UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): March 17, 2005

ALCOA INC.

(Exact name of Registrant as specified in its charter)

Pennsylvania	**1-3610**	**25-0317820**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(I.R.S. Employer Identification Number)**

201 Isabella Street, Pittsburgh, Pennsylvania	**15212-5858**
(Address of Principal Executive Offices)	**(Zip Code)**

Office of Investor Relations 212-836-2674
Office of the Secretary 412-553-4707
(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the Registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02. Results of Operations and Financial Condition.

On March 17, 2005, Alcoa Inc. released its 2004 Sustainability Report, a detailed data-based review of the company's global environmental, social, and economic performance. A copy of the 2004 Sustainability Report is attached hereto as Exhibit 99 and is hereby incorporated by reference.

* * * * *

In accordance with General Instruction B.2 of Form 8-K, the information in this Current Report on Form 8-K, including Exhibit 99, shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of that section, and shall not be incorporated by reference into any registration statement or other document filed under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits.

(c) Exhibits.

The following is furnished as an exhibit to this report:

99 Alcoa Inc. 2004 Sustainability Report.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ALCOA INC.

By: /s/ Lawrence R. Purtell
Lawrence R. Purtell
Executive Vice President and
General Counsel

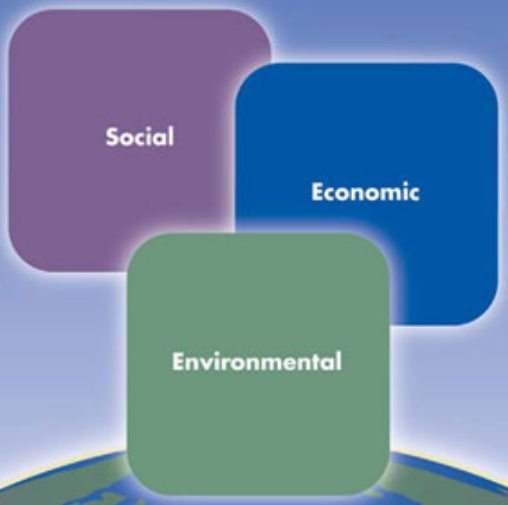
Dated: March 22, 2005

EXHIBIT INDEX

Exhibit No.	Description
99	Alcoa Inc. 2004 Sustainability Report.

2004 Sustainability Report

ALCOA



CEO Statement

Alcoa's vision is to be the best company in the world. To achieve this, we need to engage our stakeholders, set short- and long-term goals, implement initiatives to reach those goals, and be the best company in the communities in which we operate.

This belief has underpinned our efforts to work with these communities to gain a better understanding of how Alcoa affects their economies, societies, and environments. It has focused us on integrating sustainability into our decision-making processes.

This is not without challenges, as there is not always agreement between various stakeholders on the value of our involvement. These stakeholders bring expectations and experience, and we must continue to work with them to reach understanding and final agreement.

Alain J. P. Belda
Chairman and Chief Executive Officer

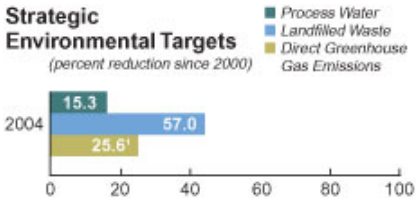
The 43 countries where we have operations are at varied stages of the economic, environmental, and social development cycle. We do not believe that our contribution to their sustainable development is limited to job creation and economic benefits.

Examples of our community engagement can be found throughout this third Sustainability Report, which is one of our key reporting tools. This year, in response to feedback received, we have published a separate executive summary to help increase readership. We have included again a Global Reporting Initiative (GRI) index to help readers more easily compare our performance to that of other organizations.

We also include current and historical data to evaluate the progress we've made in our quest of being the best.

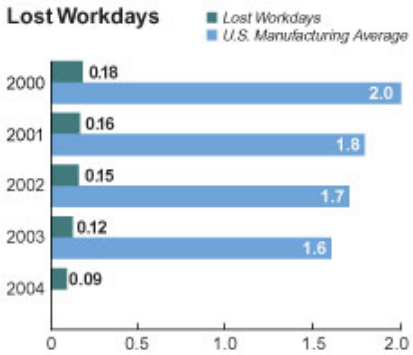
Some 2004 highlights include the following:

- The Public Issues Committee of our board reviews and approves sustainability policies, and this year we established a Sustainability Lead Team sponsored by Alcoa's top management—the Executive Council—to strengthen the connections to the business. We also created a senior managerial position for sustainability to deploy our sustainability policies and manage results.
- We continued to make good progress toward our 2020 environmental goals, with significant reductions in air emissions, wastes sent to landfills, and water use. We achieved our 2010 goal of reducing our greenhouse gas emissions by 25% below our 1990 level sooner than we thought was possible and now are working to maintain these reductions as we continue to grow the company significantly.



[1] *Reduction from 1990.*
Process water includes seawater used for process operations.

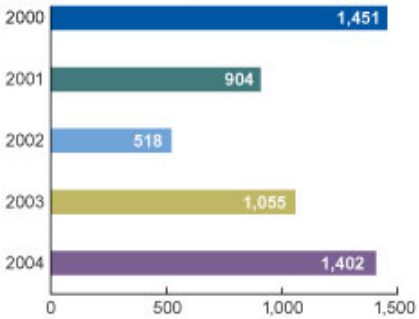
- We achieved corporate certification to ISO 14001 for our corporate-wide environment, health, and safety management system, and we have 205 separate locations certified to ISO 14001 as well. We have challenges ahead, but it is clear that we have processes and systems in place and employee commitment throughout the company that will enable us to make our 2020 vision a reality.
- For the first time, our lost workday rate dropped below 0.1, representing a more than 25% improvement from 2003. Our total recordable injury rate improved for the eighteenth consecutive year, and 81% of our locations had zero lost workdays. One of my disappointments is that our goal of a fatality-free workplace has escaped us again, as we experienced three fatalities in 2004—two employees and one contractor. We have made tremendous progress with our safety performance over the years, but our goal is achieving zero incidents and sustaining a fatality-free workplace.



2004 industry average not available. Lost workday rate represents the number of injuries and illnesses resulting in one or more days away from work with or without job transfer or restrictions per 100 full-time workers.

- The combined 2004 giving of Alcoa and Alcoa Foundation totaled US$28.8 million.
- Financial performance continued to improve. Full-year income from continuing operations increased 33% over 2003 on record annual revenues. We continued to pay down debt, which has been reduced by approximately US$2.0 billion since 2002, while investing in growth projects.

Income from Continuing Operations
(millions of US dollars)



- We again were named to both the Dow Jones Sustainability Index and *Fortune Magazine's* "Most Admired Companies" (first in metals category, second overall in social responsibility). In January 2005, we were also named one of the top three most sustainable corporations in the world by Corporate Knights and Innovest Strategic Value Advisors.

In 2000, we put in place our 2020 Strategic Framework for Sustainability together with targets to support our vision of becoming the best company in the world. In late 2004, we initiated a review of the framework to make it more comprehensive in terms of sustainability principles. The completed work will help with our 2006 planning processes and future reporting.

I welcome your comments on this 2004 report and invite you to submit them through our dedicated e-mail address (sustainability@alcoa.com), our online survey (www.alcoa.com/go/sustainabilitysurvey), or the survey found at the end of this report.

Alain J. P. Belda

Chairman and Chief Executive Officer

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Forward-looking Statement

Certain statements in this report relate to future events and expectations and, as such, constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements also include those containing such words as "anticipates," "believes," "estimates," "expects," "hopes," "targets," "should," "will," "will likely result," "forecast," "outlook," "projects" or similar expressions. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements of Alcoa to be different from those expressed or implied in the forward-looking statements. Alcoa disclaims any intention or obligation, other than as required by law, to update or revise any forward-looking statements. Some of the important factors that could cause actual results to differ materially from those in the forward-looking statements include material adverse changes in economic or aluminum industry conditions generally, including global supply and demand conditions and prices for primary aluminum, alumina and other products, or material adverse changes in the markets served by Alcoa; the company's inability to achieve the level of cost savings, productivity improvements or earnings growth anticipated by management, whether due to significant increases in energy, raw materials or employee benefits costs or other factors; political and economic risks associated with foreign activities, including fluctuations in foreign currencies or changes in the laws or governmental regulations or policies in the countries in which Alcoa operates; significant legal proceedings or investigations or the disposition of current proceedings other than as anticipated by Alcoa's management; changes in Alcoa's relationships with, or a significant downturn in the business or financial conditions of, key customers or suppliers; and the other risk factors summarized in Alcoa's Form 10-K for the year ended December 31, 2004 and other SEC reports.

Reporting Framework

As yet, there are no Generally Accepted Accounting Principles for reporting social and environmental performance. We continue to use the reporting framework emerging from the voluntary Global Reporting Initiative, as well as criteria established by other organizations, to guide the structure of this report.

Sustainability and Alcoa

ALCOA'S SUSTAINABLE STRATEGY

Alcoa's Vision, Values, Principles (see page 13), and control systems provide a solid foundation for integrating sustainability into our operations. Our sustainability strategy is designed to align our Values with society's values to ensure long-term success for Alcoa and our stakeholders.

Building from our Values, our sustainability goal is to achieve simultaneously financial success, environmental excellence, and social responsibility through partnerships in order to deliver net long-term benefits to our shareholders, employees, customers, suppliers, and the communities in which we operate.

Sustainability is not new to Alcoa, although we may not have always used the term. For many years, we have been striving for excellence with a focus on better understanding and managing the economic, social, and environmental effects we create within communities where we have a presence. The timeline below shows key dates on our sustainability journey.

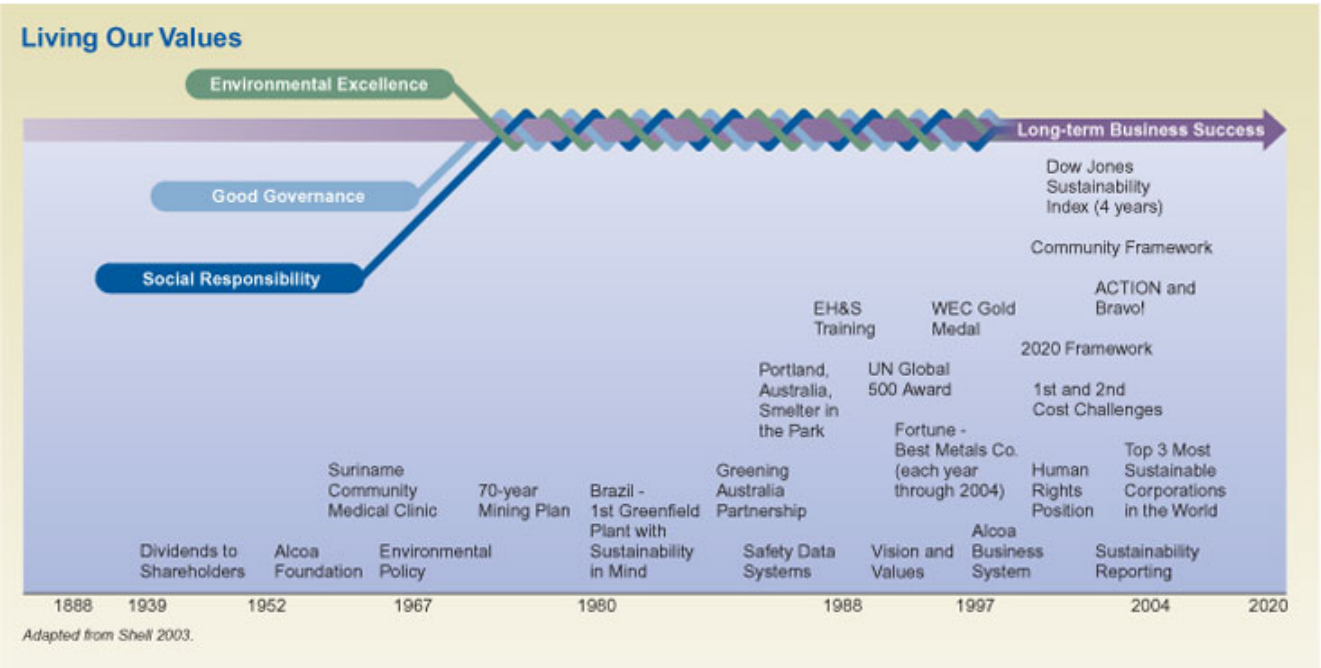
We are now taking the next step on this journey and building on the work of many of our sustainability champions over the years to integrate sustainability into our organization in a more systematic way.

During 2004, we created a senior managerial position for sustainability and also established the internal Sustainability Team, which is sponsored by Alcoa's Executive Council. This team has developed a plan built around integrating sustainability into our business by focusing on three strategies:

- People—We involve stakeholders in the development and delivery of our sustainability strategies.
- Processes—We integrate sustainability fully into all of our processes and systems.
- Products—We produce more sustainable products that contribute to people's quality of life.

Specific programs and our progress in achieving sustainability can be found in the detail of this report, but the following provides additional insight into these key sustainable issues and challenges for Alcoa:

- Climate change.
- Engagement with our stakeholders, both internal and external.
- Integration of sustainability into our business.
- Measurement system.
- Energy strategy.
- Products.
- Biodiversity.
- Technology.
- Facility end-of-life activities.



Climate Change

In 1998, we established a Climate Change Strategy Team that has developed and promoted our position on climate change, including our target of reducing greenhouse gas (GHG) emissions by 25% below 1990 levels by 2010. We achieved that goal in 2003, and we are now considering additional targets as we strive to maintain our GHG reductions as the company grows significantly. Here are some examples of our activities along the entire aluminum lifecycle chain.

Key Partnerships

We continue to actively partner with external stakeholders. We are a member of the Business Leadership team for the Pew Center on Global Climate Change, the World Resources Institute Green Power Market Development Group, and the World Economic Forum Registry (charter member). We are also actively involved in the development of GHG accounting standards in conjunction with the International Aluminium Institute, International Standards Organization, and the Intergovernmental Panel on Climate Change.

Technology Development

We continue to pursue the development of GHG-free inert-anode aluminum smelting, although there remain technical and cost targets to overcome. In addition, our introduction of a process for using CO_2 to neutralize bauxite residue will help prepare the residue for long-term disposal and reduce GHG emissions.

Power Generation

We are committed to decreasing our reliance on fossil fuels by increasing, where possible, our use of natural, renewable energy sources that help us lower our carbon dioxide emissions. This includes upgrading our older hydroelectric facilities to increase output up to 30% with no additional water flow (see case study on page five).

Smelting

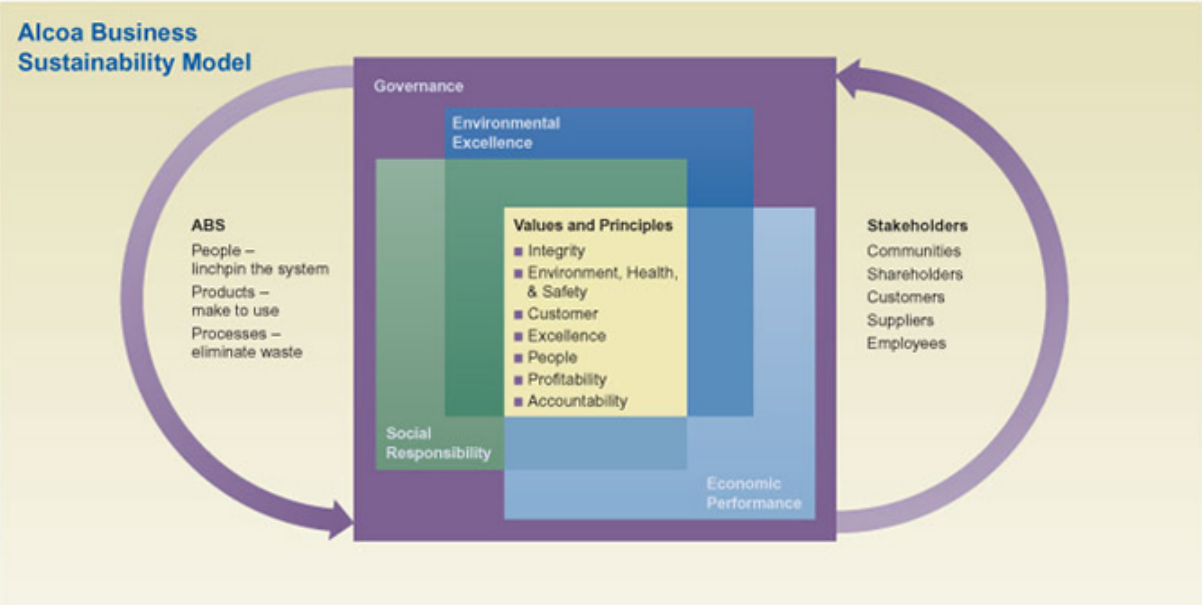
Our aluminum smelters continue to reduce perfluorocarbon (PFC) emissions. We reduced these emissions from 4.0 million metric tons of CO_2 equivalents in 2003 to 3.5 million in 2004. Furthermore, our U.S. smelters reduced PFC and anode carbon emissions below our industry's 2010 "Climate Vision" target levels with the U.S. government.

Secondary Smelting

We have a worldwide commitment to produce 50% of our fabricated aluminum product volume from lower energy and lower GHG-intense recycled metal by year 2020. Today, about 20% of our fabricated products are derived from recycled aluminum.

Fabrication

In 2002, we established the Alcoa Energy Efficiency Network based on an excellent partnership with the U.S. Department of Energy. The network conducts energy efficiency surveys at operating locations, identifying areas of possible improvement. The locations then agree to address



certain projects and are free to disregard others. At the end of 2004, the locations had agreed to develop plans for capturing more than US$50 million in savings with potential CO_2 emission reductions of 1.3 million tons. Nearly $20 million in sustainable annual savings have already been captured, most with less than a one-year payback for capital expenditures of $21 million.

Product Life

Aluminum used in transport applications pays for itself quickly in terms of fuel savings and greenhouse gas emissions. It is estimated that by 2020 or earlier, the aluminum used in automobiles, trucks, railways, and buses will provide the potential to save enough fuel to offset all of the greenhouse gases produced by all of the aluminum companies throughout the world[1]. The industry will be a net reducer of greenhouse gases on a society-wide basis.

[1] *Bruggink, Paul R. and Martchek, Kenneth J.* Worldwide Recycled Aluminum Supply and Environmental Impact Model. *Light Metals 2004. Edited by A.T. Tabereaux, TMS (The Minerals, Metals & Materials Society), 2004*

Recycling

Our beverage can recycling activities save an estimated 2 million tons of CO_2 each year compared to producing this same metal from primary sources. See page 41 for a more detailed discussion on our recycling efforts and page six for a schematic of the aluminum life cycle.

Engagement with Stakeholders

We define our stakeholders as any group or individual affected by our operations or that has the capacity to influence our operations or future prospects. While it is difficult to identify all of our stakeholders, a brief listing of some with whom we have consulted is included in the appendix on page 79. In addition, examples of stakeholder partnerships can be found throughout this report in the case studies.

A key part of our sustainability strategy is to begin working more closely with our stakeholders earlier in the development stage and during the implementation of new projects, thereby tapping into their expertise, increasing our understanding of their expectations, and defining a stronger relationship.

This engagement occurs at various levels:

- At the plant level with our employees.
- In the local communities where we operate.
- At the national and international level with governments and nongovernmental organizations.
- Through our membership in industry groups.
- Through Alcoa Foundation or on specific activities—either policy or project focused.

Turbine upgrade at Calderwood

More Hydropower Generation with Same Water Flow

A US$187 million upgrade using new turbine technology at Alcoa's Tapoco hydroelectric system in the United States will boost the generation capacity of individual turbines between 1% to 36% with no increase in water flow and environmental impacts.

The 326 megawatt Tapoco system consists of four dams and four power-houses in eastern Tennessee and western North Carolina. The oldest dam was built in 1919; the last in 1957. A new government license signed in early 2005 to operate the facilities for 40 more years provided the impetus for the modernization process.

In 2002, Tapoco completed the upgrade of one turbine at its Calderwood powerhouse to test and optimize new technology developed by engineering partner Voith-Siemens Hydro. The upgrade improved operation by as much as 36% with the same water flow. Upgrades to the second and third turbines at Calderwood are planned for 2005 and 2006, and the 10 turbines at the other three Tapoco powerhouses will be completed over the next 15 years.

By increasing generating capacity at Tapoco without constructing new dams, Alcoa is bringing additional zero-emission, renewable energy to the region and reducing dependence on electricity generated by fossil fuels. Cost competitive hydroelectric power will also help Alcoa's manufacturing operations in Tennessee remain competitive and ensure the company can continue to remain a significant source of local employment there.

Plant Level

Understanding what our employees think and involving them in planning for the future are important at Alcoa. Most business units and locations regularly collect employee feedback through formal and informal surveys, focus groups, and open discussion sessions.

For example, all plants within Alcoa Engineered Products conduct yearly employee surveys to evaluate leadership skills, communications, diversity, safety, and other key topics. They use the feedback to identify gaps and prioritize action plans. A pilot group of U.S. plants is using OptionFinder technology—handheld units which allow users to "vote" their answers to questions—to facilitate discussion within meetings. A corporate-wide survey of communications methods helps identify how we communicate company-wide.

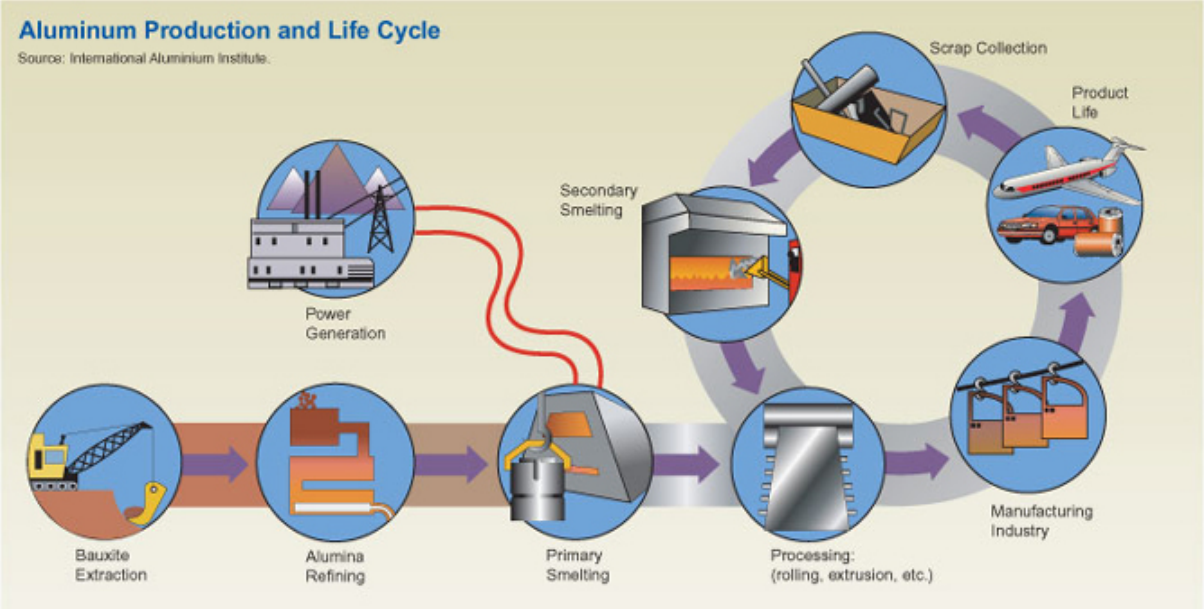
With a focus on people, the Alcoa Business System provides excellent opportunities for employee engagement. Around the company, employees are involved in identifying and solving problems utilizing a daily management process that identifies problems quickly as well as through Kaizen (rapid improvement) events, autonomous maintenance groups, and training.

At Kitts Green, United Kingdom, 85% of the workforce has been trained to problem solve using modern manufacturing techniques. At our Portovesme smelter in Italy, employees are engaged in total productive maintenance in five pilot areas to create the spirit of ownership of equipment among operators. Another good example comes from our Pinjarra refinery in Australia, where the Oxalate Kiln Advisory Group (OKAG) enabled employees to raise concerns and gain information about state-of-the-art emission controls being installed on the oxalate kiln.

Communities

We have deployed a community framework through which each operating location is expected to engage the local community by the most appropriate method for that community. This takes many different forms, such as community advisory groups and open houses. For more information, please see the community consultation section on page 59.

In addition, many of our employees engage the communities in which they work and live by serving on boards of directors or volunteering their services. These wide-ranging organizations include school boards, youth groups like the Girl and Boy Scouts, and emergency response organizations.



International

In 2004, Rick Kelson, Alcoa's chief financial officer, chaired a meeting of 12 non-governmental organizations and 11 Alcoa employees to promote an exchange of ideas and to obtain input on both mechanisms to engage stakeholders and Alcoa's future reporting process. The meeting covered our operations and our sustainability program, including our 2020 Framework and sustainability reporting. We also received feedback on our sustainability report, some of which has been incorporated in this report. We plan to hold further discussions in 2005.

In addition, we worked with host governments and national and international non-governmental organizations on specific projects throughout the year.

Memberships

Through membership in numerous organizations worldwide, we extend our leadership presence and reputation while also reaping the benefits of participating in groups with differing interests and knowledge.

In selecting which organizations to join, we first evaluate if the group shares our vision and values. The organization must also be aligned with our business strategy and bring a diversity of thinking to our business priorities. We also prefer joining organizations that can help us stretch beyond our current knowledge.

Our memberships range from industry-based organizations—such as the International Aluminium Institute—to groups that focus on business, the environment, and community. These include the Conference Board, Pew Center on Global Climate Change, World Business Council for Sustainable Development, World Resources Institute Green Power Market Development Group, European Foundation Centre, and Council on Foundations.

In many cases, our representatives to these groups take a leadership role through service on boards, executive councils, or various committees. For example, John Gardner, Alcoa's environmental manager for mining in Australia, is the current chair of the biodiversity taskforce for the International Council on Mining & Metals.

Alcoa Foundation

Alcoa Foundation serves as a key connection point with our stakeholders through grants to, and partnerships with, non-governmental organizations as well as programs like ACTION and Bravo! that encourage employee engagement within the community.

Fjardaál smelter groundbreaking on July 8, 2004

Defining and Measuring Sustainable Performance in Iceland

In an effort to ensure Alcoa's new Fjardaál smelter and related hydroelectric project in Iceland are designed, constructed, and operated in a manner that strives to balance environmental, social, and economical aspects, Alcoa and Landsvirkjun—the operator of the hydroelectric facility—have jointly worked with a broad coalition of external stakeholders to develop specific sustainability objectives, indicators, and metrics to measure the projects' performance.

An advisory group comprised of 30+ stakeholders from Alcoa, Landsvirkjun, and numerous governmental, educational, and non-governmental organizations is the backbone of the Iceland Sustainability Initiative. The group's purpose is to look forward—not back-ward—and develop indicators to measure the performance of the hydro facility and smelter against sustainability targets. Participants include project supporters and those opposed.

According to Tryggvi Felixson, managing director of Landvernd, the Icelandic environment association that has publicly opposed both projects and is a member of the Iceland project's advisory group, "The construction of an aluminium smelter and associated hydroproject in Eastern Iceland will regrettably have a profound effect on natural ecosystems and involves substantial environmental risk. Nevertheless, Alcoa's initiative to develop performance indicators to measure the socioeconomic and environmental aspects constitutes an important and useful contribution toward our understanding of development processes and how these can be improved over time."

The advisory group, which met twice in 2004, identified almost 50 indicators and nearly 70 associated metrics. Existing baseline data were gathered, and the group convened again in January 2005 to confirm the indicators.

In 2005, Alcoa and Landsvirkjun will establish specific targets and develop monitoring protocols. Both companies are fully committed to publicly reporting and communicating monitoring results.

For more information on the project, visit www.alcoa.com/iceland/en/home.asp.

Examples of 2004 grants from the foundation include the following:

- World Resources Institute: A US$200,000 grant will help mobilize business faculty, students, and leaders in Mexico and Brazil to put sustainability into practice in their communities and to promote opportunities for them to be connected with the broader Latin America Business, Environment, Learning, and Leadership (BELL) networks.
- Conservation International Foundation: This US$75,000 grant will help further develop and promote initial biodiversity assessment and planning (IBAP) methodology, which is designed to minimize the negative impacts of extractive industry projects and to maximize conservation opportunities.
- Student Conservation Association: With the help of Alcoa Foundation's US$90,000 grant, SCA will train eight participants from Canada through natural resource management internships. The participants will be emerging leaders who are working with organizations involved in conservation and sustainability initiatives.
- World Wildlife Fund: A US$150,000 grant will support graduate-level studies and peer networking for eight to 12 conservation leaders from Mexico, Costa Rica, and Honduras.
- Tsunami Relief: Immediately following the earthquake and tsunamis that struck Southeast Asia in late 2004, Alcoa Foundation provided monetary assistance to the American Red Cross International Response Fund. This and additional grants from Alcoa Foundation matched the contributions of Alcoans around the world. In addition, Alcoa of Australia donated funds to Care Australia, World Vision, Australian Red Cross, and Oxfam to help the devastated countries.

Other examples of Alcoa Foundation's work, as well as detailed grant-giving data, can be found in the society section on page 55.

Integration of Sustainability

To take advantage of opportunities for embracing sustainability, we need to further integrate this thinking into our internal processes—our governance practices, manufacturing design and processes, employee and business systems, and business opportunities.

Existing processes and systems, such as the Alcoa Business System (ABS) and financial and non-financial management systems, provide that opportunity.

Community Engagement Underscores Efficiency Upgrade Approval

By combining a state-of-the-art environmental impact assessment with an innovative community engagement process based on a sustainability framework, Alcoa's Pinjarra refinery in Australia received government approval in just seven months to increase annual production by about 600,000 tons.

"The community sentiment about the upgrade initially was a little skeptical as many felt that Alcoa had not been totally honest in the past and may continue to be so in the future," said Wally Barrett, proprietor of Pinjarra Bus Service. "A lot of this had been brought about by adverse press stories, which were not proved to be true and in many cases were incorrect, but the truth was never made available."

Pinjarra's comprehensive consultation and engagement process built on the refinery's existing Community Consultative Network (CCN). Major components included a community workshop with more than 40 stakeholders and the establishment of the 12-member upgrade stakeholder reference group (SRG) to work with the Alcoa project team on the initiative's environmental, social, and economic aspects.

"I believe Alcoa made the right decision and went about this in a totally open manner that instilled a lot more confidence in a lot of people," said Barrett, a member of the refinery's CCN and upgrade SRG. "A good example of action by Alcoa was when the refinery's bauxite residue SRG requested the next bauxite residue storage area be in a certain area that was not really favorable to Alcoa for many reasons, most of which were financial. Alcoa saw the reasoning behind the request and agreed to the area suggested, even though it brought a much higher cost."

This community engagement model, called a "best practice" by the chairman of the Environmental Protection Authority of Western Australia, is being adapted for other Alcoa upgrade and expansion projects throughout Australia.

In Iceland, we are developing indicators to measure the performance of both the smelter and the hydro facility in partnership with Landsvirkjun (owner of the hydroelectric station) and with the support of an advisory group. We are conducting a sustainability impact study in Guinea and an environmental impact assessment in Juruti, Brazil, for proposed refineries, and we are also engaging our stakeholders at an early stage in Trinidad. The lessons learned during these processes will be shared across the company.

Measurement

Alcoa has a strong history of using metrics as a means to drive change within the company. In 2000, we established our 2020 Strategic Framework for Sustainability that is supported by clear targets for measuring progress toward our vision for 2020. These targets are supplemented by environment, health, and safety (EHS) goals and complemented by our existing financial goals. Details of progress toward meeting these goals can be found in the respective sections of this report.

As part of our systematic approach to integrating economic, social, and environmental aspects throughout our businesses, we have initiated a review of the existing 2020 Framework to make it more comprehensive in terms of sustainability principles. This will also help us focus our future reporting and will be a major project for the Sustainability Team during 2005. Our goal is to complete this work for inclusion in our 2006 business plans.

Strategic Framework

- Supporting the growth of customer businesses.
- Standing among the industrial companies in the first quintile of return on capital among Standard & Poor's Industrials Index.
- Elimination of all injuries and work-related illnesses and the elimination of waste.
- Integration of environment, health, and safety with manufacturing.
- Products designed for the environment.
- Environment, Health, and Safety as a core Value.
- An incident-free workplace (an incident is any unpredicted event with capacity to harm human health, the environment, or physical property).
- Increased transparency and closer collaboration in community-based environmental, health, and safety initiatives.

Global EHS Goals
Environment

- From base year 2000:
  - 60% reduction $S0_2$ by 2010.
  - 50% reduction volatile organic compounds by 2008.
  - 30% reduction nitrogen oxides by 2007.
  - 80% reduction mercury emissions by 2008.
  - 50% reduction landfilled waste by 2007.
- 60% reduction in process water use, and discharge, by 2008.
- From base year 1990:
  - 25% reduction in greenhouse gas emissions by 2010. Assuming success with the inert anode technology, a 50% reduction by 2010.
- Implement effective environmental management systems, such as ISO 14001, at all locations by 2005.
- Zero environmental non-compliance incidents.
- US$100 million annual environmental and energy cost savings by 2006 through elimination of wastes and design for sustainability.
- Environmental targets and community relationship objectives incorporated into all Alcoa businesses' annual plans.

Health

- Locations will control 50% or more of their significant ergonomic risks by year-end 2005.
- 25% reduction in the incident rate of new work-related hearing shifts as compared to the hearing shift rate that exists for annualized year-end 2003 data *or* attainment of a 1% or lower incident rate of new work-related hearing shifts by year-end 2005.
- 60%, or more, reduction in number or magnitude of unacceptable employee chemical agent exposures by year-end 2005 from baseline 1999.
- 40%, or more, reduction in the number or magnitude of the top 10 noise sources at each location by year-end 2005 from baseline 1999.

- All locations will have in place an influenza vaccination program by year-end 2004.
- All locations will adopt no-smoking strategies and offer a smoking cessation program by year-end 2006.
- Employee assistance services and health promotion activities in place at all locations.
- Industrial hygiene programs in place and risks quantified at all locations.
- Occupational medicine programs in place and required medical evaluations completed annually.
- Community health initiatives at all locations.

Safety

- Zero fatalities, zero lost workday injuries.
- Zero incidents.
- Deployment of risk management and reduction programs to eliminate causes of injuries.

Energy Strategy

As one of the world's large users of electricity, we must balance our need for low-cost and reliable energy to meet our financial goals with responsibility to both the environment and society.

Over the next 30 years, the world demand for energy is going to double. Most of this growth will come from developing countries like China and India, where demand for electricity will typically outstrip supply and limit the amount of industrial growth that can occur.

Traditionally, Alcoa smelters have been located in deregulated energy markets, such as the United States, where energy costs have escalated. Our challenge today is to locate new smelters where we can help bring sources of power and/or jobs into a country and at the same time benefit from lower-cost energy, which is essential to competitiveness. This strategy helped shape our decision to build the new smelter in Iceland, to explore doing the same in Trinidad, and to expand our smelter at Alumar in Brazil.

When we build a smelter, we plant the seeds for other industries to also establish roots in that area. We also contribute to the community through employee volunteerism, grants, and other community-based initiatives.

In addition to finding low-cost sources of energy, we are also exploring ways to reduce the amount of energy we consume and to increase our use of renewable energy. These issues are covered in more detail in the environment section of this report.

Products

Aluminum is one of the world's most sustainable materials, with about 70% of the metal ever produced still in use. Most other materials likely have substantially lower values due to their material properties, longer history of production, or lower recovery/recycle value. Aluminum also offers a significant range of benefits—high strength, lighter weight, longer life, etc.—that helps our customers' products become more sustainable as well. That's why we are focused on better understanding the sustainability of our current products and opportunities for improving and generating new ones.

We are involved in developing products and processes to increase both the amount of aluminum used throughout the world and that which can be recovered for recycling. For example, we worked with Pittsburgh Brewing Company to introduce the first national beer in an aluminum bottle. In Spain, we built a highly efficient recycling plant to handle aluminum products previously unrecyclable due to environmental concerns caused by the burn-off of paints and lacquers.

Biodiversity

We recognize that biodiversity is critical for sustainability, and we have developed programs to address this important issue. For example, our corporate mine rehabilitation standard requires that baseline biodiversity surveys are conducted prior to developing mines, so that potential impacts on sensitive species or communities can be avoided and baseline information can be used in developing rehabilitation strategies. New mines and mining areas are implementing this standard. However, in some developing countries there is a lack of expertise to do this, and we are seeking to build this capacity within local scientists.

For our major mines located in Western Australia, Poços de Caldas, Brazil, and Trombetas, Brazil, there is routine follow-up monitoring after baseline surveys. In Western Australia, the intensive biodiversity monitoring program covers a range of objectives, including the following:

- Re-establishment of native plant species in rehabilitated areas.
- Re-colonization of fauna in rehabilitated areas.
- Long-term monitoring of undisturbed and mined areas to follow flora and fauna succession.
- Mapping and re-mapping the distribution of Phytophthora dieback disease in forests and rehabilitated areas.

The Western Australia fauna monitoring program covers a wide range of fauna groups, including mammals, birds, reptiles, frogs, and a selected range of invertebrates.

Our long-term success depends on comprehensive and consistent programs to understand, protect, and promote biodiversity, and we intend to do so. For more information, see the biodiversity section on page 33.

Technology

For Alcoa, staying at the leading edge of technology has been an integral part of business from the very start. For more than a century, our technology groups have been helping us use science to create and maintain a competitive edge. In the process, we have developed and harnessed some of the world's best technological ideas and solutions.

Throughout the world, we work with suppliers, customers, and other stakeholders to continuously improve our sites, materials, processes, and products within sustainability principles.

At the heart of this effort is Alcoa Technical Center (ATC), the world's largest light metals research lab located outside of Pittsburgh (USA). Our scientists, engineers, technicians, and support personnel develop highly innovative process and product solutions; continuously enhance customer use and application of Alcoa products; and solve environmental problems by developing sustainable manufacturing processes and products.

ATC is part of a closely linked network of Alcoa labs located around the world. Our technology groups routinely collaborate not only among themselves but also with our businesses on product- and process-related issues that address both current needs and long-term opportunities.

For example, our scientists are developing and testing alternative lubricants for our fabricating locations that minimize volatile organic compound (VOC) emissions and reduce ongoing costs (see case study below). They are also investigating new engineered designs and natural systems to better manage stormwater runoff (see case study on page 37).

Alternative Lubricants Reduce VOC Emissions, Treatment Costs

In an effort to meet its environmental goal of a 50% reduction in volatile organic compound (VOC) emissions by 2008 and to comply with increasingly stricter air regulations, Alcoa is developing and evaluating non-oil-based lubricants and related process changes for its metal forging and rolling operations worldwide.

Alcoa's Cleveland Works (USA) was facing either a 35% reduction in production or more than US$10 million in capital expenditures to reduce VOC emissions from its forging operations to meet stricter requirements if permit negotiations were not successful.

To overcome the challenge, the facility began using water-based lubricants and implemented process changes, such as how the lubricants are applied. These changes have resulted in a 10% reduction in VOC emissions and the avoidance of costly end-of-pipe treatment systems that would have increased both energy use and carbon dioxide emissions. In addition, Cleveland Works is saving approximately US$2 million annually in operating and maintenance costs. The technology and methodologies will be transferred to other Alcoa forging operations in Hungary, Mexico, and the United States.

In collaboration with the U.S. Department of Agriculture and researchers at the University of Illinois at Chicago, Alcoa is also developing and testing the use of bio-based lubricants—made from sustainable agricultural products like soybeans rather than from petroleum-based feed-stocks—for metal rolling applications. Benefits besides being an alternative source of lubricant material include VOC emission reductions of 50% or more and the avoidance of costly air treatment systems.

In addition to testing the application of bio-based lubricants for aluminum rolling, the team is developing a complete life-cycle analysis to compare all inputs and outputs of both oil- and bio-based lubricants.

Facility End-of-life Management

At times, we may need to close a facility due to asset repositioning, strategic direction, losses, or other reasons. During this process, we make every attempt to minimize the impact on the community, our employees, and the greater region.

Our assistance to employees affected by a facility's closure varies from situation to situation due to labor contracts, government partnerships, local laws and regulations, and more. Our Values guide us in this. In general, we provide employees with severance compensation as well as outplacement assistance and retraining opportunities.

For example, in April 2004 we announced that we would be idling our continuous caster operation in San Antonio, Texas (USA), at year's end. In the intervening eight months, we used onsite workshops and an outside firm to provide career transition services—resume preparation, interviewing skills, job search techniques, and networking skills—to the plant's 175 employees. We also worked to place employees with transferable skills at other Alcoa locations. On the compensation side, we provided severance pay based on years of service and will continue life and health insurance for one year (or until employment is found).

In Jamaica, our Jamalco operations used its Life after Redundancy Programme to assist the 61 employees affected by the closure of the Breadnut Valley mining operations in 1999. Employees received severance pay based on number of years served and attended company-sponsored seminars on psychological and mental adjustment to new life phases, entrepreneurial skills for starting a business, financial planning, investing, wealth creation, and resume writing. In addition, Jamalco uses services provided by a company started by former Breadnut Valley employees (see case study below).

One of the most visible aspects of our process is how we prepare the facility and land for reuse. When a plant is identified for closure, an Alcoa team evaluates the asset (real estate, buildings, infrastructure, utilities, easements, etc.) to determine the best potential reuse of the facility. We then develop the plans and contracts required to achieve the outcome. In some cases, this work may include environmental remediation and demolition. In other cases, the facility can be reused with minimal modifications. The ultimate goal is to place the asset back into productive reuse so that the community can continue to have a solid tax and employment base.

RECO employees planting calliandro in Jamalco's rehabilitation program

Employee-formed Company Lessens Impact of Mine Closure

When the Breadnut Valley mining operations in Jamaica closed in 1999, a group of employees formed the Redundant Employees Company (RECO) to provide services to Alcoa's Jamalco operations and other businesses in the local community.

RECO's 32 permanent employees—half of which are former Jamalco employees—provide the workforce for Jamalco's land rehabilitation efforts as well as maintenance services for Jamalco's deep well and sewage pumps, equipment in the machine shops, and cranes. RECO's innovative approach has allowed Jamalco to concentrate on its core business of refining bauxite into alumina while reducing costs associated with maintenance.

"The transition from working for Jamalco to working for RECO has not been a difficult one, as RECO's management maintains the high ideals and principles taught by Jamalco and its management team," said Obediah Morgan. "Since working with RECO, my family and I have benefited tremendously by being able to assist with my children's education, purchasing a motor vehicle, covering funeral expenses, and placing some of the money I received when leaving Jamalco in investments."

He adds, "RECO's management has not shortchanged the community during its tenure as employers in the Breadnut Valley region. They have maintained the working relationship within the community and have tried to bridge the gap left by the relocation of mining activities."

An example of our work in this area involves the Troutdale, Oregon (USA), facility, where we permanently closed a smelter that was obtained through the acquisition of Reynolds Metals Company. The smelter was an old design that could not be economically operated. We evaluated the facility and determined that it presented a significant opportunity to the region as an industrial and transportation hub. We also quickly determined that the structures built for aluminum production could not support this redevelopment vision. We embarked on a US$20 million decommissioning program to clear the land and remove environmental liabilities.

In 2004, we entered into a purchase and sale agreement with the Port of Portland to transfer Troutdale's 283 hectares (700 acres) to the port once we completed the decommissioning and environmental work. We anticipate that the sale will close in 2006. In addition to the redevelopment plans, which include a regional transportation hub and light and medium industrial development, 63 hectares (156 acres) are being preserved as open space for the greater community. The facility that produced aluminum for more than 60 years is now positioned to become the anchor in the continued development of the area.

The experience we have gained in the redevelopment of former facilities is being used to ensure that our new facilities can be more easily redeveloped for different uses in the future. Issues such as design parameters, building materials, and methods of construction have been evaluated to ensure that the facilities can be more readily reused or more easily removed when their useful lives as aluminum production facilities end.

VISION, VALUES, AND PRINCIPLES

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.

Values

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.

Tianjin location

Alcoa's Opportunities, Challenges in China

Over the next few years, Alcoa is planning to employ more than 5,000 people and make over US$1 billion in additional investments in China, ranking it as one of the country's 10 largest foreign investors.

Within its China operations, Alcoa steadfastly adheres to its Values and Principles while acknowledging the country's unique regulatory environment and socio-economic circumstances. This has resulted in Alcoa locations like Shanghai and Tianjin being considered model plants recognized by local authorities for their environmental, health, and safety practices and achievements. In addition, Alcoa adheres to a 40-hour workweek, pays premium for hours worked over that limit, and contributes to all required pension and housing funds. In a country where women have limited representation in professional and managerial positions, Alcoa locations typically have women in more than 25% of these positions, and the percentage continues to increase.

There are challenges. China is about the collective good rather than the individual. Since Alcoa employees in China typically earn more than non-employees, there is a need to grow more business in the communities to ensure fair employment for all.

There is also the challenge of bridging the gap between Alcoa's vision and policies and employee experience and knowledge, which are often not as developed as those in established economies.

To meet these challenges, Alcoa gains a thorough understanding of the local community to assess variances from Alcoa values, policies, and procedures and to evaluate the effect any changes will have on employees and the community. Other actions have included joining the China Business Council for Sustainable Development and working with the China Association for Employment Promotion on a nationwide program to enhance the skills and expertise of China's unemployed.

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 behaviors, actions, and results.

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

Principles

Integrity

- We live our Values everywhere, all of the time.
- We demonstrate integrity in our behavior and actions.
- We keep our promises.
- We have the confidence and courage to ask for help.
- We expect integrity from every Alcoan and do not tolerate unethical behavior.
- We avoid conflicts of interest but will declare situations where they may occur.
- We expect integrity from our customers, suppliers, and others who do business with us.
- We communicate openly with individuals and communities on issues that affect them.

Environment, Health and Safety

- We value human life above all else and manage risks accordingly.
- We relentlessly pursue and continually improve EHS systems and processes to achieve an EHS incident-free workplace.
- We do not compromise our EHS Value for profit or production.
- We comply with all laws and set higher standards for ourselves and our suppliers where unacceptable risks are identified.
- We support pollution prevention and sustainable development, by incorporating social responsibility, economic success and environmental excellence into our decision making process.
- We measure and assess our performance and are open and transparent in our communications.
- We supply and use safe and reliable products and services.
- We use our EHS knowledge to enhance the safety and well-being of our communities.
- We are all accountable for conforming with and deploying our EHS Value and Principles.

Customer

- We deeply understand our customers' needs and consistently meet or exceed them through ABS.
- We build strong long-term customer relationships at all levels.
- We cross organizational and geographic boundaries to seamlessly serve customers.
- We are the leader in our chosen market segments.
- We develop innovative product, service, and information solutions.
- We develop and nurture clear Alcoa and product brand identities.
- We develop and maintain a strong commercial organizational capability.

Excellence

- We continuously set goals beyond the best.
- We demand, recognize, and reward excellence.
- We achieve system excellence through application of the rules of our system and by rapidly implementing best practices.
- We eliminate waste by rapidly solving problems at their source.
- We move practical and theoretical limits through innovation.
- We have rapid change as a mind-set.
- We are committed to excellence by living our Values.
- We empower our people through a diverse learning organization to capture the best from everyone.

People

- We treat each other with dignity and respect at all times.
- We seek to understand each other's ideas and suggestions.
- We value diversity and our individual differences.
- We create and seize opportunities for growth and development.
- We seek and accelerate change.
- We continuously re-design our work to eliminate waste and improve the value of our work.
- We provide appreciative and constructive feedback to each other to improve our individual and team performance.
- We create the appropriate balance in our work and family lives.
- We create value in the community in which we live and work, through our presence and leadership.

Profitability

- We all understand how our job contributes to profitability.
- We eliminate waste every day, reducing our costs and capital requirements.
- We earn our right to grow by achieving returns that exceed our cost of capital.
- We aggressively pursue organic growth by creating exceptional value for customers.
- We make strategic acquisitions and integrate them excellently.
- We openly and effectively communicate our financial results internally and externally.
- We do not make money at the expense of our Values.

Accountability

- We first recognize our role and responsibilities, then take ownership, and accept the consequences of our actions.
- We act with a sense of ownership in our workplace.
- We encourage an environment of risk taking within the context of accountability.
- We solve the problems in our area of responsibility and drive continuous improvement of our work.
- We do what we say we will do.
- We communicate openly as positive team members to increase the performance of our teams.
- We recognize the impact that our own actions have in all outcomes.
- We recognize individual and team accomplishments and successes.

Idled Plant Overcomes Energy, Labor Cost Challenges

After being idle since 2001 due to soaring electricity prices, Alcoa's Wenatchee smelter in Washington (USA) restarted operations in December 2004. The plant's employees had been receiving regular wages and benefits during the downtime, performing upkeep at the plant and volunteering in the community on a full-time schedule.

"When I volunteered with estate sales at the YMCA, there was not a day that went by when I didn't hear how much they appreciated the help," said Jo Keyser, smelter employee who serves as president of the Wenatchee Aluminum Trades Council. "One of the things that stands out in my mind is how the community service projects have improved attitudes and boosted morale at the plant."

The restart of operations came about once the smelter was able to secure a long-term competitive power agreement, tax relief, and a new labor agreement that addressed spiraling healthcare costs. The plant's 400 employees resumed their full-time work in the smelter.

"I'm elated that the plant restarted, and the skills I learned working as a volunteer during our idled time have paid off at my job at Alcoa," said Jeff Foglestrom, a mechanic at the smelter. "I'm excited to be able to remain in this community and that the future looks bright for the plant."

Alcoa Intalco Works, a second Alcoa smelter in Washington negatively affected by rising costs, continued to maintain a consistent workforce in 2004 following a 57% reduction in employees in 2003. A partnership between Alcoa, government agencies and the employee union resulted in outplacement services, training, and support for the displaced employees.

Profile

ORGANIZATIONAL PROFILE

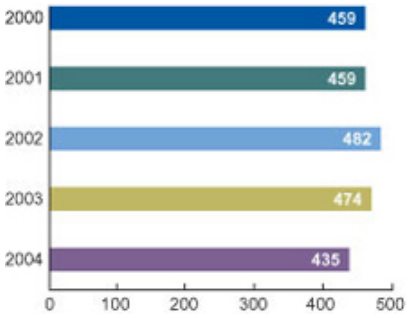
Reporting Organization

Alcoa Inc.

Products and Services

In addition to aluminum products and components, Alcoa also markets consumer brands that include Reynolds Wrap® aluminum foil, Alcoa® wheels, and Baco® household wraps. Among our other businesses are vinyl siding, closures, precision castings, and electrical distribution systems for cars and trucks.

Number of Locations



As of year end.

Countries with Alcoa Operations

As of the end of 2004, Alcoa operated in 43 countries. A complete current list is available on alcoa.com.

Nature of Ownership

Formed in 1888 under the laws of the Commonwealth of Pennsylvania, Alcoa Inc. is a publicly listed company on the New York Stock Exchange (NYSE ticker symbol: AA).

Key Statistics *(As of December 31)*

	Employees	Sales*	Debt*	Equity*	Assets*
2003	120,000	21,092	7,266	12,075	31,711
2004	119,000	23,478	6,300	13,300	32,609

* *Millions of US dollars.*

Ten-year historical data can be found in the Annual Report. Data changes from 2003 reporting due to reclassification of discontinued operations.

Markets Served

Alcoa serves customers in the aerospace, alumina, aluminum ingot, automotive, commercial transportation, homes and commercial buildings, industrial products and services, and packaging and consumer markets.

REPORT SCOPE

Contact Person

Anita Roper

Director-Sustainability

If you would like to write to us about this sustainability report, please send an e-mail to sustainability@alcoa.com. To provide anonymous feedback, please complete our online survey at www.alcoa.com/go/sustainabilitysurvey.

Reporting Period

January 1 through December 31, 2004. This is Alcoa's third sustainability report in this format. Where possible, we have provided five years of data to show trends in our performance.

Boundaries of Report

Data contained in this report are for Alcoa's global operations unless otherwise noted as regional.

Alcoa Metrics System

Alcoa's metrics system is the source of much of the data in this report.

In 1988, we initiated a process to collect and display current detailed information on safety in a way that would be available to all employees. We have expanded the original data system to include incident management, and we now use the system for all environmental, health, and safety data collection and analysis, incident management, and reporting.

At any time, we can use the system to determine current safety statistics, including accidents or near misses that occur anywhere in the world on a particular day. We can also view detailed reports on incidents, evaluate the corrective action plans or status of a corrective action, and evaluate our progress toward our goals in

environment, health, and safety. The system is an excellent management tool that has helped us facilitate our rapid progress in these areas.

As part of our commitment to openness and transparency, we began publishing real-time safety data publicly on alcoa.com in 2003 to provide timely insight into our performance on this critical measure.

We continue to work on determining what regional or global metrics are required to guide us toward the achievement of sustainability, particularly in the more complex and difficult-to-measure social aspects of our operations.

Basis for Reporting on Joint Ventures, Partially Owned Subsidiaries, Etc.

Data in this report are drawn from those operations where Alcoa has majority interest and/or management control.

REPORT PROFILE

This third sustainability report continues our efforts to become more transparent about our operations.

In this report, we provide information on our continued progress to integrate the environmental, social, and economic aspects of our operations. Our use of online reporting ensures a wider distribution of this information and provides us with the ability to support this report with additional information in a timely manner.

To help ensure the information we provide meets the needs of our readers, we encouraged our stakeholders to provide feedback on our 2003 report through direct discussions and the distribution of the report and an online survey via CSR Wire to more than 5,000 organizations that are interested in corporate social responsibility. As of December 31, 2004, 110 people responded to the online survey.

As a result of this consultative process, we have retained the basic structure of the previous reports with performance data supported by illustrative case studies. We have also [continued on page 18]

Employees of Alcoa's Deschambault smelter in Canada and their families spruce up a primary school playground during the 2004 Taking Action week

The Challenge of Measuring Community Engagement

Measuring Alcoa's community engagement performance beyond funds granted is challenging, but progress is being made.

In the United States, 125 locations are subject to a quarterly metrics assessment that evaluates eight categories of performance on a four-step scale: community assessment; events; effective government relations; effective media relations; effective contributions and employee involvement; community consultation; participation on statewide teams; and value added.

Each plant receives guidance on how to move from the starting point to full compliance in each category. To assure that high performance is achieved and sustained, the quarterly results are shared and reviewed with the business unit presidents, group presidents, and other senior Alcoa management. A similar system is used in Australia, and implementation has begun in European and Caribbean locations.

Employee engagement forms another dimension of Alcoa's community involvement, and calculating this impact is difficult. We report the funds awarded through our ACTION and Bravo! grants as well as the number of hours, number of employee volunteers (ACTION only) and average hours per volunteer. We also measure and report on our Taking Action activities through estimates of NGO, community member, and employee involvement, as well as stories of events and employee experiences.

These measures do not comprehensively capture the total amount of volunteer time employees give to their communities, as these are personal contributions made on discretionary time. There are voluntary standards to guide a company on what it can report, and we have chosen to report on those volunteer activities matched or supported by corporate funds. These programs offer the most transparent calculation of employee engagement available at this time.

retained an index to help our readers compare the information contained in the report with the Global Reporting Initiative guidelines.

This year, following a request from our stakeholders, we have prepared a separate executive summary to increase the availability of the information to stakeholders—in particular, our employees. Other changes based on consultation include more information on our overall sustainability strategy and some key challenges.

As in past reports, we have selected data that we believe contribute meaningful insight into Alcoa operations worldwide. We also selected data on the basis that systems for collecting and collating that data already exist or that we can make a reasonable estimate.

This sustainability report is just one part of Alcoa's commitment to open and transparent reporting of its operations. The following publications can be found on our external web-site, alcoa.com.

- Alcoa Annual Report
- Regional Sustainability Reports
    - Australia
    - Brazil
    - Canada
    - Europe
    - Jamaica
    - Suriname
- Location Sustainability Reports
    - Alcoa Architectural Products Merxheim (France)
- Environmental Improvement Plans
    - Portland (Australia)
    - Pt. Henry (Australia)
    - Anglesea (Australia)

Criteria/Definitions

Please refer to the Alcoa 2004 Annual Report for details on our financial accounting policies.

Internal Report Assurance

Alcoa management is responsible for the integrity of the data published in this report. The company maintains a system of internal controls, including accounting controls and a strong program of internal and external auditing. The system of controls provides for appropriate procedures that are consistent with high standards of accounting and administration. This report has been prepared within the framework of those standards.

Independent Report Assurance

As part of our consultation with stakeholders on our sustainability reporting, we have discussed options around independent verification of this report. Our finding is that no common view exists on a single credible source of verification that will satisfy every individual stakeholder group.

We remain committed to the principle of a credible and meaningful verification process and will continue to explore this issue and report on developments. We will also continue to seek input from our stakeholders to ensure that our future sustainability reports are increasingly meaningful to them.

Information Requests

Please visit alcoa.com for additional information about Alcoa's economic, environmental, and social performance.

Governance Structure and Management Systems

STRUCTURE AND GOVERNANCE

We adopted our Corporate Governance Guidelines in January 2003, and they were reviewed and updated in January 2005. These guidelines closely follow the Business Roundtable Principles of Corporate Governance, a comprehensive statement of responsible corporate governance principles dated May 2002 that we endorse. The New York Stock Exchange (NYSE) listing standards serve as an additional foundation for our guidelines.

The Business Roundtable Principles and NYSE listing standards also provide the foundation for our board committee charters, which are reviewed and revised annually, as appropriate, by the Board of Directors. In November 2003, the board modified our Business Conduct Policies to make them applicable to directors as well as all employees and all entities and ventures controlled by Alcoa.

Board of Directors

(As of February 2005)

Alain J. P. Belda, 61, chairman of the board of Alcoa since January 2001, and chief executive officer since May 1999. Elected president and chief operating officer in January 1997, vice chairman in 1995, and executive vice president in 1994. President of Alcoa Aluminio S.A. from 1979 to 1994. Director of Alcoa since 1998.

Kathryn S. Fuller, 58, president and chief executive officer of the World Wildlife Fund U.S. (WWF), one of the world's largest nature conservation organizations, since 1989; various positions with the organization since 1982, including executive vice president, general counsel, and director of WWF's public policy and wildlife trade monitoring programs. Director of Alcoa since 2002.

Carlos Ghosn, 50, president and chief executive officer, Nissan Motor Company, Ltd., since 2001; chief operating officer 1999-2001. From 1996 to 1999, he was executive vice president of Renault S.A., and from 1979 to 1996, he served in various capacities with Compagnie Générale des Etablissements Michelin. Director of Alcoa since 2002.

Joseph T. Gorman, 67, chairman and chief executive officer of Moxahela Enterprises, LLC, a venture capital firm, since 2001. He was chairman and chief executive officer of TRW Inc., a global company serving the automotive, space, and information systems markets, 1988-2001. Director of Alcoa since 1991.

Judith M. Gueron, 63, visiting scholar at the Russell Sage Foundation, a foundation devoted to research in the social sciences, and president emerita of MDRC, a nonprofit research organization that designs, manages, and studies projects to increase the self-sufficiency of economically disadvantaged groups, since September 2004. Dr. Gueron was president of MDRC from 1986 to August 2004. Director of Alcoa since 1988.

Sir Ronald Hampel, 72, former chairman of United Business Media, a U.K.-based media company, from 1999-2002; chairman of Imperial Chemical Industries plc (ICI) 1995-1999, and a director 1985-1999; deputy chairman and chief executive officer 1993-1995; chief operating officer 1991-1993. Director of Alcoa since 1995.

Klaus Kleinfeld, 47, deputy chairman of the Managing Board and president and chief executive officer of Siemens AG, a global electronics and industrial conglomerate, since January 27, 2005. Mr. Kleinfeld served as deputy chairman of the Managing Board and executive vice president of Siemens AG from 2004 to January 27, 2005. He served as president and chief executive officer, Siemens Corporation, the U.S. arm of Siemens AG, from 2002 to 2004. He was also a member of the Managing Board of Siemens AG from December 2002 to December 2003. Mr. Kleinfeld served as chief operating officer of Siemens Corporation from January to December 2001. Prior to his U.S. assignment, Mr. Kleinfeld was executive vice

president and a member of the Executive Board of the Siemens AG Medical Engineering group from January to December 2000. Director of Alcoa since 2003.

Henry B. Schacht, 70, managing director and senior advisor of Warburg Pincus LLC, a global private equity firm, since 2004. Mr. Schacht served as chairman (1996 to 1998; October 2000 to February 2003) and chief executive officer (1996 to 1997; October 2000 to January 2002) of Lucent Technologies Inc. He also previously served as senior advisor (1998 to 1999 and 2003) to Lucent. Mr. Schacht was managing director of Warburg Pincus LLC from February 1999 until October 2000. Director of Alcoa since 1994.

Franklin A. Thomas, 70, consultant, TFF Study Group, a non-profit institution assisting development in South Africa, since 1996; chairman, September 11 Fund since 2001; president and chief executive officer of The Ford Foundation 1979-1996. Director of Alcoa since 1977.

Ernesto Zedillo, 53, director, Yale Center for the Study of Globalization, since September 2002. Former president of Mexico, elected in 1994 and served until 2000; held various positions in the Mexican federal government from late 1987 to his election. Director of Alcoa since 2002.

Board Committees

Audit Committee

Reviews Alcoa's auditing, financial reporting, and internal control functions and retains the independent auditors, which at the board's initiative will be submitted to the shareholders for ratification beginning with the 2005 annual shareholders meeting. It also reviews the company's environmental, financial, and information technology audits and monitors compliance with Alcoa's Business Conduct Policies. The members of the Audit Committee are independent, as defined under NYSE listing standards. The independent auditors, the chief financial officer, the vice president—audit, and the general counsel each regularly meet in private session with the committee without any other members of management being present.

Joseph T. Gorman

Judith M. Gueron

Klaus Kleinfeld

Henry B. Schacht—Chair

Ernesto Zedillo

Compensation and Benefits Committee

Determines compensation for Alcoa officers, administers the stock option plan, oversees investment management of the principal pension and savings plans, approves any special post-retirement arrangements for retiring Alcoa officers, and performs other functions specified by the company's compensation and benefit plans. The committee retains independent compensation consultants to assist it.

Carlos Ghosn

Joseph T. Gorman—Chair

Sir Ronald Hampel

Franklin A. Thomas

Executive Committee

Acts on behalf of the board when specific action must be taken between board meetings. Under the by-laws of the company, this committee is comprised of three or more directors and has and exercises the authority of the board in the management of the business and affairs of the company, except as otherwise limited by law.

Alain J. P. Belda—Chair

Joseph T. Gorman

Henry B. Schacht

Franklin A. Thomas

Governance and Nominating Committee

Recommends nominees for election to the board and has oversight responsibility for corporate governance, director education, orientation and compensation. The committee is responsible for designing and overseeing the annual performance evaluation process for the directors, committees, and the board.

Kathryn S. Fuller

Sir Ronald Hampel

Franklin A. Thomas—Chair

Public Issues Committee

Provides advice and guidance on public issues, oversees corporate giving, makes recommendations to the board regarding significant shareholder issues, and reviews company reporting initiatives regarding social and environmental matters.

Kathryn S. Fuller

Carlos Ghosn

Judith M. Gueron—Chair

Henry B. Schacht

Ernesto Zedillo

Independence Standards for Alcoa Directors

Alcoa believes that a strong independent board is critical to the success of our business and meeting our Values. A majority of directors must be “independent” under the listing standards of the NYSE and the board’s own Director Independence Standards. Board independence depends not only on directors’ individual relationships, but also on the board’s overall attitude. Providing objective, independent judgment is at the core of the board’s oversight function, and the board’s composition should reflect this principle. The board and its committees comply with NYSE and company independence standards.

Officers

(As of February 2005)

Robert T. Alexander
Vice President—Alcoa and Chairman, Alcoa Fujikura Ltd.

Margaret A. Aupke
Assistant Treasurer

Alain J.P. Belda
Chairman and Chief Executive Officer

Ricardo E. Belda
Executive Vice President—European Region

Julie A. Caponi
Assistant Controller

William F. Christopher
Executive Vice President—Alcoa and Group President, Alcoa Aerospace, Automotive and Commercial Transportation

Donna C. Dabney
Secretary

Denis A. Demblowski
Assistant General Counsel

Ronald D. Dickel
Vice President—Tax

Janet F. Duderstadt
Assistant Secretary

Franklin L. Feder
Vice President—Alcoa and President, Alcoa Latin America

Brenda A. Hart
Assistant Secretary

Paul A. Hayes
Assistant Treasurer

Regina M. Hitchery
Vice President—Human Resources

Cynthia E. Holloway
Assistant Treasurer

Rudolph P. Huber
Vice President—Alcoa Global Business Services and Chief Information Officer

Barbara S. Jeremiah
Executive Vice President—Corporate Development

Richard B. Kelson
Executive Vice President and Chief Financial Officer

Denise H. Kluthe
Assistant Controller

Mario Longhi Filho
Vice President—Alcoa and Group President, Global Extruded and End Products

Ruth J. Mack
Vice President—Alcoa and Group President, Packaging and Consumer Products

Charles D. McLane, Jr.
Vice President and Corporate Controller

Thomas J. Meek
Assistant General Counsel

Colleen P. Miller
Assistant Secretary

Joseph C. Muscari
Executive Vice President—Alcoa and Group President, Rigid Packaging, Foil, and Asia

Judith L. Nocito
Assistant General Counsel

William J. O'Rourke, Jr.
Vice President—Environment, Health & Safety and Audit

Dale C. Perdue
Assistant General Counsel

William B. Plummer
Vice President and Treasurer

Russell W. Porter, Jr.
Vice President and Deputy General Counsel

Lawrence R. Purtell
Executive Vice President and General Counsel; Chief Compliance Officer

Bernt Reitan
Executive Vice President—Alcoa and Group President, Global Primary Products

Ricardo B. M. Sayao
Assistant Treasurer

Richard L. (Jake) Siewert, Jr.
Vice President—Global Communications and Public Strategy

Paul D. Thomas
Executive Vice President—People, ABS, and Culture

Kurt R. Waldo
Assistant General Counsel

Robert G. Wennemer
Vice President—Pension Fund Investments and Analysis

Helmut Wieser
Vice President—Alcoa and Group President, Mill Products Europe/North America

John M. Wilson
Vice President and Deputy General Counsel

Russell C. Wisor
Vice President—Government Affairs

Mohammad A. Zaidi
Vice President and Chief Technical Officer

Executive Compensation

We believe our compensation procedures and practices are in line with current corporate governance standards and practices. The design of our executive compensation is intended to encourage management to maintain a long-term perspective, while at the same time consistently delivering positive annual results. Fundamental underpinnings of the design are: paying for performance; paying competitively compared to other similar multinational industrial companies in order to attract the necessary talent; and, at the executive levels, paying total compensation that is highly leveraged toward the attainment of financial and non-financial goals. To ensure alignment with shareholders, stock ownership requirements apply at the executive level.

In 2004, we started reducing the use of stock options and began using a blend of stock options and restricted stock units. Units at the top management level are 100% contingent upon company performance as compared with that of an external comparator group. In addition, the reload feature of our previous option grants has been limited. For option grants made in 2004 and after, there will be no reload feature. We have never repriced stock options. The 2004 Alcoa Stock Incentive Plan was submitted to, and approved by, shareholders in 2004.

The Compensation and Benefits Committee of the board has responsibility for all aspects of executive officers' compensation, including approval of officer employment, retention, and severance agreements.

In September 2003, following a majority of votes cast by shareholders in favor of a shareholder proposal, the Board of Directors adopted a policy to seek shareholder approval for any future severance agreement with any senior executive officer of the company when any such agreement would result in payments to the officer in excess of 2.99 times his or her salary and bonus. Even prior to the board's response to the shareholder vote, it had been Alcoa's longstanding practice and policy that any severance agreement with a senior executive officer required approval by the Compensation and Benefits Committee. It should also be noted that prior to adoption of the policy, no severance agreement approved by the Compensation and Benefits Committee had resulted in cash payments or negotiated benefits that exceeded the 2.99 policy limit.

Audit Process

Our goal is the same through both our internal and external audit processes: to maintain world-class transparency and accountability in Alcoa operations.

Independent Auditors

Over the last several years, we have significantly reduced our ratio of non-audit to audit fees paid to our independent auditor. In 2004, audit and audit-related fees totaled US$12.5 million, while fees related to tax services totaled US$2.4 million and non-audit-related fees were US$0. Over the last four years, total

non-audit-related fees were US$0, reflecting our desire to limit the scope of the independent auditor to audit and tax work only.

In accordance with resolutions adopted by the Audit Committee, the lead audit and review partners of the independent auditor will be rotated at least every five years.

Internal Audit

We have long had an independent, global Internal Audit Department (IAD). The vice president—audit meets privately with the Audit Committee at least four times per year.

The IAD is responsible for providing financial, information technology, environmental, and health and safety audits in all Alcoa locations across the world. The group's focus is to assess risk across the company, apply audit resources to address those risks, and develop recommendations to close any gaps that are detected as a result of an audit. IAD is also charged with implementing 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.

In 2004, the IAD worked extensively with the external auditor and the controller's organization to help prepare for the company's certification process in connection with the Sarbanes Oxley Sec. 404 requirements.

Ethics and Compliance Program

Alcoa's Ethics and Compliance Program is designed to ensure that all Alcoa employees understand and fully comply with the letter and spirit of the laws and regulations that govern our businesses, as well as our Business Conduct Policies and guidelines.

The program is designed, implemented, and enforced so that it will be effective in preventing and detecting conduct not conducive to our Values. We have taken the following steps to implement this requirement:

- The program includes globally published workplace standards and behavior expectations, comprehensively explained in Alcoa's Guide to Business Conduct. The guide has been written at a tenth-grade comprehension level and translated into the native language of each significant Alcoa location (20 languages at the end of 2004). All employees are required to participate in a training session at their location that explains the business conduct standards and their applicability to the employee's job responsibilities. This training [continued on page 24]

Self Assessments Lead to Improved Controls, Performance

To increase the level of controls and help locations and administrative processes achieve sustainable outcomes, Alcoa employs a self-assessment tool to uncover and close gaps quickly and identify best practices.

Implemented in 1998 and most recently updated in 2004, the Alcoa Self-Assessment Tool (ASAT) is the same standardized tool used by Alcoa's Internal Audit Department for comprehensive internal audits. By using this "open book" test, audited groups know exactly what will be evaluated and can check and adjust performance to meet or exceed Alcoa's minimum control expectations. Each location and some processes must undergo a full audit at least once every five years; the self-assessment is required at least once every 12 to 18 months.

ASAT consists of four modules—financial and business processes, information technology, health and safety, and environment. Within each module are requirements, called objectives, that locations must evaluate on a four-grade scale (poor, fair, good, and excellent). For example, a health and safety objective is identifying how well a location keeps pedestrians segregated from mobile equipment.

Today, nearly every location and process self-assesses within the company. Continuous improvement has been evident as audit grades, internal controls, and performance measures are improving continually.

For example, Alcoa's Western Australia Mining Environmental Department deploys the ASAT schedule over an 18-month testing cycle that involves all members of the department. This stringent application of ASAT auditing has resulted in an overall strengthening of environmental management practices. During its last corporate audit, the department had 92% of tested areas receiving either an excellent or good rating.

and the guide are part of the on-boarding process for all new employees and contractors.

- To keep our ethics and compliance efforts effective, we edited our Guide to Business Conduct to produce two condensed versions to address the needs of focused groups of stakeholders. The Guide to Business Conduct in a Manufacturing Environment, made available to all Alcoa businesses, contains a subset of items discussed in the corporate guide but with a focus on business conduct issues most likely to exist in a production or manufacturing environment. We also published a guide for key customers and suppliers. As with the manufacturing guide, this document is a subset of our main guide but is intended for customers and suppliers who may benefit from knowing how Alcoa employees and agents are expected to conduct themselves in a business relationship.
- In 2004, we deployed mandatory, job-specific, web-based ethics and compliance training to 13,000 employees worldwide. This represents a 30% increase over the previous year. This training is required for corporate officers, business unit leaders, and employees who negotiate with customers and suppliers, can contractually commit the company, or have access to confidential information.
- We distributed quarterly ethics and compliance communication materials, which dealt with business ethics and proper conduct, to all Alcoa locations to maintain and further develop overall employee awareness of current ethics and compliance topics.
- We accelerated the deployment of the annual Business Conduct and Conflict of Interest Survey to August 2004 to meet the year-end requirements of the Sarbanes-Oxley law. Coverage was expanded to more than 11,000 employees, and we accounted for 100% of all surveys issued.

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

Ethics and Compliance Line

Our global Ethics and Compliance Line provides employees and other concerned parties an anonymous channel for expressing concerns and raising issues about workplace activities and business practices. Employees are also encouraged to use the line to obtain an interpretation of laws or regulations, seek clarification of Alcoa policies or procedures, or simply ask for advice on proper actions.

The compliance line is available to Alcoa employees worldwide, with the local toll-free compliance lines answered in the caller's native language. We also offer an ethics and compliance e-mail address (anonymous, if desired) and a postal mail address for submission of written inquiries. Every concern or request for advice is addressed and responded to without reprisal, and we have a target response date of 18 calendar days contingent upon the seriousness and number of issues raised.

When an employee calls or sends written notice, the issue is reviewed immediately. Those that are felt to pose an immediate threat to the personal safety of employees, Alcoa property, or the community are sent to pre-determined emergency contacts, who begin an immediate investigation and institute corrective action when necessary. Non-emergency issues are sent to a regional liaison for review and forwarding to the appropriate location or business unit for investigation.

Once an issue is resolved, a written report on the investigation and any corrective actions is submitted to the regional liaison, who then provides a response to the employee.

Shareholder Engagement

Alcoa has a dedicated shareholder relations group that engages with both institutional and individual shareholders to hear their concerns throughout the year. The group facilitates discussion with management about the strategy and tactics of the

company along with emerging corporate governance issues and the company's corporate governance policies.

Shareholder engagement occurs at quarterly analyst conference calls, the annual shareholders meeting, individual and group meetings with institutional shareholders on a monthly basis, global investor conferences (usually one per year), and via phone, e-mail, and in-person contact.

Shareholders also elect the members of the Board of Directors, and Alcoa's Governance and Nominating Committee considers shareholder recommendations for director nominees.

Shareholders can communicate any concerns to Alcoa's Board of Directors through:

- Regular mail (care of Alcoa Corporate Secretary, Alcoa Inc., 390 Park Avenue, New York, NY 10022, USA).
- Ethics and Compliance Line (see www.alcoa.com/global/en/about_ alcoa/corp_gov/business_conduct. asp for phone numbers by country).

OVERARCHING POLICIES AND MANAGEMENT SYSTEMS

Alcoa Business System

Alcoa's overarching operating system is known as the Alcoa Business System (ABS). It is characterized by three overarching principles: make to use; eliminate waste; and people linchpin the system.

In practice, this means:

- Defining precisely our customers' requirements.
- Pre-specifying the activities, the pathways, and the connections necessary for meeting those customer requirements and refusing to vary from them.
- Safeguarding what we have pre-specified with built-in tests to identify and solve problems that might threaten our predetermined outcomes.
- Enabling every Alcoan to recognize and trace problems back to their root cause and eliminate them—not through the use of elite, discrete teams of problem solvers, but through the disciplined, immediate, relentless participation of the people occupying the affected pathway.

This system provides the most efficient way for eliminating waste by enabling us to supply customers, on demand, with defect-free products at the lowest cost and with the highest degree of safety.

Analysts receive an overview of the Alcoa Business System tools used in molten metal optimization at Rockdale

Bringing Sustainability to Shareholder Relations

Sustainability is becoming an increasingly important means for shareholders to evaluate and gain confidence in a company's current and long-term prospects. Recognizing this, Alcoa has initiated efforts to supply regular information on its sustainability efforts to the investing community.

In early 2004, key Alcoa leaders met with the company's largest shareholders on an individual basis to discuss governance and sustainability issues prior to the annual shareholders meeting.

Twice a year, investors and analysts are invited to an Alcoa facility for tours of, and discussions about, that location's business. In March 2004, 17 analysts spent three days touring Alcoa locations in Australia. These included Huntly Mine, the largest bauxite mine in the world that is also recognized for its ongoing rehabilitation program and achievement of restoring 100% species richness to rehabilitated areas. Other sites toured were the Pinjarra refinery, Yenorra rolling mill, and Portland smelter.

In November 2004, 46 investors, analysts, and members of the media headed to Alcoa's operations in Rockdale, Texas, for a one-day tour. This 14,160-hectare (35,000-acre) site is home to lignite mining, power generation, and aluminum smelting operations. The location has been recognized by government agencies for its accomplishments in land reclamation, the environment, and health and safety.

Through these and other efforts to present Alcoa's sustainability efforts to shareholders, the company is underscoring Alcoa's long-term viability and providing information that will help in investment decisions.

External Principles and Initiatives

Alcoa subscribes to or endorses the following externally developed principles or initiatives:

- The Business Roundtable Principles of Corporate Governance
- International Aluminium Institute Sustainability Principles
- International Council on Mining & Metals Principles

Programs and Procedures

Some examples of Alcoa's programs and procedures pertaining to economic, environmental, and social performance are contained throughout this report via case studies.

Certification Status

In March 2004, BSI, Inc., issued a global certificate to Alcoa to recognize that our corporate-wide EHS management system met all the requirements of the ISO 14001 Environmental Management Systems Standard. All Alcoa locations and business units can seek ISO certification under this global certificate, reducing the cost of ISO certification by more than half. Locations that select other registrars can continue their location-specific registration if they choose.

It is our intent to eventually have all locations certified under the global certificate, but we will transition to that position over several years. Currently, 205 of our locations throughout the world are certified to ISO 14001, either individually or under our global certificate.

We also have four locations that are certified to the Occupational Health and Safety Management System standard (OHSAS 18001). They are Poços de Caldas, São Luis, AFL do Brasil, and Tubarão Extrusions—all Aluminio/Latin America locations. Three locations are SA8000 (social accountability) certified: AFL do Brasil, Poços de Caldas, and São Luis.

Helping the Community Through ABS

Alcoa is expanding the reach of the Alcoa Business System (ABS) through an innovative project at a Pittsburgh (USA) women's shelter.

The Women's Center and Shelter of Greater Pittsburgh provides support for more than 9,000 women victims of domestic violence and their children annually. Faced with funding cuts, rising expenses, and high staff turnover, the center needed a management system that allowed it to meet the increasing needs of women and children with reduced resources, yet was compatible with the center's goal to respectfully serve victims of domestic violence.

A US$25,000 Alcoa Foundation grant in early 2004 is funding a pilot adaptation of ABS in the center's legal advocacy area. The grant helps pay for services from a consulting firm as well as staff time to learn about and implement ABS. Members of the Alcoa Operations Management Consulting group and other Alcoa employees also volunteer to assist.

The initial focus was on optimizing the center's hotlines and data collection systems. Through ABS, two hotlines were consolidated into one, immediately giving callers direct access to a live advocate.

The ABS initiative also homed in on unwieldy administrative systems; within six weeks, report preparation was reduced from two advocates spending 14 hours each per month to one person spending 45 minutes.

"ABS shows respect for the people doing the work," said Shirl Regan, the center's executive director. "The philosophy 'People aren't the problem, it's the system' really resonates with us because that's what we tell the women we serve: 'You're not to blame, it's the system.' This approach allowed us to establish the professional safety necessary for our staff to expose our problems and focus on solutions."

Environmental Performance Indicators

Alcoa aspires to be the best company in the world in all that we do. That includes our stewardship of the environment through our processes, our people, and our products.

We have established ambitious short-, mid-, and long-term goals to ensure that all of our employees and stakeholders know our direction and targets and are helping us achieve our goals. We are making good progress and are proud to share our success and identify the areas where additional focus is needed.

As we stated in 2001 when our 2020 vision was announced, the plan is dynamic, and it will grow. Achieving the goal of zero waste disposed in landfills by 2015 will contribute to our ultimate strategy of not generating the wastes in the first place. Our goal of zero water discharge by 2015 will grow into a goal of helping assure that clean, safe water is available to more people throughout the world. By following our progress and commenting on our direction and goals, our stakeholders can help us truly be a great company that stands as the best in the world.

In many places, we have been recognized for environmental stewardship by regulatory agencies, government bodies, non-governmental organizations, and citizens groups. Our landmark agreement to help preserve the biodiversity of a region that includes Alcoa's large landholdings adjacent to the Great Smoky Mountains National Park in the eastern United States is evidence of the benefits that can come from having stewardship as a component of the company management process.

In 2004, we announced that we will invest 64 million euros (approximately US$80 million at the time of the October 2004 announcement) in technology and environmental improvements for three of our smelters in northern Spain. These investments, some of which will be completed by the end of 2006, will focus on emission reductions.

Our support of Earthwatch Institute expanded in 2004. Fifteen Alcoa volunteers (sixteen were selected, but health issues kept one from participating) traveled to research sites around the world to help scientists with their field research. These expeditioners again shared their experiences through diaries posted on alcoa.com.

The decision by BSI, an internationally recognized registrar, to certify Alcoa's corporate environmental management system to the ISO 14001 standard is a further demonstration of the comprehensive nature of our environmental efforts. Most companies are certified on a location-by-location basis, with focus on the management processes that drive the local behavior. Alcoa's corporate-level global certificate from BSI makes it clear that environmental management and stewardship is systemic throughout the corporation and a fully integrated part of the company-wide management system.

Minimizing the Waste

Throughout the world, Alcoa facilities are working to meet the company's goal of reducing landfilled waste 50% by 2007 and 100% by 2015 from base year 2000.

The Alumar refinery and smelter in São Luis, Brazil, increased solid waste recycling rates to 100% in 2001, generated 17% less waste between 2001 and 2004, and enabled the recovery and recycling of stockpiled waste. This effort reduced environmental risks and saved more than US$650,000 by eliminating the need to construct new waste disposal and storage areas.

In 1998, the facility produced 45,720 metric tons (50,400 tons) of solid waste, of which 51% was recycled. After a multi-disciplinary team used the Alcoa Business System to address waste management, all industrial wastes are now recycled or co-processed. The facility is also recycling or co-processing stockpiled solid wastes, pushing the annual recycling rate to 104% in 2004.

"The surrounding communities in Sobral, where my company is located, are aware of Alumar's work in waste management," said Luciano Tertius, general manager of Cimento Poty, which co-processes Alumar spent pot lining in its cement clinker furnaces. "If any company wants to become as world class as Alumar seems to be, they have to look for alternative means of disposing their wastes."

In Canada, Alcoa's Deschambault smelter has integrated waste management into its production processes since starting operations in 1992. Innovative programs reduced landfilled waste (excluding spent pot lining) 60% between 1995 and 2000 and an additional 35% from 2000 to 2004.

In 2003, the smelter was recognized by Recyc-Québec's recycling awareness program for having already achieved the 2008 goals of the 1998-2008 Quebec Policy for Waste Management.

We do face challenges in meeting our environmental goals. For example, process water reduction is proving to be complex and difficult, and our progress on mercury reduction has been slower than we anticipated. We remain committed to achieving our goals and will marshal the resources necessary to do so.

What follows is a brief overview of our environmental performance in 2004. More information, including a wide array of position papers on key environmental issues, can be found in the environment section of alcoa.com.

MATERIAL USE

Total Materials Use

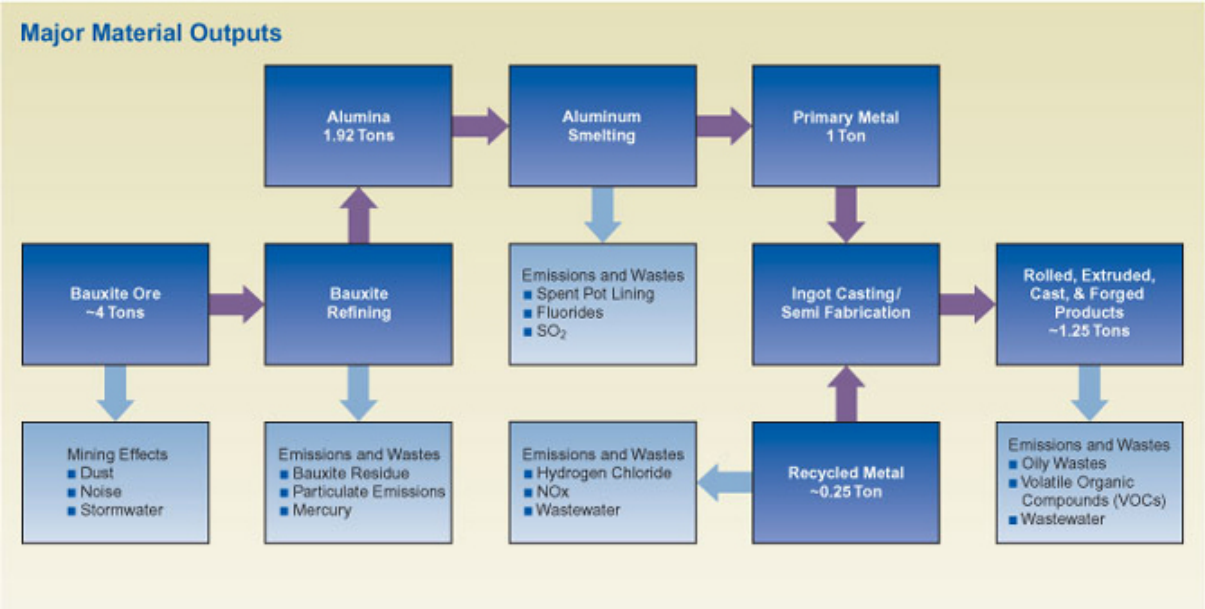
Alcoa is a fully integrated aluminum company, which means that we have the capabilities to extract raw materials, process them into aluminum metal, convert the metal into end-use products or make them available to others for further processing, and recycle aluminum products at the end of their useful life.

We mine bauxite, lignite, coal, and other minerals. We convert the bauxite to aluminum oxide and then to aluminum metal through processes that use fuels, caustic soda, lime, petroleum coke, coal tar pitch, aluminum fluoride, other chemicals, water, and energy. We also use fuels and hydroelectric facilities to produce electrical energy, which is a major component of the electrolytic process required to produce aluminum metal from aluminum oxide.

The basic process requires approximately four tons of bauxite to produce two tons of aluminum oxide, which, in combination with one-half ton of carbon, can produce one ton of aluminum metal. Once produced, the metal can be used for a wide variety of products. Because it does not rust, decay, or lose its quality, it can be recycled repeatedly without loss of properties.

We also manufacture a wide variety of products from plastics for the packaging, construction, and transportation markets. We typically purchase the resins—polyethylene, high-density polyethylene, polyvinyl chloride, and polypropylene—and convert them to semi-finished and finished products.

We are aware of the importance of materials flow throughout the economies of the world, and we recognize the need to make efficient use of all raw materials and natural assets. We believe that there is economic as well as stewardship justification for minimizing material flows, and we continue our work to make all of our processes as efficient as possible.



Waste Materials Used

Our primary approach to waste management is to reduce waste generation where possible. If waste generation is not preventable, we attempt to reuse the waste or make it attractive to others for use.

We now provide several thousand tons of spent pot lining (a large volume waste from our electrolytic process) to cement plants annually as an energy and mineralizer source, and we will expand this program by 20,000 additional tons in 2005. This will mean that almost half the spent pot lining that we produce each year will no longer be a waste but rather a raw material.

We use what is essentially a waste product from the petroleum refining industry—petroleum coke—as a raw material to form the anodes that are essential for our electrolytic process.

We also purchase coal tar pitch, a byproduct of the steel industry, as the binder for our anodes. We believe that these forms of “industrial ecology” are an important component of a sustainable business economy.

Similarly, we are initiating a full-plant program to use CO_2 to neutralize all of the bauxite residue produced at one of our refineries in Australia (see case study below).

We believe that recycled metal from products like used beverage cans, junked automobiles, demolished buildings, and discarded consumer products is an important source for our basic material, and its importance will continue to grow.

The amount of available scrap can be limited since the amount of aluminum available for recycling is dependent on the amount of material put in the products at the time of their manufacture. For example, the aluminum in a building ready for demolition was probably placed there 50 years ago, when the aluminum industry was less than 10% of the current size. Even though all the scrap is recovered and reused, it is a small portion of the total production of aluminum products for buildings in today’s market. The amount of aluminum scrap recycled today is similar in weight to the entire output of the primary aluminum industry in 1970. These scrap availability issues will continue to be a challenge for the industry since the demand for aluminum products continues to grow each year—faster than the “retirement rate” of existing products.

Our metal recovery rates have dropped in recent years due to the lack of availability of scrap and the very high scrap price that results. China and other developing economies are purchasing large quantities of scrap that would have been available to Alcoa in the past.

One Process Waste Neutralizes Another

By using waste carbon dioxide (CO_2) to neutralize the alkalinity in bauxite residue, Alcoa’s Kwinana alumina refinery in Australia has lowered environmental risks, increased opportunities to reuse a large-volume solid waste, and reduced the level of ongoing management of bauxite residue storage areas after closure.

In Australia, Alcoa produces alumina from low-grade bauxite deposits mined in the country’s Darling Range. For every ton of alumina produced, approximately two tons of bauxite residue results.

During the refining process, a caustic soda solution is added to bauxite to dissolve the alumina, allowing it to separate from the undissolved solids. Although the solids are washed to recover and recycle caustic soda, the residue still has a pH of around 13.5.

The residue carbonation process, which took Alcoa over a decade to develop and pilot, mixes high concentration CO_2 with the bauxite residue prior to it being deposited onto drying beds. The Kwinana refinery currently uses high purity and high concentration CO_2 that is a waste generated by a nearby industrial facility.

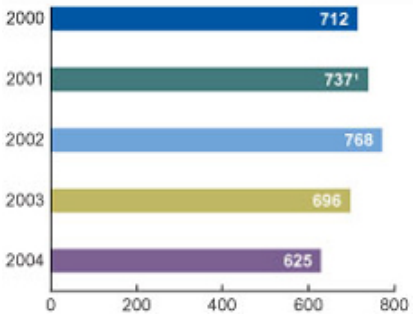
Residue carbonation’s benefits include:

- Shorter residue drying times, which defer construction of the next drying area by two to three years.
- Greenhouse gas benefit, since the CO_2 consumed equals at least 70,000 tons per year.
- Creation of a more benign waste that offers improved remediation, long-term management, and alternative use opportunities.
- Reduced risk of ground and surface water contamination.

Plans to install the technology at other Alcoa locations are underway.

Aluminum Metal Recovered by Alcoa from Purchased Scrap

(thousands of metric tons)



[1] *Estimated.*

Includes dross processed by others to recycle metal back to Alcoa. Alcoa plants in North America also generated an additional 110,795 metric tons of scrap, which was sold to the secondary aluminum industry for subsequent recycling into die-cast alloy applications. While we don't consume the scrap, we sell it to other consumers who do use it as opposed to landfilling it.

Used Plastics

We make closures, food packaging materials and containers, electrical components for automotive wire harnesses, building components (siding, shutters, soffit, etc.), and other products from a variety of plastic materials.

We use internal process controls to keep plastic materials separated, so that the residues from our manufacturing processes can be collected and reused in the process. This approach reduces the amount of waste that must be disposed of and also reduces the amount of raw material that must be purchased. Unfortunately, we have not yet found ways to effectively use waste plastics or recycled resins from used products in our manufacturing processes, but we continue to search for opportunities along with others in our industry.

ENERGY

Total Energy Used *(percent)*

	Oil	Gas	Coal	Hydro	Grid[1]
2000	8.4	17.8	34.4	36.6	2.7
2001	8.3	17.3	35.1	35.6	3.7
2002	8.9	17.8	32.5	37.8	2.9
2003	8.7	17.1	35.1	36.3	2.8
2004	9.2	17.5	35.8	34.6	3.0

[1] *Purchased electricity where the source of the power is not fully known.*

Includes all purchased and self-generated electricity plus all fuel used. The increase in coal use resulted from higher utilization rates at Alcoa's three solid-fuel-fired power plants. Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

Indirect Energy Use

Although Alcoa uses cogeneration, hydroelectric facilities, and large, stand-alone electricity generating plants to produce a significant portion of the electric power that we require, we also purchase electricity from hundreds of suppliers. We attempt to integrate our facilities into the distribution network where possible, and we can manage some of our plants in such a way that they [continued on page 31]

PVC-free Initiative Reduces Pollution, Avoids Costs

Through an initiative with Rigid Packaging Division customers to eliminate or reduce the use of PVC-coated sheet used to make aluminum can ends, Alcoa's Tennessee Operations (USA) was able to meet new air pollution requirements without modifications to its aluminum reclamation delaquering furnaces.

The PVC-free initiative allowed Alcoa to avoid pollution equipment operating costs and greatly reduce hydrogen chloride (HCl) emissions. In addition, 400 tons of solid or potentially hazardous waste was avoided. And, a portion of the savings was used to reduce nitrogen oxides (NOx) emissions by 50% through the installation of low-NOx burners in other parts of the plant.

To encourage the market switch from PVC coating to an Alcoa-developed, alternative coating, Alcoa worked with individual customers to solve any performance issues they encountered.

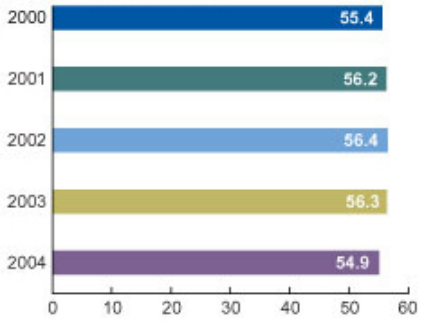
As more of the cans returning to Tennessee Operations for recycling became PVC-free, the plant began experiencing a decline in the amount of HCl emissions from its delaquering furnaces. In early 2004, the furnaces were in compliance with the stricter government HCl emission standards.

In 2004, Tennessee Operations earned the Tennessee Chamber of Commerce & Industry Air Quality Award for its PVC-free pollution prevention initiative.

can reduce electricity consumption quickly in times of emergency and allow a local distribution network in difficulty to be stabilized. Several of our large co-generation facilities also sell electric power to such networks, and some of the facilities that we plan to expand in the next three years will be designed to also supply even more electric power in this way.

Purchased Electricity

(billions of kilowatt hours)



The increases in purchased electricity reflect the increases in production at the Alcoa smelters where power is purchased from outside providers. Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

Electricity Sourcing—Purchased and Self-generated *(percent)*

	Hydro	Oil	Gas	Coal	Nuclear	Local Grid	Other Renewables
2000	45.8	4.0	1.7	40.2	4.5	3.8	0.0
2001	43.9	4.0	1.8	40.5	4.7	5.1	0.0
2002	45.7	4.3	1.9	39.6	4.6	4.0	0.0
2003	45.3	4.3	1.8	40.1	4.4	4.0	0.0
2004	43.4	4.5	1.9	41.1	4.7	4.3	0.1

We remain committed to renewable energy as demonstrated by the high percentage of hydro-based self-generated and purchased electricity.

Non-electric Fuel Sourcing *(percent)*

	Oil	Gas	Coal
2000	24.4	73.2	2.4
2001	24.5	73.2	2.3
2002	25.2	72.5	2.3
2003	25.4	72.4	2.1
2004	26.3	71.6	2.1

We continue to source a high percentage of natural gas for our fossil fuel consumption.

Renewable Energy

As we search for stable and long-term energy supplies, we are committed to decreasing our reliance on fossil fuels by increasing, where possible, our use of natural, renewable energy sources that help us lower our carbon dioxide emissions and address global climate change.

Hydroelectric power has proved to be an excellent power source for our electrolytic processes, and we continue to seek additional hydro-based power. We own and operate seven large dams in the eastern part of the United States and one in Suriname. We are also partners in two other hydroelectric facilities in the United States and Canada.

In Brazil, as part of the Brazilian government's long-term growth strategy, we are involved as a minority partner in the Machadinho hydroelectric project, which is now complete. We also have an interest in that country's Barra Grande project, which is 95% complete. This project was scheduled to begin operation in 2005 but was delayed pending the satisfactory resolution of a controversy about the destruction of some unique forestlands that included Araucaria trees. This impact was not properly identified during the environmental impact assessment process conducted by the government but found during a subsequent assessment conducted by BAESA, of which Alcoa has a 42.2% ownership.

Agreement was reached in January 2005, and a total of 1,140 families are being compensated by BAESA. This figure includes families qualified for compensation under the original terms, plus an additional 200 families under the recent agreement. The additional investment to support this new commitment is 21 million Brazilian reais (US$7.8 million.). The agreement provides for relocation of the families, donation of the wood from the reservoir area for construction of houses in the community, financial support for crops, and acquisition of 200 hectares (494 acres) of land for the community.

On the environment side, the government approved BAESA's proposal for an offset program, where the partnership will donate land to the government and plant approximately 20 new Araucaria trees for each one removed to prepare for the reservoir flooding. Details about the settlement's other environmental aspects can be found on the Brazilian country page on alcoa.com.

We are also a partner in three additional government concessions of hydroelectric projects in Brazil. The following list includes our ownership percentage and the expected completion dates pending contractual and environmental approvals:

- Serra do Facão, 39.5%, 2008
- Pai-Quere, 35%, 2008
- Estreito, 19.08%, 2009

In addition, we have expressed interest in participating in additional projects that the government of Brazil is making available to private investors. We believe that these projects can be developed in a sustainable way in accordance with the Brazilian laws, which were found to be acceptable by the World Commission on Large Dams.

We are committed to be the principal customer for a new hydroelectric dam in Iceland. Our assessment of the Iceland project is that it will require no relocation of people, will not affect any commercial fisheries, will not adversely impact agriculture, will not affect water supplies, and will have no effects on biodiversity. It will have very limited effect on the wildlife and commercial livestock activities in the region.

We will also pursue hydroelectric projects in China and other regions of the world where the projects can be developed with appropriate consideration of social, environmental, and financial issues and can be completed in accordance with all local laws and the guidelines of international institutions, such as the World Bank.

We are committed to increasing our use of renewable energy beyond hydroelectric power, and we are exploring other energy options, such as wind energy. Our Portland Aluminium plant in Australia will provide the distribution network interlink for a wind farm development, saving the developers significant additional investment that would have been required if our plant had not been nearby. We are also interested in developing wind resources where the projects are economically attractive.

In 2003, we began participating in the World Resource Institute's Green Power Market Development Group—the largest purchaser of renewable energy in the United States. In 2004, we expanded our involvement from four to seven of our administrative centers and increased our purchase of green power by 50%.

Wood harvested from Van Blommestein Lake

Harvesting Wood, Building Jobs

With the cooperation of Alcoa's Suriname Aluminum Company (Suralco), an entrepreneurial venture to harvest hardwood trees from Van Blommestein Lake has the potential to create 150 full-time jobs and help meet hardwood demand without encroaching on virgin Surinamese forest.

Van Blommestein Lake was formed when the Afobaka hydro facility was built in the early 1960s to supply power to Suralco's Paranam smelter. Most of the soft-wood trees are long gone, but the hardwood trees are still standing in the lake. Reclaiming this previously lost timber offers substantial volumes of high quality products with minimal environmental impact.

Since the operation of the hydro facility is the responsibility of Suralco, the Suriname government turned to the company for advice. Working with Brokopondo Watra Wood International—the company formed to manage the harvesting operation—Suralco identified a suitable location for a harvesting concession and provided access for a pilot project that employed 34 people full time and included a small sawmill. Suralco also assisted the operation with environmental, health, and safety audits. Brazilian divers, who have experience in underwater tree cutting from a similar operation in Tucurui, Brazil, trained local employees.

"Suralco has been very open and constructive with both general and practical support, including allowing us to use roads, gates, and other infrastructure," said Orlando Lee On, director of Brokopondo Watra Wood International.

The pilot project was successfully completed in October 2004, and commercial operations began two months later. Brokopondo Watra Wood International estimates that it can harvest 80 cubic meters (105 cubic yards) of hardwood per hectare, with 160,000 hectares (618 square miles) of the lake available for potential harvesting.

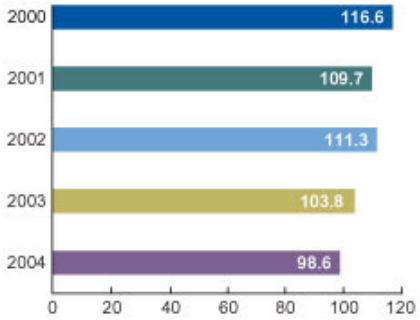
WATER

We recognize that access to clean, safe water will be an issue of growing importance throughout the world. We have determined that water-use reduction is a critical component of sustainability for our company and many others. We therefore are committed to managing the water resources available to us with care and an appreciation for the other potential users of this precious resource.

We have achieved a 17% reduction in water use since 2000 through water conservation efforts at more than half of our plants. We expect to achieve even more significant reductions in several large plants through water recycling projects and process modifications.

Total Process Water Use

(millions of cubic meters)



Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

Total Process Water Use by Region *(millions of cubic meters)*

	Asia Pacific	Europe	North America	South America	Total
2000	19.5	21.1	69.5	6.5	**116.6**
2001	16.4	21.8	65.5	6.0	**109.7**
2002	21.7	21.9	61.7	6.0	**111.3**
2003	17.7	20.3	61.1	4.7	**103.8**
2004	18.7	19.6	55.9	4.4	**98.6**

Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

BIODIVERSITY

Alcoa's Position on Conservation of Biodiversity

Consistent with Alcoa's environmental policy and our published position on sustainable development, we actively endorse the concept of conservation of biodiversity by operating worldwide in a manner that minimizes effects on natural habitats and biological resources. We attempt to preserve biodiversity on the lands that we own.

For example, we have operated hydroelectric projects on the Little Tennessee River in the United States for more than 80 years. During that time, the 9,915-hectare (24,500-acre) watershed has been under our management control. During the process to relicense the four hydroelectric dams in the system in 2004, the Nature Conservancy noted that this watershed area adjacent to the Great Smoky Mountains National Park was one of the last remaining areas in the eastern United States with the natural level of biodiversity intact. This achievement was due to limited development in the protected land (see case study on page 34).

We own other large tracts of land throughout the world (see chart on page 34). We also have large mining leases in Suriname, Western Australia, and Jamaica. In all cases, we manage these land areas with the aim of preserving the biodiversity and maintaining sustainable ecosystems. In addition, we avoid the use of sensitive areas, such as mangroves and other wetlands, and are careful to address issues like soil quality, groundwater protection, stream flow, and water quality in all of the areas where we operate, mine, or plan to mine.

Major Alcoa Land Tracts

Location	Hectares
Australia	
Western Australia	26,084
Victoria	1,185
Brazil	
Minas Gerais	600
Maranhão	5,300
Pará	600
Caribbean	
Eastern and Central Suriname	4,550
Jamaica	3,154
United States	
Central Texas	11,500
South Central Texas	1,400
Southern Indiana	3,440
Tennessee/Western North Carolina	9,600
Central North Carolina	15,355
Central South Carolina	2,000
Northern Maryland	871
Northern New York	780
Southern US (Georgia and Kentucky)	2,120

One hectare equals approximately 2.5 acres.

Impacts on Biodiversity

Alcoa operations can affect biodiversity in several ways.

Our mining activities, although usually limited to relatively small pits where bauxite exists, can affect a region because the pits must be connected by haul roads or conveyors. We work successfully to prevent the isolation of wildlife and the disruption of stream flows. We also maintain vegetation cover and the quality and quantity of groundwater.

Large water storage or residue disposal lakes that are used at our refineries are attractive to migrating birds.

We control production operations that may affect biodiversity through air emissions of materials like fluoride in order to protect vegetation and grazing animals in a smelter's vicinity. We have sampling, monitoring, and emission control programs in place at all major sources of these emissions to ensure that the impacts on the environment are acceptable.

Alcoa facilities use water from streams, lakes, and catchments as well as groundwater. This water use can affect biodiversity, as can the discharge of wastewater from our processes. These situations are monitored and managed to preserve biodiversity.

Our use of hydroelectric facilities to generate power can also have effects on biodiversity. These effects can be positive when the reservoirs and water releases are properly managed. We have recently completed detailed studies of the effects of hydroelectric projects in the southeastern part of the United States and are committed to managing and operating all hydro facilities to minimize impacts on biodiversity.

In the past, products such as detachable aluminum pull tabs on beverage cans and certain types of plastic packaging materials, when improperly discarded, could affect wildlife [continued on page 35]

Relicensing Effort Preserves Pristine Land

With the October 2004 signing of historic U.S. land-swap legislation, Alcoa's four hydroelectric dams in Tennessee and North Carolina received a 40-year licensing renewal, and more than 4,050 hectares (10,000 acres) of land adjacent to the Great Smoky Mountains National Park will be preserved.

The land swap legislation—developed in consultation with more than 20 governmental and non-governmental groups—transfers 40 hectares (100 acres) of flooded land within the park in exchange for 75 hectares (186 acres) of biologically sensitive land that Alcoa currently owns.

Alcoa will also grant a permanent easement on 2,425 hectares (6,000 acres) of land to the Tennessee Nature Conservancy, which will have the option to buy the land. In addition, Alcoa will grant a 40-year temporary easement on 1,620 more hectares (4,000 acres) to the conservancy.

"This is a textbook example of how a major American company can work with communities and conservation organizations to help Americans keep a high standard of living as well as to conserve the environment," said U.S. Senator Lamar Alexander while introducing the legislation on the U.S. Senate floor. "Once approved, I expect it to become a model for many other companies, communities, and conservation groups."

Adds Don Barger, southeast regional director for the National Parks Conservation Association, "Alcoa has been an excellent steward of this land for decades. Once we started negotiating the details of the settlement, everyone in the room—especially Alcoa's representatives—were very concerned about real, long-term protection for the land. To me, that's responsible corporate behavior."

The four dams provide power to Alcoa's Tennessee plants, and the company employs 2,000 people in the area with an economic impact of US$377 million.

and certain marine species. However, the redesign of these products has significantly reduced or eliminated concerns about such impacts.

Mining Reclamation Process

In 2004, we updated our bauxite mine rehabilitation standard, the document that describes the requirements for mine operation and mine closure for all Alcoa mines. This update reflects efforts to clarify the standard, increase alignment with Alcoa's management systems and priorities, and strengthen communication and consultation with stakeholders.

Where relatively extensive operations, such as bauxite mining, are carried out in natural habitats, rehabilitation of the disturbed land should, in most circumstances, favor the return of the pre-existing vegetation and fauna communities. Such rehabilitation should aim to re-establish the broadest practicable genetic base using local genetic material and provenances wherever possible. For example, if the local stakeholders request that road access be maintained or that rehabilitation programs be designed to increase water yield to local reservoirs, efforts will be made to accommodate those requests. In Jamaica, the reclaimed lands are designed to enhance the opportunities for farmers to use the land for crops and livestock (see case study below).

Because biodiversity preservation is a major focus of the rehabilitation process, it is always a major component of any future land-use decision and rehabilitation plan. To determine the biodiversity of our rehabilitated land, we routinely monitor the number of trees per hectare, the growth rate, the understory density and diversity, seed production rate, litter density, and other parameters to determine the health of the vegetation. We also conduct periodic bird, mammal, and insect counts for important species, such as spiders (predators), ants (seed dispersal agents), and springtails and mites (active in leaf breakdown and nutrient recycling). In addition, we conduct extensive studies on surface water volumes and quality and on groundwater levels and quality.

Goat Rearing on Rehabilitated Land Provides Alternative Income

Jamalco (Alcoa's Jamaican operations), the Jamaica Bauxite Institute, and the Inter-American Institute for Cooperation on Agriculture are collaborating on a five-year, US$3.3 million goat development project on land that Jamalco has rehabilitated after mining at Mocho in Clarendon.

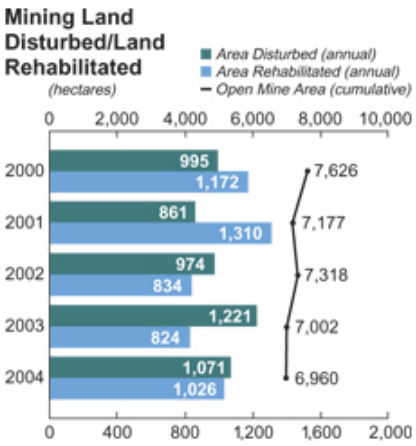
The project's aim is to promote agriculture as an avenue for sustainable development and build the skills required for creating alternative income for residents in Mocho since Jamalco concluded its mining operations in the area in November 2003.

Goats are an important source of meat in Jamaica, and local demand outstrips supply. Jamaica currently imports about 4,500 tons of goat meat—worth about US$4 million—every year.

Under the goat project, farmers are learning about advanced animal husbandry practices and herd rotation. In an effort to ensure continuity, the knowledge gained is also being transferred to the wider community through the high schools, where students are being introduced to modern animal husbandry at an early age.

Started in 2001, the Mocho goat project consisted of 11 farmers, 154 goats, and 15 hectares (37 acres) of rehabilitated land in 2004. Plans call for an additional 34 farmers by the end of 2005, when the project will be transferred to the community to be operated as a cooperative to help residents maintain its viability.

"The project has benefited the families through a steady stream of income from selling fresh goat meat and milk, which many people now want," said farmer Isabella Scott. "We can also make cheese and use the leather for crafts and drums and tambourines."



Area disturbed means annual land used in each reported year for mining or for mining infrastructure (roads, shops, crushing equipment, conveyors). Area rehabilitated means annual land returned to nature or to productive use (such as farming) after mining in each reported year. Open mine area is the cumulative area of land that has not been rehabilitated (including active mines and land used for mining infrastructure). One hectare equals approximately 2.5 acres.

South American numbers for 2003 exclude rehabilitation at the Paranam area, where current mining operations are run by BHP Billiton. South American data reported for other years have remained unchanged and include the Paranam area. Jamaican data include areas from the Breadnut Valley and Harmon Valley mines. Harmon Valley mine is a joint venture that is not operated by Jamalco.

The increase in bauxite production in Alcoa mines has resulted in the increase in the amount of land disturbed on an annual basis. We expect the area rehabilitated to equal the area disturbed when averaged over time.

Open Mine Area *(hectares)*

	Asia Pacific	Europe/Africa	North America	South America	Total
2000	2,870	1,084	1,179	2,493	**7,626**
2001	2,489	1,192	1,031	2,465	**7,177**
2002	2,404	1,359	1,077	2,478	**7,318**
2003	2,549	1,564	955	1,935	**7,002**
2004	2,643	1,661	803	1,853	**6,960**

Cumulative figures. One hectare equals approximately 2.5 acres.

Area Disturbed for Mining *(hectares)*

	Asia Pacific	Europe/Africa	North America	South America	Total
2000	598	109	205	83	**995**
2001	548	108	152	53	**861**
2002	527	178	185	85	**974**
2003	641	248	243	89	**1,221**
2004	585	97	283	106	**1,071**

Annual figures. One hectare equals approximately 2.5 acres.

Area Rehabilitated *(hectares)*

	Asia Pacific	Europe/Africa	North America	South America	Total
2000	704	0	410	58	**1,172**
2001	929	0	301	80	**1,310**
2002	612	11	138	73	**834**
2003	431	43	236	113	**824**
2004	490	90	286	160	**1,026**

Annual figures. One hectare equals approximately 2.5 acres. The high levels of rehabilitation in Asia Pacific in 2000 and 2001 resulted from the closure and full rehabilitation of all the infrastructure associated with the Jarradale mine in Western Australia—Alcoa's first bauxite mine in that region. The land has now been returned to the government, fully rehabilitated.

EMISSIONS, EFFLUENTS, AND WASTE

The Alcoa Business System recognizes that all wastes are costs. We are focused on waste reduction as a way to improve our processes, reduce costs, and reduce our environmental effects.

Over the last 20 years, Alcoa locations have made significant progress. Our fluoride emissions continue to be reduced each year. Our emissions of sulfur dioxide, volatile organic compounds (VOCs), and oxides of nitrogen continue to fall as planned under our 2020 strategy. We have reduced the volume of waste sent to landfills by more than half since 2000 and will continue to work to make further gains in this area. Our use of water has not been reduced as rapidly as we had planned, and additional efforts to address this critical resource will be necessary.

For a detailed discussion on our efforts to reduce greenhouse gas emissions, please see the climate change section on page four of this report.

Direct Greenhouse Gas Emissions[1] *(million metric tons of CO_2 equivalents—CO_2, e)*

	Direct CO_2	PFCs	SF_6	Total
1990	31.3	17.0	2.2	**50.5**
2000	32.7	7.4	1.1	**41.2**
2001	32.5	4.2	0.7	**37.4**
2002	32.3	4.6	0.0	**36.9**
2003	33.6	4.0	0.0	**37.6**
2004	34.1	3.5	0.0	**37.6**

[1] *Direct GHG emissions are the emissions from the facilities where Alcoa has at least a 50% ownership and/or management control. Please see endnote on page 43 for an explanation on data changes from 2003 reporting.*

Indirect Greenhouse Gas Emissions Associated with Purchased Electricity
(million metric tons of CO_2)

	Indirect CO_2
1990	19.2
2000	20.7
2001	21.9
2002	19.7
2003	22.0
2004	22.1

Indirect CO_2 data were affected by using updated local emissions factors for purchased electricity in accordance with the WRI/WBCSD GHG Protocol. With regards to purchased electricity, as better data become available, indirect emissions totals are refreshed. The percent of energy use allocated to grid, compared to the 2003 report, dropped significantly due to the result of better data becoming available.

Ozone-depleting Substances

We have eliminated ozone-depleting substances from process operations. In newly acquired facilities, elimination of these substances is a high priority. We do continue to use halon gas as a fire suppressant in 70 sensitive locations throughout the world, and these systems will continue to be phased out. There was one 62-kilogram (140-pound) release from a halon system at an Alcoa location in 2002 and a 14.7-kilogram (32.4-pound) release in 2004.

We are currently replacing some halon systems with FM 2000, which is not an ozone-depleting substance but does have a high global-warming potential. We continue to search for other substitutes that will address that concern as well.

Vegetated filter strip

Reducing Stormwater Volume, Contamination Through Natural Systems

Through two innovative techniques that use nature to reduce and treat stormwater runoff, Alcoa's Mt. Holly smelting facility in South Carolina (USA) has the potential to realize a 50% reduction in stormwater discharge volume and significant decreases in the residual runoff's contaminants—at a cost that is about 60% less to construct and up to 90% less to operate than conventional end-of-pipe treatment systems.

In response to Alcoa's 2020 framework for sustainability, Mt. Holly and scientists from Alcoa Technical Center designed and installed pilot engineered natural systems to reduce the costs, energy consumption, and environmental effects of wastewater discharges in the face of increasingly stringent discharge limitations. The pilot systems include vegetated soil profiles and constructed treatment wetlands.

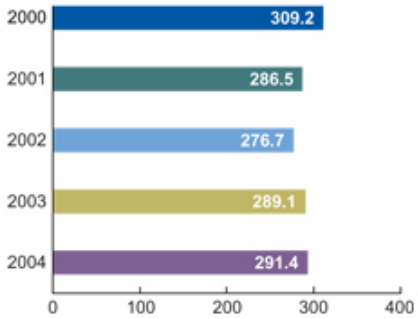
One pilot vegetated filter strip and soil profile, consisting of buffalo grass planted directly on high clay content soils, was constructed between two potline buildings. The facility also constructed another strip that replaced the top 30 centimeters (one foot) of clay with more loamy topsoil. Both are being evaluated to determine the reduction of runoff volume and contaminant transport from the building site, with a significant reduction in runoff already being experienced. During Hurricane Charley in August 2004, for example, stormwater runoff from the vegetated areas was 95% less than the runoff from non-vegetated areas.

The constructed treatment wetland consists of two separate areas—one cell biologically stabilizes metal contaminants, and the other cell adsorbs fluoride. Preliminary results show residual runoff with a 90% reduction in aluminum, a more than 95% decrease in zinc, and a 50% reduction in fluoride.

The pilot findings are being applied to Alcoa's new smelter in Iceland, which will be a zero process-water discharge plant and will have significantly reduced stormwater runoff.

SO_2 Emissions

(thousands of metric tons)



Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

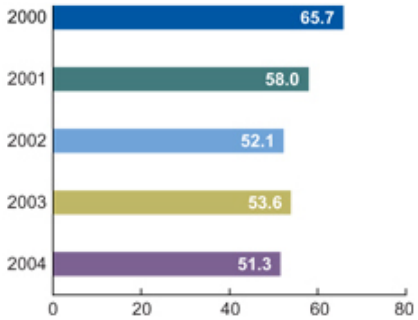
SO_2 Emissions by Region *(thousands of metric tons)*

	Asia Pacific	Europe	North America[1]	South America	Total
2000	50.7	18.7	226.2	13.4	**309.2**
2001	44.5	19.6	210.2	12.2	**286.5**
2002	50.2	21.0	192.6	12.9	**276.7**
2003	48.1	15.5	211.9	13.6	**289.1**
2004	50.5	13.4	213.2	14.3	**291.4**

[1] *Alcoa operates two large coal-fired power plants in the United States. The increase in SO_2 in North America in 2003 and 2004 resulted from increased utilization of power plants owned by Alcoa. Please see endnote on page 43 for an explanation on data changes from 2003 reporting.*

NOx Emissions

(thousands of metric tons)



Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

NOx Emissions by Region *(thousands of metric tons)*

	Asia Pacific	Europe	North America	South America	Total
2000	9.8	2.0	51.7	2.2	**65.7**
2001	9.3	2.1	44.4	2.2	**58.0**
2002	8.9	2.2	38.8	2.2	**52.1**
2003	8.9	2.3	40.2	2.2	**53.6**
2004	9.5	2.5	37.1	2.2	**51.3**

Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

Refueling with B20 soy-based biodiesel

Switch to Biodiesel Fuels Environmental Improvements

Heavy industry requires heavy equipment, and two U.S. Alcoa locations have switched their mobile equipment fleets to a soy-based biodiesel fuel to reduce emissions and improve the work environment.

Recognizing that eliminating diesel equipment wasn't feasible because of the limited capacity of alternative technology, Alcoa Davenport Works in Iowa began evaluating the use of B20, a 20% blend of soy-based biodiesel and low-sulfur diesel, in 2001. This blend can be used in new and older diesel engines with no engine modifications and no noticeable impact on the engine's output power. The biodiesel also provides better lubrication, and the solvent characteristics of the soy oil result in longer engine life, a cleaner fuel system, and reduced engine noise.

Results of the evaluation indicated that the ambient concentration of diesel exhaust particulate in high traffic areas decreased by 80%, and tailpipe emissions were reduced by 44%. Other emissions and their respective reductions were: unburned hydrocarbons (37%), sulfur dioxide (20%), carbon dioxide (10%), and carbon

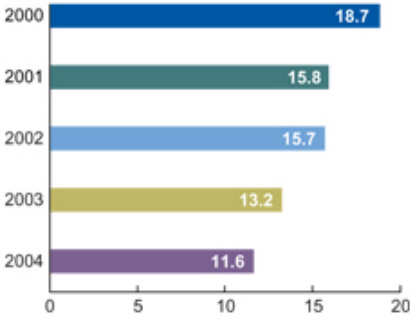
monoxide (20%). In addition, the objectionable odor of diesel exhaust changed to the odor of French fries. Davenport switched from diesel to biodiesel for all powered equipment in 2002.

Davenport’s experience with B20 cascaded to Alcoa Tennessee Operations, which began evaluating the fuel and working with engine manufacturers to ensure equipment reliability, performance, and warranties would not be negatively impacted. Full conversion of the entire Tennessee fleet began in November 2004.

In addition to emission reductions and workplace improvements, the use of biodiesel reduces dependence on oil and provides agricultural-based employment since the fuel is manufactured from soybeans—a renewable source.

VOC Emissions

(thousands of metric tons)



Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

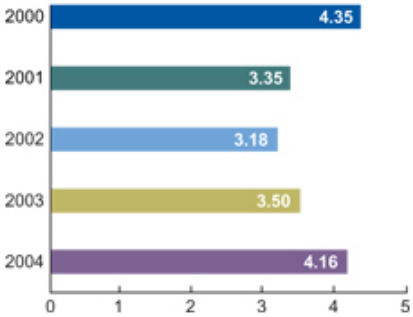
VOC Emissions by Region *(thousands of metric tons)*

	Asia Pacific	Europe	North America	South America	Total
2000	1.6	2.0	14.8	0.3	**18.7**
2001	1.4	1.9	12.1	0.4	**15.8**
2002	1.5	1.8	12.1	0.3	**15.7**
2003	1.3	1.9	9.8	0.2	**13.2**
2004	1.5	1.7	8.2	0.2	**11.6**

Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

Mercury Emissions

(thousands of kilograms)



The mercury emissions from Alcoa refineries are a function of the volume of bauxite processed. The changes in emissions in 2004 reflect the increased production at our Suralco refinery in Suriname. Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

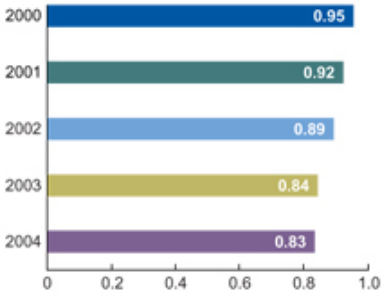
Mercury Emissions by Region *(thousands of kilograms)*

	Asia Pacific	Europe	North America	South America	Total
2000	1.01	0.38	2.59	0.37	**4.35**
2001	1.06	0.44	1.39	0.46	**3.35**
2002	1.00	0.26	1.46	0.45	**3.18**
2003	1.02	0.45	1.54	0.48	**3.50**
2004	1.02	0.46	2.22	0.46	**4.16**

The mercury emissions from Alcoa refineries are a function of the volume of bauxite processed. The changes in emissions in 2004 reflect the increased production at our Suralco refinery in Suriname. Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

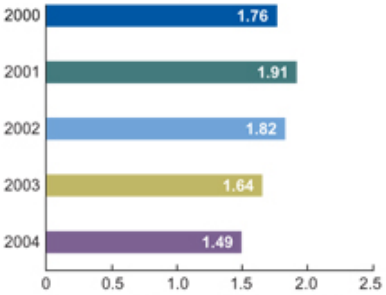
Fluoride Emissions

(kilograms per metric ton of aluminum produced)



Total Wastes Generated

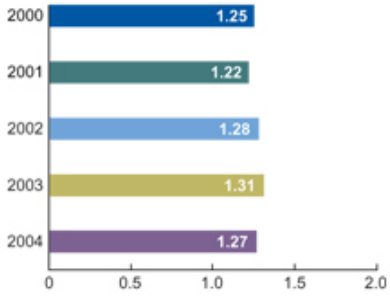
(millions of metric tons)



Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

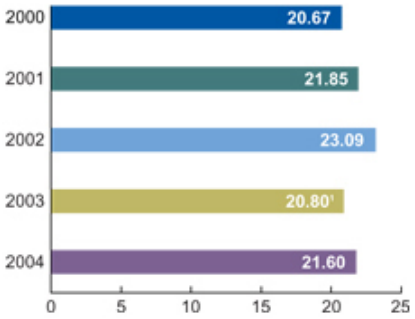
Bauxite Residue

(tons per ton of alumina produced)



Spent Pot Lining

(kilograms per metric ton of aluminum produced)

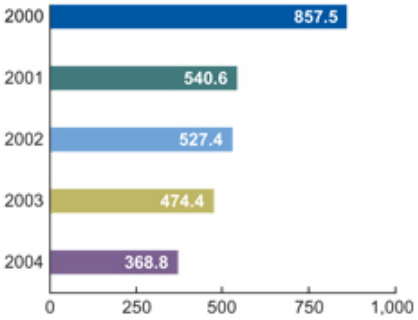


[1] *Estimate*

Alcoa's cell life continues to increase, resulting in fewer cell failures and fewer cells that need the lining removed and replaced. This pollution prevention effort reduces operating costs and will result in less spent pot lining for disposal. However, since the proportion of Pechiney-design cells has increased through the acquisition of a number of plants that use this technology, the actual weight of SPL continued to increase even as the number of cell failures decreased. (Pechiney cells use more insulation than Alcoa-designed cells.) This trend has reversed since the proportion of heavily insulated cells in the Alcoa system has not increased since 2000. Alcoa's efforts to extend cell life have been very successful and are expected to continue to result in significant improvements in cell life and reductions in the amount of SPL that will be generated. For example, Alcoa locations experienced 1,548 cell lining failures in 2002. In 2003, the number of failures was reduced to 1,463. In 2004, they dropped to 1,078.

Total Wastes Landfilled

(thousands of metric tons)



Does not include bauxite residue. Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

Spent Pot Lining Recycled/Reused

(percent)

Total Wastes Landfilled by Region *(thousands of metric tons)*

	Asia Pacific	Europe	North America	South America	Total
2000	39.2	128.3	665.3	24.7	**857.5**
2001	46.8	82.7	385.4	25.7	**540.6**
2002	24.2	83.1	394.3	25.8	**527.4**
2003	31.1	75.3	349.4	18.6	**474.4**
2004	44.1	59.5	245.2	20.0	**368.8**

Does not include bauxite residue. The high landfilled waste in Asia Pacific in 2003 and 2004 resulted from several large construction projects at two Alcoa refineries in Australia that produced demolition debris (mainly concrete) that was landfilled. Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

Belle-Iles River

Dynamic System Reduces River Fluoride Levels

Using an innovative technique called dynamic rainwater management, Alcoa's Deschambault smelter in Canada is synchronizing the release of excess stored storm and melt water—which contains fluoride—with the natural flow of Belle-Iles River to protect aquatic life. This is the first use of such a system in Canada and was designed and piloted in cooperation with the Quebec Ministry of the Environment.

“This project is a good example of how information sharing, cooperation, and participation lead to good business and better environmental management,” said Gerard Croteau, industrial ecology adviser for the Ministry.

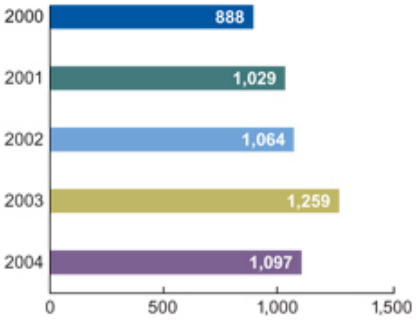
Deschambault uses treated rainwater and snowmelt water in plant processes, and often the amount collected exceeds plant needs. During periods of heavy rain, it was impossible to manage water discharge in sync with the natural rhythm of the river. When the river was running low, discharges could cause spikes in fluoride concentration and possibly jeopardize aquatic life. To get discharge concentrations within set limits, the smelter rented expensive treatment equipment.

With the new rainwater management system, Deschambault strives to maintain the river’s fluoride concentrations below 0.2 parts-per-million over a four-day average. Computerized analysis of the fluoride in the river, the flow of the river, and the fluoride in the rainwater storage basin allows the smelter to automatically adjust the discharge flow so that the river’s fluoride concentration remains under the water quality criteria needed for the long-term protection of aquatic life in this small river.

The new system also eliminated the need for rental equipment that could cost US$100,000 per year and helps Deschambault document that it is meeting all water quality objectives set for the plant by the Ministry.

Total Wastes Sold or Recycled

(thousands of metric tons)



Please see endnote on page 43 for an explanation on data changes from 2003 reporting.

Discharges to Water

Alcoa discharges wastewater from many plants throughout the world. We continue to improve the quality of our wastewater and are striving to reduce the volume of our discharges. Our long-term goal is to reach zero discharge of wastewater by 2015. In some refineries, like those in Western Australia and Jamaica, we have achieved this goal.

Recycling

Aluminum is one of the few materials used in consumer products that can be economically recycled without local, regional, or national subsidies. For example, recycling rates for aluminum beverage cans exceed 80% in many countries, including Brazil, Switzerland, Japan, and Sweden. In the United States, the aluminum can recycling rate has been as high as 66%, but now stands near 50%. Of the 100 billion aluminum cans sold each year in the United States, approximately 50 billion are collected and remelted to make new cans. Similarly, aluminum in automobiles, buildings, and electrical systems are recycled at rates near 90%.

Since aluminum can be recycled with less energy than any other metal, it's a "manufactured resource." Once the aluminum is separated from the oxide in the bauxite, it can be used over and over again by us and by future generations. The current "standing inventory" of this manufactured resource is about 500 millions tons of aluminum in use and available for future recycling. This represents about 70% of all the aluminum that has ever been produced. The International Aluminium Institute estimated that more than 12 million tons of this standing inventory is recycled every year.

We currently operate one of the largest used beverage can recycling facilities in the world at our plant near Knoxville, Tennessee (USA). All of the recycled metal from the cans is returned directly to the can sheet manufactured at the adjacent rolling mill and is converted again to beverage cans. We operate similar but smaller facilities in other countries.

Caustic Soda Waste Becomes Useful

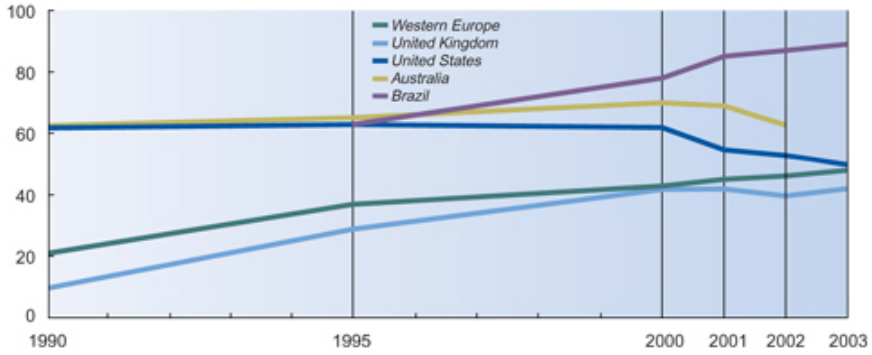
To reduce costs and make progress toward waste reduction goals, Alcoa facilities are exploring alternative uses and processes for caustic soda—an expensive raw material used to clean aluminum extrusion dies that is also a significant hazardous waste.

Alcoa's Tubarão extrusion plant in Brazil previously shipped its annual 1,000 cubic meters (1,308 cubic yards) of spent soda to another Alcoa facility for treatment. In cooperation with a local coal mining company, Tubarão explored using the waste to neutralize acid mine drainage water. Laboratory and field tests showed that one cubic meter (1.3 cubic yards) of caustic soda was capable of neutralizing 1,300 cubic meters (1,700 cubic yards) of drainage. The soda also precipitated several dissolved metals.

Following government approval of the process, the mine began introducing caustic soda into its stabilization lake. Once the acid mine drainage reaches a neutral pH of 6 to 7, the water is safely released to the river. Because the mining company pays the shipping costs for the caustic soda, Tubarão saves US$50,000 in annual transportation costs.

In Spain, Alcoa's Noblejas extrusion plant reduced the amount of caustic soda waste it produces by 50% between 2001 and 2004 by retaining some aluminum in the dies and cleaning them when required to maintain quality instead of routinely after every use. In addition to reduced caustic soda use, other advantages from this process change include reduced ergonomic risks because employees are handling the dies less, lower consumption of both water and electricity, and reduced employee exposure to caustic soda.

Aluminum Can Recycling Rate *(percent)*



Aluminum industry estimates; 2004 data, 2003 Australian data, and 1990 Brazilian data not available. 2003 Western Europe number takes into account uncertainties of some figures. Australian data from Aluminum Can Group.

PRODUCTS AND SERVICES

Significant Environmental Impacts of Principal Products and Services

Alcoa's products are used in the manufacture of transportation, construction, packaging, and consumer goods. The aluminum and plastic material we manufacture can be found in almost every market as well as in typical homes, automobiles, trucks, trains, and businesses.

Packaging materials that use aluminum provide improved food protection, reduce spoilage and waste, eliminate the need for refrigeration in some cases (aseptic packaging for milk and other products), and provide convenient and attractive packages to the customer. Aluminum beverage cans are the most recycled package in the world. Many of the more complex packages that consist of multiple layers of aluminum and other materials are more difficult to recycle, but Alcoa has entered into a partnership with Tetra-Pak in Brazil to operate a large laminated material recovery and recycling system to raise the recycling rate for these types of packages.

Aluminum used in transportation applications pays for itself in gasoline savings and reduces greenhouse gas emissions to the atmosphere. The aluminum content of the average car produced in the world increases each year, and aluminum will soon be the second most-used material after steel. (Aluminum will overtake iron within two years, as the use of that heavy material is reduced and aluminum usage increases.) Studies have shown that because of the unique properties of aluminum, including lightness, stiffness, and formability, aluminum-intensive cars can be safer, more responsive, and more fuel efficient than cars without significant amounts of aluminum.

In homes and buildings, aluminum offers the opportunity for products that are longer lived, easier to maintain, and easily recycled. Recent studies in both the United States and Europe have shown that the aluminum used in construction applications is recycled with very high efficiency when the building is demolished —approaching 95% of the metal in the structures.

ENVIRONMENTAL COMPLIANCE

In 1999, Alcoa established a comprehensive environmental compliance process and formed the Corporate Environmental Compliance Group to assure that all environmental compliance issues received the appropriate level of oversight. The group assists locations in defining compliance issues and assures aggressive corrective actions are in place and completed for any identified environmental compliance issue.

In early 2001, Alcoa adopted a goal of achieving 100% compliance with all environmental laws and regulations by the end of 2004. The Corporate Environmental Compliance Group provided stewardship to Alcoa's business units and locations in that effort through the development and implementation of compliance-focused management systems to better assure sustainable compliance.

We require all Alcoa locations to operate in compliance with all applicable environmental laws and regulations. Excellent progress has been made, with more than 60% of Alcoa locations achieving the goal in 2004. The percentage increases to 71% if you include those locations that only reported one incident[1] in 2004. The

process will continue until 100% compliance is the norm, and it will be extended to include full compliance with all internally developed standards and requirements. The ultimate goal is to have zero environmental incidents (including spills, releases, complaints from neighbors, and malfunctions, even if allowed by local laws) by 2015 or earlier.

[1] An incident is any unpredicted event with capacity to harm human health, the environment, or physical property. Some incidents can lead to an imposition of fines and penalties by various EHS regulatory bodies.

Environmental Incident Rate

	Spills Over 20 Liters[1]	Spills Over 2,000 Liters[1, 2]	Environmental Incident Rate per Location per Year[2, 3]
2000	1,038	Not available	9.3
2001	1,146	Not available	8.1
2002	1,219	97	8.1
2003	969	51	7.9
2004	969	25	8.0

[1] *Incident data reported in this year's report can vary, to some degree, from data reported in prior years. Alcoa's reporting protocols allow locations to back report incidents that may have been missed or to delete incidents that have been incorrectly reported for prior years. This can result in the number of incidents and the environmental incident rate to increase or decrease for prior years.*

[2] *Spills over 2,000 liters are classified as major incidents in the Alcoa Environmental Incident Management System. The requirements to report major environmental incidents began in 2002, the first year the data were available.*

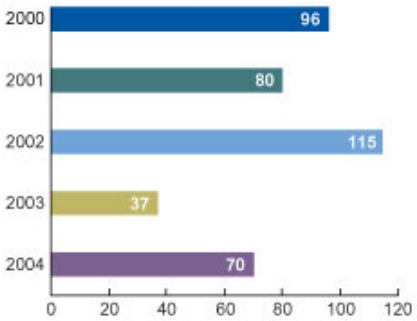
[3] *The environmental incident rate is the total number of reported incidents divided by the number of reporting Alcoa locations. It should be noted that the total number of incidents reported in 2004 was actually 7% lower from that reported in 2003. The increase in the rate for 2004 was negatively impacted by an 8% reduction in reporting locations from 2003 to 2004 as a result of divestitures and/or plant closures in 2004.*

Alcoa requires any spill of oils or other liquids in excess of 20 liters to be reported internally as an incident—whether or not they are contained within our facilities, and whether or not they are required to be reported to external agencies. The environmental incident rate includes all categories of incidents reported into the Alcoa Environmental Incident Management System.

CAPITAL EXPENDITURES

Environmental Capital Expenditures

(millions of US dollars)



Capital expenditures for environmental purposes in the period 2000-2002 reflect the upgrading of environmental standards at facilities of newly acquired companies—Reynolds (2000), Cordant (2001), Ivex (2002), and Fairchild (2002). Concurrently, significant expenditures also occurred as a result of bringing aluminum smelters to new regulatory standards in the United States. Spending in 2003 is reflective of the success in previous years to upgrade acquired locations to Alcoa standards, as well as a greater emphasis on non-capital solutions to environmental issues through the use of the Alcoa Business System, which engages people at the operating level to develop and implement solutions.

Capital Expenditures Process

We dedicate a significant portion of our capital expenditures to address environmental, health, and safety issues at operating locations. We use a number of processes, including technology teams, the EHS Request for Authorization (RfA) Review Team, and technology management review boards, to ensure that technology improvements are shared widely throughout Alcoa and that learnings from technology improvements are quickly implemented elsewhere.

For example, the EHS RfA Review Team meets monthly to discuss all projects with environmental, health, and safety implications and must approve the projects before they can be funded. This team evaluates the needs, the proposed solutions, and the long-term implications of the projects and the technologies/practices proposed. Large-scale projects, such as new projects/plants and significantly expanded plants, also must have early involvement teams established to address sustainability issues, stakeholder interactions, environmental impact assessment studies, and communications.

Endnote

Alcoa's Environmental Metrics System is a dynamic reporting tool that allows locations to update their data as more complete and accurate information becomes available. Modifications to data prior to 2004 reflect an improvement in data quality as locations revise their data measurement techniques and guidelines for reporting, thus eliminating the need for estimates.

Social

Performance Indicators

At Alcoa, we are as conscious about the effect of events and issues occurring outside the workplace as we are of those happening inside. Increasingly, these social factors can affect our success as a growing global business. They frequently connect to the health of our workforce, our safety performance, the skills development of our employees, and our ability to lead through our Values and community engagement.

We have talked in previous reports about the ongoing need to fine-tune these social dimensions of sustainability and the challenges of measuring and reporting them. It's important to note that we have made significant improvements in this area.

Our people are the foundation of our success throughout the world. Our multiple businesses require a wide range of skills, and this creates complexity in talent development that is partially addressed through a new online learning system we introduced in 2004. We are also developing processes and tools to capture our global people metrics. A challenge for 2005 is to work closely with our business units to focus on growth, attract and retain diverse talent, maintain an engaged workforce, and develop the leaders for today and our future—both in the community and at work.

In 2004, we dramatically improved our lost workday rate from an already strong basis. Between 2003 and 2004, this rate improved nearly 29%. For the first time, we hit milestones that we thought unimaginable just a few years ago. Yet there are deficiencies as well. We experienced three fatalities, an unacceptable record given our Values and our commitment to workplace safety. We are evaluating our defined procedures that could help prevent these tragedies, and we continue to seek their root causes.

In the health area, we are focusing not only on what happens on the job through ergonomics and hearing conservation initiatives, but we are also increasingly expanding our definition of health to include life issues that occur outside of work. Changes of activity, like smoking cessation or stress reduction, and early diagnosis and monitoring of medical conditions can often mitigate problems that impair employee health, attendance, and performance on the job. For these reasons, we pay for preventative screenings in the United States and have reinforced our healthy workforce initiatives. This supports the view that what frequently happens off the job can influence the health and well-being of our workforce and the costs and availability of the healthcare services that we provide.

Significant numbers of employees continue to be involved in their communities outside of work through our three employee engagement programs. This connection to the community is a fundamental expression of Alcoa's Values in action and builds essential social [continued on page 45]

New High School Fills Educational Void in Brazil

With the May 2004 opening of the Centro de Ensino Médio Professor Mário Marins Meireles High School in São Luis, Brazil, 845 students now have the opportunity to continue their studies close to home and at no cost.

Previously, many of these students either traveled long distances to attend high school or dropped out of school due to their inability to pay the transportation costs. Without a high school degree, many could not enter the local workforce.

The new US$650,000 school was paid for by the Alcoa-managed Alumar refinery and smelter in São Luis in conjunction with the state government, which is responsible for the school's ongoing operation. The construction project employed 91 people from the surrounding community (90% of the project's workforce), and the local contractor was required to follow Alcoa's environment, health, and safety standards.

"I believe that this school will develop work that is as beautiful as the school's physical space," said Priscila Lima, a student at the school. "It was God's gift that Alumar and the state government provided us this great opportunity."

Alumar also established partnerships with several local non-governmental organizations, including the Public Library Friends Society, to develop additional educational activities with the school.

Demand for the school is rising, with students from other communities requesting the opportunity to attend. School enrollment for 2005 is expected to reach 1,200, a 42% increase over the first year's roster.

capital. This is an area of community investment that we will continue to nurture wherever Alcoa's growth takes us. Employee engagement programs like ACTION and Bravo! help demonstrate the leadership roles that Alcoa employees take around the world and in our communities.

We continue to invest in our communities through Alcoa Foundation and community-funded grants by Alcoa. Through the foundation's four areas of excellence—safe and healthy children and families, conservation and sustainability, global education and workplace skills, and business and community partnerships—we seek projects with impact, focus, partnership potential, and long-term significance despite the size of the grant or the nonprofit organization fulfilling the work.

In the area of conservation and sustainability, we are developing a foundation-funded fellowship program that will support promising leaders in academia and practitioners in applied research. The initiative will support fellows around the world who are pursuing interdisciplinary work on practices, policy, and applied solutions to enhance sustainability. The program will include events that bring together leaders from across sectors and regions of the world. It will foster the development of networks that will extend the sharing of knowledge and best practices and link Alcoa Foundation with the next generation of leaders in sustainability and their important contributions to society.

WORK ENVIRONMENT

Diversity

Diversity and inclusiveness within our organizational culture are central to our aspiration of being a values-based and value-creating enterprise. Our Alcoa Business System begins with a fundamental respect for the contributions of each employee, regards individual differences as strengths, and nurtures opportunities to achieve professional and personal success. We seek to ensure that each employee is valued and that the work climate promotes inclusiveness. All qualified individuals seeking job opportunities with us will receive consideration for employment without regard to race, color, religion, sex, physical impairment, sexual orientation, or national origin.

In early 2004, we saw the establishment of the Alcoa African Heritage Network (AAHN), which is our second affinity group. The first—Alcoa Women's Network—began in 2003 and continues to provide the catalyst to develop women leaders throughout the company. The mission of AAHN is to improve Alcoa's recruitment, development, and inclusion of leaders of African heritage. The group is focusing on networking, career development, retention, and mentoring.

One of the challenges that we face is determining the appropriate models of diversity within the cultural complexity of our global family and then collecting data to reflect our progress toward those models. As we have realigned our businesses globally within their market sectors, each newly formed business group has established metrics to constantly strive to create an inclusive environment wherever we operate. The active leadership of Alcoa Women's Network has now established regional programs, and the emergence of the Alcoa African Heritage Network shows that Alcoa has embraced the affinity group model.

Gender Balance

In 1999, Alcoa established a five-year rate-of-change goal for improving gender balance within the company's leadership. We achieved the executive level goal. While progress was made at the senior manager and manager levels, it did fall short of our aspiration. We are committed to increasing the role of women leaders at Alcoa, and we anticipate the work of the Alcoa Women's Network will help us reach the new five-year goals and metrics that we are establishing within each of the Alcoa global business and resource units to ensure that this focus is a priority.

Alcoa Women in Leadership Positions
(percent)

	Manager	Senior Managers	Executives
1999 Actual	9	7	2
2004 Target	17	12	7.5
2004 Actual	13	10	8

Represents year-over-year measurement.

Talent

As we focus on global business organizations, organic growth, and market sector alignment, the changing complexion of our global workforce offers greater opportunities to strengthen our talent.

Our global presence allows us to attract a wider talent pool and create innovative development assignments. A 2004 global reorganization that connects our businesses more closely with their customers affords the opportunity to specifically tie our talent strategy to business growth and customer relationships. This creates a clear path for employee development.

Evaluating our core capabilities and our effectiveness in processes that can be leveraged has been a priority focus and will continue to be in 2005. The changing complexion of our global workforce offers us opportunities to better understand our communities and ensure our alignment with the people who will eventually join and remain a part of our workforce.

Employee Development

In 2004, we began a global rollout of Learning Express, a new learning management system that puts the power of learning directly into an employee's own hands. Through this self-service online system, an employee can search Alcoa's global learning catalog, select and enroll in courses (web-based, instructor-led, etc.), develop an individual learning plan, ensure monitoring of certifications, assess performance gaps, and maintain comprehensive records of existing and acquired skills. At the end of 2004, the system was available to employees in Brazil, Hungary, United Kingdom, and United States. We plan comprehensive deployment across all remaining regions in 2005.

After a 2002 analysis of our people data revealed a potential gap in leadership numbers due to retirements and attrition, we launched a new design for leadership development in 2003 that is rapidly facilitating broad-based global leadership skills. These programs provide distinct training that is built upon Alcoa Values, supported through demonstration of skills over nine months, and augmented with executive leadership mentors. Additionally, the training curriculum incorporates skill development in areas that ensure our commitment to global business models and cultural diversity. More than 200 managers and executives have already completed these customized learning programs.

Yennora employee Jener Belista

Multicultural Workforce Opens Windows of Opportunity

At Alcoa's Yennora rolling mill in Australia, 343 employees representing more than 40 nationalities work through language barriers, political differences, and cultural diversity on a daily basis to remain a unified workforce focused on a common goal.

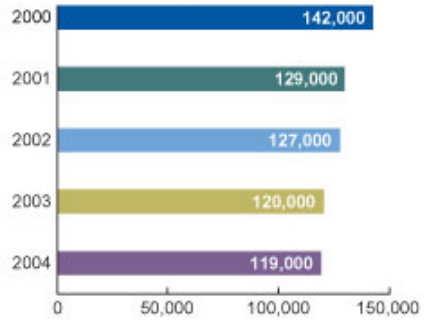
"Being part of such a diverse workforce opens the windows of opportunity for me to understand other cultures and enhances my abilities and experiences in finding a way to handle different attitudes and personalities," said Benjie Lualhati, roll shop coordinator. "It also provides ample expertise to be shared among the workforce, which in turn continuously improves work processes and ethics and leads to changes in people's attitudes toward others by making them more tolerant."

To overcome the inherent challenges in such a diverse workforce, Yennora spends significant time on direct communications. Because the level of written English is better than oral, most formal messages are in written form. All employees also must complete an English test as part of the recruiting process and are asked to speak that language at work as needed.

The facility has developed innovative ways of recognizing employees, including an open house that featured a multicultural theme with a food tasting, flag displays, and ethnic dancing and singing. In addition, every employee appointment, not just those for management, receives an organizational announcement.

"The challenge to get people to open up and express their true feelings and beliefs is overcome in part by associating with each other at ethnic functions that show people their values are important to the community and very much appreciated," said Lualhati.

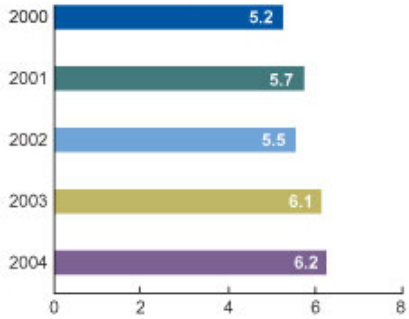
Number of Employees



Alcoa does not aggregate global data differentiating part-time from full-time employees. As of February 2005, the company has 131,000 employees due to the acquisition of two Russian fabricating facilities from RUSAL.

Labor Costs

(billions of US dollars)



Includes salaries plus employee expenses for external training, transfer and relocation, expatriate costs, workers' compensation, travel, recognition and rewards, medical expenses, meals, recruitment, transportation, education, work clothes, retiree medical, and other employee-related expenses. Excludes contract and temporary labor and computer- and communications-related expenses.

2000 figure includes six months of labor costs of mid-year acquisition of Reynolds Metals. 2003 figure includes US$345 million in labor costs for Fairchild acquisition. Increase in labor costs per employee due to rising U.S. health care costs and the effects of currency translation. Health care costs from 2003 to 2004 remained flat.

Employee Relations

Whatever the position—from chief executive office to supervisors to operators on the floor—our belief is that we are employees of Alcoa first and, for some of our workforce, members of trade and labor associations as well.

Employees by Region

	North America	South America[1]	Europe[2]	Asia Pacific
2000	96,600	11,500	27,400	6,500
2001	86,800	8,400	27,700	6,100
2002	83,900	7,800	28,300	7,000
2003	77,700	6,900	27,700	7,700
2004	76,400	6,600	28,500	7,500

1 *Includes Caribbean, Central America, and Latin America.*

2 *Includes Middle East and Africa.*

In 2004, we experienced a couple significant industrial relations issues that had a major effect on our earnings. By year's end, the issues had been resolved.

ABI At our ABI smelter in Quebec, Canada, a strike started in July after extended negotiations. Within the first 10 days of the strike, two out of three potlines were completely shut down. However, ABI had 100 salaried employees running the production of this one potline. While this was not our desirable state of production, there was community and media support for Alcoa. There have been some very positive outcomes from this, including addressing outstanding issues regarding pensions and staffing models. In addition, one of our U.S. locations had additional capacity restarted to help supply some of our customer commitments.

Five Day Notices at U.S. Plants

Four of our largest U.S. facilities received grievance notices from the United Steelworkers of America regarding the contracting out of services. The initial notice was filed with our Tennessee Operations within 12 hours of the ABI strike, and the three remaining notices arrived within weeks. We actively engaged all locations through extensive communication with our employees, customers, and communities, and we executed contingency plans for continuous production.

Following the notices, four days of negotiations occurred at the Tennessee location that ultimately led to further discussion at the international and corporate levels. The parties met in Pittsburgh in October and were able to bring resolution to the grievances.

The Alcoa management team is now focused on the company's 2005 reopener, which pertains to a labor agreement that covers about 9,000 U.S. production and maintenance workers in 15 operating locations.

HEALTH AND SAFETY

Health Summary

Alcoa’s ideal state for health and safety is zero work-related illnesses and injuries and improved health and well-being for all employees. To that end, we establish and track key metrics that move us incrementally toward these goals.

In the area of occupational health, 100% of our reporting locations (excluding new acquisitions) identified and described their workplace health hazards (qualitative assessment) by the end of 2003. Quantitative assessment, the second aspect of our comprehensive health hazard assessment process, reached 93% in 2004 versus a target

of 95%. This second step quantifies the hazards identified and is a dynamic measure of the continuous state of unknown risks within Alcoa locations. Acquisitions and other new locations within Alcoa rapidly complete these assessments so that appropriate hazard reduction plans can be developed and initiated.

With respect to chemical overexposures, our approach has been to track reduction in the number of hazards that exceed Alcoa standards from fixed reference points (baseline years). This “cycle” approach controls for new overexposures identified through the continuous hazard assessment process and for new acquisitions. For the 2001 year-end cycle (1999 baseline year) and 2003 year-end cycle (2002 baseline year), we reached 28% and 33% reductions, respectively, for a total reduction of 61%. This was against a 2003 year-end cumulative target of 40%. An additional 15% reduction was achieved during 2004 (from start of 2004 baseline), bringing the total reduction to 76% against a 2005 year-end cumulative target of 60%.

Using the same cycle approach for noise overexposures, we achieved a 12% reduction by year-end 2001 (1999 baseline year) and a 14% reduction by year-end 2003 (2002 baseline year) in the magnitude of the top 10 noise hazards at each location that exceeded Alcoa standards. This progress was against a 2003 year-end cumulative target of 40%. During 2004, an additional 12% reduction was reached from the start of 2004 baseline, bringing the total reduction to 38%. While we have not quite yet achieved the 40% reduction goal that had been set for the end of 2003, the additional progress in calendar year 2004 represents another 46% improvement over our progress through 2003, and we are expecting to achieve the 40% goal in 2005.

Our hearing conservation efforts have been strengthened through the deployment of state-of-the-art testing/training technologies, and we continue to analyze our hearing loss experience in order to reduce and ultimately eliminate work-related, noise-induced hearing losses. Our quantitative target focuses on reducing the number of new work-related hearing shifts between 2003 (the reference point) and 2005.

The identification and management of ergonomic risks continue to be high priorities. Having exceeded our 2003 goal of eliminating at least half of the top 10 ergonomic risks at all Alcoa locations (58% achieved vs. 50% target), we set a more ambitious 2005 goal. Every location has now been challenged to control at least half of all significant ergonomic [continued on page 49]

Ergonomics movement captor

Capturing Ergonomic Improvements Through Technology, Tools, Training

Elimination of ergonomic injuries is an essential component of Alcoa’s global strategy for achieving zero work-related injuries, and the current goal is for locations to control 50% or more of their significant ergonomic risks by year-end 2005.

At Alcoa’s San Ciprián smelter and refinery in Spain, an ongoing program that ranges from simple toolbox meetings to advanced motion capturing technology reduced ergonomic incidents by 99% between 1992 and 2004 and resulted in no lost workdays due to ergonomic injuries in 2002, 2003, and 2004.

The facility initiated improvements in the early 1990s and formalized a written program in 1999. Significant improvements were seen, but ergonomic-related injuries continued.

Stepping up its efforts, San Ciprián created an ergonomics laboratory, identified its top 10 ergonomic risks, hired a full-time ergonomist, and acquired a US$70,000 ergonomics movement captor. The latter captures an employee’s movements while he or she is conducting specific work tasks and then performs a biomechanical analysis. The resulting data are used to develop work process changes. The captor is also used to select the best tool for a particular process and can identify physical disabilities that may produce musculoskeletal disorders.

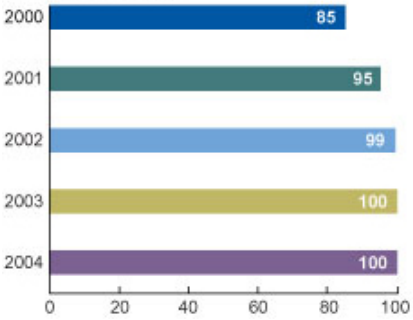
“The ergonomic improvements to my job are important because they facilitate and improve the work methods,” said Carlos Méndez Trasancos, mechanical maintainer in the carbon plant. “Load handling was one of the big contributors to ergonomic injuries, but some new tools have made our work easier. Through new tools and training, we can perform our jobs with the lowest risk.”

risks. A rigorously developed ergonomic risk-assessment tool has been created to assist locations in identifying these risks. During 2004, 22% of all significant ergonomic risks were controlled.

Compared to year-end 2003, a number of additional plant locations have improved their ergonomic self-assessment scores to good or better, bringing the total number of established locations having achieved this rigorous assessment level to 86%.

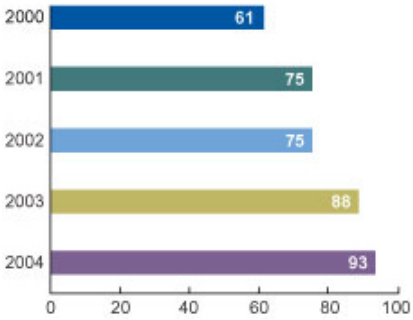
The availability of occupational medicine services at all Alcoa locations, regardless of size, remains a cornerstone of our strategy for achieving our ideal state. Through the end of 2004, 97% of our locations globally had such programs in place, and our rate for completing required medical evaluations was 94% versus a target of 100%.

Industrial Hygiene Assessments—Qualitative
(percent of assessments completed by reporting locations)



Qualitative refers to workplace health hazards identified and described.

Industrial Hygiene Assessments—Quantitative
(percent of assessments completed by reporting locations)



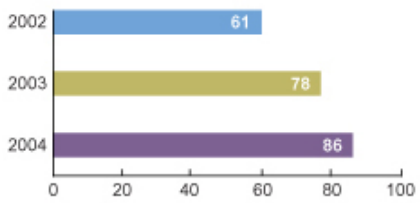
Quantitative refers to workplace health hazards adequately measured.

Ergonomic Incidents

	Total Recordable (TRR) Incidents	Number of Ergo-related TRR Incidents	Percent of TRR Incidents Ergo-related	Total Lost Workday (LWD) Incidents	Number of Ergo-related LWD Incidents	Percent of LWD Incidents Ergo-related
2000	5,081	1,460	29%	367	125	34%
2001	4,904	1,560	32%	417	149	36%
2002	2,931	933	32%	212	77	36%
2003	2,497	701	28%	223	60	27%
2004	2,150	590	27%	116	31	27%

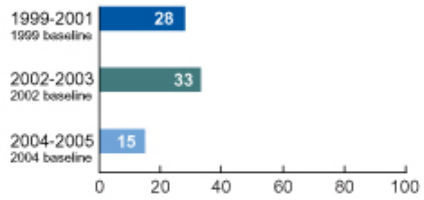
Year 2000 and, to a lesser extent, 2001 information on ergo-relatedness is incomplete due to inconsistent capturing of information in Alcoa's Incident Management System.

Locations with a Good or Better Alcoa Self Assessment Tool Score in Ergonomics



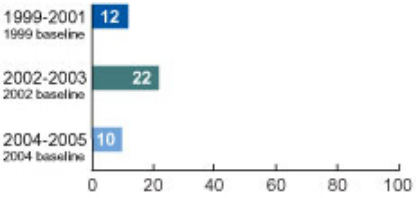
The Alcoa Self Assessment Tool is a type of self-audit that is required to be performed at least once every 18 months by every Alcoa location or administrative process worldwide.

Cumulative Chemical Number Reduction
(percent)



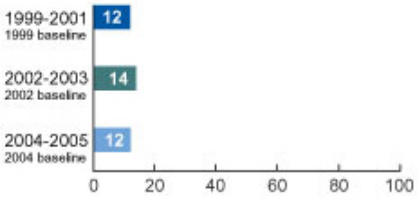
Indicates reduction in the number of chemical hazards exceeding Alcoa standards by reporting locations.

Cumulative Chemical Magnitude Reduction
(percent)



Indicates reduction in the magnitude of chemical hazards exceeding Alcoa standards by reporting locations.

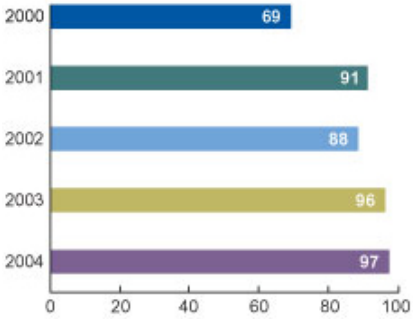
Cumulative Noise Magnitude Reduction
(percent)



Indicates reduction in the magnitude of the top 10 noise sources by reporting locations.

Occupational Medicine Programs Established

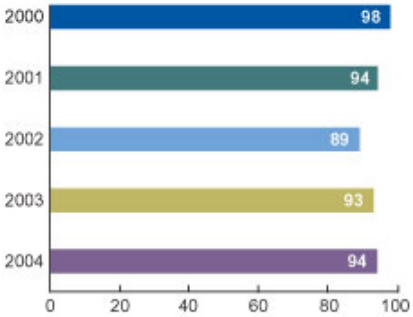
(percent of reporting locations complying)



The number of reporting locations reflected in the data increased between 2001 and 2002 due to acquisitions.

Occupational Medical Evaluations

(percent of annual required evaluations completed by reporting locations)



The number of reporting locations reflected in the data increased between 2001 and 2002 due to acquisitions.

Healthy Workforce Initiatives

The objective of Alcoa's healthy workforce initiatives—one of our six major strategic health and safety thrusts—is to assure that risks both on and off the job are understood, and that this knowledge is used to optimize the health and well-being of all employees.

Our initial round of targets began in 2001 and focused on establishing employee assistance program (EAP) services and location-specific health promotion activities. Through 2004, 93% of established global locations had EAP services in place and 93% had health promotion activities in place against targets of 100%. We also revised our EAP standard in 2004 to establish a minimum set of expectations for employee assistance, family support, and counseling to all of our employees worldwide and to assure the availability of resources.

Building on our foundation in EAP and health promotion, all locations were required to make available annual influenza vaccines to employees who desired to receive one beginning in 2004. Despite the vaccine shortage in the United States, 90% of global reporting locations were able to satisfy this goal, in part through appropriate collaboration and coordination with local public health authorities to steer vaccine to priority individuals.

Smoking cessation was a new objective in 2004, with all locations required to identify resources for smoking cessation assistance and adopt no-smoking strategies, including a declaration that their location would be smoke-free no later than the end of 2006. By year-end 2004, 91% of global reporting locations had achieved this goal.

Planned initiatives in 2005 will advance the efforts already underway, and we will continue our assessments of local and regional health issues so that appropriate future interventions can be tailored accordingly. These initiatives rely on the most efficient combination of community and company resources. Local workforce, community expectations, and cultural relevance dictate the specific type and nature of the initiatives at any given Alcoa location. Specific programming is further guided by internal efforts to understand the root causes of adverse health that may be amenable to intervention.

Healthy Workforce Initiatives *(percent of locations implementing program)*

	Employee Assistance Program	Health Promotion Activities	Influenza Vaccines	Smoking Cessation/ No Smoking Policy
2002	73	75	—	—
2003	88	89	—	—
2004	93	93	90	91

Management of Chronic Illness in the Workplace Standard

Alcoa maintains a worldwide health standard that enables and supports employees living with chronic diseases, including life-threatening and transmittable diseases like HIV/AIDS, to continue to pursue active careers. The employees must be physically capable of working, able to perform their assigned duties in an acceptable manner, and not presenting a direct threat to the health and safety of themselves or others at work.

Reasonable accommodations to the physical needs of such personnel are made on a case-by-case basis and, at a minimum, will meet all applicable legal requirements. The standard also addresses issues of reasonable accommodation, coworker education and counseling, and confidentiality.

Health and Safety Management System

Over the years, a comprehensive framework for continuous improvement efforts has evolved into what is today known as the Alcoa Health and Safety Management System. This system is used to proactively manage health and safety at all Alcoa locations.

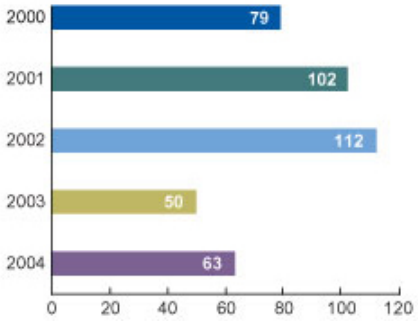
Each location has various task, department, ad hoc, and other committees to develop and implement health and safety programs based on the location's strategic health and safety plan. These leadership groups include a cross-section of personnel from the facility.

Our health and safety management systems include recording and notification of occupational accidents and diseases. Our internal standards meet, and in many cases exceed country legislative requirements. Our practices are consistent with the ILO Code of Practice on Recording and Notification of Occupational Accidents and Diseases. Any differences are of a minor nature.

Over the next two years, the Alcoa Health and Safety Management System will be integrated into the Alcoa EHS Management System to conform with ISO 14001 and OHASA 18001. This initiative will further strengthen our EHS management initiatives in such key areas as roles/responsibilities and action plans focused on root causes with aggressive closure timelines.

Health and Safety Capital Expenditures

(millions of US dollars)



Capital expenditures for health and safety in the period 2000-2002 relate to the upgrading of standards at newly acquired companies—Reynolds (2000), Cordant (2001), Ivex (2002), and Fairchild (2002). Spending in 2003 is reflective of the business condition, success in previous years to upgrade acquired locations to Alcoa standards, as well as a greater emphasis on non-capital solutions to health and safety issues through the use of the Alcoa Business System, which engages people at the operating level to develop and implement solutions.

Safety Summary

It was another year of continued improvement for Alcoa's global safety performance. For the first time in our history, our global lost workday rate dropped into single digits per 10,000 employees. We ended the year with just under nine lost workday injuries per 10,000 people in our workforce. We continue to make progress toward our goal of zero injuries, with 81% of our locations completing the year with zero lost workdays.

Regrettably, we experienced three fatal injuries—two employees and one contractor. We have conducted thorough investigations and evaluated all of the contributing factors. While no clear common causes have surfaced, we continue to look at all aspects of our complex industrial systems to identify and eliminate probable-and highly improbable—causes of fatalities. We have also deployed a global communication process to assure that all are informed of incidents with significant fatality risk.

Helping Employees Get Healthier

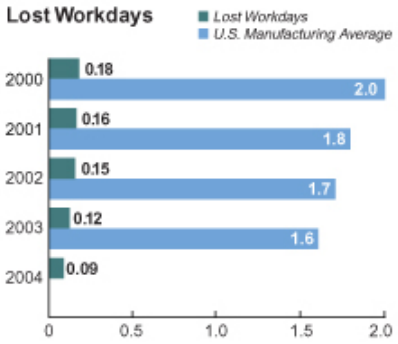
Initiated in April 2004 with the distribution of an apple for every employee, a healthy workforce campaign at Alcoa locations in The Netherlands aims to improve employee well-being at work and also instill a healthy lifestyle outside the plant walls.

With an initial internal focus on ergonomics for shop floor employees, the campaign includes specific training on neck and back issues and the use of tools to prevent ergonomic injuries to those parts of the body.

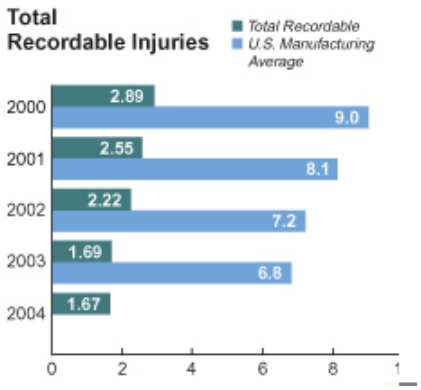
The healthy lifestyle component of the campaign—which features a kangaroo mascot named Fred Fit as its brand—uses newsletters, posters, and educational sessions to create awareness on topics ranging from smoking cessation and summer health tips to healthy food and exercise.

This proactive approach to help employees achieve positive, long-term health effects is already resulting in noticeable positive outcomes. Employees are using the back and neck information in their work, a group stopped smoking through laser therapy, and other employees have come up with ideas to promote sports and exercise. Although it’s too early to statistically measure the campaign’s effects, the locations are seeing a decrease in absenteeism.

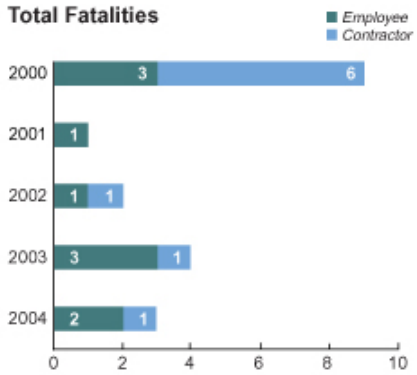
We continued to recognize and understand human error and its role in injuries and fatalities. We are using this information to optimize our systems, and we have looked both internally at our incident experience and externally to other organizations and experts to advance our learning in this area.



2004 industry average not available. Lost workday rate represents the number of injuries and illnesses resulting in one or more days away from work with or without job transfer or restrictions per 100 full-time workers.



2004 industry average not available. Total recordable rate represents the number of injuries and illnesses resulting in days away from work, job transfer or restriction, medical treatment, or other recordables per 100 full-time workers.



HUMAN RIGHTS

Alcoa is a global enterprise that does business in many markets. In order to do so successfully, we rely on all employees living our Values and supporting Principles. Specifically, our people Value provides support for the fundamental human rights embedded in our business model and is explicitly required by our statement of human rights. This statement provides clear language to assist our leaders to understand their responsibilities and identify actions they can take to support human rights across multicultural boundaries.

One of the challenges any corporation faces is understanding the diverse cultural and legal environments where it operates and seeking common ground to formulate a global human rights policy that embodies the diverse nature of each region's requirements and norms.

Training Speaks the Language of Safety

Along with the U.S. Occupational Safety and Health Administration (OSHA) and three nonprofit organizations, Alcoa's packaging facility in Avenel, New Jersey, sponsored and helped conduct much-needed safety training for an underserved segment of the working population.

The 10-hour safety training session held in October 2004 targeted Hispanic workers, a growing segment of the U.S. labor force. According to the U.S. Department of Labor, these workers accounted for 14% of all U.S. fatalities in 2003.

Three nonprofit organizations—The Wind of the Spirit, American Friends, and Little School and More—advertised the free safety training event within Avenel's Hispanic community. Topics during the session, which was conducted in Spanish, included employee rights, electrical safety, fall protection, fatality prevention, hand power tools, and more. In addition to sponsoring the training and providing 10 employee volunteers, Alcoa donated hard hats, safety glasses, and hearing protection for each of the 64 trainees. Alcoa had also sponsored and participated in three four-hour sessions earlier in the year.

"By sponsoring these events and assisting with the training, Alcoa really went a long way in helping with our initiative to address this serious issue," said Patricia Clark, OSHA regional administrator for New York, New Jersey, Puerto Rico, and the Virgin Islands. "Alcoa is serving as a wonderful role model and setting an industry example of a company that has embraced the issue of making sure workers are trained in the language they are most comfortable with. The company is going beyond training its employees to also train others that may not get training through their own employers. What we really need are other companies to do the same thing."

We evaluate major human rights doctrines, such as the Universal Declaration of Human Rights, in light of our culture and operating environment. While we see no need to adopt any specific doctrine, we review various ones for common principles and ideas that may be considered in the formation of our position on human rights.

To help ensure our human rights statement is understood and adhered to, Alcoa business leaders around the world are expected to provide timely advice and guidance to employees on ethics and compliance concerns. Our Values provide the common framework for this advice. They are the pillars of Alcoa's culture and serve as our universal language—transcending culture and geography. Our Values embody the highest standards of corporate behavior in all aspects of business and in all regions of the world.

We have a global Ethics and Compliance Line (see page 24) to enable employees to express concerns or request advice in their native language and anonymously, if they choose. Every concern and request is addressed and responded to without reprisal. Like the year before, we did not receive any calls related to human rights issues in 2004.

Human Rights Statement

Children and Young Workers

As a fundamental principle, we do not employ children or support the use of child labor. We do encourage the creation of educational, training, or apprenticeship programs tied to formal education for young people.

Freedom of Engagement

We believe that people should work because they want or need to, not because they are forced to do so. We prohibit the use of prison labor, forcibly indentured labor, bonded labor, slavery, or servitude.

Equality of Opportunity

We recognize, respect, and embrace the cultural differences found in the worldwide marketplace. Our work-place is a meritocracy where our goal is to attract, develop, promote, and retain the best people from all cultures and segments of the population, based on ability. We have zero tolerance for discrimination or harassment of any kind.

Compensation

We ensure that compensation meets or exceeds the legal minimums and is competitive with industry standards as specified in our global policy. Our compensation philosophy is clearly communicated to employees and is in full compliance with all applicable laws.

Freedom of Association

We recognize and respect the freedom of individual Alcoans to join, or refrain from joining, legally authorized associations or organizations.

Making the Learning, Communication Connection

For the indigenous peoples living in remote villages in the vast, pristine rainforest that covers most of Suriname, access to computers made available in part through Alcoa Foundation grants provides an opportunity to connect with a broader world.

Approximately 5% of Suriname's population lives in villages scattered throughout the country's undeveloped interior. Some of these villages have their own schools, and students from surrounding areas make daily trips—often in boats—to these educational centers.

Early on, Alcoa's Suriname Aluminum Company (Suralco) formed a relationship with the Education and Communication Network (Educon), a non-profit Surinamese foundation that promotes the integration of computers in everyday life to increase learning opportunities and encourage communication between different sectors of Surinamese society.

Working together, the two organizations installed 52 computers in areas outside the capital city of Paramaribo. Moengo, where Suralco has a bauxite mining operation, received 24 computers. Powaka, an Amerindian village close to the company's Paranam alumina refinery, received 12 laptops. The project was particularly challenging since no reliable electricity or telephone connections were available. Satellite connection and solar panels were installed to secure reliable service.

Through these computer systems, local village teachers keep in contact with each other and organize conference calls with colleagues and fellow students in the Paramaribo schools.

Future plans include installing computers in the schools of Brokpondo, where Suralco operates a hydro facility, and at Langatabitjie, which is close to Suralco's gold and bauxite concession.

Relationships with Indigenous People

Within the framework of our Values, we respect the cultures, customs, and values of the people in communities where we operate and take into account their needs, concerns, and aspirations.

SUPPLIER AND CONTRACTOR REQUIREMENTS

We have a comprehensive Ethics and Compliance Program that requires adherence to our policies and guidelines, which include environmental and social responsibilities. Available in 20 languages, the materials are provided to all employees and long-term contractors throughout the world.

In 2004, these materials were condensed to provide a focused Guide to Business Conduct (Supplier Guide) that specifically addresses supplier-oriented sections of our business conduct policies. Our businesses received the Supplier Guide for distribution to their major suppliers to ensure their awareness of our requirements for business conduct. The materials are also available to all current and potential suppliers via alcoa.com.

We also participated in the development of the Institute for Supply Management's Principles and Standards of Social Responsibility, which were released in 2004. The principles and standards cover seven areas of social responsibility—community, diversity, environment, ethics, financial responsibility, human rights, and safety. An internal Alcoa team defined our position statements for each of these areas, and the statements were reviewed with our global procurement leadership. Final approval is expected from company leadership in early 2005.

Once the statements are approved, the following activities are planned for the remainder of 2005:

- Conduct a series of internal procurement forums to communicate the positions and obtain feedback from our procurement professionals.
- Identify areas where we may have gaps related to our positions and develop action plans to respond.
- Respond to any gaps and continue to align with our overall sustainability framework.

In regard to human rights, all Alcoa supplier decisions are driven by Alcoa's Business Conduct Policies. We will not knowingly use suppliers who participate in the following activities: supplying unsafe products or services; breaking laws or regulations; using child labor or forced labor; or using physical punishment to discipline employees, even if it is permitted by local law.

AWN videoconference

Turning Teens into Tomorrow's Businesswomen

According to the Committee of 200 (C200) and Simmons University, 97% of U.S. teen girls expect to work throughout their lives, but fewer than 10% anticipate having careers in business. A grant partnership between Alcoa Foundation, C200, and Girl Scouts of the USA chapters in New York, Pittsburgh, and Chicago seeks to boost this number by introducing more girls to the possibilities of careers in business through a novel business planning competition and scholarship program called From Badge to Business.

In each of the three cities, members of the Alcoa Women's Network (AWN) have connected with the Girl Scouts as career day panelists and judges in the Scholarship Plus business plan competition. They have also presented scholarship awards and grant checks.

During Alcoa's 2004 Worldwide Week of Community Service, AWN members sought to actively reach Girl Scouts through an innovative career-awareness videoconference. During the conference, 26 Girl Scouts learned about different careers and businesses at Alcoa and how 10 AWN women in six cities prepared for their careers and tackle important issues like work life balance, measuring success, handling adversity, and international assignments.

The reactions from the girls were overwhelmingly positive. What did they like best? "That adults answered the ambiguities about business based on their personal experiences," said one young woman. "I got to see and learn about the diversity of women working for Alcoa," said another.

AWN will continue to reach out to young women to encourage them to consider careers in the varied and valued-added world of business.

In our work to identify sources in low-cost countries, we have implemented a robust supplier qualifica-tion and identification process. There are three levels of qualification that are accomplished through this process: first level; detailed level survey; and onsite inspection. In each stage of the process, issues related to human rights are addressed. This culminates in the final stage when Alcoa's sourcing team conducts thorough onsite audit inspections to make sure that the chosen low-cost country supplier ethically and professionally measures up to our business ethics and environment, health, and safety standards.

SOCIETY

For the past five years, we have expanded our definition of community investment to ensure that we represent more than money in the locations where we operate. This strategy keeps financial assistance at its core, but also encourages employee engagement in the community through volunteer activity, the sharing of knowledge and expertise, and the donation of products or equipment to nonprofits or non-governmental organizations.

Grant making—focused on Alcoa Foundation's four areas of excellence-continues to be a central element of our global and local leadership presence in social investing. Our grant decisions are based on the insights of 29 business unit lead teams and more than 200 local coordinators who make grant recommendations for their locations and who develop community investment strategies based on their assessment of local conditions and opportunities to make a difference.

Alcoa Community Giving

The combined giving of Alcoa and Alcoa Foundation totaled US$28.8 million in 2004. Alcoa Foundation made more than US$17 million in grants in 33 countries where Alcoa operates, with Alcoa and Alcoa-related foundations awarding another US$11.8 million in a wide range of grants to partner non-governmental organizations around the world.

Since 2001, we have supplemented Alcoa Foundation's capacity to maintain appropriate leadership levels of investment through corporate contributions in our communities as we expand to new markets, communities, and countries. Encouraging increases in our asset base, due to measured improvements in the stock market and the performance of our investment portfolio, enabled Alcoa Foundation to increase its 2004 payout by more than $2 million over the 2003 levels.

Alcoa Community Giving *(US dollars)*

2000	Total	U.S.	Mexico	Canada	Africa	Asia	Australia	Caribbean	Central & S. America	Europe	Global
Alcoa Foundation	20,103,977	15,385,392	456,528	204,500		25,000		148,284	1,250,290	1,508,683	1,125,300
Other Related Foundations	1,348,333	868,002		45,500					434,831		
Alcoa	3,286,315	1,493,338		83,825		197,390	694,808	56,489	498,014	262,451	
Excess FMV of Donated Property											
Total Combined Giving	**24,738,625**	**17,746,732**	**456,528**	**333,825**	**0**	**222,390**	**694,808**	**204,773**	**2,183,135**	**1,771,134**	**1,125,300**

2001	Total	U.S.	Mexico	Canada	Africa	Asia	Australia	Caribbean	Central & S. America	Europe	Global
Alcoa Foundation	21,284,784	15,029,312	948,750	209,200	196,892	99,500	100,000	167,000	1,306,781	1,897,350	1,330,000
Other Related Foundations	658,951	189,250		8,000					461,701		
Alcoa	18,088,028	11,090,743		3,240,453		9,799	699,904	64,508	2,229,606	753,015	
Excess FMV of Donated Property	12,600,000	12,600,000									
Total Combined Giving	**52,631,763**	**38,909,305**	**948,750**	**3,457,653**	**196,892**	**109,299**	**799,904**	**231,508**	**3,998,088**	**2,650,365**	**1,330,000**

Alcoa Community Giving *(US dollars)* ***continued***

2002	Total	U.S.	Mexico	Canada	Africa	Asia	Australia	Caribbean	Central & S. America	Europe	Global
Alcoa Foundation	17,211,415	11,464,815	840,800	229,285	196,394	20,000	135,000	167,085	1,088,834	1,879,201	1,190,001
Other Related Foundations	536,022	44,783		6,000					485,239		
Alcoa	11,355,071	6,273,962	723	178,829		44,239	1,156,334	102,057	2,679,971	918,957	
Excess FMV of Donated Property	5,650,000	5,650,000	0								
Total Combined Giving	**34,752,508**	**23,433,560**	**841,523**	**414,114**	**196,394**	**64,239**	**1,291,334**	**269,142**	**4,254,044**	**2,798,158**	**1,190,001**

2003	Total	U.S.	Mexico	Canada	Africa	Asia	Australia	Caribbean	Central & S. America	Europe	Global
Alcoa Foundation	14,970,191	8,808,555	620,387	205,500	234,500	75,000	236,500	105,000	1,241,430	1,233,140	2,210,179
Other Related Foundations	517,000								517,000		
Alcoa	11,069,967	7,481,969	122,755	485,078		72,284	2,096,064	(4,729)	393,934	422,612	
Excess FMV of Donated Property	265,405	170,453							94,952		
Total Combined Giving	**26,822,563**	**16,460,977**	**743,142**	**690,578**	**234,500**	**147,284**	**2,332,564**	**100,271**	**2,247,316**	**1,655,752**	**2,210,179**

2004	Total	U.S.	Mexico	Canada	Africa	Asia	Australia	Caribbean	Central & S. America	Europe	Global
Alcoa Foundation	17,000,536	9,209,113	584,350	339,565	277,329	287,500	448,800	334,109	862,740	2,250,500	2,406,530
Other Related Foundations	533,707	10,000							523,707		
Alcoa	10,691,586	5,990,165	95,385	522,870		26,949	2,803,182	138,533	521,842	592,660	
Excess FMV of Donated Property	556,770	503,537					53,233				
Total Combined Giving	**28,782,599**	**15,712,815**	**679,735**	**862,435**	**277,329**	**314,449**	**3,305,215**	**472,642**	**1,908,289**	**2,843,160**	**2,406,530**

Global grants can be awarded in any country for purposes that benefit multiple countries, including the United States.

Building Communities Through Education

Children at the Nueva Creación Elementary School in Acuña, Mexico, received a lesson in community investment when more than 400 people volunteered to help prepare the property where a new school will be constructed beginning in February 2005.

The students had been learning in temporary trailers, which often sweltered under the Mexican sun. A nearby Alcoa plant held an ACTION project to help with the project, and 180 Alcoa associates—many of whom were parents of the students—participated.

During the project, volunteers helped clean and beautify the site, planting trees as part of Alcoa's Ten Million Trees initiative. Alcoa's medical personnel also held a health fair for the students, conducting physical examinations and providing lessons on dental hygiene. Every student received a toothbrush, toothpaste, and school supplies. The school received a US$3,000 grant through Alcoa's ACTION program.

The Alcoa employees are continuing to help the school since it is in its initial stages and has many needs. A toy collection occurred in late 2004, and employees plan to make presentations on environment, health, and safety topics in 2005.

ACTION Grants

Groups of five or more Alcoa employees in any facility around the world can design a day of service at a local nonprofit organization and have their effort matched by either a US$1,500 or US$3,000 Alcoa grant to that local agency.

Since its inception as a pilot in four locations in 2000, ACTION has grown to include employee-designed projects in 185 locations. While an ACTION project traditionally required 10 or more employees to quality for a US$3,000 grant, we added a second track of mini-ACTION grants (US$1,500) in 2004 to accommodate smaller locations or projects that involve a minimum of five and up to nine employees.

The following tables chart the growth of this team-oriented approach to employee engagement—activity further fostered by our second Worldwide Week of Community Service.

ACTION Grants

2001	Total	U.S.	Mexico	Canada	Africa	Asia	Australia	Caribbean	Central & S. America	Europe
Number of Grants	110	67	10	3			8	3	12	7
U.S. Dollar Value	$330,000	$201,000	$30,000	$ 9,000			$ 24,000	$ 9,000	$ 36,000	$21,000
Number of Hours	9,340	5,048	524	328			488	120	1,552	1,280
Number of Employee Volunteers	2,332	1,259	131	82			122	30	388	320
Average Number of Hours per Project	85	75	52	109			61	40	129	183

2002	Total	U.S.	Mexico	Canada	Africa	Asia	Australia	Caribbean	Central & S. America	Europe
Number of Grants	234	105	17	18		3	36	3	24	28
U.S. Dollar Value	$702,000	$315,000	$51,000	$54,000		$9,000	$108,000	$ 9,000	$ 72,000	$84,000
Number of Hours	19,669	7,218	816	1,423		173	5,615	120	2,422	1,882
Number of Employee Volunteers	4,106	1,496	200	245		51	1,392	30	331	361
Average Number of Hours per Project	84	69	48	79		58	156	40	101	67

2003	Total	U.S.	Mexico	Canada	Africa	Asia	Australia	Caribbean	Central & S. America	Europe
Number of Grants	341	166	25	18		1	44		33	54
U.S. Dollar Value	$1,023,000	$498,000	$75,000	$54,000		$3,000	$ 132,000		$ 99,000	$ 162,000
Number of Hours	25,257	11,158	3,367	1,299		40	2,522		3,223	3,648
Number of Employee Volunteers	4,461	2,031	485	195		10	598		492	650
Average Number of Hours per Project	74	67	135	72		40	57		98	68

2004	Total	U.S.	Mexico	Canada	Africa	Asia	Australia	Caribbean	Central & S. America	Europe
Number of Grants	363	194	23	13		2	35		23	73
U.S. Dollar Value	$1,053,000	$559,500	$66,000	$37,500		$6,000	$ 105,000		$ 81,000	$ 198,000
Number of Hours	23,805	10,468	2,840	881		107	1,760		2,472	5,277
Number of Employee Volunteers	5,391	2,470	695	195		23	447		660	901
Average Number of Hours per Project	66	54	123	68		54	50		107	72

Represents projects paid during each respective year.

Bravo! Grants

Individual Alcoa employees who make a significant commitment of time to a nonprofit or nongovernmental organization can see their efforts maximized through a supportive grant for their organization. When an employee volunteers at least 50 hours a year at a qualifying charitable organization, Alcoa awards the organization US$250. Applications for community service performed in 2004 were accepted through January 31, 2005.

In an effort to align with Alcoa's e-business approach and to ensure the most efficient way to adhere to U.S. government requirements for anti-terrorism vetting of grant recipients, we instituted online applications for ACTION and Bravo! in 2004. We look for further improvements in 2005 to increase the number of Bravo! applicants as more Alcoa employees have access to online capabilities at work and learn about the value of the program.

Bravo! Grants

2002	Total	U.S.	Mexico	Canada	Africa	Asia	Australia	Caribbean	Central & S. America	Europe
Number of Grants	437	143		19			161	2	55	57
U.S. Dollar Value	$109,250	$ 35,750		$ 4,750			$ 40,250	$ 500	$ 13,750	$ 14,250
Number of Hours	35,758	8,644		966			20,275	100	2,750	3,023
Average Number of Hours per Volunteer	82	60		51			126	50	50	53

2003	Total	U.S.	Mexico	Canada	Africa	Asia	Australia	Caribbean	Central & S. America	Europe
Number of Grants	1,795	369	92	140			358		613	223
U.S. Dollar Value	$488,750	$ 92,250	$23,000	$35,000			$ 89,500		$ 153,250	$ 55,750
Number of Hours	169,136	45,339	5,196	19,634			45,774		30,692	22,501
Average Number of Hours per Volunteer	94	123	56	140			128		50	101

2004	Total	U.S.	Mexico	Canada	Africa	Asia	Australia	Caribbean	Central & S. America	Europe
Number of Grants	3,985	500	128	188			592	1	2,130	446
U.S. Dollar Value	$996,250	$125,000	$32,000	$47,000			$148,000	$ 250	$ 532,500	$111,500
Number of Hours	299,629	67,270	7,512	21,057			74,899	50	106,500	22,341
Average Number of Hours per Volunteer	75	135	59	112			127	50	50	50

Represents projects paid during each respective year.

Joel Câmara, his wife Sonja, and student Juliana

Drive for Employee Community Involvement

While commuting to work can be a real chore for some, Joel Câmara—an employee at Alcoa's Poços de Caldas smelter in Brazil—considers his commute a fulfilling experience.

Every morning at sunrise before heading to work, Câmara and his wife drive to the homes of up to six children with disabilities to take them to the Associação de Pais e Amigos dos Excepcionais (Association of Parents and Friends of the Disabled), a non-governmental organization that provides assistance to children and adults with disabilities.

The association provides psychological and other medical services, as well as education and job-skills training to nearly 600 clients to enable them to participate fully in the world of work or mainstream schools.

"When I give my time to these children, I receive so much more in return," said Câmara. "Organizations such as APAE really depend on everyone getting involved, and I feel privileged to be a part of these children's lives. It's also a good feeling to share my experience with other Alcoa employees and to encourage them to get involved in the community."

Câmara's volunteer work has earned the association a US$250 grant from Alcoa through the Bravo! program.

Taking Action—
Alcoa's Worldwide Week of Community Service

Under the theme of global education and workforce development, more than 170 Alcoa locations developed Week of Service activities that highlighted the work of Alcoa employees in our communities.

We celebrated this second worldwide service event from October 2-10, 2004, with activities ranging from volunteer recognition ceremonies in the plants to community-based service projects at schools, environmental trails, youth centers, and other educational facilities. Participation increased in 2004, with more countries involved and more activities occurring. Many plants invited local civic and community officials to participate first-hand in our community work.

Taking Action

	Locations	Countries	Events
2003	150+	20	235+
2004	170+	27	300+

Community Consultation

Implementation of the Alcoa Community Framework—a tool and process used to facilitate and measure ongoing relationship-building and communications between Alcoa and its community stakeholders—progressed steadily in 2004.

Engagement with individuals and groups grew significantly as locations in the United States and Australia continued implementation, and the European region began a formal roll-out in the fourth quarter.

In the United States, the seven-person North American Public Strategy Group worked with 125 locations to conduct individual community assessments to better understand each location's role in the community and how best to work with stakeholders to address the mutual needs of both Alcoa and our neighbors. Once an assessment is completed, the location develops a roadmap on how it will deal with issues and stakeholders. Tactics include building relationships with local officials and media, leveraging employee engagement in the community, and contributing to the long-term economic sustainability of the facility.

Examples of how these U.S. efforts strengthened our ties with stakeholders in 2004 include the establishment of 25 formal community advisory boards to provide a forum for ongoing interaction between the plants and area residents. These formal boards held more than 60 meetings during the year. In addition, more than 250 government officials visited Alcoa locations in 2004 to learn more about the economic and social effect Alcoa has had in these communities.

U.S. Community Consultation
(percent of reporting U.S. locations fully compliant with Alcoa Community Framework programs in 2004, by category)

Community Assessment	98
Events	61
Government Relations	31
Media Relations	32
Effective Contributions & Employee Engagement	34
Community Consultation	20
Participation on Statewide Teams	53
Value Added	25

Challenge Highlights Community Engagement

Alcoa Automotive, Aerospace, and Commercial Transportation (AACT) issued a 2004 challenge to its 50 locations worldwide—not only perform a community assessment using the Alcoa Community Framework, but establish a standard for the future by sharing insights and best practices for community engagement.

Working with Alcoa Foundation, the business unit's grant-making lead team set aside US$50,000 of its grant allocation budget for re-allocation to three exemplary AACT locations that exhibited innovative approaches to community engagement.

Eight finalist locations presented the results of their community assessments and coordinated strategies: Cleveland, Ohio (USA); Beloit, Wisconsin (USA); Auburn, Indiana (USA); Wichita Falls, Texas (USA); Tucson, Arizona (USA), Torrance, California (USA); AFL Mexico; and AFL Romania. The plan presentations were judged by Bill Christopher, group president of AACT, and representatives from Alcoa Foundation and the North American Public Strategy Group.

The judges found the plans to be thorough and creative. They connected an assessment of community issues with grant making, employee engagement opportunities, and possibilities for community consultation.

The event brought together locations from several regions of the world to share insights and best practices that set the standard for others to emulate. The presentations were so compelling that AACT and Alcoa Foundation awarded allocations to four locations rather than the three that had been envisioned. The winning locations were: AFL Mexico, Auburn, Beloit, and Tucson.

In Australia, all locations have established community consultative networks consisting of Alcoa and community representatives to work together on important issues, including sustainability, environmental effects, local employment, and Alcoa sponsorship and partnership programs. Locations have also developed other programs for community engagement. For example, our Victorian operations established Alcoa in the Community committees made up of a diverse range of employees from management to union delegates. The committees proactively pursue community partnerships, approve sponsorship requests, act as ambassadors for the company, and promote volunteering in the workforce. We plan to roll out this engagement model at other Australian sites in 2005.

We also work with Victorian communities to develop environmental improvement plans for each location. Community members participate in developing the plan, sign off on the plan, monitor our progress in achieving targets, and annually review the plan. In addition, we engage with the local community when we propose to expand or upgrade our facilities. For the Wagerup refinery expansion in Western Australia, we are working with five community working groups that include neighbors, local businesses, government representatives, and Alcoa employees as part of the community consultation and environmental assessment process. The case study on the Pinjarra refinery upgrade on page eight provides another example of this form of engagement.

In 2004, Alcoa World Alumina Australia earned the Alcoa Global Leadership Award for Best Community Engagement. This award is given to the Alcoa business unit whose community engagement achieves the most effective and sustainable linkage of the goals of both the Alcoa Community Framework and Alcoa Foundation.

Global EHS Community Programs

	Number of Locations Holding Community Programs	Number of Programs	Number of Community Participants
2001	65	231	430,998
2002	109	501	369,608[1]
2003	105	575	436,844
2004	195	726	558,684

[1] *Due to Alcoa's revised standards for community programs, locations are now reporting better data related to the number of individuals directly affected instead of those indirectly affected by means of newsletter circulation or event sponsorship.*

Community Health Initiatives

The safety and health of the people who live in Alcoa communities remain of vital concern to us. We reinforce our Values and demonstrate our commitment to our neighbors when we focus on health in the community and share information that can lead to injury and disease prevention, healthier lifestyles, and better life prospects for community residents.

In 2003, we instituted new tracking and reporting methods to capture data on the number of Alcoa locations that have engaged their communities through health-related initiatives. By the end of 2004, three-fourths of global reporting locations had established at least one health or safety community initiative. These initiatives have engaged 550,000 individuals worldwide since 2000, with 301,000 engaged in 2004 alone.

Bribery and Corruption

Alcoa has a corporate-wide policy and zero tolerance for bribes. Our corporate approach is one of strict compliance with the letter and spirit of all laws focused on anti-bribery and corruption, such as the provisions of the Foreign Corrupt Practices Act (FCPA).

Alcoa's policy in this regard clearly states that all directors, officers, and employees shall comply with all laws and regulations that are applicable to the company's activities. These provisions of our business conduct policies are further reinforced and specifically addressed through training and in our Guide to Business Conduct, which has been translated into 20 languages and deployed globally to all employees and contractors.

Political Contributions

Pursuant to Alcoa's global business conduct policies, the use of company funds, property, services, and things of value for or in aid of (or in opposition to) any political parties or candidates for public office is prohibited. Similarly, the policies dictate that no such corporate asset may be used, without the prior written approval of Alcoa's Chairman of the Board and the general counsel, for or in aid of (or in opposition to) any committee whose principal purpose is to influence the outcome of a referendum or other vote of the electorate on a public issue.

Employees may volunteer their own time to assist a candidate or campaign committee. However, company facilities, employee work-time, support services, office supplies, electronic mail access, etc., may not, under any circumstances, be utilized in such an effort. Nor does the company allow the formation of political action committees (PACs).

Similarly, corporate funds cannot be used to purchase tickets or otherwise pay for the admission fee (or other expenses) to fundraising activities of any candidate, potential candidate, political committee, or political party.

PRODUCT RESPONSIBILITY

Customer Environmental, Health, and Safety Activities

In response to increasing requests from customers and suppliers, Alcoa conducted several benchmarking sessions in North America during which we openly shared our approach to environment, health, and safety. Topics included integration of EHS into manufacturing processes, fatality prevention, occupational health initiatives, environmental programs, internal audit programs, and metrics systems.

Product Information and Labeling

For years, Alcoa has developed and provided to downstream customers material safety data sheets (MSDS) and product labels for both commercial and hazardous waste products. These documents discuss relevant environmental, health, and safety risks and what precautions to take and procedures to follow when using our products.

This program has been in place for many years to not only address our EHS values but to also meet legal requirements that exist in many regions of the world. We audit our locations to ensure they are following this practice, and many of these MSDS and product labels have been translated into languages needed for particular countries. We recently put in place a mandatory product stewardship and integrity standard that reinforces the development and distribution of MSDS and product labels.

For a complete listing of our material safety data sheets, visit alcoa.com.

Online Privacy Statement (Worldwide)

Alcoa is committed to safeguarding privacy online. From time to time, Alcoa may make changes to this privacy statement to reflect changes in its business or to serve users better. Alcoa will use reasonable efforts to publish any such changes in the privacy statement.

Alcoa protects privacy on alcoa.com through four basic principles:

- Users will always be advised when Alcoa is collecting information about them or their online preferences and expectations and it will be made clear how that information is to be used.
- Users will be able to choose whether or not they want to provide that information.
- Any information collected about users will be secure and not shared with any third parties unless users give prior permission for that information to be shared.
- Users will have access to any personal information Alcoa collects and keeps about them, and they will be able to securely change or delete that information at any time.

Because Alcoa offers a wide range of online business opportunities for its customers, the amount of information the company needs to collect in order to serve them in a particular business transaction will sometimes vary from case to case. Regardless of the amount of information collected, the four principles listed above will apply. Wherever Alcoa collects personal information, users will find a link to this privacy statement. If users choose not to provide some information, for example to enable confirmation of credit status, it may not be possible for them to proceed with their chosen business activity with Alcoa.

Economic
Performance Indicators

Disciplined financial management is essential to ensure long-term success for both Alcoa and the societies we affect.

Our financial management is exemplified by our stringent financial controls, our commitment to a conservative capital structure, our dedication to financial return goals, and our focus on value creation through profitable top-line growth, highly selective capital spending, and cost reduction activities. As an example of the strength of our financial processes, we are able to consolidate the financial performance of more than 350 operating locations in 43 countries and report quarterly earnings before any other Dow Jones Industrial Average member company.

Our aim to create sustainable financial results that enable profitable growth and superior shareholder value is defined by three financial goals:

- Joining the first quintile of Standard & Poor's (S&P) Industrials in return-on-capital (ROC) performance and, in pursuit of that goal, providing returns greater than the cost of capital.
- Consistently eliminating waste. We launched our third consecutive cost challenge aimed at eliminating US$1.2 billion in costs on a run-rate basis by 2006.
- Maintaining a strong balance sheet, defined by a debt-to-capital ratio in the range of 25% to 35%.

Within this context, 2004 was another strong year for Alcoa. We generated the highest annual sales in the company's history, increased income from continuing operations by 33% to US$1.4 billion, and reduced debt-to-capital to 30.0% through, among other factors, strong cash from operations of approximately US$2.2 billion. We achieved these results despite a weaker US dollar and cost pressures caused by increases in several key raw material inputs, including energy, caustic, and resin.

Following is a brief summary of our economic performance in 2004. For more detailed information, please refer to the 2004 Alcoa Annual Report.

SHAREHOLDER VALUE

Our strong financial results have positioned us to achieve our primary financial goal—creating significant value for our shareholders. We delivered a total shareholder return[1] of 249% over the last 10 years compared to the S&P 500 Index of 212% and the Dow Jones Industrials Index of 243% over the same period.

[1] *Represents the total return a given investment in a stock would have delivered over a given period with the assumption that all dividends are reinvested in that stock, as measured by Bloomberg.*

Online Sourcing Reduces Costs, Increases Supplier Visibility

Through the use of online sourcing to purchase goods and services, Alcoa has reduced procurement costs, leveraged its global purchasing power, and created a means for suppliers to broaden their visibility within Alcoa.

In 2004, approximately 6.4% of Alcoa's total purchases were made via online bidding. Since the program's inception in 2001, the company has sourced more than $3.9 billion in goods and services online with an average savings of 13.3% per purchase compared to historical costs.

More than 860 Alcoa buyers worldwide have been trained to use the tool, where bidders compete online for business by submitting offers with immediate feedback on their position in the event. Suppliers have indicated the tool has made the sourcing process more transparent and allowed some vendors previously not considered to routinely compete for Alcoa business.

"In the past, Alcoa's purchasing activity was very decentralized, with every location having its own way of going about procurement for the products we make," said Ben Ruela, national sales account manager for Hyster, a full-line producer of material handling equipment. "With online bidding, it's a much cleaner process, and we have a central group within Alcoa to assist us. We've also become visible to all locations and have gotten into places where we weren't before."

Alcoa Share Price Performance

Source: Bloomberg

Alcoa has been listed on the New York Stock Exchange[1] (ticker symbol: AA) since 1951 and had an estimated 295,000 common shareholders that owned, on average, 870 million common shares in 2004.

We have delivered our returns to shareholders through a combination of capital growth and quarterly dividends, which have been paid uninterrupted since 1939. The Board of Directors determines whether dividends will be paid and, if so, the amounts, taking into account various factors that include operational performance and capital requirements. Our dividends have grown at a compounded annual rate of 14% for the last 10 years.

[1] *Alcoa currently has secondary listings on exchanges in Australia, Belgium, Germany, Switzerland, and the United Kingdom. Our preferred shares are listed on the American Stock Exchange.*

Distributions to Shareholders

	Dividends[1] *(millions of US dollars)*	Dividends Paid per Common Share *(US dollars)*
2000	418	0.50
2001	518	0.60
2002	509	0.60
2003	516	0.60
2004	524	0.60

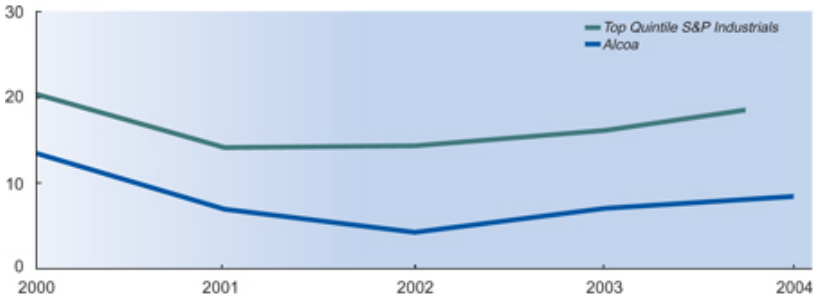
[1] *Includes dividends to both common and preferred shareholders.*

Return on Capital

We remain committed to the goal of achieving first quintile return on capital (ROC). As measured by Bloomberg, our ROC for the full year of 2004 was 8.4%, up from 7.0% in 2003. The 2004 entry point of the first quintile of the S&P Industrials[1] was 18.5%.

[1] *S&P Industrials data not available for 4Q 2004.*

Return on Capital

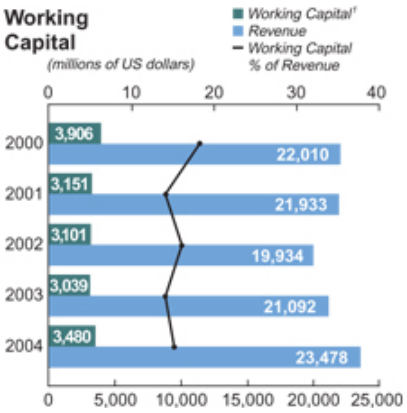


Indicators are based on Bloomberg return on capital methodology. S&P Industrials data not available for 4Q 2004.

Positioning for Growth

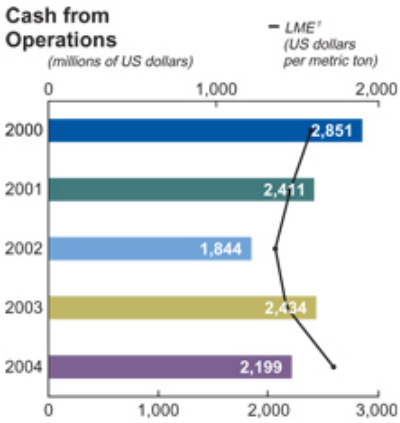
A strong balance sheet—measured in terms of the relationship between debt and total capitalization—is crucial to enabling profitable growth through both the general economic and aluminum cycles. Our target debt-to-total capitalization is between 25% and 35%.

In 2004, we made significant progress in strengthening our balance sheet. We moved our debt-to-total capitalization from 35.1% in 2003 to 30.0% in 2004. This is the lowest ratio we have achieved since 1999. Improved operating results, working capital efficiency, cash from operations, capital discipline, and business portfolio management drove this performance.



[1] *Defined as Receivables from customers, less allowances + Inventories – Accounts payable, trade.*

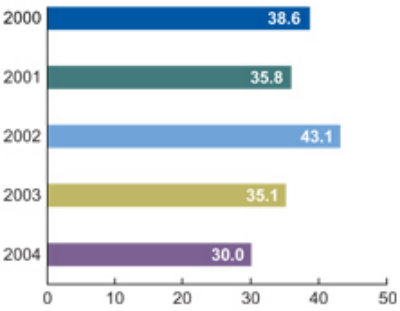
Data changes from 2003 reporting due to reclassification of discontinued operations.



[1] *Average three-month aluminum price on the London Metal Exchange.*

Data changes from 2003 reporting due to reclassification of discontinued operations.

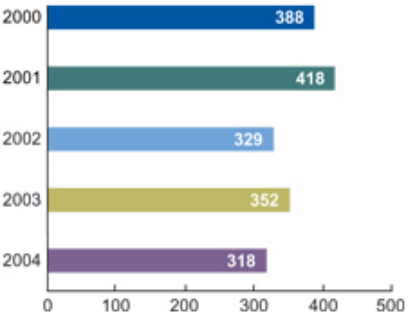
Debt as a Percent of Invested Capital



Defined as (Short-term borrowings + commercial paper + Long-term debt, due within one year + Long-term debt, less amount due within one year) / (Short-term borrowings + commercial paper + Long-term debt, due within one year + Long-term debt, less amount due within one year + Minority interests + Total shareholders' equity).

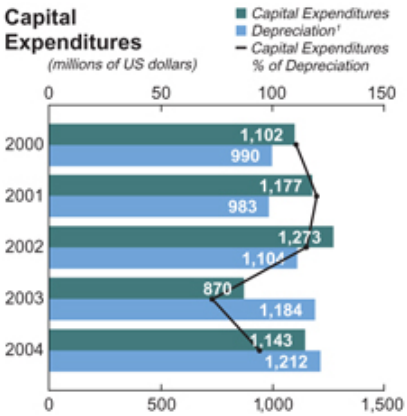
Cash Interest Paid

(millions of US dollars)



Our strong balance sheet has allowed us to retain an investment grade rating with major agencies, such as S&P and Moody's, for more than 27 years. At of the end of 2004, our long-term debt was rated "A-" by S&P and "A2" by Moody's. In January 2005, S&P revised its debt outlook for Alcoa to negative from stable,

citing higher capital expenditures in 2005 and future years. There was no change to either Alcoa's long-term or short-term ratings.



[1] *Provision for depreciation, depletion, and amortization.*

Data changes from 2003 reporting due to reclassification of discontinued operations.

Enhancing Portfolio Value

Economic value is the engine that drives our company and the benefits to shareholders, employees, customers, suppliers, and communities. To increase this value, we continually review our business portfolio and shape it for future growth. In 2004, we completed the execution of our portfolio rebalancing initiative announced in January 2003, and we continued to pursue profitable growth in both our upstream and downstream businesses. The January 2003 portfolio initiative strengthened our balance sheet through the sale of certain non-core businesses. The proceeds of these sales were used to pay down debt and position the company for long-term profitable growth.

Aluminum Smelting Growth Initiative

In 2004, we broke ground on our previously announced greenfield smelter in East Iceland. This 322,000 metric-tons-per-year (mtpy) aluminum smelter is the company's first greenfield smelter in 20 years. Upon completion, it will be one of the most efficient, environmentally-friendly, and safest smelters in the world.

We have begun preliminary work for an environmental impact assessment for a potential state-of-the-art, low-emission smelter with a capacity of 341,000 mtpy in southwest Trinidad. If the study results are positive, the project will be presented to the Alcoa Board of Directors and the Government of Trinidad and Tobago for an investment decision.

In April 2004, Alcoa and the Aluminum Corporation of China Limited (Chalco) received approval from the China National Development and Reform Commission to proceed with formation of their proposed 50/50 joint venture at the Pingguo aluminum facility in the Guangxi Zhang Autonomous Region in South China. This facility is one of the most efficient alumina and aluminum production facilities in China, with current alumina refining capacity at 850,000 mtpy and aluminum smelter capacity of 135,000 mtpy. China is one of the fastest growing aluminum markets, and the parties continue to work diligently on the terms of their joint venture and to obtain the necessary government approvals.

Brownfield expansions are often a viable option to grow our smelting portfolio. In 2004, we announced that our 100% equity-owned subsidiary, Alcoa Aluminio S.A., will expand its share of the smelting operations in São Luis by 30%, or 63,000 mtpy. This brings Alcoa Aluminio's share of smelting capacity in that facility to 262,000 mtpy. Construction is currently underway, and production is expected to begin in the third quarter of 2005.

We also sold our 10% stake in the Alscon smelter in Ikot Abasi, Nigeria, to that country's federal government. We assumed the stake as part of our acquisition of Reynolds Metals. The Alscon smelter was 70% owned by the federal government and 20% by Ferrostaal AG. Only a portion of the facility has ever been operated, and it has been idle since mid-1999.

Alumina Refining Growth Initiative

Throughout the year, we continued to pursue growth initiatives in refining. Alcoa World Alumina and Chemicals (AWAC)—a global alliance between Alumina Limited (40%) and Alcoa (60%)—and the government of the Republic of Guinea signed a protocol for developing jointly a 1.5 million mtpy alumina refinery in Guinea, West Africa.

AWAC received the Western Australian government's environmental approval for its previously announced Pinjarra alumina refinery efficiency upgrade (see case study on page eight). Work on the project, which will increase production at the facility by 600,000 mtpy, began in March 2004 and is expected to be completed by the end of 2005.

In December 2004, Alcoa announced an agreement in principle to expand the Jamalco alumina refinery in Clarendon by more than 1.5 million mtpy. The expansion will more than double the refinery's total capacity to at least 2.8 million mtpy.

In Suriname, Suralco substantially completed a 250,000 mtpy expansion to the Paranam alumina refinery ahead of schedule in early 2005. The facility's total capacity is now approximately 2.2 million mtpy. Suralco owns 55% of the Paranam facility.

We have also recently expedited engineering efforts and work toward securing permits for a 2 million mtpy expansion of the Alumar alumina refinery in São Luis, of which AWAC will have a 54% share, and for a

bauxite reserve in Juruti, Brazil, where AWAC has certain exploration rights and mineral leases.

Downstream Businesses

In early 2005, we completed the acquisition of two fabricating facilities in Samara and Belaya Kalitva in the Russian Federation from RUSAL. As part of Alcoa, the two fabricating facilities will serve not only the domestic Russian market but will also focus on global customers in Europe, Asia, and the Americas.

In January 2005, we completed the sale of our 50% equity interest in Integris Metals, Inc., a metals service center company engaged in processing and distributing metals.

In December 2004, we signed a letter of intent with Fujikura Ltd. of Japan in which Alcoa will obtain complete ownership of the AFL automotive business based in Detroit, Michigan (USA), and Fujikura will obtain complete ownership of the AFL telecommunications business, based in Nashville, Tennessee (USA). AFL Automotive is a large part of Alcoa's automotive business, and this transaction increases our position in this strategic market, helping us serve our automotive customers globally. Alcoa and Fujikura hold a 51%/49% respective ownership of both through the Alcoa Fujikura Limited joint venture until the transaction is completed.

In packaging, Alcoa Aluminio S.A. sold its Brazilian flexible packaging business unit, known as Itaipava. Earlier in 2004, we successfully completed the sale of our aluminum foil facilities at Russellville, Arkansas (USA), and St. Louis, Missouri (USA).

AWAC completed the sale of its Alcoa specialty chemicals business in 2004. We also sold our automotive fastener business, packaging equipment business, and extrusion facilities in Europe and Brazil during 2004.

Energy Generation Growth Initiative

Energy represents approximately 13% of our cost structure. In 2004, energy costs for our operations worldwide increased 13%. To help offset these costs, we continually strive to improve energy efficiency in all Alcoa operating facilities throughout the world and seek low-cost, sustainable sources of power.

Energy conservation efforts are being made in the liquor yield and calciner efficiency of alumina refineries. In smelting, the focus has been on the optimization of new cell design and the operation of existing cells combined with the upgrading of carbon baking furnaces. The energy efficiency of remelt furnaces is also improving. All operational changes are made in full compliance with applicable environmental laws and regulations.

In 2004, we signed a 20-year agreement with Eletronorte—a Brazilian regional energy producer and seller—to buy up to 500 megawatts of hydro-powered electricity annually. This power will supply our share of production at the Alumar aluminum smelter in São Luis. Our share of the Machadinho (in operation) and Barra Grande (under construction) hydropower facilities will supply the full energy needs of our Poços de Caldas smelter. We continue to pursue competitive and environmentally sound energy projects in Brazil to increase our energy self-sufficiency and make further upstream expansion possible.

Additional information about our energy initiatives can be found in the environment section beginning on page 27.

Cost Savings Initiatives

The long-term sustainability of our company is invariably tied to attaining a competitive cost position in each of the markets we serve. Since 1998, we have embarked upon a series of cost challenges based on the principles of the Alcoa Business System. These principles call for the elimination of waste on a sustainable basis.

After successfully completing our second cost savings program in January 2004, we set a new goal to seek an additional US$1.2 billion in reductions during the 2004 to 2006 period. Although higher input costs dampened our cost-savings achievement in 2004, this third program is aimed at bringing total savings to more than US$3.3 billion since 1998. These cost savings are sustainable in nature, excluding components such as energy and currency.

We will continue to widen the application of the Alcoa Business System throughout the company in a continuous effort to drive down costs and build closer ties to customers.

CUSTOMERS

In 2004, Alcoa generated revenues of US$23.5 billion in 43 countries. This represents a compounded annual sales growth of 9.3% over the last 10 years and 8.1% over the most recent five years.

While acquisition was our primary means for growth in previous years, we created a Customer and Marketing Services resource unit and related tools to help our businesses capture profitable organic growth. This effort involves expanding business with our existing customers and adding new ones—particularly in fast-growing global markets.

One new tool is the Alcoa Growth Process, which is a multi-phased, disciplined approach to market strategy development that helps link us with our customers. Using this approach, we continued to bring together Alcoa businesses serving the same customer to identify and offer integrated solutions that transcend the value of any one business.

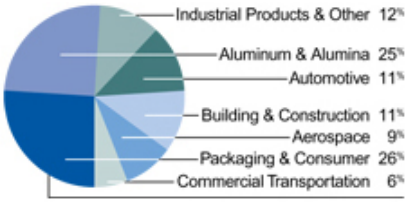
Sales

	Sales *(billions of US dollars)*	Third Party Aluminum Shipments *(metric tons)*	LME[1] *(US dollars per metric ton)*
2000	22.0	5,398	1,567
2001	21.9	4,992	1,453
2002	19.9	5,236	1,366
2003	21.1	5,047	1,429
2004	23.5	5,093	1,778

[1] *Average three-month aluminum price on the London Metal Exchange.*

Data changes from 2003 reporting due to reclassification of discontinued operations.

2004 Revenue by Market



Revenues by Market *(percent)*

	Packaging & Consumer	Aluminum & Alumina	Industrial Products & Other	Automotive	Building & Construction	Aerospace	Commercial Transportation
2000	21	26	19	11	12	6	5
2001	22	25	16	12	12	9	4
2002	25	25	13	14	12	7	4
2003	25	25	12	13	10	10	5
2004	26	25	12	11	11	9	6

Data changes from 2003 reporting due to reclassification of discontinued operations.

Revenues by Segment *(billions of US dollars)*

	Alumina & Chemicals	Primary Metals	Flat-rolled Products	Engineered Products	Packaging & Consumer	Other	Total
2000	2.1	3.7	5.4	5.5	2.0	3.3	22.0
2001	2.0	3.4	5.0	5.9	2.6	3.0	21.9
2002	1.8	3.2	4.6	5.1	2.8	2.4	19.9
2003	2.0	3.2	4.8	5.6	3.1	2.4	21.1
2004	2.0	3.8	5.9	6.3	3.2	2.3	23.5

Data changes from 2003 reporting due to reclassification of discontinued operations.

Revenues by Region *(percent)*

	United States	Europe	Other Americas	Pacific
2000	66	18	7	9
2001	64	21	7	8
2002	63	21	8	8
2003	61	23	6	10
2004	61	22	6	11

Data changes from 2003 reporting due to reclassification of discontinued operations.

Countries with Significant Alcoa Participation in the Local Economy

Alcoa has operations in 43 countries (as of December 31, 2004) with varying significance within the context of the overall scale of economic activity in these economies. In three countries in particular—Suriname[1], Jamaica[2] (see case study below), and Guinea[3]—we participate in joint ventures whose operations represent a sizeable component of the national GDP of these countries. We recognize our role and the responsibilities of good corporate citizenship in every one of the countries in which we operate.

[1]Alcoa has a refinery and two bauxite mines in Suriname that are owned 45% by BHP Billiton and 55% by Suriname Aluminum Company L.L.C. (part of the AWAC group of companies and therefore owned 60% by Alcoa and 40% by Alumina Ltd.). The Suriname Aluminum Company L.L.C. also owns a hydro-electric dam.

[2]Alcoa has a refinery and bauxite mine in Jamaica, which are owned 50% by Clarendon Alumina Production, Ltd. (a wholly owned subsidiary of the Government of Jamaica) and 50% by Alcoa Minerals of Jamaica L.L.C. (part of the AWAC group of companies).

[3]Alcoa World Alumina LLC owns a 45% interest in Halco (Mining), Inc. Halco owns 51% and the Guinean government owns 49% of Compagnie des Bauxites de Guinée (CBG), which has the exclusive rights to develop and mine bauxite in a 25,900-square-kilometer (10,000-square-mile) area in northwestern Guinea. Alcoa has a bauxite purchase contract with CBG that will provide Alcoa with bauxite through 2011.

SUPPLIER RELATIONSHIPS

We spent US$20.1 billion in operating costs (cost of goods sold; selling, general administrative, and other expenses; and research and development expenses) in 2004, with no one supplier representing more than 10% of the dollar value of total goods and services we purchased.

To help lower our cost structure, we began an initiative to source products and services from countries and suppliers that meet our quality levels but at lower total costs. We believe this initiative is critical to keep our facilities viable and operating in those communities. The jobs we generate, taxes we pay, and community investments we make remain because of our cost competitiveness.

In 2004, we initiated a supplier diversity program, which will continue to be developed and deployed during 2005. The program's goal is to encourage diverse companies to develop relationships with Alcoa, creating wealth within the minority community and throughout Alcoa's value chain. We have classified our suppliers by diversity status, developed a supplier diversity scorecard, and implemented a system to research opportunities for new relationships with diverse suppliers. We have also become an active member of the National Minority Supplier Development Council in the United States.

Rocky Point port

Alcoa and Alcoa Foundation in Jamaica

Alcoa's presence in a country or community provides positive benefits through employment opportunities, tax payments, the purchase of local goods and services, and infrastructure improvements like roads, health care, and electricity.

In 2004, Alcoa's Jamalco[1] operations in Jamaica accounted for 2% of the country's gross domestic product. Jamalco employed 540 full-time equivalent employees, paid out US$19.6 million in salary and benefits, and spent US$47.4 million on local contractor services and supplies. Additionally, Jamalco paid US$12 million in taxes. The company's assets include a refinery in Halse Hall and a port at Rocky Point, Clarendon.

Alcoa's involvement in Jamaica went further in 2004. Alcoa Foundation invested approximately US$375,000 in programs to improve the quality of life in Jamaica, bringing its five-year investment in the nation to nearly US$1 million. The funding has been used for quality health care in hospitals, vocational training for residents, and scholarship funds to local educational institutions.

Additionally, several grants addressed disaster preparedness before Hurricane Ivan hit and rehabilitation effort in its aftermath. Before the storm, US$25,000 was granted to the Jamaican Red Cross to establish and stock emergency shelters. After the hurricane, the foundation awarded US$80,000 to Food for the Poor Inc. to teach fisherman in two Jamaican communities a more sustainable and environmentally friendly technique to fish. This effort is part of a larger effort to restore the economic activity of two communities near Jamalco, where the livelihood of many fishermen was devastated by the storm.

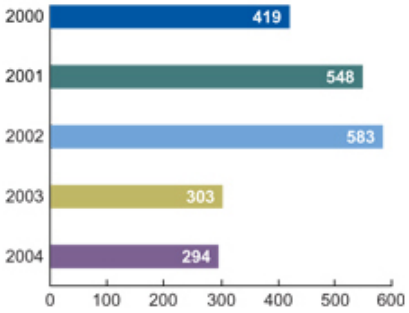
[1] *Jamalco is a 50/50 joint venture between Alcoa Minerals of Jamaica L.L.C. and Clarendon Alumina Production, Ltd., a wholly owned subsidiary of the Government of Jamaica. Jamalco is part of the Alcoa World Alumina and Chemicals (AWAC) group of companies, which is owned 60% by Alcoa and 40% by Alumina Limited.*

PUBLIC COMMITMENT

In addition to our extensive community engagement (see page 55), we make tax payments to governments in all the countries in which we operate. In 2004, cash paid for income taxes totaled US$294 million. This excludes the numerous other taxes, such as royalties, sales taxes, excise duties, levies, and local taxes, that we paid in those countries.

Cash Paid for Income Taxes

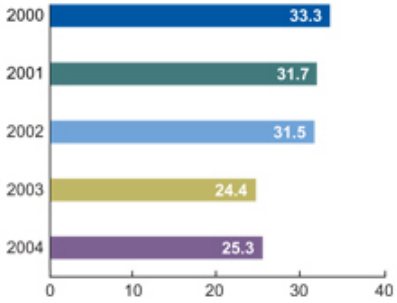
(millions of US dollars)



Data changes from 2003 reporting due to reclassification of discontinued operations.

Effective Tax Rate

(percent)



Data changes from 2003 reporting due to reclassification of discontinued operations.

Partnership with Supplier Secures Contract

Facing a contract renewal with a major customer for shrink sleeve labels and pressure to decrease costs, Alcoa Flexible Packaging (AFP) and supplier Bonset America Corporation teamed together to create a high-value proposal that secured the five-year contract.

AFP and Bonset originally had worked with the customer—one of the largest for both companies—to develop and supply the shrink sleeve label technology used on many of the customer's products. Bonset provided PETG shrink film to AFP, which then converted the film into printed shrink sleeve labels.

"We have always acted in a way that protects the market we're in," said Paul Wingate, sales manager for Bonset. "We want to partner with film converters who are committed to the technical side so that products like shrink sleeve labels gain wide acceptance because they are problem-free. We have always had a good working relationship with Alcoa, and we knew the company understood how to use our film and also had an excellent technical presence in the field."

In addition to working on trimming costs, AFP and Bonset stressed the technical expertise both companies brought, the proven track record of supplying time-sensitive industries like the dairy market, and their historically excellent customer service.

Awards and Recognition

Alcoa earned and granted numerous awards and recognition in 2004. Below are a few examples of corporate-wide awards and the granting organization. A complete listing can be found on alcoa.com under Commitment to Sustainability.

In addition, Alcoa was named one of the top three most sustainable corporations in the world by Corporate Knights and Innovest Strategic Value Advisors in early 2005.

Dow Jones Sustainability Index

(fourth consecutive year)

Most Admired Companies

Fortune Magazine
(first in metals category, second overall in social responsibility)

Best Managed Companies

Forbes Magazine
(first in materials category)

Industry Genius: Inventions and People Protecting the Climate and Fragile Ozone Layer

(Alcoa chapter included in this book)

Top Ten Organization with World-class Safety and Health Program

Industrial Safety and Hygiene News

2004 World's Best Metals and Mining Company in Europe and the United States

Global Finance Magazine

Agile 100 Award

CIO Magazine

Case Studies

The following case studies, which can be found throughout the 2004 Sustainability Report, illustrate how Alcoa is acting upon its commitment to sustainable development throughout the world

GRI Content Index

This index was developed to help interested readers compare the information in Alcoa's Sustainability Report and Annual Report and on our website with the Global Reporting Initiative guidelines. We also draw upon criteria from other organizations to frame our sustainability reporting.

In the last column of the chart, we have indicated on what pages the required information can be found in the Sustainability Report and the Annual Report as well as the URLs for relevant information on alcoa.com. "Partially reported" indicates that we have provided a portion of the information required. In a number of instances, we're working toward better data collection to more fully report this information.

"Not disclosed" means that this information is either not collected on a global basis or kept confidential for competitive or other reasons. "Not applicable" means that it does not apply to our operations or 2004 reporting.

We have used the abbreviations SR for Sustainability Report, AR for Annual Report, and Web for alcoa.com.

GRI SECTION	DESCRIPTION	LOCATION
Vision and Strategy		
1.1	Statement of the organization's vision and strategy regarding its contribution to sustainable development.	SR page 3
1.2	Statement from the CEO describing key elements of the report.	SR Preface
Profile		
2.1	Name of reporting organization.	SR page 16
2.2	Major products and/or services.	SR page 16
2.3	Operational structure of the organization.	Web www.alcoa.com/global/en/about_alcoa/listing.asp
2.4	Description of major divisions, operating companies, subsidiaries, and joint ventures.	SR page 16 Web www.alcoa.com/global/en/about_alcoa/listing.asp
2.5	Countries in which the organization's operations are located.	SR page 16 Web www.alcoa.com/global/en/about_alcoa/globalmap.asp
2.6	Nature of ownership	SR page 16
2.7	Nature of markets served.	SR page 16
2.8	Scale of the reporting organization.	SR page 16 (Key Statistics) SR page 65 (Enhancing Portfolio Value) AR inside front cover
2.9	List of stakeholders.	Partially Reported Too numerous to provide a comprehensive list. SR page 5 (Engagement with Stakeholders) SR page 79 (Appendix)
2.10	Contact person.	SR page 16
2.11	Reporting period.	SR page 16
2.12	Date of most recent previous report.	SR page 16
2.13	Boundaries of report.	SR page 16
2.14	Significant changes since previous report.	SR page 65
2.15	Basis for reporting on joint ventures, partially owned subsidiaries, etc.	SR page 17

GRI SECTION	DESCRIPTION	LOCATION
2.16	Explanation of the nature and effect of any re-statements of information provided in earlier reports.	Provided as footnotes to individual SR charts where data changed.
2.17	Decisions not to apply GRI principles or protocols in the preparation of the report.	SR page 71
2.18	Criteria/definitions used in any accounting for economic, environmental, and social costs and benefits.	SR page 18 AR page 45
2.19	Significant changes from previous years in the measurement methods.	Not Applicable
2.20	Policies and internal practices to enhance and provide assurance about the accuracy, completeness, and reliability that can be placed on the sustainability report.	SR page 18
2.21	Policy and current practice with regard to providing independent assurance for the full report.	SR page 18
2.22	Means by which report users can obtain additional information and reports.	SR page 18
Governance Structure and Management Systems		
3.1	Governance structure.	SR page 19
3.2	Percentage of the board of directors that are independent, non-executive.	SR page 19
3.3	Process for determining the expertise board members need to guide the strategic direction of the organization.	Web http://www.alcoa.com/global/en/about_alcoa/corp_gov/nominating.asp
3.4	Board-level processes for overseeing the organization's identification and management of economic, environmental, and social risks and opportunities.	Web http://www.alcoa.com/global/en/about_alcoa/corp_gov/public_issues.asp
3.5	Linkage between executive compensation and achievement of the organization's financial and non-financial goals.	SR page 22
3.6	Organizational structure and key individuals responsible for oversight, implementation, and audit of economic, environmental, social, and related policies.	SR page 22 (Audit Process) SR page 19 (Structure and Governance) SR page 21 (Public Issues Committee) SR page 21 (Officers)
3.7	Mission and value statements, internally developed codes of conductor principles, and policies related to economic, environmental, and social performance and the status of implementation.	SR page 13
3.8	Mechanisms for shareholders to provide recommendations or direction to the board of directors.	SR page 24
3.9	Basis for identification and selection of major stakeholders.	SR page 5 (Engagement with Stakeholders) SR page 79 (Appendix—Stakeholders)
3.10	Approaches to stakeholder consultation.	SR page 5 (Engagement with Stakeholders) SR page 16 (Report Scope) SR page 17 (Report Profile) SR page 59 (Community Consultation) Case Studies Throughout Report
3.11	Type of information generated by stakeholder consultations.	Partially Reported Due to the volume of our consultation at the local, national, and international levels, there are too many individual engagements to report. Many examples are contained in this report.

GRI SECTION	DESCRIPTION	LOCATION
3.11	*(continued)*	SR page 5 (Engagement with Stakeholders) SR page 16 (Report Scope) SR page 17 (Report Profile) SR page 59 (Community Consultation) Case Studies Throughout Report Web www.alcoa.com/iceland/en/info_page/landsvirkjun.asp Web www.alcoa.com/australia/en/info_page/PURE_Communityhome.asp
3.12	Use of information resulting from stakeholder engagements.	Partially Reported Due to the volume of our consultation at the local, national, and international levels, there are too many individual engagements to report. Many examples are contained in this report. SR page 5 (Engagement with Stakeholders) SR page 16 (Report Scope) SR page 17 (Report Profile) SR page 59 (Community Consultation) Case Studies Throughout Report Web www.alcoa.com/iceland/en/info_page/landsvirkjun.asp Web www.alcoa.com/australia/en/info_page/PURE_Communityhome.asp
3.13	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	Not Disclosed Through our extensive management systems, we advocate a risk-based approach to our operations. At this stage, however, we do not formally address the precautionary principle in our Sustainability Report.
3.14	Externally developed, voluntary economic, environmental, and social charters, sets of principles, or other initiatives to which the organization subscribes or which it endorses.	SR page 26
3.15	Principal memberships in industry and business associations, and/or national/international advocacy organizations.	SR page 7
3.16	Policies and/or systems for managing upstream and downstream impacts.	SR page 10 (Products) SR page 11 (Technology) SR page 41 (Recycling) SR page 42 (Significant Environmental Impacts) SR page 68 (Supplier Relationships) Web www.alcoa.com/global/en/about_alcoa/sell_terms.asp
3.17	Reporting organization’s approach to managing indirect economic, environmental, and social impacts resulting from its activities.	Partially Reported Unclear as to what would constitute full reporting under GRI.

GRI SECTION	DESCRIPTION	LOCATION
3.17	*(continued)*	SR page 12 (Facility End-of-life Management)
		SR page 68 (Countries with Significant Alcoa Participation in the Local Economy)
3.18	Major decisions during the reporting period regarding the location of, or changes in, operations.	SR page 65
3.19	Programs and procedures pertaining to economic, environmental, and social performance.	SR page 26
3.20	Status of certification pertaining to economic, environmental, and social management systems.	SR page 26 (Certification Status)
		SR page 16 (Alcoa Metrics System)
		AR page 39
GRI Content Index		
4.1	Table identifying the location of each element of the GRI report content.	SR page 71
Performance Indicators—Economic		
EC1	Net sales.	SR page 67
EC2	Geographic breakdown of markets.	Partially Reported
		We provide revenues by market, segment, and region. Revenues by product and/or country are considered commercially sensitive.
		SR page 67 (Revenues by Market)
		SR page 67 (Revenues by Segment)
		SR page 67 (Revenues by Region)
EC3	Cost of all goods, materials, and services purchased.	Partially Reported
		This information is considered commercially sensitive.
		SR page 68
EC4	Percentage of contracts that were paid in accordance with agreed terms, excluding agreed penalty arrangements.	Not Disclosed
		Processes for collecting the data on a global level do not exist currently.
EC5	Total payroll and benefits.	Partially Reported
		We report total labor costs externally.
		SR page 47
EC6	Distributions to providers of capital.	SR page 63 (Distributions to Shareholders)
		SR page 64 (Cash Interest Paid)
EC7	Increase/decrease in retained earnings.	AR page 44
EC8	Total sum of taxes of all types broken down by country.	Partially Reported
		Total cash paid for income taxes and effective tax rate have been provided. Through our membership in the International Council on Mining and Metals, we support the extractive industry's transparency initiative regarding disclosure of payment of taxes and royalties. We will work with host governments that participate in this process.
		SR page 69 (Cash Paid for Income Taxes)
		SR page 69 (Effective Tax Rate)

GRI SECTION	DESCRIPTION	LOCATION
EC9	Subsidies received broken down by country or region.	Not Disclosed While in some instances these data are commercially sensitive, more reporting of subsidies is occurring. Alcoa will keep this issue under review.
EC10	Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group.	SR page 55
Performance Indicators—Environmental		
EN1	Total materials use other than water.	Partially Reported Due to the broad range of materials used across our various businesses, we do not collect these data at the global level. SR page 28
EN2	Percentage of materials used that are wastes from sources external to the reporting organization.	SR page 29
EN3	Direct energy use segmented by primary source.	SR page 30
EN4	Indirect energy use.	SR page 30
EN5	Total water use.	SR page 33
EN6	Location and size of land owned, leased, or managed in biodiversity-rich habitats.	SR page 34
EN7	Description of the major impacts on biodiversity associated with activities and/or products and services in terrestrial, freshwater, and marine environments.	SR page 34
EN8	Greenhouse gas emissions.	SR page 37
EN9	Use and emissions of ozone-depleting substances.	SR page 37
EN10	NOx, SOx and other significant air emissions by type.	SR page 38
EN11	Total amount of waste by type and destination.	Partially Reported We report total waste, waste to landfill, and waste sold or recycled. We do not have data collection systems in place to report by other destinations on a global level. SR page 39 (Total Wastes Generated) SR page 40 (Total Wastes Landfilled) SR page 41 (Total Wastes Sold or Recycled)
EN12	Significant discharges to water by type.	Partially Reported While we track water usage, we do not track water discharges as a metric. SR page 41
EN13	Significant spills of chemicals, oils, and fuels in terms of total number and total volume.	SR page 43
EN14	Significant environmental impacts of principal products and services.	SR page 42
EN15	Percentage of the weight of products sold that is reclaimable at the end of the products' useful life and percentage that is actually reclaimed.	SR page 29
EN16	Incidents of and fines for non-compliance.	Partially Reported Alcoa's goal is 100% compliance with all environmental laws and regulations by the end of 2004. We report performance against this goal as a percentage of total Alcoa locations. SR page 43

GRI SECTION	DESCRIPTION	LOCATION
EN17	Initiatives to use renewable energy sources and to increase energy efficiency.	SR page 31
EN23	Total amount of land owned, leased, or managed for production activities or extractive use.	SR page 35
EN35	Total environmental expenditures by type.	Partially Reported Alcoa reports total global expenditures. SR page 43
Performance Indicators—Social		
LA1	Breakdown of workforce.	Partially Reported Processes for collecting the data on a global level do not exist currently. SR page 47 (Employees by Region) SR page 45 (Gender Balance)
LA2	Net employment creation and average turnover segmented by region/country.	Not Disclosed Processes for collecting the data on a global level do not exist currently.
LA3	Percentage of employees represented by independent trade union organizations or other bona fide employee representatives.	Not Disclosed Processes for collecting the data on a global level do not exist currently.
LA4	Policy and procedures involving information, consultation, and negotiation with employees over changes in the reporting organization's operations.	Not Disclosed Development of policy is planned.
LA5	Practices on recording and notification of occupational accidents and diseases, and how they relate to the ILO Code of Practice on Recording and Notification of Occupational Accidents and Diseases.	SR page 51
LA6	Description of formal joint health and safety committees comprising management and worker representatives and proportion of workforce covered by any such committees.	Partially Reported All locations have health and safety committees that participate in deployment of the location's proactive safety efforts. These committees include broad representation. SR page 51
LA7	Standard injury, lost day, and absentee rates and number of work-related fatalities (including subcontracted workers).	Partially Reported Processes for collecting absentee data on a global level do not exist currently. SR page 51
LA8	Description of policies or programs (for the workplace and beyond) on HIV/AIDS.	SR page 50
LA9	Average hours of training per year per employee by category of employee.	Not Disclosed The initial 2004 deployment of a new learning management system will help with future collection of the data. There is a wide array of training available to Alcoa employees. That training includes health and safety, Alcoa Business System, diversity, and leadership training.

GRI SECTION	DESCRIPTION	LOCATION
LA10	Description of equal opportunity policies or programs, as well as monitoring systems to ensure compliance and results of monitoring.	Partially Reported Alcoa has clearly articulated commitment to equal opportunity. The Ethics and Compliance Line is available to help monitor in this area. In 2005, we will address strengthening of our monitoring activities. SR page 53
LA11	Composition of senior management and corporate governance bodies.	SR page 19 (Board of Directors) SR page 20 (Board Committees) SR page 21 (Officers)
HR1	Description of policies, guidelines, corporate structure, and procedures to deal with all aspects of human rights relevant to operations.	Partially Reported Our human rights statement and Ethics and Compliance Line are detailed in the report. SR page 52
HR2	Evidence of consideration of human rights impacts as part of investment and procurement decisions.	Partially Reported All Alcoa activities are covered by our human rights statement. SR page 52 (Human Rights) SR page 54 (Supplier and Contractor Requirements)
HR3	Description of policies and procedures to evaluate and address human rights performance with the supply chain and contractors.	Partially Reported We investigate identified human rights issues in the supply chain, but we do not currently have a formal auditing process for this issue. SR page 54 (Supplier and Contractor Requirements)
HR4	Description of global policy and procedures/programs preventing all forms of discrimination in operations.	Partially Reported Alcoa has a clearly articulated commitment against discrimination. The Ethics and Compliance Line is available to help monitor in this area. In 2005, we will address strengthening our monitoring activities. SR page 53
HR5	Description of freedom of association policy and extent to which this policy is universally applied independent of local laws, as well as description of procedures/programs to address this issue.	Partially Reported Freedom of association is part of Alcoa’s global human rights statement. SR page 53
HR6	Description of policy excluding child labor as defined by ILO Convention 138 and extent to which this policy is visibly stated and applied, as well as description of procedures/programs to address this issue.	Partially Reported Alcoa has a clearly articulated commitment on children and young workers. The Ethics and Compliance Line is available to help monitor in this area. In 2005, we will address strengthening our monitoring activities. SR page 53
HR7	Description of policy to prevent forced and compulsory labor and extent to which this policy is visibly stated and applied, as well as description of procedures/programs to address this issue.	Partially Reported Alcoa has a clearly articulated commitment on freedom of engagement. The Ethics and Compliance Line is available to help monitor this area. In 2005, we will address strengthening our monitoring activities. SR page 53

GRI SECTION	DESCRIPTION	LOCATION
HR12	Description of policies, guidelines, and procedures to address the needs of indigenous people.	SR page 54 (Relationships with Indigenous People) SR page 53 (Equality of Opportunity) SR page 45 (Diversity) SR page 53 (Case Study: Making the Learning, Communication Connection)
SO1	Description of policy to manage impacts on communities in areas affected by activities, as well as description of procedures/programs to address this issue.	SR page 12 (Facility End-of-life Management) SR page 35 (Mining Reclamation Process) SR page 12 (Case Study: Employee-formed Company Lessens Impact of Mine Closure SR page 35 (Case Study: Goat Rearing on Rehabilitated Land Provides Alternative Income)
SO2	Description of the policy, procedures/management systems, and compliance mechanisms for organizations and employees addressing bribery and corruption.	Partially Reported Alcoa has a clearly articulated commitment against bribery and corruption. The Ethics and Compliance Line is available to help monitor in this area. In 2005, we will address strengthening our monitoring activities. SR page 60 (Bribery and Corruption) SR page 13 (Vision, Values, and Principles) SR page 23 (Ethics and Compliance Program)
SO3	Description of policy, procedures/management systems, and compliance mechanisms for managing political lobbying and contributions.	SR page 61
SO4	Awards received relevant to social, ethical, and environmental performance.	SR page 70 Web www.alcoa.com/global/en/about_alcoa/commitment_to_sustain/awards_recognition.asp
PR1	Description of policy for preserving customer health and safety during use of products and services, and extent to which this policy is visibly stated and applied, as well as description of procedures/programs to address this issue.	Partially Reported Formal policy does not exist. Product responsibility is part of our ongoing relationship with our customers. SR page 61 Web www.alcoa.com/global/en/environment/msds_search.asp
PR2	Description of policy, procedures/management systems, and compliance mechanisms related to product information and labeling.	SR page 61 Web Web www.alcoa.com/global/en/environment/msds_search.asp
PR3	Description of policy, procedures/management systems, and compliance mechanisms for consumer privacy.	Partially Reported Alcoa is committed to maintaining consumer privacy. SR page 61

Some GRI descriptions are edited for length. Reprinted with permission of the Global Reporting Initiative. For the complete Sustainability Reporting Guidelines, please visit www.globalreporting.org.

Appendix

STAKEHOLDERS

Below is a partial listing of stakeholders we have consulted or partnered with on sustainability issues. It should be noted that inclusion on this list does in no way indicate that these organizations support Alcoa's activities. Over the course of the year, we have met with them, both formally and informally, to solicit their views on our business initiatives.

International

Benedictine Sisters

Coalition for Environmentally Responsible Economies (CERES)

Conference Board

Conservation International

Council on Foundations

Earthwatch Institute

European Foundation Centre

Human Rights Watch

Independent Sector

Interfaith Center on Corporate Responsibility (and its constituents)

International Aluminium Institute

International Audit Protocol Consortium

International Chamber of Commerce

International Council on Mining and Metals

International Organization for Standardization

Missionary Oblates of Mary Immaculate (OMI)

Pew Center on Global Climate Change

Student Conservation Association

World Business Council for Sustainable Development

World Council of Churches

World Resources Institute

World Wildlife Fund

Europe

American Chamber of Commerce to the European Union

European Aluminium Association

European Association of Metals

National

Australia

Australia Aluminium Council

Australian Business Arts Foundation

Equal Opportunity for Women in the Workplace Agency

Greening Australia

Brazil

Brazilian Aluminum Council (ABAL)

Business for Recycling (CEMPRE)

Canada

Aluminum Association of Canada

Environment Canada

Jour de la Terre Québec

Quebec Ministry of Environment

Quebec Department of Public Health

Réseau des Ressourceries du Québec

Guinea

Guinea Ecologee

Iceland

INCA Landvernd

United States

American Friends Service Committee

Aluminum Association

Business Roundtable

Environmental Defense

National Business Group on Health and Human Resource Policy Association

The Conservation Fund

Community Consultative Groups

Australia

Community Consultative Networks

- Pinjarra
- Kwinana
- Wagerup

Community Advisory Boards

- Point Henry
- Anglesea

Community Advisory Network

- Portland

Stakeholder Reference Groups

- Pinjarra for the efficiency upgrade and bauxite residue
- Kwinana for bauxite residue

Working Groups

- Wagerup Working Group
- Wagerup Unit Three
  - Emissions & health
  - Residue & water
  - Noise & transport
  - Land management
  - Socio & economic impacts
- Wagerup Tripartite Group

Canada

Community Advisory Boards

- Baie-Comeau
- Bécancour
- Deschambault

Working Groups

- Baie-Comeau PAHs Committee
- Becancour Industrial Park—Responsible Management Committee
- Deschambault Quebec Farmer Union Committee

Iceland

Alcoa Fjardabyggd Community Consultative Group

Jamaica

Jamalco Community Council

United States

Community Advisory Boards

- Carson, California
- Branford, Connecticut
- Winsted, Connecticut
- Eastman, Georgia
- Warrick, Indiana
- Louisville, Kentucky
- Frederick, Maryland
- Whitehall, Michigan
- Belmont, New Hampshire
- Massena, New York
- Badin, North Carolina
- Alcoa Technical Center, Pennsylvania
- Grove City, Pennsylvania
- Lancaster, Pennsylvania
- Philadelphia, Pennsylvania
- Gaffney, South Carolina
- Goose Creek, South Carolina
- Spartanburg, South Carolina
- Alcoa, Tennessee
- Morristown, Tennessee
- Point Comfort, Texas
- Rockdale, Texas
- Richmond, Virginia
- Ferndale, Washington
- Wenatchee, Washington

Feedback

Thank you for reading Alcoa's 2004 Sustainability Report. We believe that it is an important way to provide information to a broad spectrum of stakeholders. The report is intended to provide a clear view of what we do. If we can do this job better for you, we would like to hear your suggestions for improvements. Please help us by rating our report on a scale of 1 (poor) to 10 (excellent).

1. How would you rate the report's structure in terms of finding information?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10

2. How useful is the report to assess where Alcoa has made progress and where the company has more work to do in the areas of:

Corporate Governance	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10
Environmental Progress	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10
Social Progress	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10
Financial Performance	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10

3. a) Compared to other sustainability reports, how do you rate the Alcoa Sustainability Report?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10

b) Which company's sustainability report did you like best? _____

c) Why? _____

Fold Here

4. Rate the usefulness of the case studies in adding value to the information and data on Alcoa's programs.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10

5. a) What did you like best about the Alcoa report? _____

_____

_____

b) The report could be improved by: _____

_____

_____

6. Please specify your relationship to Alcoa:

☐ Employed by Alcoa
☐ Shareholder
☐ Customer
☐ Supplier
☐ Member of a non-governmental organization (NGO)
☐ Member of a community where Alcoa has a presence
☐ Other, please specify

7. Where are you from?

☐ Africa
☐ Australia
☐ Europe
☐ Latin America
☐ North America

Thank you for your feedback!

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To provide feedback on Alcoa's sustainability report, please send an e-mail to sustainability@alcoa.com or complete our online survey at www.alcoa.com/go/sustainabilitysurvey.