

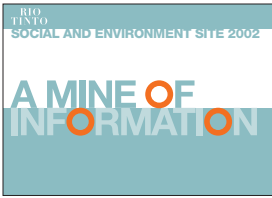
# RIO TINTO

Social and environment review highlights

[www.riotinto.com/se](http://www.riotinto.com/se)



2002



## Introduction

This publication is a summary of Rio Tinto's social and environmental programmes and performance in 2002. It supports and serves as a guide to our more detailed web based review, which is available at

[www.riotinto.com/se](http://www.riotinto.com/se)

In this summary and on the website, the information is organised into three interrelated sections, which recognise the different contexts in which our activities take place: The world we live in; Engaging with our neighbours; and Taking responsibility for our workplace.

## About Rio Tinto

Rio Tinto is a world leader in finding, mining and processing the earth's mineral resources. Our worldwide operations supply essential minerals and metals, which help meet global needs and contribute to improvements in living standards.

Our goal is to maximise the overall long term return to our shareholders by operating responsibly and sustainably in areas of proven expertise where the Group has competitive advantage.

Mineral products include aluminium, copper, diamonds and gold, energy products

(coal and uranium), industrial minerals (borax, titanium dioxide, salt, talc and zircon), and iron ore. Rio Tinto Group companies employ about 29,000 people and own operating assets of US\$13.2 billion.

We take a long term and responsible approach to all aspects of our business, concentrating on the development of first class ore bodies into large, long life, efficient operations capable of sustaining competitive advantage.

Our success depends not only on the quality and diversity of our assets and the skills of our people but on our commitment to

# 17

product types

# 8

operation types: mineral exploration, development projects, horizontal surface mines, vertical surface mines, underground mines, salt ponds, smelters/refineries/power plants, and office support facilities

# 6

geographical regions: Australia/New Zealand, North America, South America, Africa, Asia and Europe



be a global partner and local neighbour with those who share an interest in our activities. Wherever we operate, we work as closely as possible with our hosts, respecting laws and customs, minimising adverse impacts, and ensuring transfer of benefits and enhancement of opportunities.

#### About this review

This 2002 *Social and environment review* reports on activities at a Rio Tinto Group level, comprising 30 managed businesses which in total control five closed operations and 97 active operations, including five exploration regions and eight development projects. The main changes from 2001 include:

- divestment of Moura and Ravensworth/Narama coal operations;
- inclusion of Luzenac's Three Springs talc mine and processing plant in Australia, acquired in 2001; and
- inclusion of the Comalco alumina refinery project for the first time.

Data are also collected from head offices and support functions.

Unless otherwise stated, the data presented in this review are for managed operations in each of the reported years and are the total for that parameter at each operation even though equity ownership may be less than 100 per cent.

For some time we have had a commitment to implement a dual track assurance process for external reporting to address data quality and appraise the implementation of our policies and programmes. These independent assurance statements are provided at the end of this review.

In addition to this Group level review, each of our businesses and the Exploration group produce their own social and environment reports. The 2002 reports will also be available on the Rio Tinto website.

We value interaction with those who have an interest in our activities. Please use the feedback opportunities on our website or the details on the last page to provide comments or ask questions.

7 climate types: arid, semi-arid, temperate, humid sub-tropical, wet and dry tropical, rainy tropical and tundra/sub-arctic

## MESSAGE FROM THE CHAIRMAN



Each year we strive to improve safety, lessen our environmental footprint and promote constructive engagement with our neighbours.

Most of Rio Tinto's operations are very long term in nature. We believe that our business success is materially enhanced if it is supported by high standards of social and environmental performance. This annual review should therefore essentially be seen as complementary to our financial results.

This year's review, once again primarily in electronic form, builds on previous years by updating information on our programmes and providing detailed data of our performance. Each year we strive to improve safety, lessen our environmental footprint and promote constructive engagement with our neighbours.

I deeply regret that six people died working for us in 2002 including two on public highways. We will continue to drive our safety management until we have reached our goal of zero injuries in the workplace. In 2002, the lost time injury frequency rate was 0.85 compared to 1.26 in 2001, a significant improvement and low by comparison with companies in comparable businesses.

We took steps internally to align our business with the principles of sustainable development. Seventy two per cent of our operations have implemented ISO 14001 or an equivalent

environmental management system, and full compliance is expected in 2003.

We became closely associated with defining how the mining industry should contribute to sustainable development and made progress on developing a framework in which to address a range of cross cutting issues: economic, social and environmental.

As in other aspects of our business, we are always looking for ways to do things better. To keep up the momentum of improvement, in 2003 Rio Tinto will be setting five year Group targets for key environmental and occupational health indicators. This is to impart even sharper focus on our social and environmental responsibilities, recognising them as fundamental to ensuring our continued success.

This summary document is only a small fraction of the programme and performance information available on our web based review. Please explore the site [www.riotinto.com/se](http://www.riotinto.com/se) and use the feedback options for comments and questions.

Sir Robert Wilson, chairman

# PROGRESS IN

We have three long term goals: zero injuries and elimination of occupational injury and illness; zero infringement of health, safety and environment regulations; and zero spills to the environment.

## Targets set for 2002 to support our goals were:

- a 50 per cent reduction from 2001 in the lost time injury frequency rate (LTIFR), ie, 0.6 lost time injuries per 200,000 hours worked by employees and contractors. A lost time injury is an occupational injury that results in at least one day away from work or, as a result of the injury an employee is reassigned, works less than full time, or cannot perform all the duties of their permanently assigned job. With a lost time injury frequency rate of 0.85 we did not meet this target;
- all operations to implement ISO 14001 or an equivalent environmental management system. We did not meet this target. Seventy two per cent of operations have now implemented an environmental management system. Full compliance at existing operations is expected in 2003; and



- operations acquired since the beginning of 2000 to have a closure plan by 2003. 11 of the 17 operations acquired since 2000 now have a closure plan in place. We recognise that an increased emphasis on environmental commitments and performance is required. In 2003, we are focusing on developing specific and quantitative targets which are backed by action plans and linked to the business plan.

# TARGETS FOR

Rio Tinto and Group businesses will focus on increasing the specificity and quantitative aspects of our targets in order to continue to drive performance. Group targets for 2003 are as follows:

## Safety

- 50 per cent reduction from 2002 in lost time injury frequency rate (LTIFR).
- Where LTIFR is below 0.85, individual operations may choose a combination of LTIFR and all injury frequency rate (AIFR) for setting 2003 targets.

## Occupational health

- Reduce new cases of occupational disease per 10,000 employees.
- Reduce the number of employees exposed to noise over 85 dB (A) per shift.
- Make significant progress toward implementation of the Rio Tinto occupational health standards with full compliance by the end of 2004.



In 2002, we identified key areas requiring ongoing focus and commitment.

**Commitment:** continue our internal work in addressing our contribution to sustainable development and related work on biodiversity and climate change.

**Progress:** progress is discussed on pages 4 and 5. An internal steering group and external advisory panel were established for the next stage of development of our biodiversity strategy.

**Commitment:** review our statement of business practice, *The way we work*, both in the light of developments since it was created in 1997 and the 2002 Mining, Minerals and Sustainable Development report.

**Progress:** review process involved an external benchmarking exercise, internal Group wide review and consultation with external interest groups. The revised version is scheduled for April 2003.

**Commitment:** continue to play a leading role in developing meaningful indicators for our social and environmental impacts and the related processes of reporting and assurance.

**Progress:** the mining industry is continuing its discussion with the Global Reporting Initiative through the International Council on Mining and Metals. Internally, the primary focus of our current reporting activity is to drive performance improvements across the Group.

**Commitment:** maintain our focus on safety as we work towards our goal of zero injuries and illness.

**Progress:** continued effort is required through leadership, setting appropriate targets, improving our identification and management of high risk work, interaction in the workplace and implementing minimum safety standards.

**Commitment:** continue to develop and apply systems and processes that attract, retain and motivate employees at all levels.

**Progress:** Group businesses have done significant work on safety improvement, articulating and measuring desired organisational culture, leadership development, direct communication, involvement and providing incentives for individual and team performance.

### Environment

- Finalise comprehensive Rio Tinto environmental standards and associated guidance documents.
- Increase water use efficiency, especially for freshwater.
- Reduce energy used per tonne of product.
- Reduce total greenhouse gas emissions per tonne of product.
- Achieve zero significant spills.

These targets and our understanding of our performance over the last three to five years will form the basis for developing more specific annual and longer term goals and targets. In 2003, both Rio Tinto and Group businesses will focus on increasing the specificity and quantitative aspects of our emission reduction and resource efficiency

targets. Land disturbance targets will be addressed at Group businesses as land use is very specific to the individual operations. Ultimately, we hope to identify indicators that help us improve our understanding of our impact on the environment and set targets against which our progress towards minimising that impact can be measured.



# THE WORLD WE LIVE IN

Recognising that we operate in a constantly changing social context, we endeavour to understand the issues, build that into how we manage our business, and conduct open communication with those who have an interest in our activities.

## PROGRAMMES

### Sustainable development

One of the biggest long term challenges facing the world is that of making a successful transition to sustainable development. Mining and metals can contribute to sustainable development by helping to meet present needs while also preserving the ability of future generations to meet their needs. Accordingly, our activities can contribute by:

- providing products, or their raw materials;
- creating wealth and sustainable livelihoods;
- protecting human rights;
- ensuring the health and safety of our employees and communities;
- minimising the environmental footprint along the entire value chain;
- developing technologies and applications;
- closing operations at the end of their life in a way that minimises social and environmental impacts and preserves future options;
- discovering new mineral resources;

- adding to the stock of knowledge and skills within our host communities; and
- working with others to help build institutional capacity in our host communities.

In 2002, Rio Tinto continued efforts to implement sustainable development programmes across the Group as an integral part of business operations. Work on these programmes in the areas of economics, business and project evaluation, investor relations, shipping, exploration, procurement, technology, new projects, site closure and human resources either commenced or continued.

During the year a Group wide sustainable development conference was held to share lessons and hasten the process of unifying the Group's response to the sustainable development challenge. Before year end, a guidance document was issued to Group businesses to better focus sustainable development efforts.



### Climate change

Rio Tinto has significant exposure to existing and emerging greenhouse gas reduction measures. While our own facilities emit greenhouse gases, combustion of our coal by our customers and the conversion of our iron ore into steel are even greater sources of these emissions. Countries are developing climate change policies and measures to reduce greenhouse gas emissions. Rio Tinto will continue to respond to evolving climate change issues by seeking to minimise the business risks and capturing the opportunities.

We have committed to implement a climate change programme. Elements of the programme include:

- revising our climate change policy... the new policy is available in the more detailed web based review;
- gathering an accurate understanding of our current greenhouse gas practices and energy efficiency... we collect, analyse and verify greenhouse gas emissions and energy data from all business units;
- setting meaningful targets to progressively reduce emissions... we will set long term Group and business unit targets in 2003;
- undertaking a number of research projects to reduce greenhouse gas emissions and investigate alternative energy sources... we invest in a number of initiatives including Coal in a Sustainable Society, The Cooperative Research Centre for Coal in Sustainable Development and Pegasus Technologies;
- working within the Rio Tinto Foundation for a Sustainable Minerals Industry, a research partnership with the Australian Government... this will include projects on greenhouse gas sequestration, emissions reduction and energy efficiency; and
- joining voluntary agreements with countries where we operate to reduce our emissions... Rio Tinto signed the Australian Government's Greenhouse Challenge programme as an inaugural member in 1995.

Information about the other topics covered in **The world we live in** can be found on our detailed web based review, which is available at [www.riotinto.com/se](http://www.riotinto.com/se)

# PERFORMANCE

## Sustainable development

All Group businesses are being encouraged to:

- determine what sustainable development means to them;
- engage with stakeholders and consider appropriate measures, targets and reporting requirements;
- find ways to include sustainable development principles in their business plans and decision making; and

### Energy group's approach to sustainable development

Rio Tinto's Energy group has developed a framework to address the challenges of sustainable development faced by its businesses. Developed by a multi-functional working group, the framework consists of goals, objectives and specific projects for 2003 and is supported by the individual business implementation programmes.

The framework has been developed in response to the global challenges and opportunities highlighted by sustainable

- investigate how social, environmental, economic and governance issues can be integrated.

While it is difficult to measure performance in this area, we are using the level of activity as one indicator of progress.

Pilot initiatives by Borax and Hamersley Iron preceded a broader based effort across the Group. All

development, including the need to provide affordable and reliable energy to reduce poverty and support economic development, and the need to tackle the environmental impacts from energy use, including the generation of greenhouse gases.

The Energy group is working globally within the industry and with governments to build support for a number of research initiatives into near zero carbon emission technologies. These include coal gasification and the capture of CO<sub>2</sub> at power stations



businesses have now appointed a senior manager to champion sustainable development and many have developed cross functional teams to progress business wide responses. Businesses are now also required to report progress in implementing the Rio Tinto sustainable development policy every six months. The reports include an update on activities and reporting of milestones and progress towards achieving them.

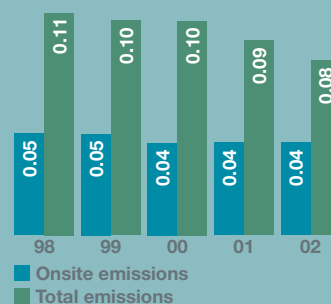
followed by permanent storage of CO<sub>2</sub> in underground geological structures such as deep saline aquifers. Gasification technology allows the capture of concentrated CO<sub>2</sub> prior to power generation, significantly reducing the cost of CO<sub>2</sub> capture. Gasification and CO<sub>2</sub> storage technologies are expected to be commercially viable beyond 2010. The Energy group is also supporting research into more efficient technologies, which reduce greenhouse gas emissions from existing power plants.

## Climate change

In 2002, there has been little change in our total greenhouse gas emissions. Our total emissions were 25 million tonnes of carbon dioxide equivalent (CO<sub>2</sub>-e). Onsite emissions, such as fuel use, onsite electricity generation, anode and reductant use, process emissions, net land management and livestock were 52 per cent of the total. The remainder are emissions associated with the generation of purchased electricity.

Over the last five years, improved efficiency at our operations has resulted in a four per cent reduction in both total emissions per tonne of product and onsite emissions per tonne of product. Additional reductions are due to changes in our mix of products as a result of acquisitions.

Total and onsite greenhouse gas emissions per tonne of product (tonnes of CO<sub>2</sub>-e/tonne product)



The use of our products also generates greenhouse gas emissions. For example, emissions from the combustion of Rio Tinto coal by our customers in 2002 were estimated to be approximately 300 million tonnes of CO<sub>2</sub>-e. Emissions associated with the conversion of our iron ore into steel were estimated at approximately 180 million tonnes of CO<sub>2</sub>-e. One of the elements of our climate change policy is to work with our customers and suppliers to reduce greenhouse gas emissions.

corporate social responsibility... sustainable development... climate change... human rights... biodiversity... engagement... products



# ENGAGING WITH OUR NEIGHBOURS

We know that our business has the potential to have both positive and negative effects on the lives of those who live near our operations. Wherever we operate, we aim to have relationships with our neighbours that realise mutual respect, long term commitment and active partnership. We believe such relationships are a necessary condition for parties to work together for mutual benefit.

## PROGRAMMES

### Contributions to the economy

Sustainable development refers to lasting benefits and opportunities in contrast to a limited term wealth endowment. In an economic sense, finite activities can contribute to economic sustainability if they trigger the formation of a lasting and durable economy. The economic benefits created by mining may be sustained in time if they can create wealth long after mining ceases.

A series of pilot studies commenced in 2002 based on the principle that

through a better understanding of the linkages between mining activities and the economies in which they take place, Rio Tinto will be better able to use the operations to leverage sustainable economic development. The work identifies critical areas on which attention should be focused, in conjunction with local partners, to advance local economic development. This work will continue during 2003.



### Contributions to communities

Successful community relations are essential to our success as a business. Every operation strives to understand and interact constructively with its neighbours and make a contribution to their well being. Our Communities policy is based upon mutual respect, active partnership and long term commitment to those who are directly affected by our operations.

Community relations are those activities which seek to establish such relationships with the people who are neighbours to Group operations. Community relations are about working closely with our neighbouring communities to arrive at an understanding of what we

can do for mutual benefit.

The first step is to conduct baseline studies and community needs assessments. Based on this information, consultations are undertaken to ascertain community priorities. This helps develop mutual understanding of what Group operations and their communities can achieve together.

Group businesses support a wide range of community programmes, including education, health, agriculture, infrastructure, business and enterprise development, employment and training. Ultimately, these programmes and initiatives are successful if the benefits

accrued last beyond the life of our mining operations.

In the area of employment and training, for example, Rio Tinto's efforts in increasing indigenous employment at the Group's Australian operations have recently been recognised by the Australian Federal Government.

In southern Africa, the spread of HIV/AIDS affects our employees and neighbours. To address this, all of our southern African operations support a range of programmes and initiatives, which include raising awareness, access to HIV/AIDS support networks and health professionals.

Information about the other topics covered in **Engaging with our neighbours** can be found at [www.riotinto.com/se](http://www.riotinto.com/se)





# PERFORMANCE

## Contributions to the economy

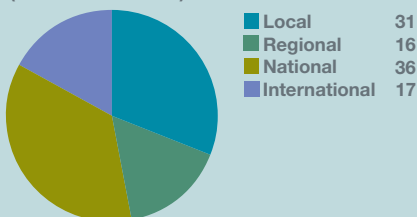
Rio Tinto operations contributed US\$10.8 billion to the global economy in 2002, an increase from US\$10.4 billion in 2001.

In 2002:

- US\$5.9 billion was value added.
- US\$4.9 billion was payments to suppliers.
- 47 per cent of total contributions stayed within the region of our operations.

Note, these data are based on Rio Tinto's equity share, and include non managed operations.

Location of economic contributions in 2002 (% of contributions)



# US\$5.9

 billion value added

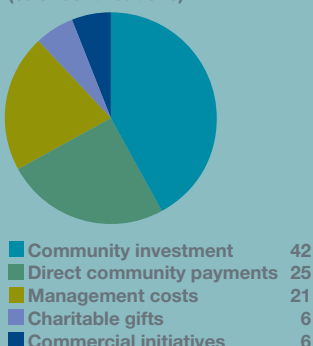
## Contributions to communities

Our operations contributed a total of US\$48 million to their surrounding communities in 2002, an increase from US\$44 million in 2001.

In 2002:

- US\$12 million was direct payments made under legislation or an agreement with a local community.
- US\$20 million was community investment which is aimed at supporting specific social activities and enterprises over the longer term.

Types of contributions to the community in 2002 (% of contributions)



Current measures of performance relate to how much we contribute rather than the benefits received. Therefore, in 2002 we started to collect information in terms of the additional resources or leverage brought to a programme from other funding sources, as well as the ways in which the community and the business benefit from the contributions (the outcomes). One example is summarised below and others can be found in the more detailed web based review.

### Diavik's community based training of welders

When a mining operation enters a remote area, people in existing communities often require additional skills to be able to take advantage of new employment opportunities. This was the case at the Diavik diamond mine, located in the remote Northwest Territories of Canada. Diavik, under the auspices of a socio-economic agreement and participation agreements signed with the five neighbouring aboriginal groups, tackled this issue by implementing a range of training schemes. One such scheme was a welding training course conducted in the spring of 2002, in Gameti, a Dogrib aboriginal community.

The community led course followed

Diavik's community based training programme, an innovative training partnership with local communities, which has helped prepare over 200 people for employment opportunities during the building and operation of the US\$900 million Diavik diamond mine. On the job and classroom training helped aboriginal people gain new skills and knowledge, also contributing to higher levels of self esteem. The training took place on village projects that the communities identified, leaving them with improved and lasting infrastructure. The courses helped Diavik meet its commitment of 40 per cent local employment during mine construction. Diavik passed full administration and operating responsibility for the course to the community, thus helping to develop

local capacity.

Partnerships created in the Gameti programme were significant, and included those with Dogrib firms NSR Employment Solutions, Tli Cho Logistics, the Gameti Development Corporation, as well as with the Gameti First Nation and neighbouring Wha Ti First Nation. Recognising the importance of community skills development, governments, as well as the local Aurora College, also offered support. Some 15 trainees successfully completed the welding course, gaining employment opportunities not only at Diavik but also at other Northwest Territory concerns. Some will use their new skills by working at the community level.

Community relations... Contributions to the economy... Contributions to communities

# TAKING RESPONSIBILITY FOR OUR

Building from a foundation of compliance with applicable health, safety and environmental laws, regulations and commitments we seek to improve our performance through target setting, implementation of management systems and standards and use of best available practices.

## PROGRAMMES

### Safety

Ensuring that the safety of our employees and communities is not compromised through our activities is an important component of sustainable development. Our goal is zero injuries in the workplace and to achieve this we need to continue to develop our safety culture at all levels in each business.

In 2002, we continued to audit our operations against the Rio Tinto safety standards and also used DuPont to carry out a review of the Group's safety

practices and performance. The review found that while Rio Tinto has a good safety strategy which has resulted in significant progress, there is still room for improvement. Opportunities include identifying and controlling all the levels of risk, making people consistently accountable for safety, strengthening the incident investigation process and achieving full compliance with the Rio Tinto safety standards. These will be areas of focus in 2003.



### Occupational health

Rio Tinto seeks to eliminate occupational disease in the Group by implementing practices to manage exposures in the workplace. The objective is to help businesses to achieve this goal by ensuring clear standards, consistent implementation, better transfer of best practice, improvement through Group wide

reporting and tracking of remedial actions.

The Rio Tinto occupational health standards cover the major occupational health risk areas and include topics such as risk assessment, fitness for work, hazardous substances, workplace monitoring, hearing conservation, manual handling and vibration, and the recognition and management of stress.

In 2002, we carried out extensive consultation with all Group businesses to finalise the standards and by the end of 2004 all businesses should be in full compliance. The standards are supported by guidelines which provide information on fundamental principles and specific guidance on achieving the requirements set out in the standards.

### Environment

Mining, smelting and associated activities cannot occur without an impact on the environment. By digging a hole in the ground to recover mineral resources, and using inputs such as energy and water, we generate emissions, waste and greenhouse gases. Rio Tinto also accepts the challenge of associated

ecosystem management and reducing disturbance to as low a level as possible.

The development of environmental standards and targets was a focus in 2002. Draft standards were developed and a series of internal workshops are planned for the first half of 2003 to provide a forum for discussion prior to

their finalisation. Implementation of the standards is due to commence in 2004 with auditing against them from mid-2005. Group environmental targets have been set for 2003 for water efficiency, energy efficiency and greenhouse gas emissions.

Information about the other topics covered in **Taking responsibility for our workplace** can be found at [www.riotinto.com/se](http://www.riotinto.com/se)

# WORKPLACE

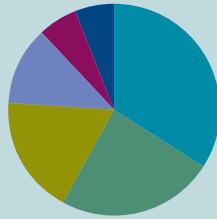
## PERFORMANCE

### Safety

We regret to report that six people died at operations we manage in 2002. Any death is unacceptable.

Accidents involving vehicles, both onsite and offsite, accounted for over half of the fatalities at our managed operations in the last three years. We need to reinforce the need for full implementation of the Rio Tinto safety standards to prevent fatalities.

Causes of fatalities 2000 to 2002 (% of fatalities)



Vehicle onsite	34
Slips, trips and falls	24
Vehicle offsite	18
Hoist/crane	12
Falling objects	6
Other	6



There was a 33 per cent reduction in both the total number of lost time injuries and the lost time injury frequency rate (LTIFR) in 2002, with 487 lost time injuries and a LTIFR of 0.85. While we made significant progress in reducing the number of lost time injuries, we did not meet our target of 50 per cent reduction in the LTIFR from 2001.

### Occupational health

In 2002, there were 120 new cases of occupational disease per 10,000 employees compared to 106 last year. This is partly attributed to improved understanding and measurement of occupational disease as a result of the occupational health standards.

The main types of new diseases reported in 2002 were muscular-skeletal disease (43 per cent), noise induced hearing loss (18 per cent) and skin diseases (13 per cent).



### Environment

Environmental stewardship involves going beyond a general concern for environmental protection to understanding the risks of what we do and building what we learn into systems to manage those risks and reduce potential impacts. It also means using the natural resources required for our activities, such as land and water, efficiently.

While we did not meet our target of 100 per cent implementation, 72 per cent

of our operations have now implemented ISO 14001 or an equivalent environmental management system. Implementation at all operations is a focus for 2003.

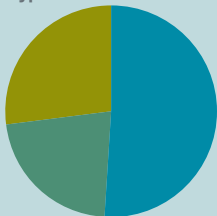
We used 763 million cubic metres of water in 2002 and 27 per cent of this was met by recycling. Reducing the amount of water withdrawn from the environment means using less water, particularly freshwater, and recycling more. Programmes to achieve this include target setting and development of the

Rio Tinto water strategy and environmental standards.

Our total land footprint at the end of 2002 was 1,427 square kilometres.

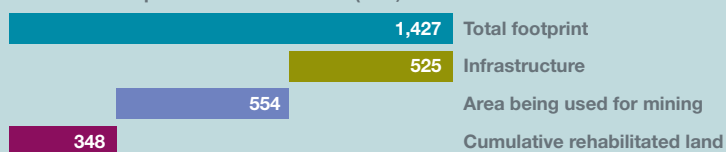
- 63 per cent of this has been used for mining and the balance is used for infrastructure, and is expected to remain for the life of the operation.
- 39 per cent of the land used for mining has now been rehabilitated.
- Land management targets will be a focus at Group businesses in 2003.

Types of water used in 2002 (% of total water use)



Fresh water	51
Poor quality water	22
Recycled	27

Rio Tinto's footprint at the end of 2002 (km<sup>2</sup>)



human resources... safety... occupational health... environment... internal assurance



## Performance data for key parameters 2000 – 2002

Selected data for our activities in the workplace are presented here as a snapshot of our performance. Additional and supporting information can be found in our detailed web based review, which is available at [www.riotinto.com/se](http://www.riotinto.com/se)

	2000	2001	2002
<b>Safety</b>			
Number of fatalities	5	6	<b>6</b>
Number of lost time injuries per 200,000 hours worked	1.20	1.26	<b>0.85</b>
Fines for infringement of occupational health and safety regulations	US\$63,000	US\$50,000	<b>US\$80,000</b>
<b>Occupational health</b>			
New cases of occupational health cases per 10,000 employees	123	106	<b>120</b>
Percentage of employees exposed to average annual noise levels of more than 85 dB(A)	23	24	<b>25</b>
Percentage of employees exposed to more than 50 per cent of the legal limit for dust	7	6	<b>6</b>
Number of employees exposed to radiation levels above 10 milliSieverts	34	0	<b>0</b>
<b>Environment</b>			
Percentage of operations with ISO 14001 or a similar environmental management system implemented	39	56	<b>72</b>
Fines for infringement of environmental regulations	US\$129,000	US\$450,000	<b>US\$2,000</b>
Number of significant spills	16	17	<b>16</b>
Total water withdrawn from the environment (million cubic metres)	NA	626	<b>645</b>
Fresh water withdrawn from the environment (million cubic metres)	NA	443	<b>463</b>
Total water requirements met by recycling (percentage of water use)	40	29	<b>27</b>
Energy use (gigajoules per tonne of product)	0.88	0.73	<b>0.74</b>
Total greenhouse gas emissions (tonnes of CO <sub>2</sub> equivalent per tonne of product)	0.10	0.09	<b>0.08</b>

A number of initiatives, such as the data quality standard, data quality reviews and external verification, have increased the focus on data quality across the Group.

As a result, some of the data in this table have been updated since the 2001 *Social and environment review*. Wherever possible historic data have been updated as well to improve the quality of our inventories.

## Data quality verification

### To the Boards of directors of Rio Tinto:

ICF Consulting<sup>1</sup> was retained by Rio Tinto to verify the integrity of the information collected for presentation under Performance in the 2002 *Social and environment review*. The objective of our work was to answer four questions, which are discussed briefly below.

### Are the focusing questions posed by Rio Tinto in reporting its performance the relevant ones?

Yes. The questions posed by the Rio Tinto team compiling the data for the report are appropriate and relevant. They are reflective of those that interested third parties, including non governmental organisations, are asking. The questions asked and answered attempt to focus on outcomes, not just outputs. For example, the discussion of contributions to communities attempts to address the actual benefits to the community, not just the magnitude of the expenditures.

### Do the data support the claims made in the report?

Yes. The text of the report, which we reviewed in draft, is responsive to the focusing question in each section and is supported by the data in the tables and figures. It must be noted that measures for “outcomes” are generally less well developed and more qualitative than those for “outputs;” nevertheless any move in the direction of outcome measures is commendable. As in previous years, the 2002 review is frank and open in reporting progress (both “on track” and “not met”) against the specific Group HSE targets to which Rio Tinto has committed itself.

### Do the data presented in the report match those submitted by the businesses?

Yes. The processes for managing the data have been further streamlined. For 2002, Rio Tinto has implemented both an intranet system for capturing businesses’ data and a new software package for compiling and analysing the data. Based on our assessment of a sample of the businesses, we conclude that the data base entries, from which the reported Group totals are directly computed, do correspond to the values reported by the operations.

### What confidence can be placed in the quality of the data submitted by the businesses?

The data quality is generally acceptable and there is a commitment to continual improvement. In 2002, Rio Tinto initiated the development of a data quality standard, in collaboration with ICF, as part of its overall assurance process. Site visits to ten

businesses were made to conduct a “gap analysis” of the businesses’ data quality practices versus a draft standard. Where gaps were identified, most had to do with *Completeness* (whether the business was reporting all of the relevant information requested by the Group) and *Comparability* (whether reported information was categorised correctly). Few of the omissions or incorrect categorisations would have a material impact on the total numbers reported at a business, product group, or Rio Tinto Group level.

However, when reviewing the data for 2002, we noted that operations are not consistent in the way they are reporting occupational health incidents, such as noise-induced hearing loss. As a result, within the performance section of the 2002 *Social and environment review* these “significant” health incidents are not consistently reported and discussed as “incidents”, although they are included in the tabulation of new cases of occupational disease. This discrepancy was identified too late to make changes for the 2002 reporting year.

While it is not possible for us to confirm the accuracy and precision of each piece of data, we believe that the data as a whole are soundly based and representative of the actual performance of the businesses within the Group. As the data quality standard becomes effective over the next few years, we expect that corporate audits against the standard will contribute to a continual improvement in data quality. The level of resources that Rio Tinto devotes to reporting, including both internal and external verification, is exceptionally high. However this investment of resources is entirely appropriate to support the Group’s global commitment to social and environmental responsibility and to transparency of reporting its performance.

Overall, it is our opinion that the 2002 *Social and environment review* presents a fair and accurate representation of the Group’s performance based upon the data.

ICF Consulting  
14 February 2003



<sup>1</sup>In 2002, ICF Consulting acquired the Arthur D. Little Global Environment & Risk Practice - Americas, which had conducted similar verification work for Rio Tinto in previous years.

## External assurance

### ERM Assurance Statement

ERM was appointed by Rio Tinto to undertake an external assurance assessment of its 2002 *Social and environment review*. The aim was to review the document for relevance, completeness and accuracy. We have not verified data as this was undertaken by ICF Consulting.

Specifically, ERM assessed the degree of alignment between Rio Tinto's policy intent, as expressed in *The way we work*, and implementation at operational level.

ERM first interviewed 20 external opinion formers (NGOs, investors, academics and government institutions) and 12 senior managers (including the chairman, chief executive and three product group chief executives) in Australia and the UK.

We then visited nine operations worldwide, representing a spread of products, locations, performance profiles and length of time under Rio Tinto management. At each operation ERM ran a workshop with the management team, using a question-based diagnostic tool to assess how Rio Tinto's policies really work. This was designed to flush out candid views on programmes and performance and was structured around a consistent framework. Finally, we reviewed Rio Tinto's 2002 *Social and environment review* to assess how well it represents progress and performance.

All operations and interviewees were selected by ERM and we retained editorial control of this statement. As a well established international consultancy on environmental and social issues, we believe that our knowledge of the mining industry (which includes past and ongoing work with Rio Tinto), the MMSD process and the emerging business challenges around these issues mean that we are well placed to conduct external assurance.

### Overall assessment

We believe that this review is a fair and balanced representation of Rio Tinto's programmes and performance. Subject to the comments set out below, we believe that the review covers the key issues that interested parties need to know to inform decision making (ie is relevant), does not avoid major issues (ie is complete) and fairly reflects programmes and performance on the ground (ie is accurate).

The corporate management team has clearly invested significant energy in articulating what sustainable development and social responsibility mean for a mining company and can claim to be a leading player in the sector.

However, while the company exerts a strong influence on mining issues in the locations where it operates, the ability to think more laterally on the broader implications of its presence, for example the long term sustainability of economies around its mines,

is still being developed.

Our findings and recommendations reflect the challenges that remain in turning that clear corporate thinking into practical action at mines operating in a variety of cultures and at different levels of maturity.

### Detailed findings

#### Corporate

Within Rio Tinto headquarters we found a powerful culture and sense of common purpose that encompassed sustainability and social responsibility.

We discovered a healthy divergence of views on priorities going forward, from health and safety, through environment to communities. We believe that this willingness to question will play a vital role in helping Rio Tinto to embrace changing views of its role in society.

Health and safety have received significant attention, including championing by the chief executive. The corporate team is now moving to raise the profile on environment in a similar way. The importance of community issues is well recognised but needs a more robust and consistent approach across the business.

Positions on other issues, including employees, human rights, business integrity and political involvement have also been articulated. However, operation level conformance is often monitored 'by exception' and more support is needed to help operations better implement these requirements in their local setting.

#### Operations

We discovered a high level of awareness of *The way we work* and in particular health and safety. Many operations have recently achieved marked improvements in safety performance but now face significant challenges in driving an effective safety culture further into the workforce, particularly contract labour.

Community is generally dealt with as a good neighbour issue, and some operations are tackling it on a proactive basis. Many, although not all, formally document their community practices. A smaller number have begun to position themselves as partners in local socio-economic development rather than as paternalistic providers.

In the other areas, and in particular for human rights, business integrity and political involvement, we found that although all operations had adopted corporate policies few had fully explored how these might apply in their local operating cultures. Many are looking for more corporate support on these issues.

Overall, operations need to implement a broader and more systematic view of socio-economic issues, particularly after mine closure, but also at the earliest stages of exploration. This will then enable Rio Tinto to

report more completely about sustainable development and social responsibility throughout the life cycle of its activities.

### External opinion formers

Many opinion formers interviewed by ERM see Rio Tinto as a leader on sustainability in the mining sector and commend its increasing transparency. The external assurance process was broadly welcomed, with support for the methodology being used in 2002.

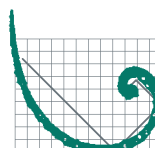
In order to ensure that the review contains a complete, accurate and relevant picture of Rio Tinto performance and progress, many interviewees want more context to enable them to further benchmark inside and outside the business – including information on non managed operations. They also called for greater involvement of local stakeholders (employees, communities, etc) in the external assurance process.

### Overall recommendations

We recommend that Rio Tinto:

- Integrate and streamline interactions between corporate and operations (such as audits and senior management visits) to bring the same high level of energy that has gone into health and safety to environment, community and business integrity issues.
- Strengthen support mechanisms to help operations interpret non financial business principles in a local context, particularly on community, human rights, business integrity and political involvement.
- Encourage a more questioning attitude on performance, particularly at local level, as part of a broader effort to change behaviours in different cultures.
- Provide more context in its corporate report to explain how programmes are delivering performance.
- Consider reporting on non managed operations.
- Extend the corporate external assurance programme to involve local stakeholders.

ERM  
February 2003



ERM



## Group managed operations

Equity ownership may be less than 100 per cent.



### ALUMINIUM

#### Operating sites

- 1 Anglesey Aluminium
- 2 Bell Bay
- 3 Boyne Island
- 4 Tiwai Point
- 5 Weipa

#### Projects

- 6 Comalco Alumina Refinery

### BORATES

#### Operating sites

(only major sites are shown)

- 7 Boron
- 8 Coudekerque Plant
- 9 Tincalayu
- 10 Wilmington Plant

### COAL

#### Operating sites

- 11 Antelope
- 12 Bengalla
- 13 Blair Athol
- 14 Colowyo
- 11 Cordero Rojo
- 15 Hunter Valley Operations
- 11 Jacobs Ranch
- 16 Kestrel
- 15 Mount Thorley
- 17 Spring Creek
- 18 Tarong
- 15 Warkworth projects
- 13 Clermont

#### Projects

- 13 Hail Creek
- 15 Mt Pleasant

### COPPER AND GOLD

#### Operating sites

- 19 Barneys Canyon
- 20 Kelian
- 21 Kennecott Utah Copper
- 22 Lihir
- 23 Morro do Ouro
- 24 Northparkes
- 25 Palabora
- 26 Peak
- 27 Rawhide
- 28 Renco and Patchway

#### Projects

- 24 Northparkes Lift 2

### DIAMONDS

#### Operating sites

- 29 Argyle
- 30 Diavik

#### Projects

- 31 Murowa

### IRON ORE

#### Operating sites

- 32 Corumbá
- 33 Hamersley Iron mines:
  - Brockman
  - Marandoo
  - Mt Tom Price
  - Paraburdoo
  - Yandicoogina
  - Channar
- 34 Iron Ore Company of Canada
- 33 Robe River

#### Projects

- 35 Hismelt®

### NICKEL

#### Operating sites

- 36 Empress Plant
- 37 Fortaleza

### SALT

#### Operating sites

- 38 Dampier
- 39 Lake MacLeod
- 38 Port Hedland

### TALC

#### Operating sites

(only major sites are shown)

- 40 Ludlow
- 41 Talc de Luzenac
- 42 Yellowstone
- 43 Three Springs

### TITANIUM DIOXIDE FEEDSTOCK

#### Operating sites

- 44 QIT-Fer et Titane Lac Allard
- 45 QIT-Fer et Titane Sorel Plant
- 46 Richards Bay Minerals
- 45 QMP Quebec Metal Powders

#### Projects

- 47 QIT Madagascar Minerals

### URANIUM

#### Operating sites

- 48 ERA
- 49 Rössing

### ZINC, LEAD, SILVER

#### Operating sites

- 50 Greens Creek
- 51 Zinkgruvan

# 2002

## Social and environment review highlights

Through this highlight summary and more than 1,000 pages of web based reporting at [www.riotinto.com/se](http://www.riotinto.com/se), our aim is to provide a comprehensive account of our social and environmental policies, objectives, programmes and performance. We would appreciate your help in assessing whether we have accomplished our reporting goals. Your comments will help to shape the content of future reviews. Contact us with comments or questions on any aspect of our performance.

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