# Sustainable development review

Mining is a long term, capital intensive business in which assets are often situated in remote locations and can last for 30 years or more. This extended timescale means that, if we are to deliver financial returns to local communities, host governments and our shareholders, we need economic, environmental and social stability and strong governance.

Starting with the pioneering work of former Rio Tinto chairman Sir Robert Wilson, a focus on sustainable development has become an integral part of the way in which Rio Tinto conducts its business. This is reflected throughout the Group, from explicit recognition of the value of sustainable development in *The way we work* and regular references to the benefits of sustainable development in statements by our chairman Paul Skinner and chief executive Tom Albanese; to implicit recognition of sustainable development thinking in the way we make decisions about finding, acquiring, developing, and operating assets around the world.

This year we have integrated the annual *Sustainable development review* with the *Annual report and financial statements*. This change allows us to reach a wider audience and improve links between corporate, local and economic issues. A full account of our 2007 economic, social, environmental and governance programmes and performance is available in the sustainable development section of the Rio Tinto website: www.riotinto.com/ourapproach/sustainabledevelopment.asp

#### Business case for sustainable development

We are committed to contributing to sustainable development. Not just because it is right to safeguard the health of the planet for future generations, but because it also makes sound business sense.

By earning a good reputation for our care of the environment and contribution to social improvement and the economic conditions of local communities within a strong governance structure, we gain improved access to land, people and capital, the three critical resources on which our business success is built.

We believe this yields a range of long term benefits such as:

- better return for our shareholders;
- improved management of risks;
- reduction in our operating costs;
- greater business opportunities;
- attracting and retaining high calibre employees;
- maintaining or improving the value and quality of our products but with less impact on the environment; and
- better development opportunities for and relations with local communities.

All of these factors help differentiate Rio Tinto from its competitors and contribute to our goal of being the undisputed sector leader in maximising value for our stakeholders.

The business case for sustainable development was demonstrated earlier this year at our Mesa A/Waramboo iron ore project in Australia. As part of our biodiversity baseline assessment for the project area a number of new species of rare air breathing subterranean invertebrates (troglofauna) were discovered by Rio Tinto. This discovery could have stopped the project from proceeding. However, building on our biodiversity management framework, additional research was conducted and an enlarged mine exclusion zone was developed to protect these species. Rio Tinto's revised plans were endorsed by the Western Australia Environmental Protection Agency, allowing the project to proceed to the next phase.

## **Reporting boundaries**

Rio Tinto and Alcan data is presented side-by-side where possible. In many cases data is not directly comparable due to differences in definitions. Moving forward, former Alcan operations will adopt Rio Tinto definitions and consolidated data will be presented from 2008.

Rio Tinto data is reported for calendar years and, unless otherwise stated, represents 100 per cent of the parameter at each managed operation, even though Rio Tinto may have only partial ownership. Information on our data definitions can be found in our online report.

Alcan data is also reported for calendar years and represents 100 per cent of the parameter at each operation that was managed by Alcan, with the exception of greenhouse gas emission and energy use data, which are presented on an equity share basis.

Rio Tinto reports in line with the Global Reporting Initiative (GRI) G3 guidelines. Accordingly, we use a materiality assessment to select what information should be included in our report. Please see our online report for further details. We declare that our web based GRI report is aligned with Application Level A+.

Our business units and exploration group also produce their own local sustainable development reports. These 2007 reports will be available on the Rio Tinto website from the end of April 2008.

#### Managing sustainable development

We believe that making a contribution to sustainable development should be integrated into all aspects of our business and that a structured framework is needed to ensure that we accomplish this goal.

Our sustainable development policy is laid down by the board of directors in *The way we work* and applies across the Group to drive our business culture. The board committee on social and environmental accountability ensures that we have the policies, standards, systems and people in place to meet our social and environmental commitments and that our businesses, projects, operations and products are developed and implemented in line with our commitment to sustainable development.

Rio Tinto is a founding member of the International Council on Mining and Metals (ICMM), a body that provides sustainable development leadership for the industry. As a member of the ICMM, we are committed to superior business practices in sustainable development, implementing the sustainable development framework and complying with their policy statements.

To help explain the concepts of sustainable development, both to existing employees and newcomers, we continue to use training and awareness raising tools throughout the Group. This includes an e-learning programme for managers called Chronos, developed by the World Business Council for Sustainable Development and Cambridge University in the UK. By the end of 2007 more than 2,000 managers had signed up to the programme.

In 2007 we started implementing our "mine of the future" project in Western Australia to demonstrate better ways of mining through automation and remote operations. Key building blocks for automated mine to port iron ore operations are currently being commissioned. These include controlling mining from a remote centre 1,300 kilometres away in Perth; using driverless trains to carry ore; introducing a driverless 'intelligent' truck fleet and remote control production drills. We aim to be the leader in integrated and automated mining and transport in the Pilbara, decreasing the footprint required for infrastructure and leading to greater efficiency, lower production costs and more attractive working conditions that will help recruit and retain staff in the highly competitive labour market

Rio Tinto's demonstrated values in contributing to sustainable development are matched by those of Alcan. This is greatly assisting in the integration of the two businesses. Alcan was also a leader in combating climate change by reducing greenhouse gas emissions from its aluminium smelting operations. It developed the most advanced smelting technology in the industry and has significant access to low carbon footprint hydro-electric power. Rio Tinto Alcan is building a US\$180 million facility to recycle spent potliners used in the aluminium smelting process. This promises to provide a long term solution to one of the environmental problems associated with aluminium smelting.

#### **External recognition**

In 2007, Rio Tinto was listed on the FTSE4Good and Dow Jones Sustainability World Indexes. We achieved platinum ratings on the Business in the Community's Corporate Responsibility, Environment and Community indexes and also achieved the maximum score on the Climate Disclosure Leadership Index. We were again rated highest in the metals, mining and steel sector.

## Goals and targets

Rio Tinto	Results	2007 performance comment	Trend	
Environment targets				
A 4% reduction in total greenhouse gas emissions, per tonne of product, between 2003 and 2008	<b>©</b>	0.7% decrease in greenhouse gas emissions per tonne of product compared to 2003	>	
A 5% reduction in energy used, per tonne of product, between 2003 and 2008	•	0.7% decrease in energy used per tonne of product compared to $2003$	>	
A 10% reduction in freshwater withdrawn, per tonne of product, between 2003 and 2008	0	4.1% decrease in freshwater withdrawn per tonne of product compared to 2003	>	
Safety targets				
Zero fatalities	0	Three contractors were fatally injured at Rio Tinto managed sites. One metal merchant was fatally injured at an Alcan Engineered Products site in December	~	
A 50% reduction in the lost time injury frequency rate (LTIFR) between 2003 and 2008	0	43% improvement in LTIFR compared to 2003	^	
A 50% reduction in the all injury frequency rate (AIFR) between 2003 and 2008	0	40% improvement in AIFR compared to 2003	^	
Health targets				
A 40% reduction in the rate of new cases of occupational illness (per 10,000 employees) between 2004 and 2008	0	81% decrease in new cases of occupational illness per 10,000 employees compared to 2004	^	
A 20% reduction in number of employees (per 10,000 employees) exposed to a noise environment in the workplace of more than 85 decibels between 2004 and 2008	0	5.8% decrease in employees (per 10,000) exposed to more than 85 decibels in the workplace	^	
<b>Employment goals</b>				
Increase the representation of women in senior management	0	7% of current senior management and 22 per cent of identified	>	
to 20% by 2009		"future leaders" are women		
Increase the proportion of women in the graduate intake by 50% from a 2004 baseline	0	50% increase in the proportion of women in the graduate intake compared to 2004.	^	
Community relations targets				
Site managed assessments (SMA) completed at all high risk sites by end of 2008, or within two years of acquisition <sup>1</sup>	0	7 of 18 high risk SMAs were commenced or completed in 2007	^	
Human rights and political involvement targets				
No breaches of Rio Tinto's policies for human rights and political involvement	0	No reported breaches of our policies in 2007	^	

Alcan		2007 performance comment	Trend	
Environment targets				
All new sites (acquired or commissioned) required to	0	All sites acquired prior to 2005 are ISO 14001 certified	^	
be ISO 14001 certified within two years				
A 10% reduction in on-site greenhouse gas emissions,	•	4% reduction in on-site greenhouse gas emission	^	
per tonne of product, between 2005 and 2010		per tonne of product compared to 2005		
Safety targets				
All new sites (acquired or commissioned) required to be OHSAS 18001 certified within two years	0	All sites acquired prior to 2005 are OHSAS 18001 certified	^	
Recordable case rate of 1.06 per 200,000 hours worked	0	0.82 recordable case rate, a 29 per cent improvement from 2006	^	
Lost time injury/illness case rate of 0.26 per 200,000 hours worked	0	0.28 lost time injury/illness rate, a 28 per cent improvement from 2006	^	
Serious injury case rate of 0.21 per 1,000,000 hours worked	•	0.23 serious injury case rate, no change from 2006	>	

 $<sup>^{\</sup>mbox{\tiny 1}}$  Target changed in 2007 to reflect a risk based approach to SMA scheduling

## Key

- Target met or significant progress
- Considerable improvement
  - Target not met or behind Group trajectory
- ▲ Positive trend
- > Results variable over time
- Negative trend

Performance data		2005		2006		2007
	Rio Tinto	Alcan Inc.	Rio Tinto	Alcan Inc.	Rio Tinto	Alcar Inc
Environment						
Environmental Management System (EMS) certification (% operations)	90%	100%	95%	100%	100%	100%
Significant environmental incidents	8	0	8	15	9	9
Significant spills <sup>1</sup>	2	-	2*	-	2	
Fines and prosecutions – Environment (US\$ '000)	67.9	-	56.8	-	9.6	
Energy use (Petajoules) <sup>2</sup>	246*	281	257*	277	266	27
Greenhouse gas emissions – on-site (million tonnes CO <sub>2</sub> equivalent) <sup>2</sup>	14.1	20.6	15.2*	19.8	15.6	19.
Greenhouse gas emissions – total (million tonnes CO <sub>2</sub> equivalent) <sup>2</sup>	26.7*	30.6	28.3	29.5	28.3	27.
Freshwater input (billion litres)	-	210	-	200	-	19
Freshwater withdrawal (billion litres)	370	-	392*	-	411	
and disturbed (hectares)	1,083	136	1,112	167	1,154	10
and rehabilitated (hectares)	376	42	401	182	418	5
Naste generation – mineral (million tonnes)	1,752	3.3	1,871	3.1	1,904	3.
Naste generation – non mineral (million tonnes)	0.31	1.04	0.33	1.05	0.29	1.0
Social						
Employees (average)	32,000	63,000	35,000	65,000	39,000	67,00
atalities	2	0	3	2	3	
ost time injury frequency rate (LTIFR) (per 200,000 hours worked) <sup>3</sup>	0.57*	-	0.49*	-	0.42	
All injury frequency rate (AIFR) (per 200,000 hours worked) <sup>3</sup>	1.35	-	1.10	_	0.97	
ost time injury/illness case rate (LTII) (per 200,000 hours worked) <sup>4</sup>	_	0.54	_	0.39	_	0.2
Recordable case rate (RCR) (per 200,000 hours worked)4	_	1.51	_	1.16	_	0.8
Fines and prosecutions – safety (US\$ '000)	87.9	_	34.8	_	118.1	
New cases of occupational illness (per 10,000 employees)	47*	_	32	_	20	
Total occupational illness case rate (per 200,000 hours worked)	_	_	_	1.1	_	1.
Fines and prosecutions – health (US\$ '000)	58.1	_	3	_	0.1	
Community contributions (US\$ million)	93	-	96	-	107	
Economic <sup>5</sup>						
Gross sales revenue (US\$ billion)	20.7	_	25.4	_	33.5	
Underlying earnings (US\$ billion)	5.0	_	7.3	_	7.4	
Cash flow from operations (US\$ billion)	8.3	_	10.9*	_	12.6	
Dividends paid to shareholders (US\$ billion)	1.1	_	2.6	_	1.5	
Demand for materials, facilities and services (US\$ billion)	8.0	_	11.0	_	16.3	
Capital expenditure (US\$ billion)	2.5	_	4.0*	_	5.0	
Vages and salaries paid (US\$ billion)	2.3	_	2.7	_	4.2	
Faxes and royalties charged (US\$ billion)	3.1	_	4.2	_	4.2	
Fotal value added (US\$ billion)	12.7	_	14.4	_	17.2	

- \* Numbers corrected from those originally published following data verification
- 1 Significant spills are incidents which were of a nature to impact the environment or may have concerned local communities
- <sup>2</sup> Alcan energy use and greenhouse gas emission data is calculated on an equity share rather than on a management control basis
- <sup>3</sup> Hours used in injury frequency rate calculations are based on reasonable estimates
- 4 Alcan safety data is not comparable with Rio Tinto's due to differences in data definitions related to restricted work day injuries and contractor statistics
- <sup>5</sup> Economic data includes contributions from the former Alcan operations during the 69 day post-acquisition period in 2007
- Indicates the parameter is not applicable or data is not available

## **ENVIRONMENT**

Respect for the environment is central to Rio Tinto's approach to sustainable development. Unless we operate responsibly and can demonstrate leadership in all aspects of exploring, mining, processing, transporting and marketing we are unlikely to be given the ready access we need to people, capital and land. In this regard, we want Rio Tinto to be viewed as the public's preferred developer from exploration right through to mine closure.

We have devised and implemented a number of practical programmes covering the management of climate change, water, land stewardship, biodiversity, mineral and non mineral waste, air quality, and closure. These programmes include input from our local communities as well as from experts in these fields. Examples of our work in 2007 include:

- developing and implementing a biodiversity values assessment tool designed to prioritise risks and opportunities;
- developing and implementing a new protected area of national significance in Madagascar in collaboration with other stakeholders:
- discovering and protecting several new species of rare troglofauna at an iron ore development in the Pilbara;
- conducting risk and opportunity assessments for water management at 34 sites; and

• testing a programme to improve mineral waste management at three sites to help operations reduce the financial risks and increase environmental protection relating to tailings, waste rock, open pits, block caves, underground workings and waste processing.

Discussion of Rio Tinto's significant environmental incidents can be found in the Directors report on pages 101 and 102.

#### Greenhouse gas emissions

We accept the urgent need for climate change action and recognise the issue as being one of our greatest challenges and opportunities. We are identifying ways to improve how we do business so that we actively contribute to solutions. Controlling emissions that lead to climate change is a difficult task. It also imposes costs for greenhouse gas abatement and necessitates changes to the way we and our customers generate and use energy. For this reason we are focusing on the seriousness of this issue from both an economic and environmental perspective. Further details can be found in our online report.

- reducing emissions from our operations;
- understanding and developing low emission product pathways by working with others on supply chain emissions and on breakthrough technologies; and
- engaging with governments and stakeholders to advocate sound and efficient domestic and international policies.

Rio Tinto continues to navigate successfully through a challenging and fast changing external environment. We remain confident that our programmes will deliver value to our business and enhance our reputation.

#### Key steps in 2007

- Together with BP we launched Hydrogen Energy, which will
  develop decarbonised energy projects around the world. The
  venture will initially focus on hydrogen-fuelled power generation,
  using fossil fuels and carbon capture and storage technology to
  produce new large scale supplies of clean electricity. Hydrogen
  Energy is our first major foray into new business arenas which are
  being opened up by climate change and energy policy.
- On the Carbon Disclosure Project we were one of only four companies worldwide (one of only two carbon intensive companies) to achieve a perfect score in the Climate Disclosure Leadership Index. We were ranked number one in the Mining and Metals sector.
- Alcan was included in the FT500 Climate Disclosure Leadership Index and the Canada 200 Climate Disclosure Leadership Index. Alcan was ranked number one for disclosure in the high carbon impact sector in the Canada 200 report.
- After over a decade of involvement Rio Tinto remains a committed supporter of the Australian Greenhouse Challenge Plus programme.
- Rio Tinto renewed its sponsorship of Battelle's Global Energy Technology Strategy Programme (www.battelle.org)
- We obtained regional climate predictions for six businesses using the University of Oklahoma Climate Model to improve our understanding of physical climate change impacts and to determine what adaptation measures may be needed in future.
- Both Rio Tinto and Alcan participated in a number of collaborative efforts to promote effective public policy frameworks to address climate change, including the US Climate Action Partnership (USCAP) and made submissions on proposed legislation to governments in Australia, the US, New Zealand and Canada.
- Rio Tinto's executive committee continues to centrally fund certain greenhouse gas reduction and/or energy efficiency projects. Two successful examples of how this fund has been applied include: Partnering with Forestry NSW to test commercial scale forestry on buffer land at Rio Tinto Coal Australia sites; and reviewing energy use at our Richards Bay Minerals and Quebec Iron and Titanium operations.

#### Future direction for 2008

- Hydrogen Energy and Masdar (Abu Dhabi's initiative for renewable and alternative energy and clean technology) have agreed to work together on an industrial scale hydrogen fired power generation project with carbon capture and storage in Abu Dhabi. The project is expected to limit greenhouse gas emissions by capturing some 90 per cent of the carbon dioxide generated, and safely and permanently store up to 1.7 million tonnes of carbon dioxide per year. The plant is expected to be in commercial operation by 2012.
- We will develop new strategies and capabilities to participate in emerging carbon trading markets.
- Our climate change leadership panel will transform into an advisory panel with external and internal members to improve our understanding of climate change and our decision making capabilities.

Rio Tinto's total greenhouse gas emissions, made up of on-site emissions and those from the purchase of electricity and steam, were 28.3 million tonnes of carbon dioxide equivalent ( $CO_2$ -e) in 2007. This is the same as in 2006, which is commendable given the rate of expansion across the Group.

We believe it is important to understand the impact of our products along the value chain. There are energy efficiency and greenhouse gas emission benefits associated with the use of many of our products, like uranium use for power generation, aluminium use to make cars lighter, borate use in insulation products and copper use in high efficiency motors. However, there are significant greenhouse gas emissions associated with the transportation, processing or use of Rio Tinto's products. For 2007, these include:

- 6.6 million tonnes of CO<sub>2</sub>-e associated with third party transport of our products and raw materials;
- around 42 million tonnes of CO<sub>2</sub>-e associated with processing bauxite and smelting alumina that Rio Tinto sold to third parties;
- an estimated 344 million tonnes of CO<sub>2</sub>-e associated with customers burning our coal for electricity generation and steel production; and
- approximately 268 million tonnes of CO<sub>2</sub>-e associated with steel produced from our iron ore. Note that some steel producers use both Rio Tinto coal and iron ore, thus to avoid double counting, these emissions cannot be added to those associated with the combustion of our coal above.

Alcan's total greenhouse gas emissions were 27.8 million tonnes of  $\rm CO_2$ -e, calculated on an equity share basis. The new combined Aluminium product group is expected to make up about two thirds of Rio Tinto's gas emissions in the future (as shown).



\*excludes greenhouse gas emissions from Alcan's Engineered Products and Packaging divisions

Rio Tinto's greenhouse gas emissions per tonne of product have only decreased 0.7 per cent compared to 2003. We are not on track to meet our four per cent reduction target by 2008. This is due to a decline in energy efficiency (see discussion in the energy section), expansion activities such as overburden removal and land clearance, changes in ore grades and purchased electricity emission factor increases, particularly in South Africa. These effects overshadow efficiency gains elsewhere in the Group.

Alcan's 2010 target was a ten per cent improvement in on-site greenhouse gas emissions per tonne of product from a 2005 baseline. In 2007, performance had improved by four per cent as a result of efficiency improvements, retrofitting best in class technology and shutdown of some under performing operations.

Prior to 2003, considerable improvements in high intensity perfluorocarbon (PFC) emissions control were realised at both Rio Tinto and Alcan aluminium smelters. Following this historic step change, achieving additional gains in smelting efficiency has been more difficult. Prioritisation and implementation of projects to improve energy efficiency remain a focus for Rio Tinto.

## Energy use

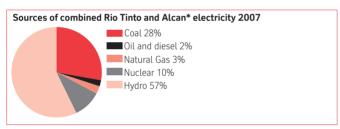
Rio Tinto both consumes energy in its operations and produces it. Our smelting and mineral processing operations are energy intensive and depend heavily on electricity, coal, oil, diesel and gas to keep them running. At the same time, Rio Tinto is one of the world's leading producers of coal and of uranium for the energy industry.

We believe the energy challenge can best be met by companies, governments and society working together on all fronts. Global energy demand growth will require all available energy sources: fossil fuels, nuclear and renewable energy sources. The goal in each case should be to continually improve the cost-security-cleanliness equation, by fully recognising and addressing the risks involved and benefits achievable. Technology development will be at the heart of improved energy solutions.

We strive to improve the energy efficiency of all our operations. Some of the energy saving opportunities we have identified are actionable immediately; others require significant capital expenditure and have long design and construction lead times. For example, we are currently developing a step change technology, the Drained Cathode Cell for aluminium production. This has the potential to significantly reduce the amount of process energy required to make aluminium metal.

A US\$550 million pilot plant is being built at Rio Tinto Alcan's *Complexe Jonquiere* site in Canada to develop the proprietary Aluminium Pechiney Series 50 (AP50) smelting technology. The AP50 pilot plant is the initial step in creating up to 450,000 tonnes of new generation smelting capacity, based entirely on clean, renewable hydroelectricity. The technology offers lower carbon dioxide output and allows for emissions reductions that could be applied across the industry. The company has set an ambitious goal of developing an environmentally friendly aluminium smelting cell that is 20 per cent more energy efficient than existing technology.

Compared to 2006, Rio Tinto's energy use increased by 3.3 per cent to 266 petajoules. In 2007, Alcan used 270 petajoules on an equity share basis. This includes a significant proportion of hydroelectric power. Two thirds of our combined electricity supply will be greenhouse friendly hydro and nuclear power going forward.



\*excludes electricity used by Alcan's Engineered Products and Packaging divisions

Rio Tinto's target is a five per cent reduction in energy use per tonne of product by 2008, compared with 2003. Energy use efficiency has improved by 0.7 per cent compared to 2003. Incremental improvements in energy efficiency seen at many operations were overshadowed by restrictions to production, expansion activities and reductions in ore grade, which make meeting out target challenging.

This year, industrial action at the Iron Ore Company of Canada during the cold winter months suppressed production at a time when energy use is at its peak. Our Pilbara iron ore mines saw increased fuel used for mining and increased demand for electricity supply to third parties in the region, which overshadowed other efficiency gains. Our Argyle diamond mine experienced a decrease in ore grade following its transition to underground operations combined with an increased reliance on on-site electricity generation that decreased its energy use efficiency. Coal operations on the east coast of Australia experienced rail and port restrictions while fuel and electricity continued to be used at the mines.

Step changes in energy efficiency will not be possible within the target period. However, our executive committee has sponsored additional projects over and above "business as usual" to review and prioritise opportunities for large scale energy use savings and greenhouse gas emission reductions.

#### Water

Water is a resource with social, environmental and economic value at both the local and global level. Access to water resources is a key business risk that we manage using leading sustainable practices. Our water requirements, particularly for freshwater, compete with the needs of others and the environment, especially in arid and semi arid regions. Our operations also have the potential to affect the quality of water discharged into the environment.

We have a long term approach to water management that aims to improve our performance, recognise the significance of water and work with others to contribute to sustainable water management. Our strategy provides a framework for all our water activities in the Group. For example, during 2007 we engaged with external operations, such as WWF Australia, to build knowledge about the value of water. We continue to focus on ways to minimise the amount of water we remove from the environment, to re-use it whenever we can, and to return it to a state as similar to its original purity as possible when we discharge it.

Alcan freshwater input decreased by eight per cent compared to 2006. This was the result of improved water management at Alcan's Quebec hydroelectric generating facilities after installing control valves to automatically restrict water use during maintenance and shut down.

Compared with 2006, freshwater withdrawal increased by 4.8 per cent to 411 billion litres in 2007. When compared to 2003, we have reduced the amount of freshwater withdrawn per tonne of product, by 4.1 per cent. However, we are not on track to achieve our five year target of a ten per cent reduction in freshwater withdrawn, per tonne of product, by 2008. This is due to:

- the seven weeks of Industrial action at the Iron Ore Company of Canada causing freshwater to be withdrawn to maintain processes while production levels were low;
- new borefields commissioned in the Pilbara to access ore as part of expansion activities; and
- fewer cyclones and hence drier conditions required operations in the Pilbara to withdraw additional water for dust control where poor quality water could not be substituted.

The UN Millennium Development Goal on water is to reduce by half the number of people who do not have sustainable access to safe drinking water by 2015. Increasingly we work in developing countries where clean freshwater is a rare commodity, and this is an issue of growing importance for us. For example in Madagascar we are working with the local community and the World Bank to help people get access to clean drinking water. In Cameroon, Alcan contributed to the installation of water wells for villages surrounding it's Alucam aluminium smelter near Edea.

## Land stewardship

In line with leading practice, we always aim to rehabilitate land as it comes out of mining use rather than waiting until all operations at the site have ceased. Rio Tinto manages 36,900 square kilometres of land, excluding our exploration leases. Just over four per cent of this area was disturbed for mining purposes in 2007 and by the end of the year more than a quarter of the disturbed land was rehabilitated.

Land stewardship means matching the current and potential uses of land we manage, with ecological and social values, tenure, customary ownership and community expectations regarding development.

Our leading policy and technical position on land stewardship has resulted in invitations to participate in a number of international and national policy development forums. Rio Tinto is also playing a significant role in bilateral initiatives with organisations such as the World Conservation Union.

As a member of the International Council on Mining and Metals, we help develop industry policies and practices on protected areas and long term access to land. We are working with the World Resources Institute to assess ecosystem services in site rehabilitation. We are also working on a UNESCO project to identify best practice for assessing decisions about land use options and access while taking a regional view on landscape planning, rather than just a local view of the land within a project area.

#### **Biodiversity**

We recognise the importance of conserving and responsibly managing biological diversity, both as an issue for business and for society.

Rio Tinto is committed to a net positive impact on biodiversity. and is introducing the strategy at its managed operations around the world. This means making sure our actions have an overall positive effect on biodiversity and that they outweigh the impacts associated with mining and processing.

We work in regions that are recognised and valued locally and globally for their biodiversity. While high profile sites in countries such as Madagascar, Brazil or Guinea attract a great deal of our attention we recognise that biodiversity values are important at any site. And their significance is expected to grow, as human and natural pressures modify habitats and raise extinction rates.

Biodiversity also relates to communities, especially as many may depend on these natural resources for cultural and subsistence requirements. Our biodiversity strategy therefore provides a framework for managing the interests and concerns of a wide and diverse range of groups, among them traditional land owners, local communities, NGOs, regulators and the scientific community. This is essential for achieving our twin goals of net positive impact on biodiversity and sustainable communities. We continued to work on biodiversity related projects with partner organisations including BirdLife International; Royal Botanic Gardens, Kew; Conservation International; Fauna & Flora International and the Earthwatch Institute.

In 2007, we conducted a baseline assessment of the biodiversity values at each Rio Tinto site. This information will be used to prioritise our biodiversity activities and management over the next four years.

#### Waste

In using our resources wisely, we ensure we also manage our mineral and non mineral wastes in a socially responsible way.

Mining activities require large quantities of rock to be moved to access economic resources. Mineral processing activities result in generation of slags and tailings. These materials, commonly termed mineral wastes, can pose environmental hazards if poorly managed. Through improvements in mine planning we are improving the efficiency with which we mine and process ore leading to reduced material movements, fuel consumption and greenhouse gas

We produced 1,904 million tonnes of mineral waste in 2007, about two per cent more than in 2006. Much of this material was moved within mined areas and placed as in-pit backfill (66 per cent) or was stored in engineered piles (31 per cent) close to where it was generated.

The acquisition of Alcan is expected to have marginal impact on our mineral waste profile. Alcan operations generated 3.2 million tonnes of bauxite waste in 2007.

One of the most serious environmental risks for the mining industry is "acid rock drainage" (ARD) from mineral waste. When sulphide containing rocks are disturbed and exposed to air and water, they may release acidity, metals and sulphate. Left unchecked, this can reduce water quality in the long term.

We minimise the potential for ARD generation by adopting leading practices in mine planning, operation and waste management. Only about 11 per cent of Rio Tinto's mineral waste generated was considered to have acid generating potential or to pose other geochemical hazards in 2007. Kennecott Utah Copper contributed 63 per cent of this total. To minimize water contact chemically reactive mineral waste is covered or capped and vegetated wherever possible.

Rio Tinto's ARD review programme is regarded as the industry benchmark for this key risk area. Since 2004 we have completed 22 ARD risk reviews, including reviews of all of our operations and advanced projects that pose high ARD hazards. In 2007 we focussed on the ARD risks and management programs for our La Granja copper project in Peru. Rio Tinto continues to play a leading role in

the International Network for Acid Prevention.

This year we rolled out a new diagnostic tool to improve the management of all types of chemically reactive mineral waste. In addition to ARD, this programme also focuses on wastes that pose salinity, radioactivity, metals soluble or bioavailable at neutral pH and naturally occurring asbestos risks. Four mines and advanced projects have now completed this diagnostic program.

Non mineral waste includes materials that are used in mining and processing, such as tyres, oils, refractory lining and domestic rubbish. We re-use and recycle these materials, where possible. If recycling is not an option, we burn, store or dispose of waste in engineered landfills in an environmentally responsible way and in accordance with local regulations. In 2007, non mineral waste generation was 288 thousand tonnes, 11 per cent lower than in 2006.

With an increased exposure to smelting and other downstream packaging activities, the inclusion of Alcan is expected to have a significant impact on our non mineral waste profile. Alcan operations generated 1.09 millon tonnes of non mineral waste in 2007.

#### Air quality

We recognise that we must ensure the highest quality of air possible at and around our operating sites. Some of our activities emit sulphur dioxide, fluorides and dust. Given the potential impact of our emissions on people and the environment, we need to understand and control their effects. While meeting our legal requirements we are also looking ahead to address evolving community expectations.

Sulphur dioxide emissions increased by 2.8 per cent to 72 thousand tonnes. Fluoride emissions, mainly from aluminium smelting, were 1.2 thousand tonnes, which was similar to 2006.

Within Alcan, technology has led to reductions in air emissions over the last ten years. However decreasing raw material quality has made it difficult to improve on this performance. Alcan is undertaking a comprehensive review of its raw material supply as well as addressing this challenge through research and development.

Dust is an important issue that cuts across many areas, including occupational health, environment, processing and assets. Dust collectors are used wherever possible. The total number of community complaints about air quality, mainly dust related, were nearly four times higher than in 2006 (417 complaints compared to 87 in 2006). Much of this can be attributed to drier conditions in Australia and the result of making it easier for local community members to contact us.

A programme to reduce water use for dust control using chemical suppressants and improved spray technology should see improvements in dust and water management. Our local sustainable development reports provide a more comprehensive discussion on regional dust management.

#### SOCIETY

Ethical integrity and social responsibility are critical to the way we conduct our business. We aim to build enduring relationships with our stakeholders that are characterised by mutual respect, active partnership and long term commitment. In the long run, the trust that is engendered by solidly based relationships will reinforce Rio Tinto's ability to gain preferential access to resources.

Safety is a core value at all our businesses. We believe that all injuries are preventable and our aim is for all employees to go home safe and healthy at the end of each day.

Rio Tinto's activities involve working on the surface and underground with large, heavy equipment, explosives and chemicals, sometimes at extreme temperatures. We also face normal industrial hazards such as driving vehicles, working at heights and operating machinery with dangerous moving parts.

Rio Tinto has one of the best safety records in the industry. We actively manage the safety of all those who work on our sites employees and contractors alike.

Complex mineral processing facilities such as smelters, refineries and concentrators require particular attention to process safety. We have conducted risk assessments of major process hazards across the Group to prioritise activities and capital investments effectively. Implementation of these actions will remain a focus area in 2008.

In 1998, the Group embarked on a drive to improve its safety. Since then, the all injury frequency rate (AIFR) has improved by 78 per cent, a good record but not one to be complacent about. Indeed, we deeply regret that in 2007 three contractors were fatally injured at Rio Tinto managed operations. One metal merchant was fatally injured at an Alcan Engineered Products operation in the reporting period after Rio Tinto assumed management control in October. We have thoroughly investigated these incidents and communicated and acted upon the lessons learned. Contractor management will be a key focus for us in 2008.

The lost time injury frequency rate (LTIFR) at the end of 2007 was 0.42 per 200,000 man hours, an improvement of 16 per cent over 2006. The AIFR was 0.97, an improvement of 11 per cent over 2006. We are on trajectory to achieve our 2008 targets in both areas.

It is regrettable that injuries are still taking place at our sites. In order to further embed a strong safety culture, we are increasing focus on individual intentions and behaviour while ensuring we maintain our strong systems and performance standards.

Some key steps we took in 2007 were:

- progressing the key elements of a revised safety strategy to embed safety standards and implement a leadership development
- completing a risk management assessment, which allows risks to be ranked in a practical way for operations; and
- developing a protocol for the conduct of process safety technical risk reviews to reduce complexity and prioritise hazard rankings.

A key factor in the Alcan acquisition was the consistency across both companies on the importance of safety. While our philosophies were similar, Alcan's definitions were different to those used by Rio Tinto and hence 2007 performance is not comparable. Work has commenced to create a 2007 baseline for Alcan using Rio Tinto definitions.

Alcan's recordable case frequency rate was 0.82 at the end of 2007. This represents a 29 per cent reduction over 2006 and an 84 per cent reduction over 2001. This performance was 23 per cent better than Alcan's target for the period. The lost time injury illness rate also declined by 28 per cent but remained eight per cent short of the 2007 target.

Some notable examples of Alcan's success in reducing these rates include controlling hazardous energy sources from upstream operations and development and roll out of large scale Man-Machine-Interface programmes in downstream operations.

#### Health

An important element of our sustainable development approach is the health and wellbeing of our employees, contractors and the people in the communities in which we operate.

The nature of occupational illnesses is changing. Illnesses such as stress, fatigue, and musculo-skeletal, and the normal results of ageing such as heart disease and reduced physical capacity present different challenges to the traditional mining health issues. One of the most important occupational health issues we face are the risks associated with an ageing workforce and their ability to continue to perform their roles injury and illness free.

We are committed to reaching our goal of no new cases of occupational illness and believe that we will only achieve this through promoting the good health of all our employees and contractors. Supporting healthy lifestyles reduces health related risks such as fatigue and obesity, and improves productivity.

In 2007, more than 77 per cent of our employees worked at operations that had implemented health and wellness programmes. We have developed a leading practice "promotion of wellness" model that will be introduced to more than 6,000 workers and their families across 21 sites in Australia in 2008. On demonstrating

its effectiveness, this model will be recommended to the rest of the Group.

Although mechanisation and automation are rapidly reducing the physical demands of our work, musculo-skeletal illnesses remain the most common cause of new occupational illnesses at 34 per cent.

Noise induced hearing loss from heavy equipment accounted for 12 per cent of our reported health incidents in 2007. We are reducing employee exposure to noise in the workplace through engineering solutions and alternative ways of doing our work.

Since 2004 we have achieved a 5.8 per cent reduction in employee exposure to a noise environment of more than 85 decibels. Although the majority of this improvement was achieved during 2007, we have considerable work ahead to meet our target of a 20 per cent reduction in the number of employees (per 10.000) employees) exposed to noise between 2004 and 2008. The drive to achieve this aggressive target has resulted in improved data and better knowledge of workers' noise exposures.

In 2003 we set a stretch target to reduce the number of new cases of occupational illness by 40 per cent. We met this ambitious target and at the end of 2007 the number of cases was 38 per cent lower than in 2006 and 81 per cent lower than in 2003.

Rio Tinto is operating in countries where the prevalence of HIV/AIDS, tuberculosis and malaria is high. We are working closely with the international community of government agencies and NGOs concerned with these problems not only in Africa, but globally. For example, where we have operations located in regions with a generalised HIV epidemic (as defined by UNAIDS) we actively encourage all employees to know their HIV status through voluntary testing. We also require that all employees and their nominated partner have affordable access to treatment, care and support, including antiretroviral drugs.

Some other key steps in our occupational health management in 2007 were:

- extending voluntary counselling and testing of HIV to over 70 per cent of employees at Richards Bay Minerals in South Africa. The programme also highlighted 200 cases of other chronic diseases;
- developing workplace exposure limits for high temperature work in conjunction with trade associations and implementing practical solutions where possible:
- · commencing work on developing the science needed to set workplace exposure limits for copper; and
- Rio Tinto chaired the ICMM committee that produced practical guidelines on the management of tuberculosis, malaria and HIV in the workplace.

We have begun to integrate the Rio Tinto and Alcan approaches to occupational health. At the strategic level, the two companies had similar programmes: active reduction of health risks, promotion of wellness and HIV/AIDS management. At the detailed level more work is needed to align our reporting definitions. The inclusion of Alcan changes our health risk profile with an increased proportion of smelters.

## **Employment**

Rio Tinto employs on the basis of job requirements and does not discriminate on grounds of age, ethnic or social origin, gender, sexual orientation, politics or religion. Exceptions are made to favour local employment where local laws provide. We do not employ forced, bonded or child labour.

Employee numbers are continuing to increase as expansion of our operations takes place. In 2007, Rio Tinto directly employed an average of about 39,000 people. Many of these are recruited from the local areas in which we operate, but an increasing number of employees are sourced internationally. In addition, Alcan employed an average of 67,000 people in 2007, including the Engineered Products and Packaging divisions.

We employ graduates from many disciplines including engineering, anthropology, human resources, health, safety and environment. For the fifth year in a row, there has been a significant increase in the number of graduates that we are recruiting globally, 265 in 2007, compared with 203 in 2006. We have not yet included gender diversity information from former Alcan operations. We are ensuring our systems provide appropriate opportunities for women graduates. Thirty per cent of the 2007 graduate intake were women, a 50 per cent increase from our 2004 baseline.

Although we have reached the goal for increasing the number of women at graduate levels, we would like to make better progress towards the goal for gender diversity at senior levels. Women represent 22 per cent of identified "future leaders", a two per cent increase from 2006, and seven per cent of Rio Tinto's senior management, a one per cent increase from 2006. A review of our diversity goals and the development of new initiatives to improve the representation of women at all levels, including senior management roles, is planned for 2008.

In world class mines and processing facilities such as those we operate, the workforce is becoming increasingly skilled, requiring a high level of training and capability. More than 1,000 people attended regional and global leadership and functional development programmes in 2007 and 280 graduates attended the Rio Tinto Graduate Development Programme. Our business units and Group functions deliver over 7,000 role specific and relevant training courses annually across all technical and functional areas and among all levels of the organisation. We are increasing our use of simulator based and technology driven experiential learning and have also developed our own approach to coaching.

We recognise that attracting, developing and retaining a skilled workforce is critical to business performance. We believe that our approach is one of the most competitive in the industry and is based on:

- engaging with employees about the business, valuing each individual's contribution, and working with people to achieve ongoing change and improvement;
- conducting performance reviews, development planning, coaching and feedback processes;
- managing talent so that managers review employees career aspirations and potential;
- offering opportunities for career development and progression, including options for working across a range of businesses both locally and internationally; and
- introducing flexible working arrangements in many parts of our business.

Rio Tinto's total rewards strategy is designed to attract, retain and motivate the skilled workforce essential to the success of our business. Base pay is reviewed regularly and adjusted as necessary taking into account the individual's role, local market trends and, for many employees, business and personal performance. This process allows us to ensure that employees are paid competitively against the external market and consistently with their internal peers. In addition we also offer allowances, bonuses, share plans and healthcare benefits appropriate to the local markets.

We not only comply with employment legislation in the countries in which we operate, but look to apply a best practice approach to remuneration. We aim to ensure that our remuneration systems are transparent and equitable. Equally qualified and experienced employees doing the same work to the same standards of performance will receive comparable remuneration and employment conditions regardless of gender, age, ethnic or social origin, sexual orientation, politics or religion; unless required by local laws. We spent US\$3,346 million (excluding Alcan) on wages and employee benefits in 2007, which represents about 11 per cent of our total economic contributions.

The Group also has retirement benefits in place for many employees. It participates in state arrangements where offered and appropriate, and supplements these with company arrangements in the main jurisdictions in which we operate. The main plans are independently audited and we use independent advisers and actuaries to ensure that the plans are sustainable and adequately funded.

Rio Tinto expects managers to abide by the highest standards of behaviour. Employees are expected to treat each other and external contacts with dignity, fairness and respect. Harassment in the workplace is guarded against and neither abuse nor misuse of position or facilities for any purpose is tolerated. Obligations to colleagues and the Group are respected, while collaboration is encouraged within and across businesses, cultures and countries. The *Speak-OUT* programme provides employees with an independent and confidential means of reporting concerns to senior managers.

#### Communities

Wherever we operate we seek to understand the social, environmental and economic implications of our activities, both for the local community and for the overall economy. We work closely with local representatives to inform ourselves of community concerns and priorities, and our programmes are the result of extensive consultation and research. Mutual benefits and obligations are discussed with local governments and community representatives. Objectives are agreed to secure long term results.

In Australia, Rio Tinto establishes agreements with Aboriginal traditional owners and groups affected by its activities to gain access for exploration (land access agreements) and to develop mining operations (regional development agreements). Our policy of increasing opportunities for indigenous Australians is reflected in those agreements.

During 2007, we increased Australian indigenous employment by 367 people to 1,212 or eight per cent of Rio Tinto's Australian workforce. The biggest increase was seen at Rio Tinto Iron Ore, which now employs 518 indigenous people (11 per cent of the workforce) compared to 274 in 2006.

Similar values are applied by Alcan. In 2007 the company published its new Aboriginal policy formalising ongoing activities and partnerships with native people around the world.

To enable us to target the delivery of socio-economic programmes reflecting the priorities of local communities, 2007 saw an increased use of community baseline assessments, including identification of potential positive and negative impacts of our presence. We use this information along with two way community and local stakeholder consultation to develop our multi year communities plans, which include measures of success that are internally and externally monitored.

To contribute to sustainable livelihoods after mine closure, each Rio Tinto business now has an annually updated closure plan. The plans apply throughout the lifecycle of the Group's activities, from exploration to mine closure and beyond. All these plans are developed with community input, particularly regarding post mining land use.

Our work in 2007 included:

- updating our Communities Standards and guidance notes including a new standard for Cultural Heritage Management for Australian Businesses:
- providing financial and technical support to community HIV programmes in Madagascar with public and NGO partners and establishing a business advisory centre to promote local entrepreneurs and decentralise our supply chain;
- undertaking a new social and environmental impact assessment for the expansion project at Rössing Uranium, Namibia, after 30 years of operations;
- renewing our commitment to an enhanced community assistance programme at Murowa diamonds, Zimbabwe, to include school construction and rehabilitation, electrification, small irrigation projects, and food security programmes;
- progressing 23 Guinean staff from entry level positions to positions of higher responsibility at the Simandou project and donating 130 computers collected from various Rio Tinto operations to local civil society organisations;
- sponsoring nine Mongolian students to study in Mongolia and other parts of the world in mining related fields including: finance, law, geology and accounting;

- relocating scarred trees of cultural significance to a suitable site in consultation with traditional land owners as a result of heritage surveys of land designated for mining at the Weipa bauxite mine in Australia.
- introducing a community relations diagnostic tool for operations to more rigorously assess their performance against Rio Tinto standards.

#### **ECONOMIC CONTRIBUTION**

Our gross sales revenue in 2007 was US\$33,518 million, a 32 per cent increase on the previous year. This includes sales revenue of US\$3,798 million from the former Alcan operations during the 69 day post-acquisition period. The rise was primarily attributable to record production volumes across most of our products and to strong prices, driven by surging demand. Underlying earnings were US\$7,443 million compared to US\$7,338 million in 2006.

The Group's continuing financial success is based on its ability to secure access to people, capital and land. We use our expertise to harness these resources, creating prosperity for our shareholders, employees, communities, governments and business partners.

Rio Tinto has significant economic impact on the communities in which it operates, at the local, state and national levels. We take considerable care to delineate this economic impact, allowing us to demonstrate the value of our ventures to existing and potential partners and stakeholders.

#### Socio-economic programmes

In 2007, Rio Tinto businesses supported more than 2,900 socioeconomic programmes covering a wide range of activities including health, education, business development, housing, environmental protection and agricultural development.

We spent an estimated US\$107 million on community assistance programmes and payments into benefits receiving trusts set up in directly negotiated community impact benefit agreements. This does not include economic multiplier contributions, such as salaries and wages, local procurement, infrastructure, housing and utilities support.

The acquisition of Alcan brought together two similar approaches to facilitating sustainable communities, with complementary community support programmes not yet fully captured in this report.

By understanding our economic interaction with the communities where we operate we can optimise benefits for communities and our operations alike. This economic interaction includes relationships with local suppliers, training and local employment, small enterprise support, the optimal distribution of taxes and royalties and multi-lateral socio-economic programmes. The infrastructure developed for a particular mine or processing plant can also greatly benefit local communities and other regional players such as local businesses and governments.

#### **Procurement**

We apply our approach to sustainable development along the supply chain encouraging those we work with to adopt sound practices. Payments to suppliers constitute a strong additional benefit to the economy, generating employment and creating wealth in other sectors.

Across the world, we spent US\$13.5 billion on goods and services in 2007 (excluding Alcan). Rio Tinto had about 40,000 suppliers and Alcan had about 22,000, excluding suppliers for the engineered products and packaging divisions. The success of each of our business operations depends on the ability of those suppliers to deliver what we need, when we need it, and to our standards. We can exert a considerable positive influence by ensuring that suppliers meet stringent requirements, not just for the quality of the goods and services they provide, but also for their safety and employment practices and their commitment to sustainable development. To help explain Rio Tinto's procurement practice, we published *The way we buy* in 2006 which is on our website.

#### **Product stewardship**

Active monitoring of the health, environmental and lifecycle factors associated with our products once they are in use serves to protect our markets and our ability to supply them. We also engage with regulators and consumers on issues arising from the use of our products.

By understanding the health and environmental impacts and benefits of our products over their complete lifecycle, we can potentially improve our processes, enhance our reputation in the market place, differentiate our products from our competitors and become a "brand of choice" for metals and minerals products. The enhanced reputation we earn by adopting a lifecycle "know your products" approach helps improved access to land, people and financial assets.

We have been able to translate our product stewardship approach into tangible business value by securing premium prices, developing ongoing engagement with customers and successfully providing scientific input to developing regulations affecting market access.

Across the Group 86 per cent of businesses had formal product stewardship programmes to address customer needs and a majority of business units engaged in supply chain activities, a significant improvement on 2006. Sixty two per cent of businesses undertook a lifecycle assessment of major products. Together with the work performed by industry associations, life cycle data is now available on all of our major products. Alcan also has a formal product stewardship programme and has completed lifecycle assessments on its major products. Alcan has also developed a regulatory programme to address emerging REACH (Registration, Evaluation, Authorisation and Restriction of Chemical substances) regulations in Europe that complements the Rio Tinto REACH and Material Safety Data Sheet programmes aimed at compliance with worldwide emerging hazard classification regulations.

We are committed to research and development leading to innovative products. Rio Tinto Alcan's aluminium smelting, composite material and recycling innovations are resulting in reduced energy use and greenhouse gas emissions. In automotive applications, market opportunities continue to grow for advanced aluminium crash management systems, providing lightweighting opportunities while improving vehicle safety and vehicle performance through innovative design. For every tonne of aluminium that replaces traditional higher density materials in a vehicle today, 20 tonnes of carbon dioxide emissions are avoided over the lifetime of the vehicle.

Rio Tinto Alcan is also supporting development of advanced energy saving solutions by expanding the portfolio of lightweight aluminium materials available. The high-gloss rolled aluminium sheet, Solar SurfaceTM 992, is being used in innovative parabolic solar cooker applications, designed for markets in developing regions. Approximately 20,000 parabolic cookers distributed by charitable organisations are currently in use.

Aluminium recycling requires only about five per cent of the energy required in primary aluminium production and avoids approximately 95 per cent of the greenhouse gas emissions associated with first-generation metal production. A project is currently underway to expand capacity at Rio Tinto Alcan's Neuf-Brisach facility to recycle beverage cans in a closed-loop arrangement with can manufacturers.

## **GOVERNANCE**

Sound governance and high ethical standards of conduct are a source of competitive advantage in securing access to resources. Environmental performance, community relations and employee welfare and transparency are just as important as technical aspects of mining and processing. If Rio Tinto is to succeed in positioning itself as a "developer of choice" it has to be equipped to deal with complex stakeholder relationships.

Accordingly, our operating philosophy has a strong focus on corporate responsibility spelled out in our statement of business practice, *The way we work*. This covers issues such as human rights, political involvement, transparency and zero tolerance of corruption.

All our employees are required to comply with the policies in the document. The objective is to ensure that they reflect in their daily work high standards and values such as accountability, fairness, integrity and openness. Published in more than 20 languages, *The way we work* is a reflection of the Group's diverse workforce as well as the range of communities and stakeholders affected by our operations.

We also actively engage with a wide range of external stakeholders to promote leading business practices. As a member of the International Council for Mining and Metals (www.icmm.com). we are continuously improving our economic, social and environmental performance. We regularly report our progress in line with the Global Reporting Initiative (www.globalreporting.org) as part of the United Nations Global Compact Communication on Progress and in our annual report.

#### **Human rights**

Rio Tinto and Alcan actively support the United Nations Universal Declaration of Human Rights.

At Rio Tinto, our commitment to human rights is reflected in our statement of business practice *The way we work* and our complementary guidance documents on Human Rights and Business Integrity. Our human rights policies and procedures have been strengthened as part of an online web based ethics and compliance training system. During 2007, over 1,800 employees completed the human rights training module, which is compulsory at the general manager level or above.

Within Alcan, human rights were addressed through the Alcan Worldwide Code of Employee and Business Conduct, and Indigenous Peoples Policy. Human rights considerations were also addressed in the areas of procurement, security, stakeholder and community engagement, project development and governance.

In implementing human rights policies, Rio Tinto is subject to the relevant laws in the many other countries where we operate. At all times we respect and comply with the obligations which those bodies of legislation impose upon us.

Rio Tinto is a signatory to a host of international commitments and standards and remains dedicated to meeting them. Rio Tinto was involved from the inception of the Voluntary Principles on Security and Human Rights (www.voluntaryprinciples.org) and has supported these principles since their announcement in 2000. We are also a founding member of the United Nations Global Compact (www.unglobalcompact.org) and a participating member of the UK Network. The United Nations Global Compact is a voluntary initiative for businesses committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, the environment and anti-corruption.

Furthermore, Rio Tinto is a founding member of the Council for Responsible Jewellery Practices (www.responsiblejewellery.com) which commits members to promote responsible business practices in a transparent and accountable manner throughout the industry from mine to retail. It also seeks to maintain consumer confidence in diamond and gold jewellery products and the trust of all interested stakeholders in the industry. We are also a member of the Kimberley Process (www.kimberleyprocess.com) a joint government, industry and civil society initiative to stop trade in diamonds that fuel conflict.

There were no reported incidents of breaches of our human rights policy during 2007.

#### Transparency and political involvement

We are committed to maximum transparency, consistent with good governance and commercial confidentiality. Rio Tinto strives to conduct its business with integrity, honesty and fairness, building from a foundation of compliance with relevant local laws, regulations and international standards wherever we operate.

Training on our business integrity guidance is required for all managers. These guidelines cover bribery, anti-corruption and political involvement. We do not directly or indirectly participate in party politics or make payments to political parties or individual politicians.

Mining is a heavily regulated industry and we maintain continuous dialogue with many governments and public authorities at national, provincial and municipal levels. We speak out and make representations on matters affecting our business interests and those of our shareholders, employees and others involved in our activities.

In addition to internal policies and activities, Rio Tinto is active in promoting transparency and good corporate governance. We have been a member of the steering committee which developed and now assists in the implementation of the Transparency International (www.transparency.org) Business Principles since their inception. Through the International Council on Mining and Metals (www.icmm.com) we are also a member of the Extractive Industries Transparency Initiative (www.eitransparency.org). Both Rio Tinto and Alcan also endorse the World Economic Forum's Partnering Against Corruption Initiative (www.weforum.org).

There were no reported incidents of breaches of Rio Tinto's political involvement policies during 2007.

#### Competition

Rio Tinto has adopted a specific antitrust policy requiring all employees to compete fairly and to comply with relevant laws and regulations. Guidance is provided on contacts with competitors and benchmarking as well as implementation of the policy in individual businesses. As integral parts of the policy, all relevant employees receive regular training and are required to certify annually that they are not aware of any antitrust violations. No violations were reported in 2007.

#### **Engagement**

Genuine engagement with stakeholders is a critical element of successful business practice. Many issues, such as climate change and poverty elimination, are globally complex and require stakeholders to work together to explore and develop appropriate solutions. Building strong working relationships with those who are affected by, or have an interest in, what we do is essential to our future operations. We engage with a broad range of organisations and individuals including our employees, investors, governments, communities, academia, industry bodies, and civil society groups.

We are a member of a number of industry associations and of representative bodies including the World Business Council for Sustainable Development (www.wbcsd.org), the Commonwealth Business Council (www.cbcglobelink.org) and the International Chamber of Commerce (www.iccwbo.org), and we work closely with international and non governmental organisations to develop appropriate standards and guidelines for our industry. Rio Tinto also maintains an active partnership programme with other external organisations to address issues of mutual interest. By working together, we can achieve our shared goals more effectively.

During 2007, the US\$1 million annual Rio Tinto Alcan Prize for Sustainability, continued to recognise significant contributions made by non profit, non governmental, or civil society organisations promoting and implementing sustainable development.

## Mine closure and legacy issues

Closing a mine or other operating site does not simply mean shutting down production, rehabilitating the land and walking away. Relationships change and people's livelihoods can be affected, as can the social and environmental programmes established during the life of the mine.

Rio Tinto standards treat mine closure as a multi disciplinary responsibility, involving community relations, human resources, environmental specialists and engineers and financial specialists. Integrating closure planning into all aspects of decision making in a business, from the earliest stages of project development to decommissioning facilities is crucial to leaving a positive legacy of sustainable development.

We understand that our legacy at one site may well determine our future access to land, people and capital at another.

In 2007 we conducted ten reviews to ensure that all our mine closure plans are current and are accurately reflected in the

provisions in the financial statements in addition to sustainable development considerations. These reviews included several site visits by multi disciplinary teams.

The acquisition of Alcan brings more than 30 additional operations into the Group. These sites will progressively develop closure plans to meet the requirements of the Rio Tinto Closure Standard and incorporate stakeholder expectations. Alcan has brought valuable expertise in the creation of post closure sustainable value to the Group through proactive stakeholder engagement, life cycle planning, capacity building and application of innovative technology at all stages of mine life.

Through our partnership with the Eden Project, we continued to work with the Post Mining Alliance which aims to encourage and promote the regeneration of old mine sites for the sustainable benefit of the local community and natural environment. The alliance provides us with the opportunity to participate in a multistakeholder discussion intended to address issues regarding abandoned mines, and to encourage good practice across the industry in closing mines.

#### Non managed operations

The Rio Tinto Group consists of wholly and partly owned subsidiaries, jointly controlled assets, as well as other entities and associated companies some of which we do not manage.

Examples of these non managed operations include the Escondida copper mine in Chile and the Grasberg copper-gold mine in Indonesia. Alcan is involved in six joint venture operations and has an additional two joint venture projects under way.

Although Rio Tinto may not be directly involved in managing these operations, we remain closely engaged through membership of the boards of directors and of technical committees. We encourage them to adopt our policies and standards in community relations, human rights, environmental stewardship, health and safety.

#### Escondida, Chile

Rio Tinto has a 30 per cent interest in the Escondida copper mine in Chile, which is managed by BHP Billiton. Our seat on the mine's Owners Council allows us regular input on strategic and policy matters.

Rio Tinto also played a part in helping to establish the Escondida Foundation. The Foundation is funded by about one per cent of the mine's pre-tax profits and is the vehicle through which Escondida fulfils its social responsibilities.

## Grasberg, Indonesia

The Grasberg copper-gold mine in Indonesia is owned and operated by Freeport-McMoRan Copper & Gold. Rio Tinto has a 40 per cent joint venture interest in Grasberg's 1995 mine expansion and is represented on the joint venture's operating committee.

As well as providing substantial economic benefits to the state, Freeport Indonesia is the largest private employer in Papua and one of the largest in Indonesia. The mine supports the economy by directly employing approximately 8,000 workers. Of these, about a quarter are Papuans. Another 10,700 people are employed by contractors. In the provision of healthcare, funding from the Freeport Partnership Fund for Community Development was used to build and expand two hospitals and a system of community health clinics in Papua.

Both Rio Tinto and Freeport-McMoRan support the Voluntary Principles on Security and Human Rights and continue to work together to ensure practice is consistent with them.

To meet the mine's social obligations to local communities, at least one per cent of the mine's net sales are committed to support village based programmes. In addition, two trust funds were established in 2001 in recognition of the traditional land rights of the local Amungme and Komoro tribes.

#### **Assurance**

Our Corporate Assurance function has accountability and responsibility for providing internal assurance to the board that:

- Rio Tinto's policies, standards and controls as endorsed by the board are adequately designed and effective for their intended purpose; and
- these policies, standards and controls are consistently implemented by all Rio Tinto sites on a timely basis and as designed.

The objective of assurance and verification is to enhance the transparency and accountability of our performance on social and environmental issues.

A key part of the assurance programme is to engage an independent, external provider to prepare a statement that our sustainable development report is fair and accurate based on testing of a selection of material areas. In 2007, Ernst & Young took over from Environmental Resources Management (ERM) to provide both the external assurance and data quality verification of our sustainable development reporting. The change in assurance providers was a result of ERM indicating their desire to provide assistance to Rio Tinto on the design and implementation of programmes and systems, which had the potential to compromise ERM's independence. We believe that it is important to learn from our assurance and verification activities. The recommendations made by ERM in the 2006 Sustainable development review have been assessed, and actions taken during 2007 to address them are described online.

#### **ERNST & YOUNG EXTERNAL ASSURANCE STATEMENT**

## **■ Ernst & Young**

Independent assurance statement in relation to Rio Tinto's sustainable development performance information presented under the heading of "Sustainable development" for the year ended 31 December 2007.

## To the managers and directors of Rio Tinto

#### Scope

The "Sustainable development" section of the 2007 *Annual report* has been prepared by the management of Rio Tinto, who are responsible for the collection and presentation of sustainable development performance information within it. Management is also responsible for maintaining adequate records and internal controls to support the sustainable development reporting process. There are currently no prescribed requirements for the preparation, publication and verification of sustainability reports, such as this sustainable development section.

Our responsibility, in accordance with Rio Tinto management's instructions, was to carry out a limited assurance engagement ("our assurance engagement") in relation to a selection of disclosures presented in the sustainable development section.

Our responsibility in performing our assurance activities is to the management and directors of Rio Tinto only and in accordance with the terms of reference for this engagement as agreed with them. As such, we do not accept or assume any responsibility for any other purpose or to any other person or organisation. Any reliance any such third party may place on this Independent assurance statement is entirely at its own risk.

Our assurance engagement has been planned and performed in accordance with the International Federation of Accountants' International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ("ISAE3000") and with regard to the Global Reporting Initiative's Sustainability Reporting Guidelines Version 3.0 ("GRI G3"). We designed our procedures in order to evaluate the sustainable development section

against the principles of Materiality and Completeness as set out in the GRI G3 specifically as follows:

- "Materiality" has Rio Tinto reported the material topics concerning its sustainable development performance, and has Rio Tinto presented material aspects of its performance concerning the selected material sustainable development areas?
- "Completeness" has Rio Tinto fairly presented performance information concerning the selected material sustainable development areas with respect to the boundaries defined in the Annual report?

#### Work performed

We selected five material sustainable development areas on a risk basis (the "selected material sustainable development areas") and six operations for our testing. The selected material sustainable development areas were safety; health; climate change; land use and biodiversity; and community and the six sites selected were Boyne Island Smelters (aluminium); Iron Ore Company of Canada; Energy Resources of Australia; Kennecott Utah Copper; Richards Bay Minerals; and Rio Tinto Exploration Australasia Region. These operations were selected to obtain a cross section of significant contributors to the selected material sustainable development areas, and to give coverage across product groups and the geographic regions in which Rio Tinto operates.

Our procedures included but were not limited to:

- 1. Interviewing Rio Tinto executives and senior managers to understand Rio Tinto's challenges, priorities and status of activities in relation to sustainable development for the reporting year, and the process by which Rio Tinto implements *The way we work* policies and receives assurances in relation to the implementation of these policies.
- Comparing the material topics identified by Rio Tinto's materiality assessment to topics reported by industry sector peers, external public information, and internal documents.
- 3. Visiting the selected operations to sample test their processes for the collection and accurate reporting of performance information to the Group level for the selected material sustainable development areas.
- 4. Sample testing the Group level processes for collection, consolidation and reporting of performance data, such as the Social and Environment Survey and Social and Environment Assurance Reporting Tool as well as management's responses to the Internal Control Questionnaire for the selected material sustainable development areas.
- 5. Reviewing the sustainable development section of the *Annual* report against the outcomes of Rio Tinto's materiality assessment.
- 6. Reviewing a selection of performance data, statements and assertions related to the selected material sustainable development areas presented in the sustainable development section of the *Annual report* against the outcome of our testing at the operations and Group level.

### Level of assurance

Our procedures were designed to obtain a limited level of assurance on which to base our conclusions. The procedures conducted do not provide all the evidence that would be required in a reasonable assurance engagement and, accordingly, we do not express an audit opinion.

## Limitations of our work performed

Our scope of work did not include:

- management's forward looking comments and any comparisons made against historical data;
- Rio Tinto's online information and sustainable development reports produced by Rio Tinto's business units;
- any previous Rio Tinto Sustainable development reviews;
- assessing whether Rio Tinto's reporting meets the requirements of the A+ application level of the GRI G3; and
- the sustainable development performance of Alcan.

We did not test electronic systems used to collect and aggregate operations level data and we did not attend any stakeholder engagement activities.

#### Our independence and assurance team

This Australian firm and all professional personnel involved in this engagement have met the independence requirements of Australian professional ethical requirements. Ernst & Young has provided a range of services to Rio Tinto such as internal audit of systems and processes unrelated to sustainable development, tax advisory, human capital and other business advisory services. We believe the provision of these services has not impaired our independence.

Our team has been drawn from our Sustainability Assurance and Advisory Services network, which undertakes similar engagements for a number of Australian and international businesses. Our team has the required competencies and experience to perform this engagement.

#### Our conclusions

Based on our work described in this statement, in relation to the "Sustainable development" section of the 2007 *Annual report*, we conclude that nothing has come to our attention that causes us to believe that:

#### Materiality:

- There are any material sustainable development topics that were identified by Rio Tinto's materiality assessment process for disclosure that have not been reported.
- There are any material aspects of performance in relation to the selected material sustainable development areas that have not been reported.

#### Completeness:

- There are any material reporting units from within Rio Tinto's defined boundaries that have been excluded from the performance information presented in relation to the selected material sustainable development areas.
- The performance data reported for the selected material sustainable development areas have not been accurately collated at the Group level from operations level data.
- There are any material errors or material misstatements regarding performance data, statements and assertions presented in relation to the selected material sustainable development areas.

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Melbourne, Australia 5 March 2008

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