
ALCOA MATERIALS MANAGEMENT, ASIA PACIFIC
Michael Parker and Bruce Ayres

GENERAL MANAGER
ENGINEERING
Craig Walkemeyer

VICE PRESIDENT
TECHNOLOGY AND ALCOA BUSINESS SYSTEM
Laurence Stonehouse

ASSISTANT DIRECTOR WA OPERATIONS AND REFINERY MANAGER
PINJARRA
David Olney

REFINERY MANAGER
WAGERUP
Bill Knight

REFINERY MANAGER
KWINANA
Tom Adams

MANAGER OF MINES
WESTERN AUSTRALIA
Kim Horne

OPERATIONS MANAGER
POINT HENRY SMELTER
John Osborne

OPERATIONS MANAGER
PORTLAND ALUMINIUM
Matthew Pistner

POWER STATION MANAGER
ANGLESEA
Phillip Cooke

Alcoa Australia Rolled Products

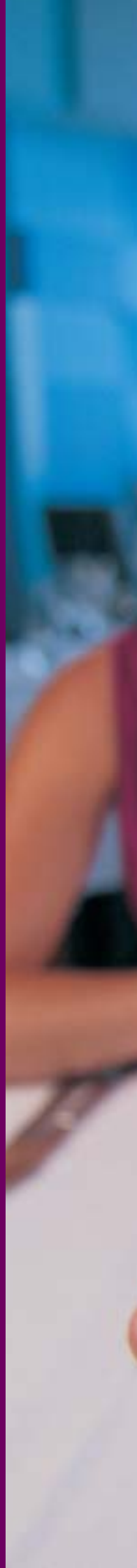
Executive Management in 2003

MANAGING DIRECTOR
Shirley In't Veld

LOCATION MANAGER
POINT HENRY
Len Leach

LOCATION MANAGER
YENNORA
Malcolm Murphy

economic
making good business sense



australia's aluminium
since 1963

economic

During the past 40 years Alcoa has grown into one of Australia's major mineral/energy exporters. We operate the largest integrated bauxite, alumina refining and aluminium smelting system in the world.

Since we first started producing alumina at our Kwinana refinery and smelting aluminium at our Point Henry smelter in 1963, we have continued to value add to raw resources and create wealth for Australia.

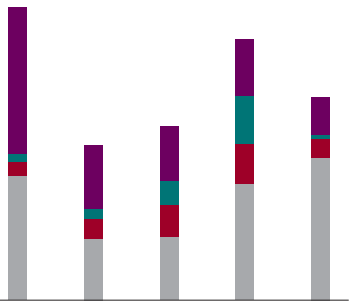
Since 1963 we have invested more than $12 billion (based on current day value on capital projects in Australia (Figure 2). We have made a long-term commitment to Australia and created multiple flow-on benefits to Australia's economy. Our presence and contribution has delivered increased direct and indirect employment and support for local business, particularly in regional Australia where we are based.

In 2003 we achieved record alumina and aluminium production, emphasising our position as a leader in Australia, and an important player globally. Alcoa Australia Rolled Products has the only aluminium rolling mills in Australia and is the largest aluminium recycler in the southern hemisphere.

Maintaining our global competitiveness requires pursuing ways of further cutting costs and increasing production to meet global demand at our existing operations,as well as potential new projects.With massive market growth in China, we must find new ways to remain competitive and take advantage of expanding markets (see p.18).

FIGURE 1 – Total capital expenditures

Year	1999	2000	2001	2002	2003
Growth *(millions of AUD)*	97.5	42.5	36.7	37.3	25.3
Environmental *(millions of AUD)*	5.3	6.8	15.3	31.9	2.5
Health and Safety *(millions of AUD)*	9.5	12.7	21.8	26.5	12.5
Non-growth *(millions of AUD)*	81.6	40.4	41.4	76.6	94.1



Note: 2002 figures have been amended to reflect a change in classification between Growth and Non-growth.

There is a positive outlook for our future in Australia. We have several substantial opportunities and upcoming projects including an efficiency upgrade at the Pinjarra refinery. Development of these projects involves significant long-term capital investment. They will boost regional economic activity in Australia as well as provide long-term export gains and jobs growth.

Many factors play an important role in whether these projects proceed including long-term predictability of the regulatory environment, specifically in respect to greenhouse gas abatement measures and limits (see p.7), and energy issues. To address these factors we are incorporating sustainable development principles into new projects.

Alcoa of Australia and its subsidiaries recorded a net profit after tax of $657 million in 2003 (Figure 3). This result was a modest two per cent, or $15 million, increase on the 2002 year, where net profit after tax was $642 million.

The volatility of currency markets in 2003 impacted on our profits. This was offset by record-breaking alumina and aluminium production at all our operations (Figures 7,8 and 9), marginally lower production costs and an increased average US$ aluminium price on the London Metal Exchange (Figure 4).

The strengthening Australian dollar impacted on sales revenue which decreased from $3,101 million in 2002 to $2,923 million in 2003 (Figure 5). The export component of revenue also decreased from $2,658 million in 2002 to $2,561 million in 2003.

The overwhelming proportion (about 80%) of the $1,282 million we spent on material and services in 2003 was spent in Australia. This benefits the Australian economy and particularly regional communities by increasing spending and creating more jobs. During 2003, the company paid shareholders fully franked dividends of $680 million (60% Alcoa Inc., 39.25% Alumina Ltd and QBE Insurance 0.75%) compared to $667 million in 2002 (Figure 6).

FIGURE 2 – 40 year investment summary

Year	Capital expenditure *(AUD Million)*	Expenditure milestone
1963	29	Kwinana Refinery & Point Henry Smelter
1964	17	
1965	10	
1966	17	
1967	29	
1968	42	Anglesea Power Station
1969	58	
1970	65	
1971	81	Pinjarra Refinery units 1 & 2
1972	21	
1973	20	
1974	60	Pinjarra Refinery unit 3
1975	101	
1976	35	Pinjarra Refinery units 4 & 5
1977	42	
1978	53	
1979	91	
1980	295	
1981	355	
1982	253	Wagerup Refinery
1983	70	
1984	69	
1985	189	
1986	170	Portland Smelter
1987	184	
1988	172	
1989	180	
1990	121	
1991	296	
1992	245	Wagerup unit 2
1993	237	
1994	118	Wagerup upgrade
1995	194	
1996	180	
1997	169	
1998	298	
1999	194	Wagerup upgrade
2000	103	
2001	115	
2002	172	
2003	134	

"Alcoa is an integral part of WA's economy and has a proud record in creating jobs and opportunities throughout the State."

GEOFF GALLOP
WESTERN AUSTRALIAN PREMIER
OCTOBER 2003

The global market*

World consumption of all the major minerals and energy commodities, including alumina and aluminium, is forecast to increase in 2004, supported by higher growth in global industrial activity.

As world economic activity expands in the long term, the demand is expected to continue to increase. Improvements in the economic, political and social environment to facilitate resources growth will have a significant impact on long-term commodity price trends, growth rates of metals production and the location of mining projects.

This forecast increase in global demand is also expected to lead to an increase in Australian production of minerals and metals. For example, it reflects the accelerated development of production capacity in Western Australia to meet burgeoning demand from China.

According to China's National Bureau of Statistics, China's economy grew by 9.1% in 2003 and its GDP rose an annual 9.9%, far higher than the 8.5% forecast by most regional economists. China's economy has surged ahead in major sectors such as manufacturing, automobiles and construction – key aluminium markets.

Alcoa Inc. has a substantial relationship with China, in both joint ventures and equity investments established over the past decade. In light of the demonstrated growth in China's economy, and as an important element of Alcoa's business strategy, we are maximising our resources to meet this demand. Brownfield development at the Pinjarra refinery will increase alumina production by 600,000 tpa as a pre-cursor to further growth.

* *Some information summarised from Australian Commodities Vol 11, No 1 March Quarter 2004: ABARE.*

FIGURE 3 – Net profit after tax

Year	1998	1999	2000	2001	2002	2003
Net profit after tax *(AUD million)*	423.0	529.0	882.0	1,023.0	641.5	656.9

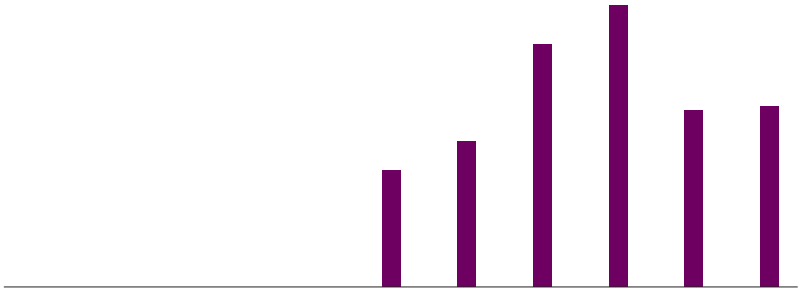
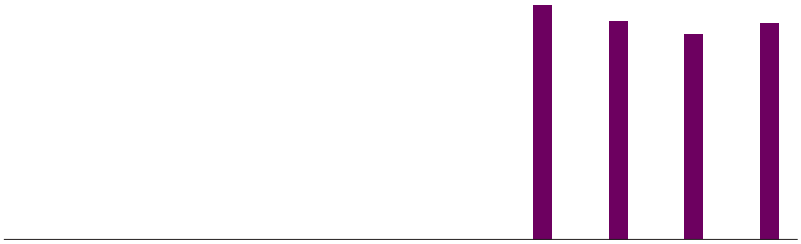


FIGURE 4 – LME average aluminium price

Year	2000	2001	2002	2003
Average aluminium price – cash rate *(USD per tonne)*	1,550	1,444	1,355	1,432



"Victoria is richer in every way for Alcoa's presence here over the past four decades."

JOHN BRUMBY
VICTORIAN TREASURER; MINISTER FOR STATE AND REGIONAL DEVELOPMENT; MINISTER FOR INNOVATION
JUNE 2003

Pinjarra meeting global demand

The environmental approval† of the Pinjarra refinery efficiency upgrade will ensure Alcoa is ready to meet growing global demand for alumina. The efficiency upgrade will increase production by about 600,000 tonnes of alumina per annum (tpa) by upgrading equipment and installing new emissions control technology.

The Pinjarra refinery is currently one of the world's most efficient alumina refineries accounting for around seven per cent of the international market. The efficiency upgrade will increase export revenue for Australia by up to $160 million per annum and provide real financial and social benefits to the local communities by creating jobs and opportunities for small business.

In line with Alcoa's sustainability principles, community consultation and engagement in the planning

FIGURE 5 – Revenue – 2003

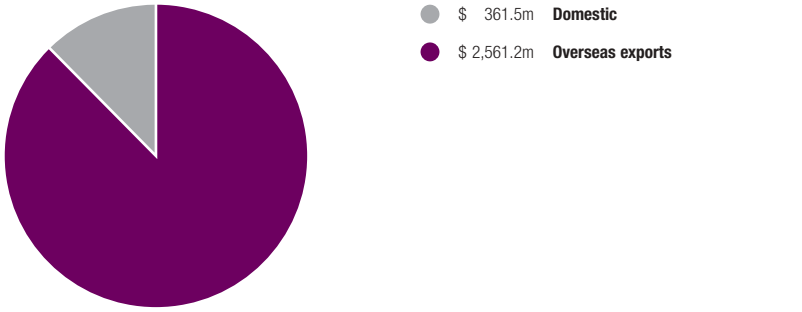
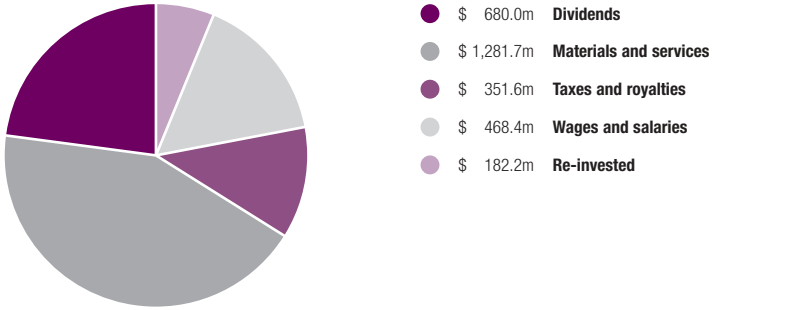


FIGURE 6 – Revenue distribution – 2003



process was vital to the project's success. A Stakeholder Reference Group (SRG) was established through an open community workshop involving neighbours, townspeople, local business owners, and local and state government. The SRG was formed to liaise with Alcoa's project team on the environmental, social and economic aspects of the alumina refinery upgrade.

In increasing alumina production, the benefits of the project include a major air emissions upgrade resulting in a reduction in key atmospheric emissions from the refinery. There will be an overall reduction of about 10% in volatile organic compounds and a 40% overall reduction in particulate emissions from the calciners. Carbon monoxide emissions will be limited to current levels and a potential increase in oxides of nitrogen will be offset by improved boiler technology.

The efficiency upgrade will create a peak of 1000 jobs during the construction phase. Alcoa also has a local content policy which recognises the value of sourcing goods and services from the surrounding local community. The efficiency upgrade presents significant direct and indirect business opportunities for businesses in Pinjarra and the broader Peel Region.

For further information visit **http://pinjarraupgrade.alcoa.com.au**

† *The Western Australian Minister for the Environment approved the efficiency upgrade in early February 2004, subject to stringent environmental conditions.*

FIGURE 7 – Annual alumina production

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total *(tonnes per million)*	6.20	6.49	6.54	6.71	6.91	7.15	7.68	7.77	7.76	7.86

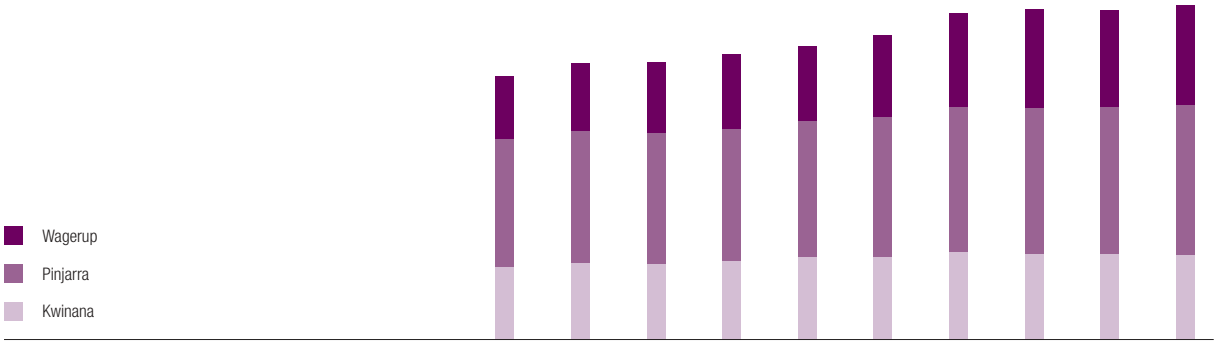
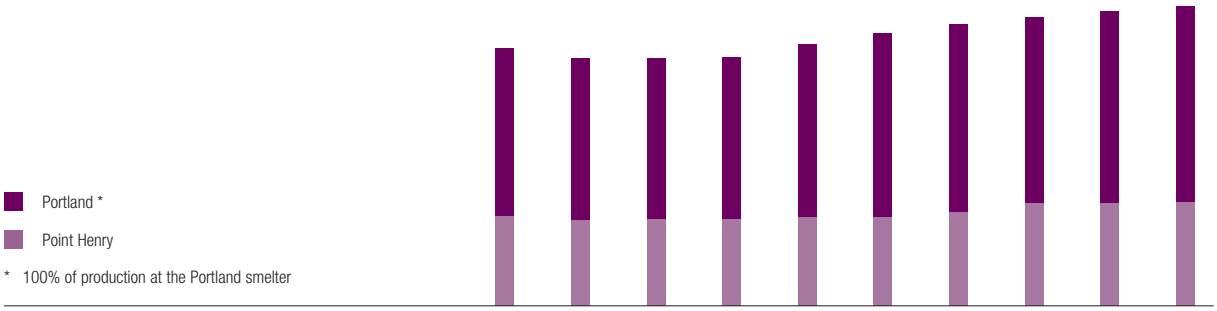


FIGURE 8 – Annual aluminium production

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total *(tonnes)*	469,184	451,223	451,737	452,819	475,807	496,200	511,371	525,562	535,618	544,719



* 100% of production at the Portland smelter

FIGURE 9 – Annual rolled products production

Year	1997	1998	1999	2000	2001	2002	2003
Point Henry and Yennora *(tonnes)*	138,172	158,119	151,703	146,903	151,353	155,517	164,333

MEMBERS OF THE PINJARRA REFINERY EFFICIENCY UPGRADE STAKEHOLDER REFERENCE GROUP.

DISCUSSING WAYS TO INCORPORATE SUSTAINABILITY INTO OUR EVERYDAY BUSINESS.

Supplying locally and globally

Alcoa hopes to create opportunities and build skills and expertise among its local suppliers opening up potential for them to compete successfully in global markets.

The move by Alcoa to global buying is one of the areas that will provide opportunities and challenges for local and global suppliers alike. An ability to supply to Alcoa on a global basis, while meeting local and global sustainability expectations, will be a key differentiator of success for suppliers in the coming years.

As an example, a Western Australian company recently won a multi-million dollar contract to supply valves to Alcoa operations in Jamaica and Suriname. This is a positive example of the benefits that can accrue from a win-win approach to global purchasing.

Committed to better energy efficiency

Reliable, cost effective energy is essential to Alcoa's operations across Australia. Alcoa uses gas supplied from the offshore north-west gas fields in Western Australia to produce steam and electricity via highly energy efficient cogeneration facilities at each of its refineries at Kwinana, Pinjarra and Wagerup. Alcoa is self sufficient in its power production and supplies about 20MW of surplus power to the market via an interconnection with the Western Power transmission system.

In the early 1980s, Alcoa and the State Energy Commission of Western Australia (SECWA) signed a long-term gas transportation contract for the Dampier to Bunbury Natural Gas Pipeline.

This agreement was transferred to Epic Energy when the pipeline was subsequently privatised.

Under the agreement, Alcoa effectively underwrote 50% of the initial capital and operating costs necessary to finance construction of the pipeline in return for the rights to gas transportation with a lower gas tariff to take effect post-June 2005, after the completion of the high tariff which referenced on the initial pipeline capital costs.

Over the initial 20 years contract period, Alcoa will have contributed $1.8 billion over operating costs towards the pipeline and continued to make payments to Epic Energy when the pipeline was privatised in 1998. This translates into a current tariff around 40% above the rates paid by regulated users.

This massive commitment to the pipeline was a key enabler for the construction of the pipeline, the development of the domestic gas project by the North West Shelf Joint Venture and for other gas projects in the north west which have made cheap, environmentally-friendly energy available to industry and consumers in Western Australia.

Alcoa last year announced a partnership with Alinta Limited which will see a new electricity cogeneration unit at the Pinjarra refinery with capacity for 140MW of electricity sales into the grid.

The joint venture involves Alinta building a gas turbine and heat recovery steam generator adjacent to Alcoa's Pinjarra refinery and selling electricity to third parties via the South West Interconnected System of Western Power, as well as providing steam to Alcoa.

"Not only will the new power station reduce Alcoa's greenhouse gas intensity, it will increase electricity competition and create jobs in the Peel region."

CLIVE BROWN
WESTERN AUSTRALIAN MINISTER FOR STATE DEVELOPMENT, TOURISM AND SMALL BUSINESS JUNE 2003

Leadership in research and development

An essential demonstration of Alcoa's commitment to a sustainable future is our expenditure of more than $23 million on research and development in Australia each year.

Alcoa's global refining research centre, which accounts for $16 million of funding, is based at our Kwinana refinery, employing 75 staff (51 with university degrees and 19 with PhDs). This makes us one of the largest industry employer of scientists in Western Australia. It is the world's largest alumina refining research and development group.

Our research and development effort has enabled us to efficiently process bauxite of the lowest grade currently mined throughout the world. To achieve this we have developed many new processes that make our Western Australian refineries among the most efficient low cost producers in the world. Our research and development leadership has ensured our refineries continually reduce environmental emissions, increase production, and reduce costs to maintain our world leadership in alumina refining.Alcoa's global network of refineries benefit from this knowledge.

Much of Alcoa's research is done collaboratively with other research institutions such as the CSIRO and universities in Australia and overseas. This collaborative approach has been in place for many years and ensures our research effort is of the highest quality.

In Victoria, we had 15 research and development projects underway in 2003 with five more about to come on stream. One project completed during the year was an investigation into the distribution and habitat of four threatened animal species on and near Alcoa land at Portland and Anglesea. The project also looked at methods for habitat restoration including the use of fire and limitation of the spread of plant disease caused by *Phytophthora cinnamomi.* A planned outcome of the research is to reintroduce the New Holland Mouse, a critically endangered species, into restored habitat at Anglesea (see p.46 for more detail).

FIGURE 10 – Three-year summary – Alcoa of Australia Limited

	2001	2002*	2003
From the balance sheet *($millions)*			
Total assets	3,840	3,621	3,450
Shareholder equity	2,317	2,292	2,267
From the profit and loss statement *($millions)*			
Sales revenue	3,441	3,101	2,923
Net profit after tax (1)	1,023	642	657
Dividends	800	667	680
Statistics			
Capital expenditure *($millions)*	115	172	134
Return on average shareholders' funds *(%)* (1)	45.8	27.8	28.8
Return on average assets *(%)* (1)	26.7	17.2	18.6

* Adjustments to prior years made as a result of changed accounting practices and classifications.

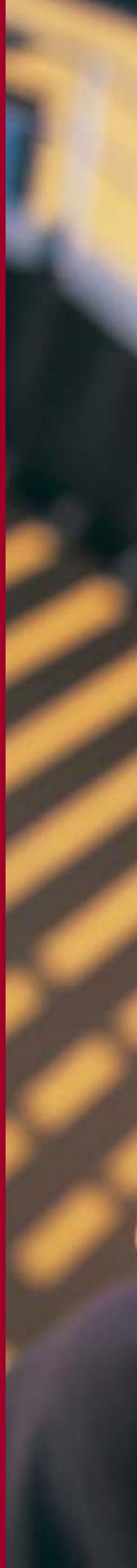
(1) After abnormal items.

As part of our ongoing commitment to research and technology, Alcoa encourages and rewards outstanding achievements. In 2003, Alcoa Kwinana employee, Dr Gerald Roach, was one of the two recipients of the prestigious Alcoa Chairman's Award for significant contributions to innovation, development and implementation of materials processing and systems technologies.

Dr Roach, Technical Manager, Extraction Technology, is a recognised world leader in alumina extraction technology and has pioneered ways to reduce raw material usage and improve the quality of alumina produced by Alcoa. His work has helped to make Alcoa's Kwinana, Pinjarra and Wagerup refineries among the most efficient in the world.

WE SPENT $23 MILLION IN 2003 ON RESEARCH AND DEVELOPMENT.

social
embracing and celebrating life

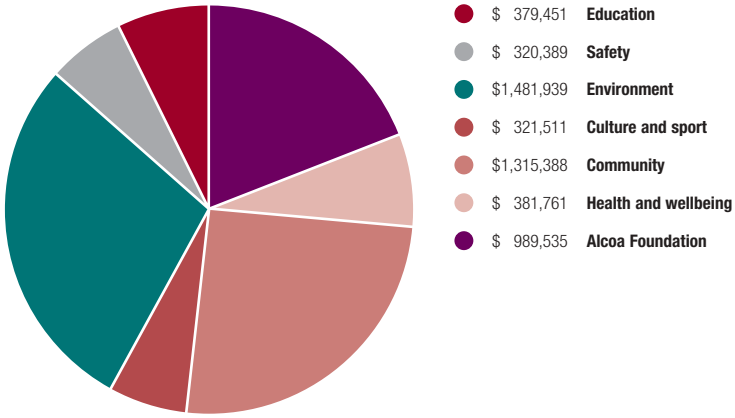


australia's aluminium
since 1963

social

In 2003, Alcoa contributed more than $5 million in Australia to a wide range of partnerships, sponsorships, community projects and events (Figure 1).

FIGURE 1 – Community contribution – 2003



These programs were supported from all areas of Alcoa:

- National partnerships
- State-wide programs in Western Australia and Victoria
- Regional and local projects and events
- Alcoa Foundation
- Alcoa's environmental partnership program (see p.29)

Alcoa has been part of the Australian community for 40 years. We have formed real and lasting partnerships that support and strengthen our local communities and the community as a whole.

Creating lasting community capacity is the driving force. 'Partnering Stronger Communities', Alcoa's partnership and sponsorship program, has become a key signature of our presence and contribution to the Australian way of life.

Strong communities emerge when individuals, institutions, governments, and businesses actively collaborate to develop strategies for dealing with change and seize opportunities for growth. They involve people of all ages and embrace cultural diversity. They are global, national or local. They have shared commitments with local government, workplaces and community services, and they recognise the fundamental importance of sport, recreation, and the arts.

Therefore, our focus is on supporting six vital areas of the community – education, safety, health and wellbeing, culture and sport, community and environment. We do this through a broad array of programs, some of which are included in this report. These programs involve employees at our sites, our regional operations, corporate offices, engineering, environment, research and development and human resources areas and the Alcoa Foundation. They are marked by direct engagement by our employees exemplified by Personnel Employed by Alcoa Charity Help (PEACH) (see p.41).

Alcoa Foundation

In 2003, the Alcoa Foundation provided almost $1 million to local Australian communities, helping hundreds of different groups or individuals. Managed in the United States, the Foundation was established in 1952 as a global resource that actively invests in the quality of life in Alcoa communities all around the world. It was introduced in Australia in recognition of the important role volunteering plays in strengthening communities by providing essential services as well as networks and community spirit.

A recipient of the Alcoa Foundation in 2003 was the Anglesea Primary School which received a US$10,000 grant and in-kind support from Alcoa Anglesea Power Station. The funds were used to make changes to the year five and six curriculum at the Anglesea Primary School to increase student involvement in real life and meaningful community based action projects. Following the success of the program, it will be extended to become an integral and core component of the school day, replacing traditional class programs. As well as support from Alcoa, the school has been greatly supported by other local agencies.

A wide variety of other groups also received support through volunteering programs including emergency services, disability services, sports, arts and environmental groups. The two main volunteering programs supported by the Foundation are ACTION (Alcoans Coming Together In Our Neighborhoods) and Bravo!.

ACTION recognises the collective effort of Alcoa employees in communities where they live, work and play. The Foundation rewards initiatives where 10 or more employees choose to volunteer their time working together on a special community project. Each project received more than 50 hours of labour and US$3,000.

Alcoa's Australian employees and their families joined 150 communities around the world in November to help celebrate the Alcoa Foundation's Worldwide Week of Community Service.

To mark the occasion in Australia, the Foundation funded special ACTION grants around the country which saw Alcoa employees and their families volunteering on the projects in line with the 2003 theme of Conservation and Sustainability.

Bravo! supports Alcoa employees who volunteer within community organisations. Employees can nominate community organisations for a Bravo! grant of US$250 if they have devoted 50 or more personal hours with that community organisation.

LOCAL VOLUNTEERS DURING THE WEEK OF ACTION.

SIDNEY NOLAN'S WORK LANDSCAPE (SALT LAKE), 1966, WAS DONATED TO THE NATIONAL GALLERY OF VICTORIA IN 2003.

Partnerships in 2003

The Alcoa Research Centre for Stronger Communities

In 2003, Alcoa and Curtin University of Technology implemented a unique program to strengthen our communities which have had their resiliency challenged in recent years due to technological and societal changes.

The Centre's projects will incorporate research concerning communities which are facing the challenges of new technology and the development of "virtual" communities; how increased work demands limit the time people can engage in their communities, as well as the demographic changes (for example, the shift from rural to urban) which are occurring throughout Australia.

Alcoa supports the arts

In recognition of Alcoa's long-term commitment to the arts, we were named the winner of the Caliburn Partnership Strategy category of the 2003 Australia Business Arts Foundation (AbaF) Awards.

This award recognised Alcoa's real and lasting partnerships with the arts community ranging from our support of community arts projects to playing a part in Australia's national art and cultural history.

"By working toward stronger communities at family, local, and state levels, we lay the foundation for strong and harmonious communities."

PROFESSOR LANCE TWOMEY
VICE-CHANCELLOR OF CURTIN UNIVERSITY OF TECHNOLOGY

We choose partners, forums and projects which emphasise broad participation and are accessible to all and which create confidence and warmth among groups in our communities to share and explore their creativity.

We created a promising new partnership in 2003 with Craftwest, Western Australia's peak craft and design organisation. This new partnership will create educational and employment opportunities in the fledgling aluminium design industry. It introduces a range of individual programs, including the Alcoa Innovation Award, to promote the beauty and versatility of aluminium and to provide young designers with professional mentoring and support.

In mid-2003, to celebrate the opening of the Ian Potter Centre at the National Gallery of Victoria, Alcoa donated Sidney Nolan's work Landscape (Salt Lake), 1966, valued at more than $1 million. As part of our commitment to regional communities Alcoa hosted a group of rural women from drought affected central Victoria to view the Sidney Nolan exhibition: Desert and Drought.

THE SEEDBANK AT PORTLAND IS PART OF OUR AWARD-WINNING PARTNERSHIP WITH GREENING AUSTRALIA.

Alcoa and Greening Australia win by working together

A partnership that began in 1982 and has inspired thousands of Australians to band together to help the environment, received national recognition in 2003.

The 21-year-long partnership between Alcoa and Greening Australia received the Special Award for Longevity at the Prime Minister's Awards for Excellence in Community Business Partnerships in December 2003.

With its roots in Western Australia, the partnership began with the Alcoa Community Tree Planting Program that evolved into the Greening Australia Support Scheme to provide trees to community groups for tree planting projects.

In 1990 the partnership extended into Victoria with initial funding supporting the Treeline Project which was to become the forerunner for the State Rail Trails program. A year later, the Alcoa Landcare South West Seedbank Revegetation Centre at Portland was born to support seed supply in Victoria.

Throughout the partnership, Alcoa and Greening Australia have jointly developed a range of programs, such as Ribbons of Green, which went on to inspire the National Corridors of Green project, and the Plants for Conservation Program.

Another remarkable achievement by our employees and their families around the world was announced on World Environment Day when we planted the one millionth tree in the Alcoa One Million Trees program – five years ahead of schedule. The program was an important element in our global commitment to sustainable development and environmental initiatives. A new challenge, to plant 10 million trees by 2020 has been set by the company's Chairman and Chief Executive Officer, Alain Belda.

"Alcoa has made an unprecedented contribution to rural and regional Australia through their support of Greening Australia and the Landcare movement."

CARL BINNING
GREENING AUSTRALIA LIMITED CEO
DECEMBER 2003

Community capacity building

Partnering regional communities

Alcoa has made large contributions to development of regional infrastructure and the development of communities in regional Western Australia, particularly in the Peel and South West regions. We have helped develop community facilities such as libraries, universities and community buildings. We committed $1 million over 10 years to the Shire of Murray's social infrastructure program and are providing $700,000 per annum for five years to Waroona for community infrastructure projects, including the Waroona swimming pool.

Through the Alcoa Community Development Fund we have allocated $1.5 million to the Shire of Harvey, as seed funding for a range of community projects. We have worked closely with the Harvey Shire during the past 18 months to advance this program and provide organisations like the Yarloop Progress Association with an opportunity to develop programs for the long-term benefit of the Yarloop community.

An additional $500,000 was allocated through the Alcoa Community Development Fund for the Shire of Waroona to investigate an eco-tourism planning concept for the town site of Hamel.

We are a major employer in the Shire of Murray and in the greater Peel Region providing direct employment for more than 4,000 people in the region. We are committed to innovative training and employment initiatives which have been developed to harness the skills of students in the Peel region. Each year about 2000 young Western Australian lives are improved through Alcoa's youth opportunity programs.

Our focus on partnering stronger communities has led to us providing more than $4.5 million in direct financial support to local community projects in the Murray Shire. These include $1.5 million to the Fairbridge Pathways Project, the establishment of the Alcoa-Murray Library and $450,000 to the Pinjarra aged care facility.

THE ALCOA IN THE COMMUNITY COMMITTEES HELP LOTS OF LOCAL COMMUNITY GROUPS.

Alcoa in the Community Committee

The Point Henry Alcoa in the Community Committee was embraced by both employees and community members during 2003, contributing more than $240,000 to community groups in the Geelong area. Formed in 2002, the committee consists of a range of members recruited from across the site including production, finance, human resources, unions, contractors and safety areas. It aims to add diversity and transparency to the sponsorship decision-making process which was previously solely administered by the public relations department.

The committee has a variety of partnerships in the community including supporting preventative drug education for students in local primary schools, Alcoa Frog Watch, conservation of marine and coastal environments and helping kids at risk at school.

Alcoa in the Community Committees are now in place at all our Victorian operations.

OPEN DAYS ARE ENJOYED BY FAMILIES AT ALL OUR SITES.

"My personal pride is rejuvenated by being part of a team that can give something back to those in need in my local region."

NED KELLY
POTROOMS, POINT HENRY AND ALCOA IN THE COMMUNITY COMMITTEE MEMBER

In addition to the Alcoa in the Community Committees in Victoria, Alcoa sites across Australia have their own Community Consultative Networks. These allow us to inform the community on important issues and events impacting on the business and potentially the community. Consisting of community representatives, they also provide an important forum for the community to raise issues of interest or concern relating to Alcoa.

Alcoa opens its gates

Most of Alcoa's operations opened their gates to the community and employees' families during the year. The Kwinana refinery and Point Henry smelter had extra reason to celebrate, inviting the community to join them in their 40-year celebrations.

At Kwinana more than 3,000 employees, their families and community members attended the open day enjoying activities such as a bungy trampoline, air slide, the snake man, plays, face painting, the Alcoa worm farm display and Scitech Discovery Centre activities.

At Point Henry, more than 1,000 people toured the smelter and the adjoining wetlands. The Alcoa Frog Watch program was featured along with other community partnership programs including local primary schools, Geelong Performing Arts Centre, the Marine Discovery Centre and United Way. A highlight of the day was the Alcoa Point Henry Smelter Passport, a question and answer booklet for young children which helped them participate in the day.

safety & health

In 2003, we did not achieve our lost work day injury rate target of zero, despite improvements at our Western Australian operations from 1.10 in 2002 to 0.64 in 2003. Our Victorian operations recorded a similar rate to 2002 of 0.63 (Figure 2). The improved rate in Western Australia was due to a strong ongoing focus on the identification and elimination of high potential events. In addition to this, all Western Australian locations now have in place formal behavioural programs based on employee workplace observations and management safety contacts (see p.34).

Alcoa Australia Rolled Products (Alcoa ARP) recorded a lost work day rate of 0.55 in 2003 compared to zero in 2002, as the result of a back strain injury at Yennora in May (Figure 2). This task was reviewed and equipment and procedures were modified. Both Alcoa ARP sites will implement more aggressive ergonomic risk reduction programs during 2004 to prevent future ergonomic injuries.

The lost workday injury rate across all our operations is substantially better than the average recorded by the Australian smelting/refining industry in 2002/2003 which was 4.0 (Australian Minerals Industry Safety and Health Safety Survey Report 2002-2003). Based on the latest available information from the National Occupational Health and Safety Commission, our outstanding performance is also better than a wide cross-section of all industries including mining, construction, agriculture, forestry and fishing, and even retail/wholesale trade industries.

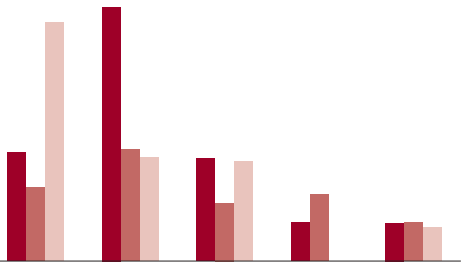
The total recordable injury rate at our Western Australian operations increased compared to 2002 and was well above our target of 6.5 for both Victorian and Western Australian operations (Figure 3).

Our Western Australian operations recorded a rate of 12.66, an increase of 4.4 compared to 2002. This was due to an increase in the number of cases of work-related, noise-induced hearing loss, a substantial contribution from hand and finger injuries, and the continued occurence of strain/sprain injuries. In particular we applied tighter reporting criteria during the year to identify potential hearing impacts earlier, and to capture a wider group of exposures. The 2004 plan will actively focus on reducing injuries in these three areas.

Victorian operations recorded a rate of 10.12. Twelve of the 32 injuries (38%) in 2003 occurred in the first two months of the year and were predominantly sprain and strain type injuries. An increased focus on ergonomic programs resulted in reduced injuries throughout the rest of the year. In 2004, an even more aggressive ergonomic risk reduction program will be implemented to address these types of injuries.

FIGURE 2 – Lost work day injury rate

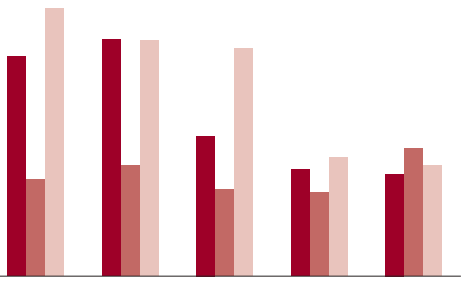
Year	1999	2000	2001	2002	2003
Victoria *(rate/million person hours)*	1.78	4.22	1.66	0.64	0.63
Western Australia *(rate/million person hours)*	1.22	1.85	0.96	1.10	0.64
Alcoa ARP *(rate/million person hours)*	3.95	1.71	1.65	0.00	0.55



Note: Previous years data may have changed due to case reclassification.

FIGURE 3 – Total recordable injury rate

Year	1999	2000	2001	2002	2003
Victoria *(rate/million person hours)*	21.79	23.54	13.94	10.59	10.12
Western Australia *(rate/million person hours)*	9.57	10.95	8.59	8.26	12.66
Alcoa ARP *(rate/million person hours)*	26.54	23.38	23.12	11.77	11.01



Notes:

- TRIR affected by reclassification of hearing loss criteria.
- Previous years data may have changed due to case reclassification.

FIGURE 4 – Lost workday injuries – 2003

	Incident Type	Injury Type
Western Australia	Same level fall (1)* Contact with hot condensate (1) Light vehicle accident (1) Contact with moving object (2)	Strain/sprain (2) Burn (thermal) (1) Fracture (1) Amputation (fingertip) (1)
Victoria	Contact with moving object (1) Caught between two objects (1)	Fracture (1) Amputation (finger end joint) (1)
Alcoa ARP	Strain/over exertion (1)	Strain/sprain (1)

*Numbers in brackets represent the number of incident and injury types

Occupational health

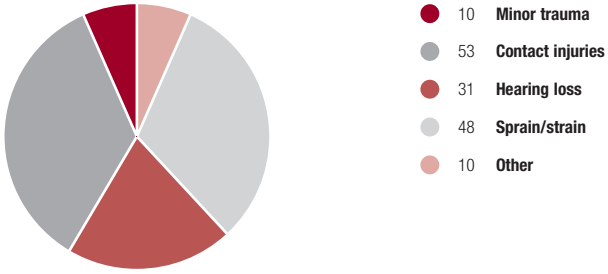
Sprains and strains are the largest single source of both our traumatic and gradual onset injuries. (Figures 4 and 5).

In 2003, all locations actively engaged in meeting the corporate goal of a 50% reduction in the top 10 ergonomic risks. A team-based approach was used and many of the more innovative solutions originated from shop floor personnel. The end result was excellent with 75% of the 40 Western Australian projects, and 47% of the 30 Victorian operations projects, being completed by year-end. Alcoa Australia Rolled Products (Alcoa ARP) achieved a 45% reduction at the end of 2003.

Another focus during 2003 involved attention to workplace airborne contaminant exposures – usually in the forms of dusts, fumes or gases. The corporate target was to achieve a 40% reduction in magnitude from a baseline position in 1999. Overall, the reduction achieved over the full four year period to the end of December 2003 was 56% for Western Australian operations and 18% for Victorian operations.

A further corporate target was to achieve a 40% reduction in the top 10 noise exposure tasks by the end of 2003. For Victorian operations a reduction of 42% was achieved and for Western Australian operation a reduction of 12% was achieved. Alcoa ARP achieved the target with a 41% reduction.

FIGURE 5 – Recordable injuries by type



The corporate target to complete qualitative occupational hygiene risk assessments for 100% of potential workplace exposures was achieved. Also the target to undertake quantitative (measured) exposure assessment for more than 95% of jobs with significant exposures, was achieved. Victorian operations completed 96%, and Western Australian operations completed 87% of all medical surveillance evaluations scheduled in 2003. We are committed to improving these results in 2004 and working towards our target of 100%.

Further stretch targets have been set for the coming two-year period covering the above measures plus new programs including employee health promotion and also community health partnerships.

OUR MINING OPERATIONS RECEIVED A NATIONAL SAFETY AWARD IN 2003.

Alcoa's sites excel at safety

The Anglesea Power Station reached a significant safety milestone in August clocking up two years without a lost work day injury. Deployment of work planning forms, standard work instructions and the efforts of Anglesea's temporary safety resources have all contributed to the improvement in safety performance.

For the past two years at Anglesea, an operational or maintenance person has moved away from his/her normal duties for six months to focus on health and safety projects. Some of these projects include developing hazard identification and risk assessment, standard work instructions, investigating incidents and managing corrective actions.

A variety of initiatives and programs at the Pinjarra refinery has contributed to a steady reduction of all injury types over the past three years.

Pinjarra had its lowest injury rate on record in 2003, with reductions in all areas ranging from first aid through to injuries which may require medical attention. Site job observation programs have been an essential part of this achievement, including the Safety Training Enhancement Program (STEP).

STEP is a voluntary process where employees observe each other working and feedback is given immediately.

A very proactive approach, it ensures employees continuously discuss safety and react to risk situations before they cause an injury.

Other observation and communication programs in use across the site include a newly introduced health and safety record of activities which details guidelines for health and safety commitment across the Western Australian operations.

Hea*l*thwise

Since 1994, Alcoa has supported one of the largest and most comprehensive occupational health studies carried out in Australia. Called Hea*l*thwise, the independent long-term study is designed to assess the overall health status of people who have worked in the aluminium industry compared to people who have not. The study is being conducted by health researchers at Monash University and the University of Western Australia, and is divided into three sections:

- A respiratory health study of existing employees in 1995/96 (cross-sectional study)
- A respiratory health study of new employees since 1995 (new starters study)
- A cancer incidence and cause of death study among current and former employees (cancer incidence and mortality study).

During 2003, some former employees and relatives raised concerns with the Western Australian Health Department about the incidence of cancer in the Kwinana refinery workforce. The Health Department consulted Professor D'Arcy Holman, Professor of Public Health at the University of Western Australia, and it was decided that the Hea*l*thwise cancer incidence and mortality study was the best means of assessing these concerns.

Hea*l*thwise researchers undertook a reanalysis of the data from the first search of the cancer registers looking specifically at current and former Kwinana refinery employees.

This showed no statistically significant excess of cancer cases compared to the numbers that would have been expected based on Western Australian community cancer rates. A further analysis of Kwinana refinery cancer incidence will be performed following the second search.

A second search of the Australian cancer and death registers is currently underway to update the cancer incidence and mortality study. Delays in accessing the information due to new privacy legislation requirements have delayed this analysis and postponed the release of further interim results until 2004.

Recruitment to the Victorian cohort of the new starters respiratory health study continues and analysis will begin when sufficient new starters have been recruited to enable meaningful statistical analysis. This will be assessed at the end of 2004. Recruitment is now complete for the Western Australian cohort of the new starters study and analysis is scheduled to start when analysis of the second cancer and mortality search data is completed.

Mining Group wins safety award

At a time when health and safety remains one of the most challenging issues facing the mining industry, Alcoa's Western Australian Mining Group was awarded the 2003 MINEX Award in October.

The award is in recognition of its demonstrated safety culture and promoting continuous improvement in performance, both on and off site at our Huntly and Willowdale mines.

The mining sites were recognised for their comprehensive safety and health management, the effectiveness of their planning processes, their innovative communication practices and their highly-committed leadership.

The MINEX Awards are coordinated by the Minerals Council of Australia to ensure that excellence and innovation at individual sites are recognised and that best practice, in terms of safety and health policy, systems and practice, is identified and promoted.

EMPLOYEE TO EMPLOYEE SAFETY OBSERVATION AND FEEDBACK PLAYS A VITAL ROLE AT OUR SITES.

our people

"We've worked with three generations of some families – the fathers, sons and now even the grandchildren. Really terrific people."

BOB PAULDEN
40-YEAR EMPLOYEE
POINT HENRY SMELTER

OUR 40-YEAR POINT HENRY SMELTER EMPLOYEES.

Throughout 2003, Alcoa celebrated 40 years of production in Australia having grown from pioneering a new industry to becoming an integral part of the Australian community.

Alcoa is a company proudly shaped by its people and infused with their character, values and enthusiasm. As part of our celebrations we acknowledged the tremendous contribution of the thousands of men and women who have dedicated their skills and talents to ensure the continuing success of the company.

Of all the people who have given long and valued service, a special few have been with us since production began 40 years ago. At Point Henry they are Bob Paulden, Neville Stalio, Henk Egberts, Peter Rankin, Morgan Quick and Kay Eckersley. At Kwinana they are Joe Fulgaro, Ivor Stockwell and Ben Farrell.

In both Victoria and Western Australia, long term employees, including several who had been with the company from the beginning, parliamentarians, former Alcoa Directors, resource industry stalwarts, community partners and others, joined together to celebrate.

Alcoa of Australia had about 6,500 employees in 2003 with the majority working in regional centres around our operations. Alcoa Australia Rolled Products employs 860 people at its Yennora and Point Henry rolling mills.

As a major employer in the Peel, Geelong and Portland regions we provide a wide range of benefits to local communities by creating wealth for small business and creating a multitude of indirect jobs. The majority of our employees live in the communities where they work, spending part of the $468 million (permanent and fixed employees) they earned in 2003 at local businesses. On a broader scale, Alcoa's payroll tax in 2003 was $26 million, contributing to Australia's overall economy.

In addition to payroll, our employees received a further $22 million for training and education, transfers and relocation expenses, stock options, medical expenses, travel allowances, workers compensation and other items.

We encourage our people to undertake training courses and higher education programs and provide them opportunities to develop their skills and stay up-to-date with the latest developments. In 2003, we spent more than $1 million on internal and external training courses and $152,000 on higher education.

In 2003, 63% of our permanent employees had been with the company for more than 10 years, supported by our low turnover rate of 6% in 2003 (Figure 6). By having such a stable workforce we have been able to develop strong corporate knowledge and have a wealth of experience among our employees. A challenge of low turnover is to introduce diversity into the workforce and grow new talent. We are aware of this issue and are looking at ways to bring new people into the organisation, as well as provide strong career paths for our existing employees.

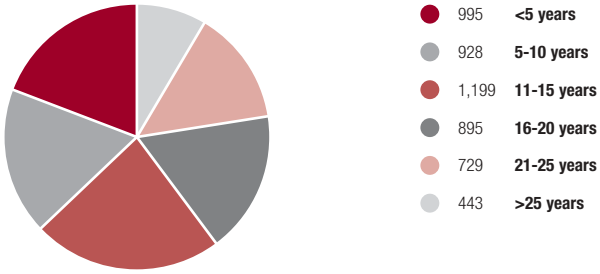
One way of bringing diversity and new ideas into the organisation, as well as meeting our business needs, is through contractors and temporary staff. We draw on the specialist skills provided by contractors to ensure we have the best person for a specific job. In a lot of cases, these people work side by side with our permanent teams, imparting their knowledge and bringing a fresh view to the company.

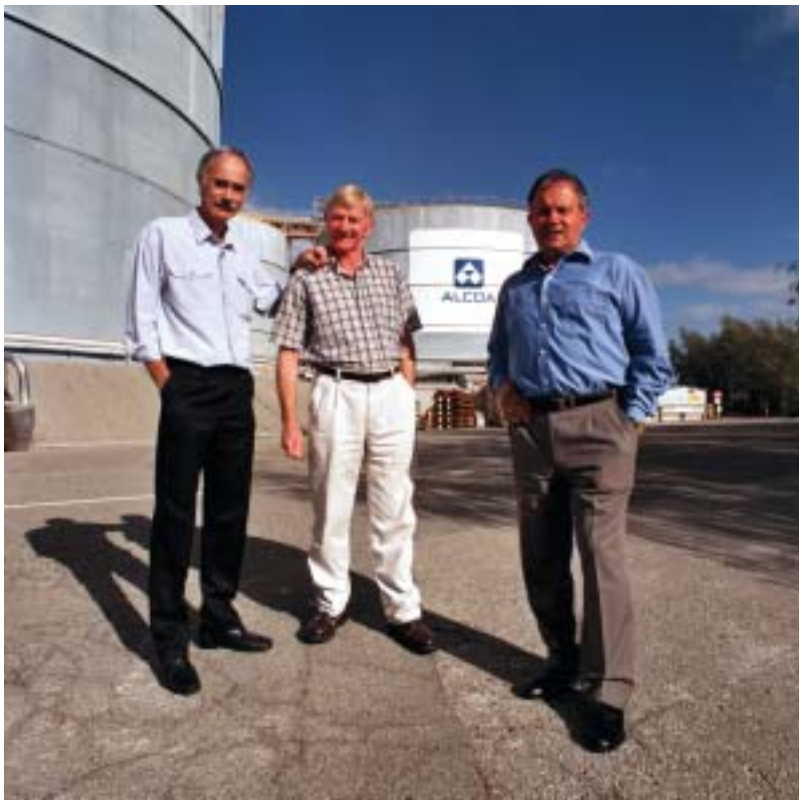
Women in Alcoa

Almost 10 years ago, Alcoa deliberately set a goal to actively employ more women. Although we have made some headway, it is frustratingly slow and not always easy to quantify. For example, the gender percentages have not changed much – the proportion of women has risen from around eight per cent in 1994 to now only about 11%. However, what has changed is the mix of roles that women hold. We now have more women in more diverse roles, and more women in senior positions.

In 2003 there were 35 female managers (19%) opposed to six (3.4%) in 1995 (Figure 7). The number of women in senior positions has also grown in parallel during that time. Of our current group of female managers, about 40% have been with Alcoa for five or less years. Retention of our female employees is a real emerging issue in Australia.

FIGURE 6 – Duration of service of employees





OUR 40-YEAR KWINANA REFINERY EMPLOYEES.

"Alcoa is part of my family, my life. You just couldn't get a better company to work for."

JOE FULGARO
40-YEAR EMPLOYEE
KWINANA REFINERY

OUR TRAINEE, APPRENTICESHIP, GRADUATE AND WORK EXPERIENCE PROGRAMS BENEFIT MANY YOUNG AUSTRALIANS.

We are looking very closely at how we can offer meaningful career paths to women in the organisation through, for example, networking and mentoring programs.

One of our real challenges has been attracting women to the resources/heavy manufacturing sector. Typically it has not been a sector which women have wanted to work in, which means we have to work extra hard to encourage female applicants to apply for positions. In response to this, in 1999 we launched a scholarship program called Future Women of Industry to assist, mentor and educate talented and enthusiastic young women about opportunities within the industry before they decide upon a career.

We encourage women to move into non-traditional roles and our percentages as a result are higher than the average for the industry. We also actively recruit and appoint very capable females into non-traditional roles where they had different backgrounds and experience to their predecessors. Despite this, of our 35 female managers in 2003, only three were in line positions. Most of our executive team has operational experience, so it is essential that more women in the organisation get an opportunity to be exposed to this particular aspect of the business.

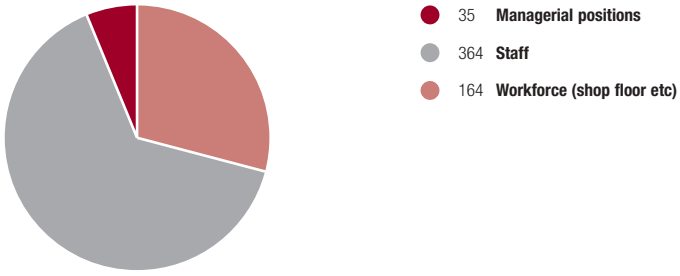
Essentially there is a serious business-based imperative fuelling our drive for diversity. We realise that if we don't make ourselves more attractive as a company to a broader range of people, we will not have the people we need to drive our future cost competitiveness in a relentlessly challenging global commodities market. By opening doors to women and actively seeking to recruit them,

"My time with Alcoa, and in particular the engineers, opened my eyes up to the diversity of an engineering career."

LAUREN SMITH
2003 FUTURE WOMEN OF INDUSTRY SCHOLARSHIP RECIPIENT

NEW TRAINEE OPPORTUNITIES NOW EXIST AT OUR FARMLANDS OPERATIONS.

FIGURE 7 – Roles held by women within Alcoa



we are ensuring we are tapping into the whole talent pool to attract the most qualified and often sought after people throughout our organisation.

Although we have made significant improvements over the past 10 years, we still need to do more. One area which we need to improve is our executive group where we only have two women out of 12 executives. To achieve a greater balance we will continue to focus on diversity as a business issue and explore new ways to support the women currently in the organisation.

Youth training programs at Farmlands

Alcoa provides a wide variety of training opportunities for young people in Western Australia and Victoria, spending more than $5 million on apprenticeship and training programs each year. In 2003 we recruited 22 new apprentices, 12 graduates and six trainees across our Australian operations, adding to our track record of training more than 1,000 apprentices since 1963.

A new rural traineeship at Alcoa's Farmlands operations has provided an opportunity for a young local to gain qualifications in his own backyard. Nineteen-year-old Clayton Sharp of Hamel is the first trainee to enter the 12-month program which provides extensive practical and theoretical training as well as a Certificate III in beef cattle production. He will complete the practical elements of the traineeship at each of Alcoa's Farmland operations in Wagerup, Pinjarra and Boddington.

University students have also been able to take advantage of the Farmlands operation. Agribusiness student Michelle Trigwell of Dardanup spent three months completing her practical element of her third year Muresk Institute Agribusiness studies at the operation. Numerous requests are received for work experience placements each year and Farmlands accommodates these on a first in, first served basis.

In addition to running 10,000 cattle, we have a 400 ha cropping program and have around 7,000 sheep running over 17,000 ha at Wagerup, Pinjarra and Boddington.

Recycling cans in many different ways

Recycling aluminium cans in Victoria creates employment and training opportunities for people with disabilities as well as providing valuable recycling services to the community. Alcoa Australia Rolled Products (Alcoa ARP) and Nadrasca Incorporated set up the Nadrasca Recycling Services as a joint venture to benefit both organisations in 1993.

Established in 1967, Nadrasca is a community based non-profit organisation which helps provide services to more than 300 people with disabilities. As one of the largest volume aluminium can collection and processing operations in Victoria, Nadrasca sells its aluminium cans to Alcoa ARP. In addition to working with Alcoa, Nadrasca also helps the Cash for Cans program on Melbourne Cup Day.

The main aim of the collection is to raise money to help street kids in Dandenong and surrounding areas. In exchange for the cans, Alcoa ARP donates money towards helping the kids. In 2003, Alcoa ARP sent 50 youths and their parents to a week long camp.

PARTNERSHIPS WITH EXTERNAL ORGANISATIONS ARE AN INTEGRAL PART OF OUR BUSINESS.

Partners with Portland

Native trees, shrubs and grasses have appeared around several Victorian communities during 2003 as the result of a very successful partnership between Seawinds Nursery and Portland Aluminium's environmental services group.

Seawinds – part of the local Kyeema organisation that provides support services for people with disabilities – propagated 60,000 plants last year which were then planted in and around the Portland Aluminium site, as well as Alcoa's locations at Anglesea and Point Henry. Plants were also provided to community groups and private landholders for revegetation projects.

Seawinds employees work hand-in-hand with the smelter's nursery crew to support land management projects and provide required plants. They also help out with some community and school group visits, and carry out plant propagation and nursery duties at the wholesale nursery run by the group. Employees also undertake some ground works for Portland Aluminium.

Windward Industries is another successful partnership with Portland Aluminium which was first established in 1985 and employs 10 people at its supported employment workshop. The employees work on site and are fully integrated into the workforce, undertaking recycling, component assembly, laundry and processing tasks. This integration process is invaluable experience for Windward employees who have achieved increased levels of self-esteem, confidence and vocational skills.

Employees help their communities

Personnel Employed by Alcoa Charity Help (PEACH), the Western Australian operations employee conceived, funded and administered charity trust, distributed almost $150,000 to 44 deductible gift recipient organisations in 2003. Started in 1980, nearly 1,100 employees contribute to the fund by payroll deduction.

More than $1.7 million has been distributed to over 200 charity groups in that time.

One of the main beneficiaries in 2003 was the Association for the Blind of WA which received $10,700 to buy 400 adult and children's white canes. The Association is the only agency in Western Australia which provides white canes and training in their use, free of charge to its clients. PEACH contributors joined sighted and visually impaired staff and members of the Association to celebrate International White Cane Day with a series of fun activities aimed at raising awareness about blindness and white cane usage. White canes are made from aluminium because of its light weight, strength and durability.

environment
dedicated to a healthy world

australia's aluminium
since 1963

environment

Since beginning to mine bauxite, refine alumina and smelt aluminium in 1963, Alcoa has always placed great importance on environmental management.

With our operations in Western Australia located on the metropolitan area's doorstep, we have been under scrutiny for a long time. Consequently, we have led the way in developing real environmental solutions.

We received recognition for this in 1990, when the United Nations listed us on the Global 500 Roll of Honour, for two decades of progress in environmental rehabilitation of our bauxite mining areas. Alcoa still is the only mining company in the world to have been recognised in this manner for rehabilitation of mining areas. We received further global recognition for our rehabilitation work in 2003.

As we look to the future, our environmental challenge has broadened into other areas such as air and water quality, and noise issues. Because of our location near populated areas, both in Western Australia and Victoria, we are seeing environmental issues merge into social issues. We are committed to working in partnership with our local communities to address these issues and come up with mutually beneficial solutions.

Rehabilitation recognised internationally

Alcoa received a prestigious international award in 2003 for its work in successfully returning the botanical richness of the jarrah forest in restored bauxite mines in Western Australia.

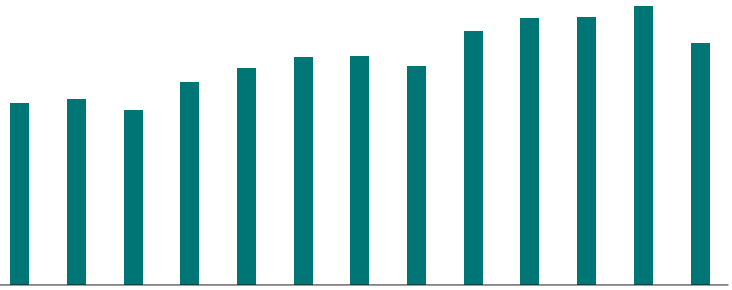
The Society for Ecological Restoration International (SERI) presented Alcoa of Australia with the Model Project Award, which recognises restoration projects that have truly advanced the craft of ecosystem restoration and upon which future projects may well be modelled, at a special ceremony in Austin, Texas.

The SERI is the peak society for scientists who study and work in the field of ecological restoration. The Society does not itself engage in restoration projects but instead its mission is "...to promote ecological restoration as a means of sustaining the diversity of life on Earth and re-establishing an ecologically healthy relationship between nature and culture."

The Alcoa restoration work has seen the number of plant species in the re-established young jarrah forest equal to the surrounding native forest (Figure 1). This is despite severe unfavourable seasonal conditions, including drought effects in 2002. The project has included research, development and implementation of many innovative practices and technologies in the areas of seed treatment, seed application, topsoil handling, mine planning and native plant propagation. It is the result of a collaboration of scientists from local universities, the Western Australian Department of Conservation and Land Management and the Botanic Gardens and Parks Authority working alongside Alcoa's scientists. For 2003 we cleared more land than we rehabilitated due to development of our next mining envelope at Huntly (Figure 2).

FIGURE 1 – Botanical diversity trend

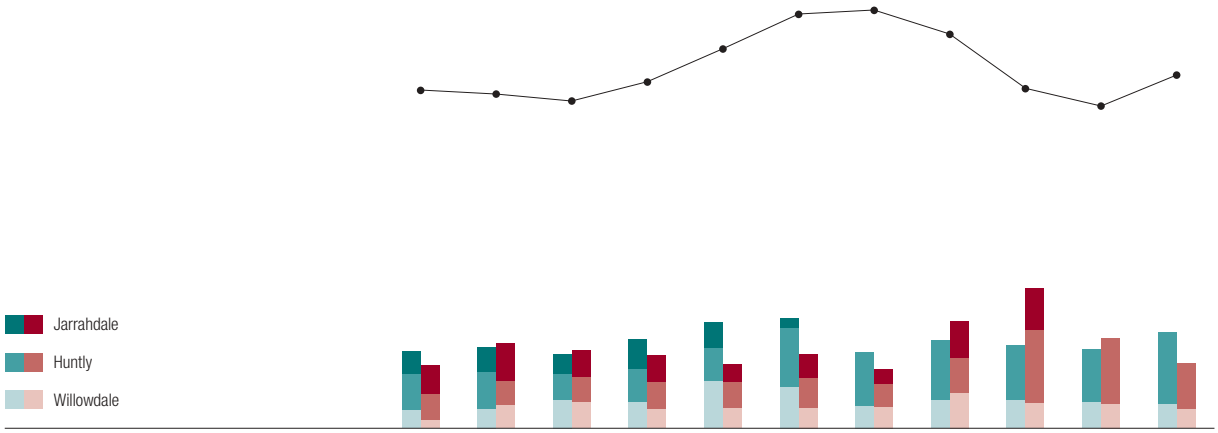
Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Percentage of jarrah forest species *(mean including planting)*	66.07	67.36	63.64	73.80	78.82	82.70	83.21	79.55	92.32	96.81	97.41	101.40	88.00



Note: Results greater than 100% mean that the number of plant species in rehabilitation monitoring plots was greater than the number in native forest control plots

FIGURE 2 – Clearing and rehabilitation

Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Annual clearing *(ha)*	512.7	537.2	486.9	587.2	700.6	729.1	500.8	583.5	547.9	526.6	637.3
Rehabilitation *(ha)*	418.1	562.1	513.2	480.3	421.5	488.2	393.3	704.9	928.5	599.2	429.4
• **Area still to be rehabilitated – all sites** *(ha)*	2,234.4	2,209.5	2,164.0	2,290.1	2,508.4	2,734.6	2,764.0	2,604.6	2,248.1	2,128.2	2,336.4



"This project is one of the best large-scale examples of native ecosystem restoration in the world."

THE SOCIETY FOR ECOLOGICAL RESTORATION INTERNATIONAL (SERI) AWARDS COMMITTEE

ALCOA LEADS THE WAY IN ENVIRONMENTAL REHABILITATION.

Restoring woodland communities at Anglesea

The Anglesea Heath woodland community is the richest and most diverse vegetation community recorded in Victoria and consists of more than 620 flora species or 25% of the total Victorian flora.

Progressive mine rehabilitation has been undertaken at Anglesea since the 1970s, but an increased focus on establishing a heathland community over the past two years has produced encouraging results.

A rambling flora survey completed in July 2003 found impressive early results from current mine rehabilitation techniques with over 55 indigenous plant species returning within only 15 months of the initial works. Monitoring the regeneration rate of individual species is now taking place to determine whether selective planting is necessary across the mine rehabilitation area to expedite the return to a heathy woodland community.

A more comprehensive monitoring survey was conducted again in November, which showed further improvements of up to 70 species returning to the area. This is a significant achievement considering the slow-growing regeneration characteristics of Anglesea heathland species.

Compliance

All of Alcoa's Australian operations are subject to environmental regulation. Our Western Australian refining operations are licensed under the WA Environmental Protection Act 1986.

Since the introduction of the Environmental Protection Act in Western Australia, Alcoa has conducted all of its operations under the Act's provisions. However, because the State Agreement Acts for both the Kwinana and Pinjarra refineries were enacted prior to the Environmental Protection Act, some doubt was cast as to the applicability of the Environmental Protection Act at these refineries. This doubt existed even though Alcoa's operations hold licences issued by the WA Department of Environment. So, to eliminate this doubt, in 2003, Alcoa and the Government of Western Australia agreed to variations to the Kwinana and Pinjarra State Agreement Acts that clearly stated that the Pinjarra and Kwinana refineries were subject to and operated under the provisions of the Environmental Protection Act.

The Victorian operations are licensed under the Victorian Environmental Protection Act 1970 and are regulated by the State Environmental Protection Policy (SEPP). The Point Henry smelter and the Portland Aluminium smelter are recipients of an Accredited Licence under Victoria's environmental licensing system.

Alcoa's environmental incident reporting system identified all of the breaches made in 2003 (Figure 3), and all relevant statutory authorities were notified appropriately. Corrective actions have either been implemented or are in the process of being implemented.

FIGURE 3 – Non-compliance incidents arising in 2003

Operation		Description of incident	Status at Q1 2004
Anglesea Power Station		• The location of stack testing test ports was not in accordance with the requirements of the relevant EPA Guide.	Agreement has been reached with the EPA that the sampling points are acceptable. Further work with the EPA is underway to determine long-term sampling point location.
		• The inlet pipe to the primary pond was not located properly.	The inlet pipe to the lagoon has been extended to prevent a recurrence.
		• Signage and security measures at the asbestos landfill did not strictly meet licence requirements.	New signs have been erected to replace old ones, the fence repaired and an inspection program implemented.
Mining	**- Willowdale**	• Occasional noise breaches under certain weather conditions.	A noise abatement program has been implemented (see p.48).
		• Too many tyres stored at site.	Resolved
	- Huntly	• A discharge of treated but untested wastewater occurred from the large holding pond.	Resolved
Refineries	**- Wagerup**	• Occasional noise breaches under certain weather conditions.	The Wagerup refinery is actively seeking to further reduce noise emissions. An application has been lodged with the Department of Environment for a variation to the assigned noise levels which, if successful, will bring the facility into compliance.
		• Two calciners, in separate incidents, recorded results from quarterly stack monitoring tests that indicated dust levels may have been in excess of discharge limits specified in the DoE refinery operating licence.	Modifications have been made to alarming systems. Investigations are ongoing into options to improve opacity meters as a tool for accurately measuring dust levels in calciner stacks.
		• An odour was experienced by a neighbour in September 2003 that was thought to be associated with the start up of the liquor burner. This is being investigated by the DoE as a potential breach of the Environmental Protection Act.	The source of odour for this incident has not been clearly determined and may well have been non-refinery in origin.
		• Insufficient placarding on some dangerous goods depots.	Additional placarding installed during April/May 2004
		• A waste storage facility used by a contractor had not been through the required approval process.	Approvals completed.
	- Kwinana	• Occasional noise breaches under certain weather conditions.	The weather conditions that cause non-compliance are rare. Attempts to resolve the status are in progress with a second consultant.
		• An employee altered residue dust monitoring data in the refinery's database.	This has been resolved with improved procedures and audit trails, relocation of dust monitors and regular review of dust results.
Smelters	**- Point Henry**	• A landfill site encroached on public land (unconfirmed).	Alcoa is in the process of obtaining a long-term lease rather than purchasing this land from the State following community consultation.
		• Zinc levels in stormwater were in excess of the SEPP for Waters of Victoria.	Changes to the State Environmental Protection Policy – Water in June 2003 resulted in no current limits for zinc in the new policy. Efforts to reduce zinc levels entering the water stream are continuing.
	- Portland	• Three carbon bake scrubber interruptions. Two cases resulted in temporarily elevated emissions and visible emissions.	The two events which caused temporary visible emissions were due to material in the exhaust system catching fire and the emission control system by-passing the emissions to protect the filter baghouses. The third event was due to poor combustion of volatile materials. All three events are being addressed by improving combustion within the system.
Alcoa ARP	**- Yennora**	• An overflow of a mixture of sewerage and ingot furnace backwash spilled into the arrestor pit and nearby pit.	Resolved
		• Licence limits for opacity on the rotary furnace and the melter 8 stacks were exceeded according to the strict definition of the licence.	Resolved
Bunbury Port, WA		• Insufficient bund capacity around the caustic tanks.	Design for upgraded bund completed. Upgrade expected to be completed during 2004.

Update on dust at Kwinana refinery

In January 2003, Alcoa informed the Department of Environment (DoE) that a Kwinana residue area employee had altered dust results in the environmental database. Following an independent review of data and procedures, the DoE announced in August 2003 that Alcoa had not breached the Environmental Protection Act.

The independent review involved the reassessment of more than 4,700 samples collected between October 1999 and mid-January 2003. Only two samples (less than 0.05%) were found to be above the Kwinana Environmental Protection Policy (EPP) limit. The DoE stated it was highly unlikely the dust collected in one of the samples came from our residue area, with respect to the other, doubt existed about its accuracy due to possible cross contamination and the age of the filter paper.

An internal review of the procedures relating to sample collection and analysis was completed in January 2003. New procedures based on Australian Standards have been audited and tested.

The DoE announced on June 30, 2003 that it would cancel the refinery's best practice environmental licence. The DoE acknowledged at the time that Alcoa did not knowingly provide misleading information and had taken quick remedial action after discovering the problem.

Noise issues in Western Australia

Noise limits are occasionally exceeded at Kwinana, Wagerup and Willowdale sites under certain climatic conditions.

Noise from the Willowdale mine conveyor system has been found to exceed night-time regulatory limits at one neighbour's residence. This mainly occurs in autumn and winter under light wind conditions. In 2003, we received 52 complaints in relation to noise from the conveyor system, however only five were from the resident of the site that is considered to be non-compliant. With the help of the owners of this site, we conducted extensive monitoring between June and September 2003. The remaining 47 complaints related to fixed plant noise and were from the one residence. Alcoa has since resolved the noise issue with this neighbour.

At Willowdale, 121 complaints were received in relation to noise from heavy equipment and blasting. All complaints were promptly investigated and outcomes fed back to complainants. Monitoring confirmed that in all instances, noise levels were below regulatory limits. Nevertheless, on many occasions when it was practical, mobile equipment was relocated to a different part of the mine with a view to further reducing the noise impact.

Wagerup refinery is periodically out of compliance with the noise regulations due to retrospective legislation which we have not been able to meet after taking all practicable steps. This is predominantly during the winter months. For this reason we are currently pursuing a variation to the noise level specified in the Environmental Protection regulations. The Department of Environment (DoE) has had our application independently reviewed which has confirmed that the variation to the noise levels we are requesting are reasonable, and reflects a request to make current noise levels legal, rather than a request to increase current noise levels.

The DoE is now consulting with the community on the conditions of the variation, so it can provide advice to the Environmental Protection Authority.

In the interim, Wagerup has offered to work with affected residents to further reduce the impact of refinery noise on their properties. We also progressed with noise control work on the bauxite conveyor system and transfer station.

"We recognise that Alcoa did not knowingly provide misleading information to the department, and took quick remedial action when it discovered the problem."

PAUL ROSAIR
DEPARTMENT OF ENVIRONMENT, KWINANA-PEEL REGIONAL MANAGER

National Pollutant Inventory (NPI)

Alcoa continued to report to the National Pollutant Inventory, demonstrating its commitment to the sharing of data and information on emissions performance with the Australian community.

During 2002-2003, we continued work on the development of comprehensive emissions inventories for alumina refineries in Western Australia (see p.50). This is part of a commitment to identify and quantify our main emissions. Out of a total of 90 reportable compounds on the NPI list, Alcoa's refineries in Western Australia trigger 33 and our bauxite mining operations trigger 25 compounds. Our operations in Victoria trigger 19 compounds on the NPI list.

At our refineries, we achieved significant reductions in acetaldehyde, acetone, formaldehyde, methyl ethyl ketone, polycyclic aromatic hydrocarbons and total volatile organic compounds as a result of VOC emission reduction projects in 2002-2003. Benzene was not triggered in the reporting year because of the suspension of operations of the Kwinana refinery liquor burner in May 2002 while new emission control technology is being investigated.

A minimal amount of toluene was triggered for the first time at the Pinjarra refinery. Lower fugitive dust emissions saw decreases in air emissions of lead and compounds, cobalt and compounds, fluoride compounds and particulate matter. An increase in sulphur dioxide was recorded due to more frequent and accurate stack testing.

At our mining operations, an increase in tonnes of bauxite mined has resulted in a slight increase in metallic substances in air emissions as well as an increase in carbon monoxide levels due to the use of additional explosives. Mobile equipment activity associated with the development of a new mining area resulted in an increase in dust levels.

At our smelters, several substances were reported for the first time including arsenic and compounds, cadmium and compounds, chromium compounds, copper and compounds, lead and compounds, magnesium oxide fumes, mercury and compounds and nickel and compounds. With no estimation techniques available for these compounds emitted from smelters, reporting relies on measurements. While these compounds are emitted in very low amounts, the accuracy of current methods has been a major challenge. As the accuracy has improved, results can now be reported. Work is presently underway as a joint aluminium smelting industry exercise to develop an estimation process.

Improvements to process and work practices saw fluoride compounds and particulate matter decrease at our smelters significantly compared to 2002. Increases in oxides of nitrogen were a result of variations in emissions levels from the process and also within the sampling technique. A process operation upset in part of the plant at the time of sampling at the Portland smelter resulted in an increase in polycyclic aromatic hydrocarbons and total volatile organic compounds levels compared to 2002.

At Anglesea, improvements to emissions calculation methods resulted in decreases in reported emissions of carbon monoxide, hydrochloric acid, sulphur dioxide and total volatile organic compounds, and increases in chromium compounds.

A variety of substances recorded by Alcoa ARP varied substantially from previous years. At Yennora, monitoring is only undertaken once a year, resulting in variations in emissions according to what is happening on the day samples are taken. Yennora will increase its testing in 2004 to get a more accurate representation of emissions. Similarly, the majority of significant changes, both increases and decreases, in emissions at Point Henry smelter resulted from changes in reporting and measurement techniques.

FIGURE 4 – National Pollutant Inventory air emissions

	Units	Bauxite mining	Alumina refining	Aluminium smelting	Anglesea power	Alcoa ARP
acetaldehyde	kg		53,000			
acetone	kg		190,000			
ammonia	kg		79,000			
arsenic and compounds	kg	88	310	235	7.9	6.9
beryllium & compounds	kg	1.2	2.0		4.5	9.4
cadmium and compounds	kg	1.5	150	45	3.6	2.42
carbon monoxide	kg	380,000	2,700,000	60,000,000	72,000	477,000
chlorine	kg					70
chromium (iii) compounds	kg	890	1,000	570	160	3.47
chromium (vi) compounds	kg	1.8	0.0003		13	12.4
cobalt and compounds	kg	5.7	2.0			
copper and compounds	kg	94	130	225	31	17
fluoride compounds	kg	1,700	1,100	390,000	720	21,380
formaldehyde	kg		62,000			
hydrochloric acid	kg				20,000	2,800
lead and compounds	kg	110	110	320	20	5.8
magnesium oxide fume	kg			910		380
manganese and compounds	kg	730	1,600			
mercury and compounds	kg		1,000		1.9	22.26
methanol	kg					43
methyl ethyl ketone	kg		54,000			1,400
nickel and compounds	kg	16	100	960	81	17.4
nickel carbonyl	kg					270
oxides of nitrogen	kg	900,000	4,100,000	156,000	3,600,000	141,000
particulate matter (PM10)	kg	2,100,000	1,400,000	134,000	370,000	85,600
polychlorinated dioxins & furans	kg		0.0011	0.000013	0.00093	0.000033
polycyclic aromatic hydrocarbons	kg		260	37,000	0.95	33
selenium and compounds	kg		63			
sulphur dioxide	kg	23,000	250,000	10,000,000	38,000,000	32,000
toluene	kg		12,000			1,200
total volatile organic compounds	kg	72,000	450,000	36,200	25,000	133,000
xylene	kg					660
zinc and compounds	kg	98	700			

Reducing sulphur dioxide emissions at Anglesea

During 2003, Alcoa worked with the Victorian Environmental Protection Authority to develop strategies to further reduce sulphur dioxide emissions at the Anglesea Power Station. These included developing a load reduction strategy, increasing monitoring, improving plume dispersion modelling and installing an online sulphur dioxide monitor.

Continuous monitoring of sulphur dioxide ground level concentrations is now conducted at three sites around Anglesea, after an additional site was added in mid-2003. Located at the Anglesea Community House, about 1.5km from the power station, the monitor has shown no ambient readings over the EPA intervention level at this site since it was installed.

Additional ambient monitoring at more sites, online stack gas monitoring and continuing work on refining the plume dispersion modelling will be priorities in 2004 to continue to address the sulphur dioxide issue.

Emissions at Wagerup refinery

Alcoa continued to focus on emissions reduction work at Wagerup during 2003, spending most of the year evaluating the success of the projects commissioned in 2002.

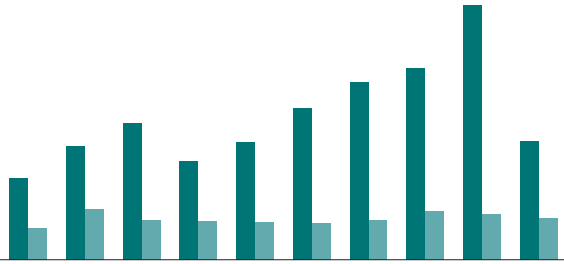
During 2002, a $25 million major capital works program was undertaken to further reduce odorous emissions in the calcination, digestion, evaporation and clarification areas. An independent auditor's report verified that the reductions were greater than we had claimed.

Results from the 2003 field odour survey and stack tracer studies indicated that the newly installed 100m multi-flue stack had, as expected, increased the dispersion of calciner and liquor burner emissions. A project to capture non-condensable gases which contain odorous volatile organic compounds (VOCs) and send them to the powerhouse for thermal destruction resulted in reductions in refinery emissions.

REDUCING EMISSIONS IS A CONTINUED FOCUS.

FIGURE 5 – Smelter fluoride emissions

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Point Henry *(Kg F/t Al)*	0.67	0.94	1.13	0.81	0.97	1.25	1.47	1.58	2.10	0.98
Portland *(Kg F/t Al)*	0.26	0.42	0.33	0.32	0.31	0.30	0.33	0.40	0.38	0.34



Note: Historical data amended to account for minor rounding errors for Point Henry smelter.

A newly installed vapour condensing system has also been effective in virtually eliminating vapour emissions from the digestion containment tanks, resulting in a significant improvement in localised odour levels and a reduction in total plant VOCs and odour emissions.

New efficient burners were installed on the heat recovery steam generator and one of the powerhouse boilers during 2003, resulting in significant reductions in NO_x (oxides of nitrogen) from the refinery.

One remaining boiler is still to be fitted with low NO_x burners and is currently scheduled for the first half of 2004 as part of the next major boiler overhaul.

Research and development into further emissions reduction opportunities continued in 2003 including slurry heater process control improvements, an alternative makeup water source investigation, and projects on the filter aid tank stacks, liquor burning feed storage tank and liquor burning leach tank odour reduction.

NEW TECHNOLOGY HAS PLAYED AN IMPORTANT ROLE IN REDUCING EMISSIONS.

Fluoride at Point Henry

The Point Henry smelter reduced its fluoride emissions by more than 50% last year, at a time of record-breaking production levels (Figure 5).

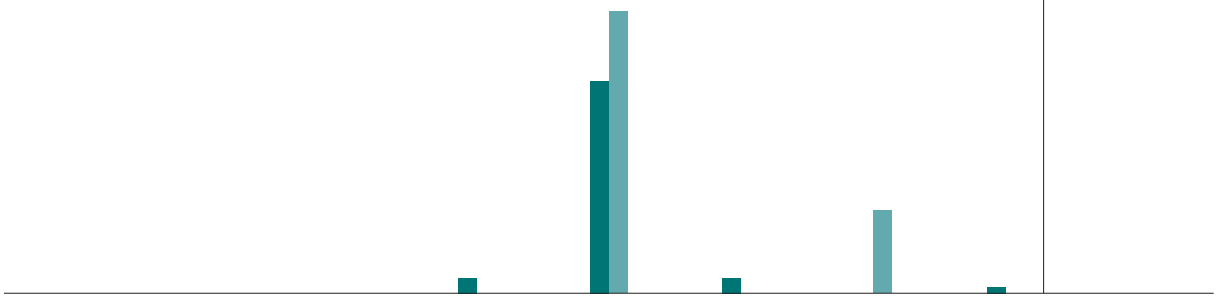
During 2003, a detailed fluoride emission reduction plan was devised and implemented which involved employees identifying aspects of the operations which contribute to fugitive emissions of fluoride. Work practices, equipment performance, emission monitoring and awareness communication were all reviewed, updated and reinforced during the year.

In March, a laser monitor system was installed in each of the six potrooms which provides instantaneous results for gaseous fluoride being emitted from the pots and escaping to the environment via the roof. A measurement is taken every 10 seconds and has helped target times of elevated fumes. The results correlate well with the figures obtained in the monthly roof vent monitoring conducted by the laboratory.

Installation of lasers has shown employees the impact of work activities and equipment performance on the release of fluoride emissions when they actually occur which has enabled rapid improvement in performance.

FIGURE 6 – Total water use

2003	Bauxite mining	Alumina refining	Aluminium smelting	Anglesea power	Alcoa ARP (Point Henry & Yennora)	TOTAL
Fresh Water *(ML)*	762	10,536	769	23	318	12,408
Poorer Quality Water *(ML)*	53	13,994	0	4,118	0	18,165
Total water use ***(ML)***	**815**	**24,530**	**769**	**4,141**	**318**	**30,573**



Working smarter with water

Making alumina from bauxite is a water intensive process, with our refineries using 24,530Ml of water in 2003. For this reason, about 95% of water used by Alcoa's Western Australian operations comes from sources developed by us in close proximity to our operating areas. We are committed to using water responsibly to conserve higher-grade water in particular for broad community use and environmental benefit.

Alcoa developed a Water Conservation Strategy in late 2002 and shared it with several stakeholders. While the company has a global goal of reducing process water use (and effluent discharge) from its operations, the goal in Western Australia is to achieve a 20% reduction in high grade fresh water use by the end of 2005.

The first step in achieving this goal was to install a pumping station on the Harvey drain at Wagerup, which was brought on line in 2003 and recovered 900Ml of lower quality agricultural drainage water during the latter part of winter in 2003. We were able to use this water as a substitute for higher quality Darling Escarpment runoff water, freeing up the better quality water for public water supply use.

This substitution is the equivalent of a 20% reduction in dependency on higher grade fresh water at Wagerup or around seven per cent for our Western Australian operations (Figure 6).

During 2003 Alcoa, together with the Water Corporation, initiated a feasibility study into the possible use of treated wastewater (recycled water) from Mandurah, by the Pinjarra refinery, following discussions with local community representatives. This will be completed in early 2004 and a decision made whether to proceed to the next phase.

We are also discussing ways in which Alcoa can contribute to the Local Government 'Water Campaign' Initiative with key stakeholders including the Peel Catchment Council, City of Mandurah and Shire of Murray.

Alcoa of Australia Limited and Alcoa Australia Rolled Products Pty Limited lodge their annual financial returns with the Australian Securities and Investments Commission where they are on the public record.

Alcoa of Australia's consolidated accounts include the following subsidiaries:

Alcoa of Australia (Asia) Limited
Coala Insurance Company Limited
A.F.P. Pty Ltd
Hedges Gold Pty Ltd
ACAP Australia Pty Ltd
Alcoa Portland Aluminium Pty Ltd
Eastern Aluminium Pty Ltd
Eastern Aluminium (Portland) Pty Ltd

Copies of Alcoa of Australia's consolidated accounts can be obtained by telephoning (08) 9316 5290 or by e-mailing to pr@alcoa.com.au

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