



# Strategy Delivery Growth

A focused and integrated strategy

Excellence in operational delivery

Positioned for growth

**2009 Annual report**



This report is available online at [www.riotinto.com](http://www.riotinto.com)

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## A focused and integrated strategy

## Excellence in operational delivery

## Positioned for growth

Rio Tinto is a leading international business involved in each stage of metal and mineral production. We produce aluminium, copper, diamonds, coal, iron ore, uranium, gold and industrial minerals (borates, titanium dioxide, salt, talc, zircon). With production mainly from Australia and North America, we operate in more than 50 countries. We employ about 102,000 people whose health and safety is a key priority and an integral part of placing sustainable development at the heart of everything we do. We operate as a global organisation with one set of standards and values, sharing best practices across the Group.

- Our strategy is to invest in and operate large, long term, cost competitive mines and businesses, driven by the quality of each opportunity.
- Our assets give us a rich array of options for growth in line with demand.
- Our recapitalisation and asset divestment programmes have strengthened our balance sheet and enhanced options for growth.
- Safe working and sustainable development are at the heart of our activities, with our worldwide operations providing long term local benefits.

The *Annual report* and *Auditor's report* comply with the Australian and UK reporting requirements.

Copies of Rio Tinto's shareholder documents are available on the website at [www.riotinto.com](http://www.riotinto.com). They can also be obtained free of charge from the Company. Some shareholders may prefer to receive the *Annual review* which contains the summary financial statements although shareholders should note that it does not allow as full an understanding of the Group.

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### Cautionary statement about forward looking statements

This document contains certain forward looking statements with respect to the financial condition, results of operations and business of the Rio Tinto Group. The words "intend", "aim", "project", "anticipate", "estimate", "plan", "believes", "expects", "may", "should", "will", or similar expressions, commonly identify such forward looking statements.

Examples of forward looking statements in this *Annual report* include those regarding estimated ore reserves, anticipated production or construction dates, costs, outputs and productive lives of assets or similar factors. Forward looking statements involve known and unknown risks, uncertainties, assumptions and other factors set forth in this document that are beyond the Group's control. For example, future ore reserves will be based in part on market prices that may vary significantly from current levels. These may materially affect the timing and feasibility of particular developments. Other factors include the ability to produce and transport products profitably, demand for our products, the effect of foreign currency exchange rates on market prices and operating costs, and activities by governmental authorities, such as changes in taxation or regulation, and political uncertainty.

In light of these risks, uncertainties and assumptions, actual results could be materially different from projected future results expressed or implied by these forward looking statements which speak only as to the date of this report. Except as required by applicable regulations or by law, the Group does not undertake any obligation to publicly update or revise any forward looking statements, whether as a result of new information or future events. The Group cannot guarantee that its forward looking statements will not differ materially from actual results.

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What you can find online [www.riotinto.com](http://www.riotinto.com)

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Key performance indicators within this report



Additional information available online at [www.riotinto.com](http://www.riotinto.com)



Sustainable development review at [www.riotinto.com](http://www.riotinto.com)



Additional information available on other pages in this report



## Performance highlights

*A snapshot of the year*

### Commendable results in the face of the global downturn

- Underlying earnings of US\$6.3 billion (2008: US\$10.3 billion)
- Net earnings\* of US\$4.9 billion (2008: US\$3.7 billion)
- Significant price resurgence in the second half
- Pilbara iron ore production joint venture to deliver substantial synergies

### The balance sheet has been recapitalised

- Net debt reduced to US\$18.9 billion (2008: US\$38.7 billion)
- Major progress on divestments programme
- Rights issues net proceeds of US\$14.8 billion
- Successful US\$3.5 billion bond issue

### Strong operational performance

- Cash flows from operations of US\$13.8 billion (2008: US\$20.7 billion)
- Controllable cash costs reduced by US\$2.6 billion
- Rio Tinto Alcan surpassed targeted integration synergies
- Strong volume growth delivered in iron ore, copper and gold
- Capital expenditure of US\$5.4 billion

### Continuing focus on sustainable development

- Reduced greenhouse gas emissions intensity by 7.5%
- Rate of new occupational illness improved by 21%
- Spent US\$119 million on community assistance programmes

### Dividend

Dividend declared	2009	2008 restated	2007 restated	2006 restated	2005 restated
US cents	45.00	111.22	111.23	85.07	65.46
UK pence	28.84	67.49	56.20	44.22	36.91
Australian cents	51.56	146.22	125.72	110.69	86.26

The special dividend of 90.00 US cents per share (50.64 UK pence or 118.98 Australian cents per share), declared payable at the same time as the 2005 final dividend, is not included above. Prior year comparatives have been restated for the impact of the rights issues.

#### Notes

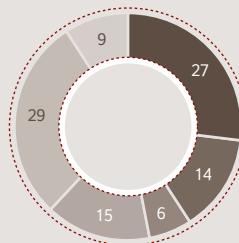
- All references in this report to net earnings and underlying earnings relate to profit attributable to equity shareholders of Rio Tinto. Underlying earnings is defined below and is reconciled to net earnings on page 23. EBITDA is earnings before interest, taxes, depreciation and amortisation. Underlying EBITDA excludes the same items that are excluded from underlying earnings. EBITDA and underlying EBITDA are reconciled to the income statement in the "Financial information by business unit" section of the financial statements.

#### Notes to page 3

- (a) The accounting information in these charts is drawn up in accordance with EU IFRS.
- (b) Underlying earnings is the key financial performance indicator which management uses internally to assess performance. It is presented here as an additional measure of earnings to provide greater understanding of the underlying business performance of the Group's operations. Items excluded from net earnings to arrive at underlying earnings are explained in note 2 to the 2009 *Financial statements*. Both net earnings and underlying earnings deal with amounts attributable to equity shareholders of Rio Tinto. However, EU IFRS requires that the profit for the year reported in the income statement should also include earnings attributable to outside shareholders in subsidiaries.

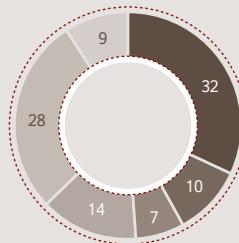
#### Revenue by product group 2009

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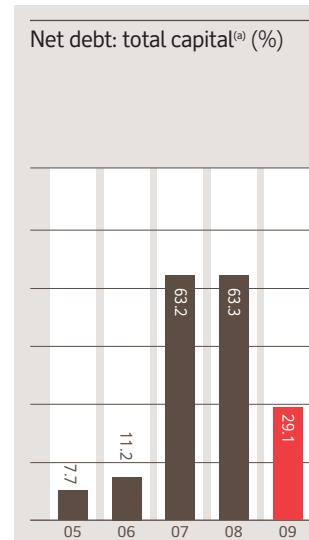
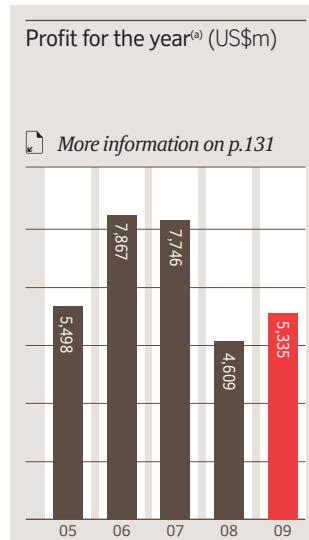
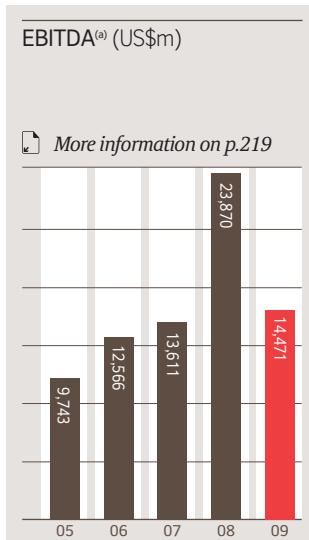
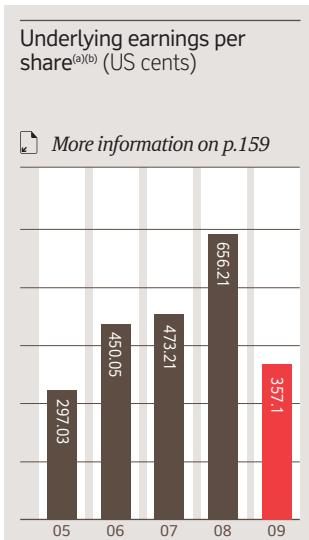
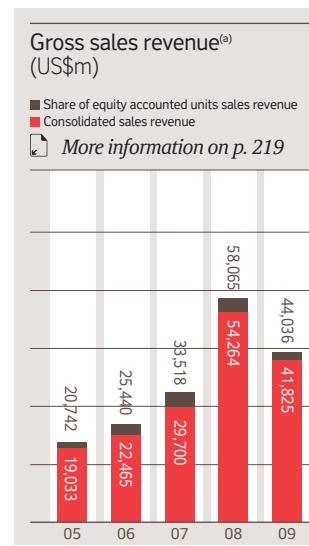
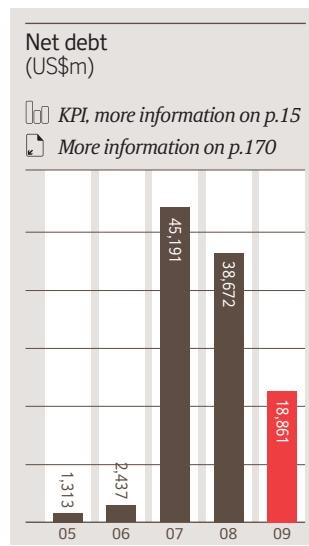
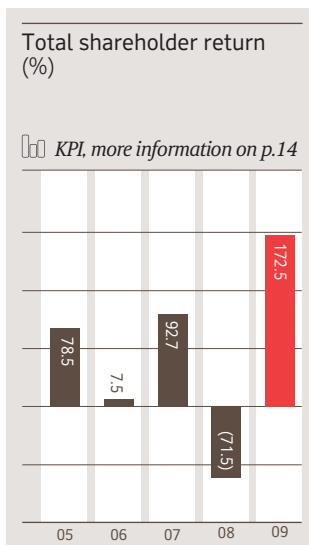
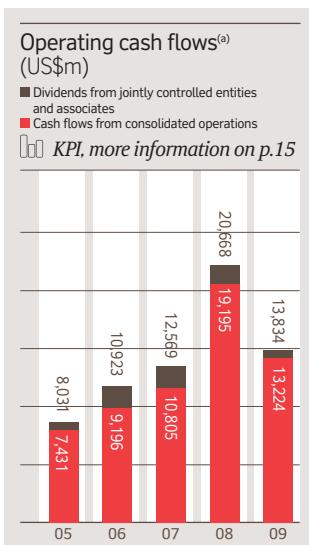
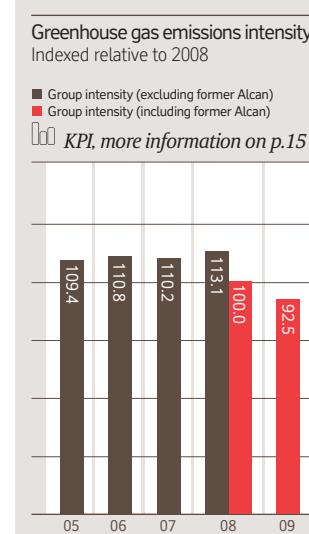
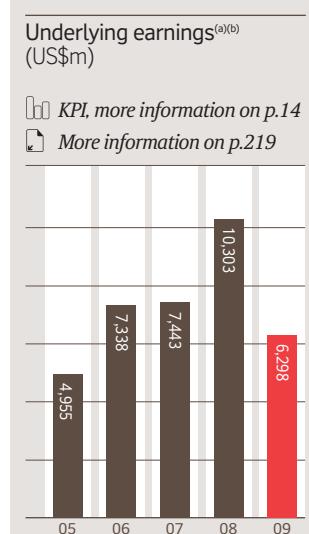
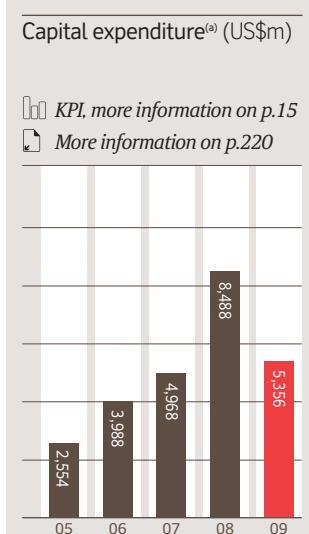
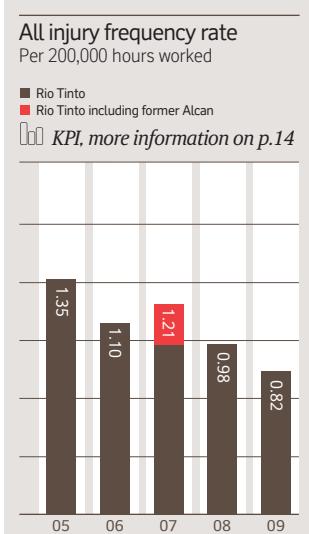
#### Revenue by product group 2008

[More information on p.219](#)



#### Key

- Aluminium
- Copper
- Diamonds & Minerals
- Energy
- Iron Ore
- Other operations and inter segmental transactions



## Group overview

*An extensive global presence*

We have major operations in Australia and North America which account for approximately 85 per cent of the value of our assets, as well as significant businesses in South America, Europe, southern Africa and Asia.

- All injury frequency rate reduced to 0.82 from 0.98
- Set iron ore production and sales records
- Progressed transformation of our aluminium business
- Exceeded targeted controllable operating cost savings



*View more about our global operations at [www.riotinto.com](http://www.riotinto.com)*

### Aluminium

Rio Tinto Alcan is a global leader in the aluminium industry. It mines high quality bauxite, refines alumina for both primary aluminium production and specialty alumina markets, and produces primary aluminium at some of the lowest cost, most technologically advanced smelters in the industry. The group is renowned for its technology leadership as well as its advantaged renewable energy assets.

Number of employees: 22,919 <sup>(1)</sup>

#### Products

Bauxite, Alumina, Specialty aluminas, Aluminium

#### Key facts

- Integration synergies expected to exceed US\$1.1 billion in 2010
- Achieved rapid cost reductions and production curtailments
- Business being transformed in readiness for the economic recovery
- During the course of the year, aluminium prices plummeted by as much as 70 per cent from 2008

### Copper

The Copper group is one of the world's largest producers of copper, with valuable by-products of gold and molybdenum. A diverse mix of operations and projects are located in North and South America, Africa, Asia and Australia. In addition to interests in some of the world's largest copper mines, it is taking the lead in the development of three of the world's largest new copper projects.

Number of employees: 7,612 <sup>(1)</sup>

#### Products

Copper, Gold, Molybdenum, Silver, Nickel

#### Key facts

- Strong operating performance in 2009 supported by recovering market
- Kennecott Utah Copper production up 37 per cent from 2008
- Copper industry faces future supply challenges
- Breakthrough agreement for development of major Mongolian copper-gold mine

### Diamonds & Minerals

The group comprises Rio Tinto Diamonds (RTD), Rio Tinto Minerals (RTM) and Rio Tinto Iron & Titanium (RTIT). RTD accounts for about six per cent of the world's production of rough diamonds by value. RTM is a global leader in borates and talc supply and of the science behind their use, and RTIT is a market leader in titanium dioxide feedstock, used in the manufacture of pigments for paints and plastics.

Number of employees: 7,375 <sup>(1)</sup>

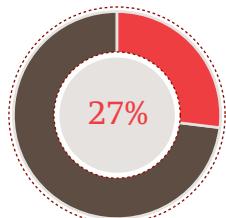
#### Products

Diamonds, Borates, Titanium dioxide feedstocks, Talc, High purity iron, Metal powders, Zircon, Rutile

#### Key facts

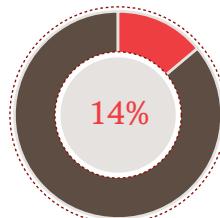
- Businesses oriented to OECD demand hence difficult conditions
- Businesses showing signs of recovery, particularly in Asian markets
- Diavik Diamonds underground mine starts production in 2010
- Commencement of ramp up of Madagascar mineral sands mine

Contribution to gross sales revenue



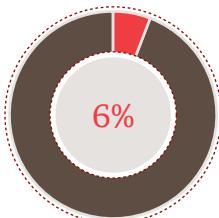
*More information on page 219*

Contribution to gross sales revenue



*More information on page 219*

Contribution to gross sales revenue



*More information on page 219*



## Energy

Rio Tinto is a leading supplier of thermal and coking coal to the Asian seaborne market as well as being one of the world's largest uranium producers supplying uranium oxide to electric power utilities worldwide. Rio Tinto Coal Australia manages eight coal mines in Queensland and New South Wales. In the US, the group operates the Colowyo coal mine and has a 48 per cent interest in Cloud Peak Energy.

Number of employees: 7,613<sup>(1)</sup>

### Products

Thermal coal, Coking coal, Uranium

### Key facts

- More robust seaborne coal markets emerging
- De-bottlenecking of Australian coal export ports under way
- New Clermont mine and Kestrel mine expansion on track
- Nuclear power comeback spells promise for uranium

## Iron Ore

Rio Tinto Iron Ore is the second largest supplier to the world's seaborne iron ore trade and produces direct saleable lump and fines ore, pellets and concentrates. It has a global supply capacity to serve both the Pacific and Atlantic markets, operating an integrated platform of mines, rail and port infrastructure including development projects designed to respond rapidly to changes in demand. It operates Dampier Salt located near its iron ore mines in Australia as well as Rio Tinto Marine.

Number of employees: 11,375<sup>(1)</sup>

### Products

Iron ore and Salt

### Key facts

- Operated at full run rate of 220 million tonnes capacity in second half of 2009
- Developing plans to produce 330 million tonnes per year
- Uses automated mining technologies including driverless haul trucks

## Global functions

### Activities that support our businesses

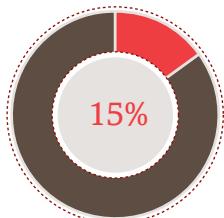
#### Exploration

The role of the Exploration group is to add value to Rio Tinto by discovering or acquiring resources that can increase future cash flows. It is organised into regional multi-commodity teams, with head offices in the UK, the US and Australia, supported by commodity and commercial specialists. Programmes are prioritised on a global basis, with investment decisions driven not by location or choice of commodity but rather by the quality of each opportunity.

### Technology & Innovation

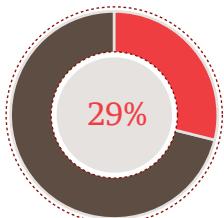
Technology & Innovation has offices in Australia, Canada, the UK and the US. Its role is to identify, develop and promote best operational technology practice across the Group and to pursue step change innovation of strategic importance to orebodies of the future.

#### Contribution to gross sales revenue



More information on page 219

#### Contribution to gross sales revenue



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#### Notes

- (1) This is the average Rio Tinto share of employees for managed businesses, excluding contractors and employees in businesses classified as assets held for sale during 2009.

# Chairman's statement

## A year of two halves

Jan du Plessis



Thanks to a number of significant decisions on our part and assisted by a more favourable external environment, we have recovered our poise and steadied the ship.

During what was clearly a historic and tumultuous year for the global community, Rio Tinto found 2009 to be particularly testing. It certainly felt at times as if we were experiencing an amplified version of the global financial crisis and its knock-on effect on business confidence, demand for commodities and availability of credit.

However, despite the early trauma, for Rio Tinto it turned out to be a year of two halves. After the particularly difficult first few months, characterised by our balance sheet challenges, very weak demand, low product pricing and the contentious Chinalco transaction, our fortunes improved considerably as the year progressed. As a result of shareholder support for our rights issues, together with the success of our disposal programme and improved operating conditions, we ended the year with a much

stronger balance sheet. In short, thanks to a number of significant decisions on our part and assisted by a more favourable external environment, we have recovered our poise and steadied the ship.

### Chinalco

Looking at the year as a whole, our attempt to establish a strategic partnership with the largest Chinese resources group and our largest shareholder, Chinalco, was undeniably a very significant event for Rio Tinto. The proposed transaction would have allowed us to establish a highly important strategic link with the Chinese market, whilst at the same time enabling us to significantly recapitalise our balance sheet. Especially in the context of the situation prevailing at that time, the board considered the Chinalco proposition both strategically and financially attractive.

The transaction was nevertheless highly controversial. On becoming chairman in April it was evident to me that I needed to look for guidance from our shareholders. During the ensuing consultation process, I met with a large number of shareholder groups in the UK, Australia and elsewhere. It became clear to me that many shareholders had considerable misgivings about the proposed transaction.

These concerns related not only to the financial terms of the transaction, but there were high levels of discomfort about the structure of our relationship with Chinalco. The board could not ignore the strength and depth of these feelings although, in deciding not to proceed with that transaction, we deeply regretted the loss of a unique opportunity to establish a strategic partnership that would have fundamentally changed our relationship with our largest customer base. We will continue to work towards extending our

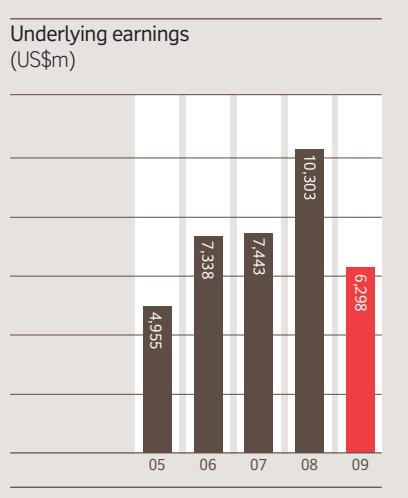
relationship with Chinalco and to pursue business opportunities that may be to our mutual benefit.

### Improving prospects

In deciding that we were not able to pursue the transaction with Chinalco, the board was nevertheless delighted that it was able to announce the proposed production joint venture with BHP Billiton in relation to our respective iron ore assets in Western Australia. The joint venture will allow us to capture the enormous long term synergy benefits that would result from the integration of our production facilities. The value that could be captured has been estimated to be at least US\$10 billion.

We simultaneously announced major rights issues which took place in the UK and Australia in June and July. These raised net proceeds of US\$14.8 billion which were used to repay debt, well ahead of our original US\$10 billion target. The rights issues attracted an extraordinary vote of confidence in Rio Tinto, with 97 per cent of shareholders taking up their rights in Rio Tinto plc, and a 95 per cent take up in Rio Tinto Limited. All of Rio Tinto's directors, as well as Chinalco, took up their full entitlement of shares.

These decisions brought relief from some of the pressures of the earlier months of the year. It put the period of unusual corporate activity behind us and finally gave us a firm foothold to advance into the second half of the year. As we saw markets improve in the subsequent months, I was particularly pleased to see the executive team focused on first class operational delivery as a priority for the Group. We ended the year with a strong set of production figures and the achievement



of a number of production and sales records. This of course also signalled a significant pickup in physical demand for our products.

### Results and dividend

The strong production numbers, coupled with improved commodity prices, translated into a significant improvement in operating cash flow in the second half. This, together with the proceeds of our rights issues and the disposal of assets, significantly strengthened our balance sheet. Rio Tinto started 2009 with net debt of US\$38.7 billion and a debt to equity ratio of 63 per cent. We had made the commitment in December 2008 to reduce net debt by US\$10 billion during 2009. Net debt at the end of 2009 stood at US\$18.9 billion with gearing much reduced to 29 per cent.

The Group's underlying earnings in 2009 were US\$6.3 billion, 39 per cent below 2008. Net earnings were US\$4.9 billion compared with US\$3.7 billion in 2008. Cash flow from operations decreased 33 per cent to US\$13.8 billion.

With our balance sheet significantly strengthened and our prospects much improved, we are pleased to be able to reinstate the dividend. Total dividends declared for 2009 were 45 US cents per share. The Group expects that the total cash dividend for the 2010 financial year will be at least equal to the total cash dividend of US\$1.75 billion paid in respect of 2008, albeit spread over an increased number of shares. From 2010 on, we are committed to a progressive dividend policy over the longer term.

### Sustainable development

Rio Tinto conducts business in an ethical and socially responsible manner aimed at building a positive reputation and ensuring ongoing access to people, capital and mineral resources. Delivering on our commitment means making sustainable development considerations an integral part of our business plans and decision making processes.

Rio Tinto was again identified as a sustainable development leader during the year by retaining its listing on the Dow Jones Sustainability Index (DJSI) World Index and DJSI STOXX Index as well as the FTSE4Good. We have been included in the DJSI series since 2002 and the FTSE4Good since becoming eligible for inclusion in 2007. Rio Tinto's long standing commitment to sustainable development and the quality of our sustainable development web pages have been recognised in the CSR Online Awards

"Global Leaders 2009", published by Dow Jones Newswires and an Italian business daily.

Our recently completed mineral sands mine in Madagascar won South Africa's prestigious 2009 Nedbank Environmental Award in the environmental category, for significant effort in protecting or improving the biophysical environment in which it operates.

Rio Tinto became a signatory to the UN Global Compact in 2000 and we were one of its early supporters. We also remain an active member of the World Business Council for Sustainable Development and the International Council on Mining and Metals, whose members are committed to superior business practices in sustainable development.

### Governance and board

The board is committed to high standards of governance as the foundation of our ethical approach to business. In 2009, we strengthened our governance system by renewing our global code of conduct, *The way we work*, establishing a common Group wide code to replace business unit codes of conduct. The code serves to spread our values of accountability, respect, teamwork and integrity throughout the organisation by providing guidance on how employees should conduct themselves at work and when representing Rio Tinto. Our confidential whistleblowing programme, *Speak-OUT*, is a key element of *The way we work*, available in the language of the employee's choice to alert senior management to any serious issues or inappropriate behaviour that employees do not feel able to discuss with management on site.

Your boards enjoy a balanced representation of viewpoints and a wealth of business experience. Sir David Clementi and David Mayhew will retire as directors at the conclusion of the 2010 annual general meetings. The boards thank them for their valuable contributions over many years. We welcomed Ann Godbehere, who has 25 years' experience in the financial services' industry, to the board on 9 February 2010. She will be chairman of the Audit committee. Robert Brown, who has considerable global business experience in the aerospace industry, will join the boards on 1 April 2010. Ann and Bob will be standing for election at the annual general meetings in April, along with Sam Walsh, chief executive, Rio Tinto Iron Ore and Australia, who joined the boards effective 5 June 2009.

### Outlook

The outlook for mining and metals is improving but remains volatile and uncertain in the short term. The latest leading indicators for developed economies imply that we may have returned to expansionary territory, although no one knows to what extent or for how long. The pick up in metals demand at mid year was primarily driven by government stimulus measures and a recovery in economic activity which caused producers to return to buying raw materials.

The key driver for the mining industry continues to be demand from China. Record Chinese metals imports have served to offset weakness in other markets. However, we will also need to see OECD economies improve and a resumption in international trade flows to fully support a global economic recovery.

Similarly, there are concerns about the sustainability of Chinese demand in the short term. Longer term, China is likely to move towards more domestic, consumption led development.

### Our people

Our year of two halves demonstrated commendable perseverance as we moved from difficulty to success. Facing up to setbacks and promoting recovery has shown Rio Tinto to be a high performing organisation. We have come through these testing times thanks in no small measure to the quality and commitment of our people. The downturn unfortunately necessitated a reduction of about 16,000 employees and contractors across the Group which took place mainly in the early months of the year. Since then we have stabilised the organisation and a renewed management structure has been introduced. These steps will provide the platform to mobilise and energise the workforce and give us the momentum to resume growth.

The board and I would like to express our collective appreciation to Group employees and contractors around the world for their strong commitment and unflagging efforts in 2009; for their focus on safety, operational excellence and delivery to customers, as well as for conducting our business in a socially responsible way.



Jan du Plessis  
Chairman

# Chief executive's message

## Well positioned for growth

Tom Albanese



Over the course of 2009 management's focus has been on strengthening the business after a period of prolonged corporate activity and a severe downturn. We are grateful for the support we received from shareholders in recapitalising the company and helping us regain our momentum. We were also helped by the capacity of our organisation to deliver strong operational performance in challenging economic circumstances.

The successful injection of US\$14.8 billion from our rights issues, the efficiencies derived from our cash preservation measures, and significant progress with our divestment programme which realised sales and binding offers of US\$5.7 billion in the year, have given Rio Tinto greater financial strength and flexibility.

I am proud of the way in which our employees have persevered in delivering the commitments we made during these demanding times. Unfortunately, these achievements have been overshadowed by four fatalities during the year at managed operations. Three of these took place in Africa and we have renewed our focus on embedding our safety systems in developing countries. I am pleased to say our key performance indicators for safety continued to improve during 2009 with a reduction in our all injury frequency rate of 16 per cent.

Reaching agreement to form the Western Australian iron ore production joint venture with BHP Billiton was an important highlight of the year. We expect it will achieve substantial benefits for stakeholders by delivering synergies and unlocking the full potential of the valuable Western Australian iron ore assets in an era of increasing demand for this vital commodity.

During 2009 we made some good decisions to improve our financial position. We have emerged from this testing year as a stronger and fitter business.

During 2009 we took steps to improve our aluminium business which was significantly affected by the economic downturn. Rio Tinto Alcan surpassed targeted integration synergies, adopted Rio Tinto HSE policies and standards, improved safety performance, implemented cost reductions, progressed with the permanent closure and divestment of high cost facilities and made temporary production curtailments. Taken together, these measures amount to a strong start to the transformation of that business.

To prepare ourselves for the next stage of Rio Tinto's growth and to develop the next generation of leaders, I made changes to the structure of my senior management team. This included the reinstatement of the Diamonds & Minerals product group. Our structure ensures a tight focus on our core objective and allows for a broad range of investment opportunities to be generated, regardless of our portfolio.

### Market conditions

A year ago, I said that we hoped to see some recovery in China's gross domestic product (GDP) in the second half of 2009. The effect of the Chinese Government's monetary stimulus package exceeded most commentators' expectations – actual growth surpassed eight per cent – and we expect this strong growth to continue through 2010.

The improvements we have seen in most of our markets were primarily driven by this stronger Chinese GDP growth and its attendant effects on Chinese construction and infrastructure development. Whilst we remain cautious about the recovery in our markets, we believe that these trends are likely to continue for some time as China continues to urbanise and industrialise.

By contrast, the continuing strong China story was offset by a stagnant demand picture in OECD countries where consumer spending remains relatively weak. Australia was an exception, with its economy bolstered by the strong demand for commodities. In the US, Japan and Europe, pervasive economic concerns mean that we will continue to be cautious, especially as we begin to see the effects of the winding down of stimulus programmes.

### Financial recovery

The speed and severity of the downturn in late 2008 exposed our levels of debt and made it more difficult to achieve the asset disposals we had planned for the repayment of debt. During 2009 we made some good decisions in difficult circumstances to improve our financial position and achieve a reduction in controllable cash costs of US\$2.6 billion. We have emerged from this testing year as a stronger and fitter business.

Regarding divestments, we chose to postpone a number of sales. We made good progress with completion of the sale of our potash assets in the first half and the Brazilian iron ore operation in the second half. More importantly, in the second half we made significant progress with announced divestments on most of the former Alcan's Packaging businesses, and our US coal operations. By the end of 2009, we had announced sales transactions of more than US\$10 billion over the past two years.

### Strategic direction and markets

We completed a thorough review of our strategy with our board and executive committee, leading to the reaffirmation of our longstanding core objective. This is to maximise our long term return to shareholders by investing in and operating large, long life, cost competitive mines and assets, driven not by choice of commodity but rather by the quality of each opportunity. This strategy will of course be recognisable to our long term shareholders. We will ensure that our structure and capabilities are tailored to meet the requirements of our customers and the marketplace.

Our diverse portfolio, high quality assets, people and expertise in technology and marketing give us the capability to supply a wide spectrum of customers and markets. This gives us exposure to worldwide markets at various stages of the development cycle. We will continue to improve our understanding of market dynamics and how we fit into the global picture, and apply this to our planning and investment proposals.

To deliver on our objective, the Group will continue to concentrate on developing Tier 1 assets. These are assets that will safeguard our future cash flow and will operate profitably at every stage of the commodity cycle. Key to our way of operating is a commitment to sustainable development. It is an essential part of the way we work and is at the heart of everything we do.

This commitment is key to maintaining our licence to operate. We have a comprehensive sustainable development programme which is discussed more fully on pages 24-33. Carbon, water use and biodiversity are becoming increasingly topical in this context. We have taken a pro-active approach in all three areas and are progressively building them into our planning, especially as we see these three issues becoming increasingly inter-linked.

### Priorities for growth

One of our key objectives for 2010 is to put the Group back on a growth path following the rights issues and strengthening of the balance sheet. We continued to invest in growth throughout 2009. Capital expenditure was US\$5.4 billion of which US\$3 billion was on major construction projects. In 2010, capital expenditure is expected to be US\$5 to US\$6 billion.

The strong demand for iron ore clearly provides the most obvious option for production growth. We are continuing work on staged growth projects in the Pilbara. We used the past 12 months to optimise our planned growth pathway, finding ways to ease input costs, capture savings from reduced lead times, and refining project design. We have commenced initiatives to expand capacity to 280 million tonnes per year by 2013 and 330 million tonnes per annum by 2015.

In 2009, we completed an unprecedented and technologically sophisticated integration of our iron ore operations in Western Australia through our Mine of the Future™ programmes and the opening of our new Operations Centre in Perth. This will contribute to the US\$10 billion synergy savings we expect to reap from the proposed production joint venture with BHP Billiton. The benefits from the production joint venture would be without equal in the mining industry, applied broadly across production and development activities, including combining adjacent mines into single operations, more efficient use and allocation of infrastructure and ore blending opportunities to maximise product recovery.

In Aluminium we completed the start up of the Sohar smelter in Oman, to which we

contributed our benchmark AP36 smelting technology. This is a good example of how Rio Tinto Alcan's technology leadership can position us as a partner of choice. The portfolio will enable us to leverage our technology advantage, extensive project management expertise and strong operating capabilities.

Current projects involve investment in the Clermont thermal coal and Kestrel coking coal projects in Queensland, Australia, reflecting strong energy markets. We have options to expand at both of our uranium operations. Construction of the Yarwun 2 alumina refinery continues, albeit at a slower rate than originally anticipated in response to market conditions. In Diamonds, the Diavik and Argyle underground projects also continued at a slower rate. Each of these projects was approved before the global financial crisis, and we have continued to invest in them. We expect to see production begin at both Clermont and Diavik underground in 2010.

We increased our stake in the Oyu Tolgoi project through additional investment in Ivanhoe Mines. Rio Tinto has responsibility for developing and operating the mine. Following the signing of the Investment Agreement with the Government of Mongolia in October 2009, a project budget was agreed that covers the resumption in 2010 of shaft sinking, construction of a shaft headframe, continuation of underground development and installation of infrastructure. The size of the resource is consistent with our strategy of investing in large, long term, cost competitive mines and businesses.

### China

An objective for 2010, and one that I am particularly focused on, is to strengthen our relationship with China. China is our largest source of short term demand growth. In 2009, it became the most important destination for our products and influences global pricing of most metals. It is also the home of our largest shareholder, Chinalco.

We were pleased to see Chinalco take up its full entitlement of shares in our rights issues and maintain its shareholding at 12 per cent of Rio Tinto plc and 9.3 per cent of the dual listed company overall.

I would like to add a word on our four employees who were detained on 5 July 2009 in Shanghai. We wish to see the completion of an expeditious and transparent legal process. Our continued priority is our duty of care to our colleagues and support for their families.

### Outlook

Our markets and our balance sheet are much improved from last year, but we recognise that major short term uncertainties remain. Long term however, given continued growth and urbanisation of the developing world, the outlook for our industry is attractive.

The exponential growth of China's demand for iron ore, copper, coal and aluminium is expected to continue over the next 15 years, as the average wealth of many millions of people increases. Their consumption of raw materials will rise accordingly. As China nears the top of the commodity intensity usage curve, India is expected to follow, supporting a further potential wave of strong commodity demand.

For Rio Tinto, 2009 marked a positive turning point from which we have emerged with our options for growth enhanced. Nevertheless, major challenges remain. The Tier 1 deposits that are the focus of our strategy are becoming harder to find and more technologically difficult to develop. There are pressures in countries well endowed with minerals for governments to gain a greater proportion of resource rents.

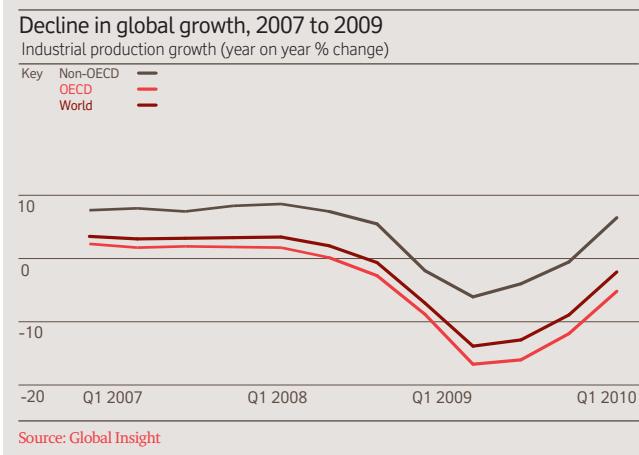
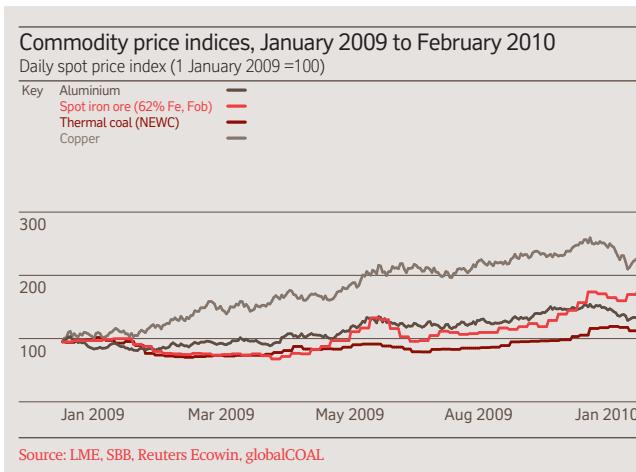
Together with the executive committee, I wish to join our chairman in expressing appreciation to all who work for Rio Tinto for their contribution to a very busy and successful year. All have played a part in strengthening the business for our next stage of growth. With our strong assets, growth options and great people, we can look forward to an exciting future for the Group.



Tom Albanese  
*Chief executive*

# Market review

## A global perspective for metals and minerals



### Competitive environment

Rio Tinto is a major producer in all of the metals and minerals markets in which it operates. It is generally among the top five global producers by volume in each such market. It has market shares for different commodities ranging from five per cent to 40 per cent. Rio Tinto's activities are spread across the globe. Most of Rio Tinto's competitors are private sector companies which are publicly quoted. Several are, like Rio Tinto, diversified in terms of commodity exposure, but others are focused on particular commodities.

High quality, long life mineral resources, the basis of attractive financial returns, are relatively scarce. Nevertheless, Rio Tinto holds interests in some of the world's largest deposits. Rio Tinto expects world production volumes to grow in line with global economic growth. In addition, higher demand from China and potentially India, as a result of high rates of economic growth and urbanisation trends in those countries, could contribute further to increases in world production volumes in the long term.

### Economic overview

#### Global economy

Following more than four years of rapid expansion the global economy started to deteriorate rapidly during the third quarter of 2008 as financial markets became increasingly unstable. The bankruptcy of Lehman Brothers became the defining moment of this period sparking significant increases in risk premiums and a sharp contraction in availability of finance. Governments around the world took action to restore confidence in financial markets but a decline in global economic

growth became unavoidable with most major developed economies moving into recession by the end of 2008.

The deterioration in global economic activity continued into 2009, leading to the greatest contraction in industrial production for over 30 years. Global trade ground to a halt, consumer confidence collapsed with rising fears about unemployment, and businesses responded to the credit crunch by cutting spending and reducing output in order to pare back high inventory levels. However, the introduction of large fiscal and monetary stimuli by governments around the world started to take effect towards the middle of the year, averting a second Great Depression.

Global trade started to recover during the second half of 2009, led by activity in Asia. Major developed economies gradually stabilised with most experiencing renewed GDP growth by the third quarter of 2009.

Most OECD economies are now in the early stages of recovery initially driven by inventory rebuilding, government spending and in some cases net trade. The normal pattern of recovery is that the process of inventory rebuilding and economic stimulus would generate job growth, increase business confidence, and create the basis for increased consumption. However at this stage there remain risks that the pace of recovery may not be sustained. This is mainly because consumer confidence has been so heavily weighed upon by high unemployment rates, the loss in wealth and the prospect of increased taxes to fund the current stimulus.

#### China

The collapse in global trade affected many developing economies including China. The lagged impact of policy tightening by the

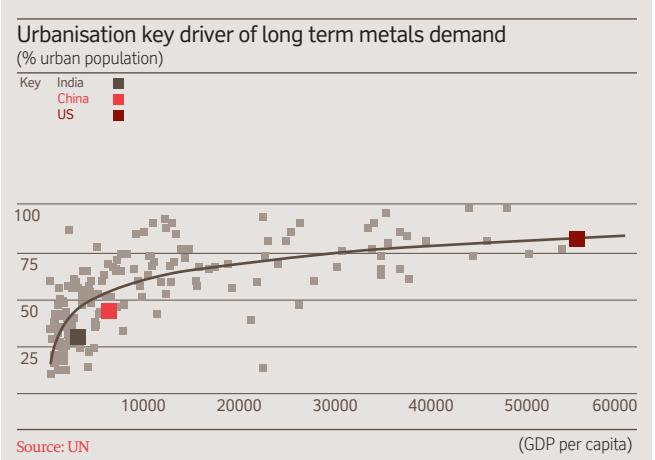
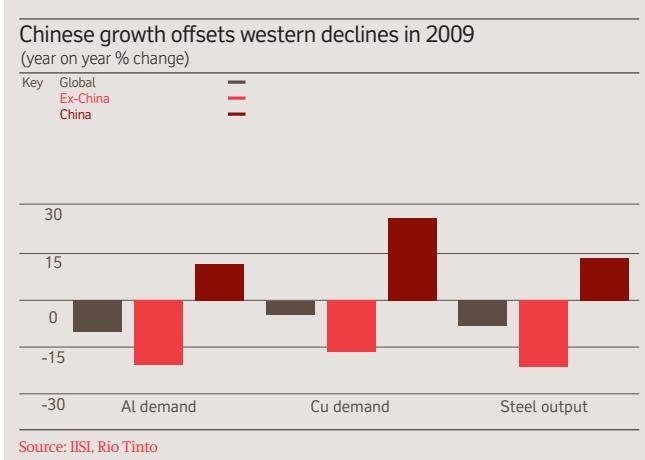
Chinese government in early 2008 and a correction in a slightly overheating property market contributed to the slowdown in the pace of economic growth in China during the second half of 2008. By the first quarter of 2009 the annualised pace of GDP growth had fallen to nearly six per cent, a sharp contrast to the double digit growth that the Chinese economy had become accustomed to over the previous four years.

The Chinese Government reacted strongly and rapidly to the economic slowdown, announcing a Rmb 4 trillion stimulus package, equivalent to about 12 per cent of GDP, to be spent over two years. The Government also introduced a set of measures aimed at supporting demand in key sectors and boosting consumption in rural areas. The stimulus was accompanied by a massive surge in bank lending during the first half of 2009 with significant investment going into the development of infrastructure projects. All these measures were successful in boosting economic growth as early as the second quarter of 2009.

The growth momentum continued to build up during the second half of the year with activity in the property sector also starting to bounce back strongly. All of these developments bode well for the strength of China's economy in 2010.

#### Commodity markets

The sharp fall in global economic activity has had a significant impact on the demand for metals and minerals. Contractions in end-use consumption have been amplified by heavy destocking at all stages of the supply chains. Metals such as aluminium, which tend to be more exposed to the construction and transport sectors of developed economies, have been affected most strongly leading to



very rapid increases in excess stocks. Prices, which in many cases were trading well in excess of the marginal costs of production prior to the economic downturn, reacted quickly to falling demand and rising inventories. The price falls were especially steep for exchange traded commodities as the turbulence in the financial sector forced investors out of these markets.

Aluminium and copper experienced a peak-to-trough variation of about 60 per cent and 70 per cent respectively within just a couple of quarters. Meanwhile the iron ore contract price settled with Japanese customers in the second quarter of 2009 was about one third lower than the previous benchmark. The hard coking coal contract price also fell substantially by close to 60 per cent, whilst spot thermal coal prices fell 65 per cent between July 2008 and the end of the first quarter of 2009. Such price declines put significant pressure on mining companies, with, for some commodities, significant portions of the industry showing negative margins. This led to a shift in focus from maximising output to capital management, production curtailment and cost saving. These recent developments reinforced Rio Tinto's strategy of investing in Tier 1 assets, which are generally able to generate positive margins over the whole of the economic cycle. The sharp price falls and credit restrictions also led to the cancellation or postponement of many mining projects.

The start of a stabilisation in the global economy from the second quarter of 2009 and more importantly the rapid turnaround of the Chinese economy triggered a sharp bounce back in commodity prices. Chinese imports of metals and minerals soared to new highs as a result of recovering

underlying demand, restocking, closure of high cost domestic capacity and some speculative activity facilitated by rising liquidity. Falls in scrap supplies as a result of slower industrial activity and lower prices also created a need for Chinese consumers to use and import a higher proportion of primary metals. This was especially acute in the case of copper throughout the first half of 2009. These high levels of Chinese imports absorbed some of the surpluses building up outside China, keeping some markets relatively tight.

Copper experienced one of the strongest rebounds with prices rising 140 per cent between the start and the end of the year, moving to within less than 20 per cent of the pre-crisis 2008 peak. Meanwhile, spot iron ore prices almost doubled over the second half of 2009 and aluminium recovered from a low of near US\$1,300 per tonne during the first quarter of 2009 to just over US\$2,200 per tonne by year end despite historically high visible stock levels. Movements in coal prices were more subdued during 2009 but started to trend up again towards the very end of the year.

### Outlook for 2010

Forecasters have become progressively more optimistic about economic growth in 2010. The IMF is predicting global growth of nearly four per cent and Chinese GDP is expected to grow at between nine and ten per cent. Economy wide inventory rebuilding in the OECD should provide a short term boost to activity. Such growth acceleration would have positive implications for metals and minerals markets. Although it is still unclear whether a sustainable recovery in private sector confidence and economic activity will

emerge as the fiscal and monetary stimulus wanes or is removed over time.

Some risks to the outlook include the possibility of an aggressive tightening of monetary policies in Asian economies in response to concerns about consumer and/or asset price inflation. Also it is possible that consumer spending in the OECD will remain constrained due to concerns about employment prospects, housing wealth and increased tax burdens. Economic data releases and news flow will affect investors' perceptions about the likelihood of such risks compared with the strength of the more positive forces on the markets. This will lead to negative and positive swings in sentiment affecting commodity prices through speculation.

### Trend information

Demand for the Group's products is closely aligned with levels of, and changes in, global GDP. Changes in the GDP of developing countries will generally have a greater impact on demand for commodities such as iron ore and coking coal, which are significant inputs in the development and improvement of infrastructure. Conversely, changes in the GDP of developed countries will have a greater impact on industrial minerals, which have many applications in consumer products. Aluminium and copper are used in a wide range of applications from infrastructure to consumer products and demand for these metals has tended to grow in line with or slightly faster than global GDP. Trends in production of the Group's minerals and metals, gross sales revenue and underlying earnings are set out in the Performance reviews starting on page 22.

# Strategy

## A focused and integrated strategy

### Summary

Rio Tinto's vision is to be the global mining leader.

Our vision shapes our core objective, which is to maximise total shareholder return by sustainably finding, developing, mining and processing natural resources.

To deliver this objective, the Group follows a strategy of investing in and operating large, long term, cost competitive mines and businesses, driven not by choice of commodity but rather by the quality of each opportunity.

We have five business priorities for 2010 to enable us to deliver our strategy and improve our long term financial performance:

- Focus on operational delivery
- Pursue our growth path
- Complete the iron ore production joint venture
- Prudent balance sheet management
- Strengthen our relationship with China

Given our geographical reach, strong assets and reputation we believe we are well positioned for success.

### Vision

Our vision of being the global mining leader means maintaining or achieving sector leadership, including operational excellence, sustainable development, exploration and innovation.

We are well placed to achieve this vision through our ownership of some of the world's best assets. We focus on the development of Tier 1 orebodies – those that will give us large scale, long term and cost competitive operations. This will safeguard our future cash flow and ensure we can operate profitably at every stage of the commodity cycle.

The global reach of our operations and projects gives us the ability to respond to rising demand for metals and minerals from developed and emerging economies. We will use the advantages that our assets bring to deliver options for future growth.

Our diverse portfolio, high quality assets, and expertise in technology and marketing give us the capability to supply a wide spectrum of customers and markets. We can supply the raw materials needed for basic infrastructure and the high performance mineral grades needed for high tech applications. This gives us exposure to markets worldwide at various stages of the development cycle. By understanding what our customers value, we develop offerings which meet their needs and generate superior returns for Rio Tinto.

Effective supply chain integration with our operations and Rio Tinto Marine ensures that we meet customer needs and create value for ourselves by supplying the right products and services at the right time to the right place.

Rio Tinto has a strong reputation for operational excellence and sustainable development. This reputation gives us our licence to operate, and it is essential that we uphold it and build upon it.

Long term sustainable development is at the heart of everything we do. We must build upon recent improvements in our safety performance, and we must also continue, and extend, our leadership in areas such as community and government engagement; biodiversity; and land, carbon, water and energy management.

Our assets and reputation give us the capabilities to operate and grow our business on a global scale. And as we do so, we also have the scope and expertise to bring long term benefits to our local communities and host countries.

### Priorities for 2010

The Group is focusing on five business priorities, which are the pathway to delivering our strategy and achieving our vision.

### Core objective

To maximise total shareholder return by sustainably finding, developing, mining and processing natural resources.

### Strategy

To invest in and operate large, long term, cost competitive mines and businesses, driven not by choice of commodity but rather by the quality of each opportunity.

### Priorities for 2010

We have five business priorities to enable us to deliver our strategy and improve our long term financial performance. These priorities will support our vision to be the global mining leader.

### **Focus on operational delivery**

We will pursue cost reductions and productivity improvements in order to strengthen our focus on operational delivery.

A key activity will be the continued transformation of the Aluminium business. Rio Tinto Alcan is now sharing common safety, internal compliance and human resource systems. As we complete the financial integration of Alcan, we expect to exceed US\$1.1 billion per year in synergies.

Our capacity for innovation is an important driver of operational delivery improvements. We will continue to capitalise on our leading technologies and develop our capabilities in areas such as automation.

The delivery of capacity improvements along the supply chain is also a key part of this priority. This includes the mining, processing and shipping of our commodities.

### **Pursue our growth path**

Our second priority is to grow our business through disciplined capital expenditure. The improved strength of our balance sheet in 2009 positions us well for growth. We have confidence in the projected increase in long term demand for our products, particularly from emerging markets, which will be the driver of this growth.

The growth opportunities that we focus on are aligned with our strategy, and so we will make investment decisions based on the quality of each opportunity rather than the choice of commodity. This may mean considering new commodities, as well as capitalising on the expansion potential that is held within our existing assets.

### **Complete the iron ore production joint venture**

A key achievement this year would be the completion of the proposed Western Australian Iron Ore production joint venture with BHP Billiton. After signing the binding agreements in December 2009, covering all aspects of how the joint venture will operate and be governed, we are now addressing the approvals required and integration planning. This transaction would enable us to deliver substantial synergies and unlock the true value of our significant assets in the Pilbara.

### **Prudent balance sheet management**

We will focus on prudent management of our balance sheet, building on the successful measures we undertook to alleviate our debt position in 2009. We will continue with our operating and capital cost reduction initiatives as well as our asset divestment programme in order to optimise our financial position. Our objective in this area is towards achieving a single "A" credit rating. This priority links closely to the pursuit of growth through disciplined capital expenditure.

### **Strengthen our relationship with China**

We will seek to strengthen our relationship with China: our largest trading partner, the home of our largest shareholder, and a market that will be one of the major drivers of future demand. China is strategically important to Rio Tinto and it is essential that we build durable and ongoing relationships there.

## **Sustainable development**

Our commitment to sustainable development underpins our vision and every area of our business. It is an essential factor in maintaining and extending our licence to operate. This commitment provides opportunities for us to plan, implement and deliver sustainable contributions to social wellbeing, environmental stewardship and economic prosperity, within our strong governance systems.

Our approach helps us to manage risk, and our strong reputation as a socially responsible miner gives us improved access to land, people and capital – the three critical resources upon which our business success is built. A full review of our sustainable development performance begins on page 24.

Building relationships with all our internal and external stakeholders is a cornerstone of our sustainable development approach. A vital element of our relationship with our employees is to keep them healthy and safe. We believe that all incidents and injuries are preventable, and we must continue to make improvements in our key safety indicators.

Our aim is to create an environment where all employees and contractors have the knowledge, skills and desire to work safely, so that everyone goes home safe and healthy at the end of each day. Attracting, developing and retaining a skilled and engaged workforce is essential for our business performance.

Building enduring relationships with our local communities, host countries and governments is also fundamental to our sustainable development commitment, and helps us to be seen as the partner of choice for mineral development.

## **Key performance indicators**

Achievement of our strategy and goals are measured by a mixture of financial and non financial performance indicators, some of which are linked to executive remuneration.

1. Focus on operational delivery
2. Pursue our growth path
3. Complete the iron ore production joint venture
4. Prudent balance sheet management
5. Strengthen our relationship with China

 [More information on p.14](#)

# Key performance indicators

*Measuring progress against strategy*

Rio Tinto's core objective and strategy dictate key performance indicators (KPIs) that the Group monitors, targets and measures. These KPIs fulfil three roles:

- To give senior management a means to evaluate the Group's overall performance from an operational, growth and sustainable development perspective.
- To provide managers and their teams with clarity and focus on the areas that are critical for the successful achievement of the Group's goals.
- To give guidance to the Remuneration committee in framing the Group's remuneration policy.

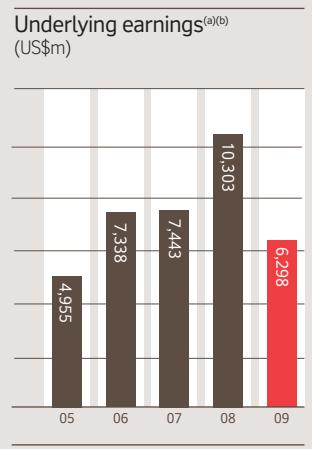
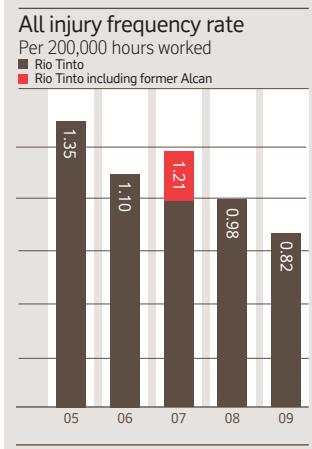
## KPI trend data

The Group's performance against each KPI is covered in detail in later sections of the *Annual report*. Supporting the data is an explanation of the actions taken by management to maintain and improve the performance of each KPI.

### Notes

(a) The accounting information in these charts is drawn up in accordance with EU IFRS.

(b) Underlying earnings is the key financial performance indicator which management uses internally to assess performance. It is presented here as an additional measure of earnings to provide greater understanding of the underlying business performance of the Group's operations. Items excluded from net earnings to arrive at underlying earnings are explained in note 2 to the 2009 *Financial statements*. Both net earnings and underlying earnings deal with amounts attributable to equity shareholders of Rio Tinto. However, EU IFRS requires that the profit for the year reported in the income statement should also include earnings attributable to outside shareholders in subsidiaries.



## Definition

Rio Tinto's continuous focus on safety in the workplace means that the AIFR is one of the Group's most important non financial KPIs.

It is calculated based on the number of injuries per 200,000 hours worked. This includes medical treatment cases, restricted work day and lost day injuries for employees and contractors.

Underlying earnings is the key financial performance indicator used across the Group.

It is a measure of earnings that provides insight into the underlying business performance of the Group's operations. Items excluded from net earnings to arrive at underlying earnings are explained in note 2 of the 2009 financial statements.

TSR measures the Group's performance in terms of shareholder wealth generation through dividends and the share price. Rio Tinto's TSR is calculated by an independent third party. The Group's TSR performance compared to the FTSE 100 Index, the ASX All Ordinaries Index and the HSBC Global Mining Index, as well as the relationship between TSR and executive remuneration, is shown on pages 105-106.

## Performance

At the end of 2009 our AIFR was 0.82, an improvement of 16 per cent from 2008.

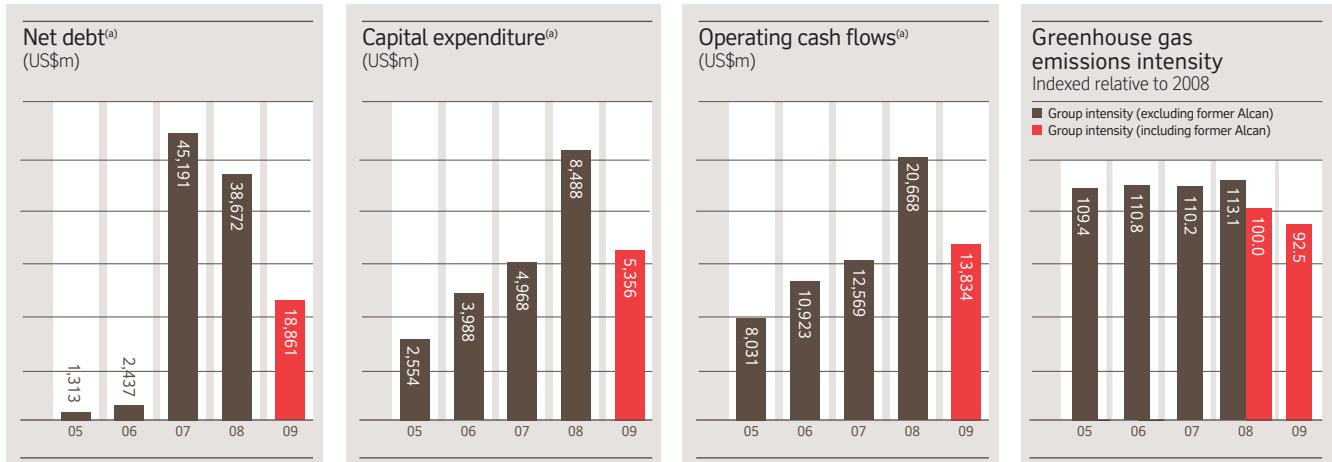
Underlying earnings in 2009 of US\$6,298 million were US\$4,005 million below the comparable measure for 2008. This was largely due to a US\$6,879 million decrease due to price movements on all major commodities, partially offset by a US\$484 million increase due to favourable movements in foreign exchange rates; a US\$652 million increase from greater iron ore, copper and gold volumes; a US\$742 million increase due to a reduction in cash costs; and an US\$890 million increase from the reduction of exploration and evaluation expenditure.

Due to the rights issues in 2009, the adjusted share prices of Rio Tinto plc and Rio Tinto Ltd have changed, so the TSR values in the 2009 *Annual report* do not match up to the TSR values in the 2008 *Annual report*. At the end of 2009, the Group's TSR was an increase of 172.5%, compared with a decrease of 71.5% for 2008.

More information on p.27

More information on p.219

More information on p.111



## Definition

In December 2008, Rio Tinto announced its commitment to reduce net debt by US\$10 billion in 2009.

Net debt is calculated as: the net total of borrowings, cash and cash equivalents, other liquid resources and derivatives related to net debt.

Capital expenditure tracks new and continuing investment in value adding sustaining and growth projects.

The Group's capital projects are listed on page 61 in the Capital projects section.

Operating cash flows were introduced as a key element of the short term incentive plan in 2009. This measure is the same as that in the consolidated cash flow statement.

Rio Tinto accepts the urgent need for climate change action. Improvement in intensity is a reduction in total greenhouse gas emissions per unit of commodity production over time. Broadly consistent with the WBCSD/WRI Greenhouse Gas Protocol, we calculate total greenhouse gas emissions as direct emissions (Scope 1) plus emissions from imports of electricity (Scope 2) minus electricity and steam exports and net carbon credits voluntarily purchased from, or sold to, recognised sources. We index our performance relative to 2008 as the base year.

## Performance

During 2009, net debt decreased from US\$38.7 billion to US\$18.9 billion following the proceeds from the divestment programme, strong operating cash flows and net proceeds of US\$14.8 billion from the rights issues. Net debt to total capital was significantly reduced to 29.1 per cent at 31 December 2009, compared with 63.3 per cent at 31 December 2008.

Capital expenditure was US\$5,356 million in 2009, a decrease of US\$3,132 million over 2008. Capital expenditure included the Brockman 4 and Mesa A iron ore mine developments in Western Australia, the expansion of the Yarwun alumina refinery, the construction of the Clermont thermal coal mine, the expansion of the Kestrel coking coal mine, the development of the underground diamond mines at Diavik and Argyle and the completion of the Madagascar ilmenite mine.

Operating cash flows, including dividends from equity accounted units, was US\$13,834 million, 33 per cent lower than 2008, primarily as a consequence of lower commodity prices.

During 2009 we achieved a 7.5 per cent reduction in total greenhouse gas emissions intensity. This was largely as a result of divesting the Ningxia aluminium smelter in China, which is powered by coal based electricity, and reduced production at a number of operations with a higher than average emissions intensity.

More information on p.170

More information on p.220

More information on p.133

More information on p.29

# Principal risks and uncertainties

The following describes some of the material risks that could affect Rio Tinto. There may be additional risks unknown to Rio Tinto and other risks, currently believed to be immaterial, which could turn out to be material. These risks, whether they materialise individually or simultaneously, could significantly affect the Group's business and financial results. It also outlines the exposure to risk without explaining the detail of how each is managed and mitigated, or how some risks could result in either a positive (upside) or negative (downside) impact. They should also be considered in connection with any forward looking statements in this document and the cautionary statement on the inside front cover.

## External

**Commodity prices and global demand for the Group's products are expected to remain uncertain, which could have a positive or negative impact on the Group's business.**

Commodity prices and demand for the Group's products are cyclical and strongly influenced by world economic growth. This is particularly so for our key customers, especially in the US and Asia (notably China). There is potential volatility in short to medium term commodity prices as various national stimulus packages are reduced. Muted consumer spending may result from concerns over unemployment. The Group's normal policy is to sell its products at prevailing market prices and not to enter into price hedging arrangements. The recent improvement in commodity prices and demand for the Group's products may not remain as strong, which would have an impact on Group revenues, earnings, cash flows, asset values and growth.

**Continued growth in demand for the Group's products in China could be affected by future developments in that country.**

The Group's iron ore is sold to Chinese customers predominantly at fixed prices rather than at spot rates. The 2009 benchmark prices were never officially agreed. Failure to agree on prices remains a source of tension between China and all the major iron ore suppliers.

The slowdown of China's economy in 2009 contributed to a contraction in demand for aluminium and lower aluminium prices. If Chinese customers' demand for the Group's products fails to continue to recover or Chinese customers source such products from elsewhere, the Group's business, financial condition and prospects could be affected.

**Rio Tinto is exposed to fluctuations in exchange rates that could have an adverse impact on its overall business results.**

The Group uses US dollars to denominate most of its sales, hold surplus cash, finance its operations, and present its external and internal results. Although many costs are incurred in US dollars, significant costs are influenced by the local currencies of the countries where the Group operates, principally the Australian dollar, Canadian dollar and Euro. The Group's normal policy is to avoid hedging arrangements relating to changes in foreign exchange rates.

Appreciation in the value of these currencies against the US dollar or prolonged periods of exchange rate volatility may adversely affect the Group's business results.

**Political, legal and commercial instability or community disputes in the countries and territories in which the Group operates could affect the viability of its operations.**

The Group has operations in jurisdictions with varying degrees of political, legal and commercial stability. Commercial instability can be influenced by bribery and corruption in their various guises. Administrative change, policy reform, and changes in law or governmental regulations can result in civil unrest, increased regulation and potentially expropriation, or nationalisation. Renegotiation or nullification of existing agreements, leases and permits, changes in fiscal policies (including increased tax or royalty rates) or currency restrictions as well as significantly increased costs or impediments to operation are all possible consequences. Such instability could have an adverse effect on the profitability, the ability to finance or, in extreme cases, the viability of an operation.

Some of the Group's current and potential operations are located in or near communities that may regard the operation as being detrimental to their environmental, economic or social circumstances.

Community reaction could have an adverse impact on the cost, profitability, ability to

finance or even the viability of an operation. Such events could lead to disputes with national or local governments or with local communities and give rise to reputational damage. If the Group's operations are delayed or shut down as a result of political and community instability, its revenue growth may be constrained and the long term value of its business could be adversely impacted.

**The Group's land and resource tenure could be disputed resulting in disruption to the operation or development of a resource.**

The Group operates in several countries where title to land and rights in respect of land and resources (including indigenous title) may be unclear and may lead to disputes over resource development. Such disputes could disrupt or delay relevant mining projects, impede the Group's ability to develop new mining properties, and may have an adverse effect on the Group's results of operations or its prospects.

**Changes in the cost and/or interruptions in the supply of energy, water, fuel or other key inputs could adversely affect the economic viability of the Group's operations.**

The Group's operations are resource intensive and, as a result, its costs and net earnings may be adversely affected by the availability or cost of energy, water, fuel or other key inputs. If the prices of key inputs rise significantly more than expected, or if the Group experiences interruptions in, or constraints on, its supply of key inputs, the Group's costs could increase and its results could be adversely affected.

## Strategic

**Failure of the Group to make or successfully integrate acquisitions could have an adverse effect on the business and results of operations.**

Business combinations entail a number of risks including the effective integration of acquisitions (including the realisation of synergies), significant one time write-offs or restructuring charges, and unanticipated costs and liabilities. All of these may be exacerbated by the diversion of management's attention away from other ongoing business concerns. The Group may also be liable for the past acts, omissions or liabilities of companies or businesses or properties it has acquired, which may be unforeseen or greater than anticipated.

### The Group's business and growth prospects may be negatively affected by reductions in its capital expenditure programme.

The Group requires substantial capital to invest in greenfield and brownfield projects, and to extend the life and capacity of its existing operations. Reductions in capital expenditure (including sustaining capital) have resulted in the cancellation, slowing or deferral of projects until market conditions and commodity prices recover, and sufficient cash is available for investment. If significant variations in commodity prices or demand for our products occurs, the Group may reduce its capital expenditure further, which may negatively impact the timing of its growth and future prospects.

With the volatility of the commodity markets, the Group's ability to take advantage of improvements may be constrained by earlier capital expenditure restrictions and the long term value of its business could be adversely impacted.

### The Group's exploration and development of new projects might be unsuccessful, expenditures may not be fully recovered and depleted ore reserves may not be replaced.

The Group develops new mining properties and expands its existing operations as a means of generating shareholder value. The Group seeks to identify new orebodies and mining properties through its exploration programme and has also undertaken the development or expansion of other major operations. There is a high degree of competition for opportunities to develop such orebodies. Certain competitors, such as state run interests, have access to significant resources and may be motivated by political or other non economic factors. The Group may be unable to find willing

and suitable joint venture partners to share the cost of developing large projects. There is no assurance, therefore, that the Group's investment in exploration and project development will be recouped, or that depleted ore reserves will be replaced.

### The Group's proposed iron ore production joint venture with BHP Billiton in Western Australia may not yield the synergies anticipated, or may fail to be completed as currently envisaged.

Rio Tinto and BHP Billiton have proposed a production joint venture covering the entirety of both companies' Western Australian iron ore assets. The binding agreements on the proposed joint venture were signed on 5 December 2009, and cover all aspects of how the joint venture would operate and be governed. The estimated US\$10 billion net present value of the synergies may not be realised or may take longer to realise than expected. The proposed production joint venture requires regulatory approvals in a number of jurisdictions which may not be secured. Regulators may require the Group to relinquish ownership or control over certain assets prior to approving the production joint venture. Any or all of these could reduce the value anticipated from forming the production joint venture or result in a failure to implement the venture as currently envisaged.

## Financial

### The Group's reported results could be adversely affected by the impairment of assets and goodwill.

An asset impairment charge may result from the occurrence of unexpected adverse events that impact the Group's expected performances. In accordance with IFRS, the Group does not amortise goodwill but

rather tests it annually for impairment: such impairments cannot be reversed.

The Group will continue to test goodwill and may, in the future, record additional impairment charges. This could result in the recognition of impairment provisions (which are non cash items) that could be significant and could have an adverse effect on the Group's reported results.

### The Group's net earnings are sensitive to the assumptions used for valuing defined benefit pension plans and post retirement healthcare plans.

Certain of the Group's businesses sponsor defined benefit pension plans. The pension expense reported for these plans is sensitive to the assumptions used to value the pension obligations, and also to the underlying economic conditions that influence the assumptions. Changing economic conditions, particularly poor pension investment returns, may require the Group to make substantial cash contributions to its pension plans.

Actual investment returns achieved compared to the amounts assumed within the Group's reported pension expense are reported in the table below (amounts for prior years have been adjusted to exclude defined contribution assets as explained in note 50 to the financial statements).

As at 31 December 2009, the Group had estimated pension liabilities (on an IAS19 accounting basis) of US\$16.2 billion and assets of US\$12.4 billion. After excluding those pension arrangements deliberately operated as unfunded arrangements, representing liabilities of US\$1.1 billion, the global funding level for pension liabilities (on an IAS19 basis) was approximately 82 per cent. If the funding level materially deteriorates further, cash contributions from the Group may be needed, subject to local requirements.

## Pension plan investment returns

US\$ millions	2009	2008	2007	2006	2005
Expected return on plan assets	581	857	438	261	249
Actual return on plan assets	1,472	(2,451)	309	517	365
Difference between the expected and actual return on plan assets (loss)/gain (US\$ million)	891	(3,308)	(129)	256	116
Difference as a percentage of plan assets	7%	(36%)	(1%)	5%	3%

# Principal risks and uncertainties continued

## Operational

Estimates of ore reserves are based on many assumptions and changes in the assumptions could lead to reported ore reserves being restated.

There are numerous uncertainties inherent in estimating ore reserves including subjective judgements and determinations based on available geological, technical, contract and economic information. Assumptions that are valid at the time of estimation may change significantly when new information becomes available. Changes in the forecast prices of commodities, exchange rates, production costs or recovery rates may result in the reserves ceasing to be economically viable. Ultimately this may result in the reserves needing to be restated. Such changes in reserves could also affect depreciation and amortisation rates, asset carrying values, deferred stripping calculations and provisions for close down, restoration and environmental clean up costs.

### Labour disputes could lead to lost production and/or increased costs.

Some of the Group's employees, including employees in non managed operations, are represented by labour unions under various collective labour agreements. The Group may not be able satisfactorily to renegotiate agreements when they expire and may face tougher negotiations or higher wage demands. In addition, existing labour agreements may not prevent a strike or work stoppage, which could have an adverse effect on the Group's earnings and financial condition.

### Some of the Group's technologies are unproven and failures could adversely impact costs and/or productivity.

The Group has invested in and implemented information systems and operational initiatives including new technologies. Some aspects of these technologies are unproven and the eventual operational outcome or viability cannot be assessed with certainty. The costs, productivity, value in securing business opportunities and other benefits from these initiatives, and the consequent effects on the Group's future earnings and financial results may vary from expectations. If the Group's technology systems fail to realise the anticipated benefits, there is no assurance that this will not result in increased costs, interruptions to supply continuity, failure of the Group to realise its production or growth plans or some other adverse effect on operational performance.

**The Group's mining operations are vulnerable to natural disasters, operating difficulties and infrastructure constraints, not all of which are covered by insurance, which could have an impact on its productivity.**

Mining operations are vulnerable to natural events, including earthquakes, drought, floods, fire, storms and the possible effects of climate change. Operating difficulties such as unexpected geological variations that could result in significant failure, could affect the costs and viability of operations for indeterminate periods, including smelting and refining.

The Group requires reliable roads, rail networks, ports, power sources and power transmission facilities, water supplies and IT systems to access and conduct its operations. The availability and cost of infrastructure affects capital and operating costs, and the maintenance of planned levels of production and sales. In particular, the Group transports a large proportion of its products by sea. Limitations, or interruptions in, rail or shipping capacity at any port, including as a result of third parties gaining access to the Group's integrated infrastructure, could impede the Group's ability to deliver its products on time. This could have an adverse effect on the Group's business and results of operations.

The Group uses an extensive information technology system and infrastructure. A significant failure of major parts of the system or malicious actions could result in significant interruption that could affect the Group's reputation and operating results.

The Group's insurance does not cover every potential risk associated with its operations. Adequate coverage at reasonable rates is not always obtainable. In addition, the Group's insurance may not fully cover its liability or the consequences of any business interruptions such as equipment failure or labour dispute. The occurrence of a significant event not fully covered by insurance could have an adverse effect on the Group's business, results of operations, financial condition and prospects.

**Joint ventures and other strategic partnerships may not be successful and non managed projects and operations may not comply with the Group's standards, which may adversely affect its reputation and the value of such projects and operations.**

The Group participates in several joint venture arrangements and it may enter into further joint ventures. Although the Group has sought to protect its interests, existing

and future joint ventures necessarily involve special risks. Whether or not the Group holds majority interests or maintains operational control in its joint ventures, its partners may:

- have economic or business interests or goals that are inconsistent with, or opposed to, those of the Group;
- exercise veto rights to block actions that the Group believes are in its or the joint venture's best interests;
- take action contrary to the Group's policies or objectives with respect to its investments; or
- be unable or unwilling to fulfil their obligations under the joint venture or other agreements, such as contributing capital to expansion or maintenance projects.

Where projects and operations are controlled and managed by the Group's partners, the Group may provide expertise and advice but it has limited control with respect to compliance with its standards and objectives. Improper management or ineffective policies, procedures or controls could adversely affect the value of related non managed projects and operations and, by association, damage the Group's reputation thereby harming the Group's other operations and access to new assets.

### The Group may be exposed to major failures in the supply chain for specialist equipment and materials.

Rio Tinto operates within a complex supply chain depending on suppliers of raw materials, services, equipment and infrastructure to ensure its mines and process plants can operate, and on providers of logistics to ensure products are delivered. Failure of significant components of this supply chain due to strategic factors such as business failure or serious operational factors, could have an adverse effect on the Group's business and results of operations.

## Sustainable development

### Increased regulation of greenhouse gas emissions could adversely affect the Group's cost of operations.

Rio Tinto's operations are energy intensive and depend heavily on fossil fuels. There is increasing regulation of greenhouse gas emissions, progressive introduction of carbon emissions trading mechanisms and tighter emission reduction targets, in numerous jurisdictions in which the Group operates. These are likely to raise energy and production costs to a material degree over the next decade. Regulation of greenhouse gas emissions in the jurisdictions of the Group's major customers and suppliers as well as in relation to international shipping could also have an adverse effect on the demand for the Group's products.

### The Group depends on the continued services of key personnel.

The Group's ability to maintain its competitive position and to implement its business strategy is dependent on the services of key engineering, managerial, financial, commercial, marketing and processing people. Loss or diminution in the services of key employees, particularly as a result of an inability to attract and retain staff, or the Group not maintaining a competitive remuneration structure, could have an adverse effect on the Group's business, financial condition, results of operations and prospects.

Competition for experienced people with international engineering, mining, metallurgy and geological expertise is high, due to a small pool of individuals against medium to high demand. This may affect the Group's ability to retain its existing senior management, marketing and technical personnel and to attract qualified personnel on appropriate terms. Similar competition may be felt by the Group's key contractors and equipment suppliers that, in turn, could affect the Group's expansion plans.

### The Group's costs of close down, restoration, and rehabilitation could be higher than expected due to unforeseen changes in legislation, standards and techniques, or underestimated costs.

Close down and restoration costs include the dismantling and demolition of infrastructure and the remediation of land disturbed during the life of mining and operations. Estimated costs are provided for over the life of each

operation and updated annually but the provisions might prove to be inadequate due to changes in legislation, standards and the emergence of new restoration techniques. Furthermore the expected timing of expenditure could change significantly due to changes in commodity prices that might curtail the life of an operation. Total provisions at 31 December 2009 amounted to US\$6,916 million (2008 restated: US\$6,011 million) as set out in note 27 to the financial statements. These provisions could prove insufficient compared to the actual cost of restoration, or the cost of remediating or compensating for damage beyond the site boundary. Any underestimated or unidentified close down, restoration and environmental rehabilitation costs could have an adverse effect on the Group's reputation as well as its asset values, earnings and cash flows.

### Health, safety, environment and other regulations, standards and expectations evolve over time and unforeseen changes could have an adverse effect on the Group's earnings and cash flows.

Rio Tinto operates in an industry that is subject to numerous health, safety and environmental laws, regulations and standards as well as community and stakeholder expectations. The Group is subject to extensive governmental regulations in all jurisdictions in which it operates. Operations are subject to general and specific regulations governing mining and processing, land tenure and use, environmental requirements (including site specific environmental licences, permits and statutory authorisations), workplace health and safety, social impacts, trade and export, corporations, competition, access to infrastructure, foreign investment and taxation. Some operations are conducted under specific agreements with respective governments and associated acts of parliament but unilateral variations could diminish or even remove such rights. Evolving regulatory standards and expectations can result in increased litigation and/or increased costs, all of which can have an adverse effect on earnings and cash flows.

# Proposed iron ore production joint venture with BHP Billiton

## How it will work

- The establishment and operation of the joint venture are governed by a Framework Agreement signed in June 2009 and binding agreements signed in December 2009.
- The establishment of the joint venture is conditional on regulatory and shareholder approvals.
- A new company, owned 50:50 by Rio Tinto and BHP Billiton, will be established as joint venture manager.
- The joint venture manager, with its own management team, will manage the joint venture as a standalone, production-only operation.
- The manager's mandate will be to achieve synergies, minimise costs, maximise production and present options for expansion.
- Rio Tinto and BHP Billiton will each access a half share of the joint venture's production (subject to some adjustments to recognise existing commitments to third parties).
- Each party will independently market its share of production.

## Iron Ore Joint Venture Framework Agreement

On 5 June 2009, Rio Tinto and BHP Billiton signed a Framework Agreement to establish an iron ore production joint venture combining the operation and management of their respective Western Australian iron ore production assets.

The Framework Agreement contains exclusivity provisions preventing either party from soliciting or engaging in discussions with respect to a proposal that (in broad terms) enables a person to acquire an economic or security interest in assets within the scope of the joint venture; which may adversely impact on its benefits; which is likely to be inconsistent with completion of the joint venture; or which might require a restructuring of it.

The Framework Agreement provides for a mutual break fee of US\$275.5 million payable in the event that either party announces that it does not intend to proceed with the joint venture; after satisfaction of the key regulatory approvals, fails to recommend the joint venture to its shareholders or fails to take the steps necessary to obtain the approval of its shareholders; or breaches the exclusivity provisions. It also set out core principles that would apply to the establishment of the joint venture.

## Description of binding agreements

On 5 December 2009, Rio Tinto and BHP Billiton signed binding agreements that set out the terms that will regulate the establishment of the joint venture and its ongoing operation. Those terms are consistent with the core principles set out in the Framework Agreement, except that the joint marketing of 15 per cent of output contemplated by the core principles will not take place: all output will be sold by Rio Tinto and BHP Billiton separately.

## Scope of joint venture

The joint venture will encompass the management and operation of the economic interests of Rio Tinto and BHP Billiton in all current and future iron ore operations in Western Australia, including exploration interests, leases, mines, rail lines, ports and associated infrastructure, and all related employees and contractors. However, the joint venture will not include BHP Billiton's Hot Briquetted Iron plant (HBI) or Rio Tinto's interest in Hismelt™, and its application to other secondary processing activities will be limited. Marketing activities and business development outside Western Australia are also outside the scope of the joint venture.

The parties to the joint venture will share the economic burden of all related liabilities, other than material undisclosed liabilities (with a minimum claim of US\$300 million and a maximum claim period of ten years) and certain pre-July 2009 tax liabilities. It is intended that the joint venture will continue in perpetuity.

## Conditions precedent

The binding agreements remain subject to satisfaction of certain conditions precedent, including satisfying relevant anti-trust requirements, obtaining Australian foreign investment clearance from the Commonwealth Treasurer and favourable rulings from the Australian Taxation Office and State revenue authorities, obtaining certain other government approvals, and obtaining the approval of BHP Billiton and Rio Tinto shareholders. The Framework Agreement and the binding agreements will terminate if the conditions precedent are not satisfied by 31 December 2010.

## Financial adjustments

The economic interests of Rio Tinto and BHP Billiton in the joint venture will be equal. The

joint venture is a contractual arrangement and the parties will not be acquiring shares in each other's iron ore companies or legal or beneficial interests in each other's iron ore assets. The parties will obtain an economic exposure to each other's iron ore production assets through each of them subscribing for debentures in an interposed company in the other's group that holds shares in the other's asset holding subsidiaries.

To equalise the net value of the parties' asset contributions to the joint venture, BHP Billiton will also subscribe US\$5.8 billion in cash for additional debentures in the Rio Tinto interposed company. This amount will be inflated from 1 July 2009 to completion at a rate of 6.5 per cent per annum, and will also be adjusted to reflect equalisation of net cash flows from 1 July 2009 in the manner described below.

The parties have agreed that they will bear the economic benefit and burden of the after-tax cash flows of their respective assets in the period from 1 July 2009 to commencement of the joint venture. To achieve this, the BHP Billiton cash subscription payment described above will be adjusted for 50 per cent of the difference between the net cash flows (after tax) from the Rio Tinto operations and the BHP Billiton operations during the period from 1 July 2009 until completion, inflated at a rate of 6.5 per cent per annum.

## Governance of the joint venture

Management of the joint venture will be overseen by a "non executive" Owners' Council comprised of four representatives of each party. All decisions of the Owners' Council must be approved by both parties, subject to certain deadlock breaking mechanisms.

The initial chairman of the Owners' Council will be Sam Walsh (Rio Tinto executive director and chief executive, Iron Ore), who will hold that office for a period of four years. The Owners' Council will have the power to approve high level policies (such as accounting, business conduct, communities and health, safety and environment) relating to the joint venture, review the conduct of activities undertaken by the manager and give general direction to the manager.

The Owners' Council will also have powers and functions, much like a board of directors, in relation to other matters, including: approval of business and synergy plans; approving major contracts and capital projects; reviewing performance of the joint venture; approving major asset acquisitions, disposals and closures; approving strategies for dealing with third party access requests; approving

product types, volumes and specifications; approving entry into, or amendment of State Agreements; and approving the appointment and remuneration of senior executive team members. Standing and ad hoc committees comprised of an equal number of representatives of Rio Tinto and BHP Billiton will be established to advise the Owners' Council in relation to the exercise of some of its powers and functions.

### **Management**

The joint venture manager, a new entity owned equally by Rio Tinto and BHP Billiton, will manage all day to day activities of the joint venture without interference from Rio Tinto and BHP Billiton. In addition, the manager will develop plans for realisation of synergies and will present the Owners' Council with annual business plans and budgets designed to achieve full utilisation of system capacity and options for maximisation of production capacity through expansion. The manager must ensure joint venture operations are conducted safely at all times, act equitably and fairly to the parties, and act in accordance with business plans and budgets approved by the Owners' Council.

Senior management of the manager will be selected jointly, with broadly equal participation from Rio Tinto and BHP Billiton. The initial chief executive officer of the joint venture will be BHP Billiton Iron Ore President Ian Ashby, who will hold that office for a period of four years. Future chief executive officers will be appointed by the Owners' Council.

### **Funding and default**

The joint venture will operate with a minimum cash balance and will be financed entirely by the parties, through money subscribed for debentures and money advanced by loan to the relevant iron ore companies conducting operations. The manager of the joint venture will call for cash from Rio Tinto and BHP Billiton on a regular basis to fund the joint venture and capital expenditure programmes. The parties may elect to fund their proportionate share of an expansion or acquisition by way of project financing and may use their interests in the joint venture to secure corporate debt.

Failure to advance funds to meet calls made by the manager will give rise to a suspension of the defaulting party's Owners' Council voting rights and may trigger dilution of the defaulting party's interest in the joint venture or a right to buy out the defaulting party.

### **Expansions and acquisitions**

Sole risk rights will exist for expansion projects which involve capital expenditure exceeding US\$250 million (indexed).

Disagreements in relation to preferred expansion pathways (where more than one option exists) will be resolved by the manager determining which expansion pathway has the highest net present value.

Proposals for new iron ore acquisitions or investments in Western Australia will be referred to the Owners' Council and, if both parties agree, be undertaken within the joint venture. Absent this agreement, the opportunity may be undertaken by the proposing party as a sole risk project.

### **Marketing of product and adjustments and tonnage supply**

Rio Tinto and BHP Billiton will continue to compete and market iron ore to their customers separately. A separation protocol will ensure that the manager has no knowledge of Rio Tinto and BHP Billiton's marketing strategies or sale terms relating to production from the joint venture. The manager will supply equal product volumes and specifications of product to each party to the extent possible. Where equal supply is not possible, adjustments will be made to ensure that each party receives equal value. These adjustments may include differential distributions on the debentures.

### **Disposal of interests**

The parties will both be free to sell some or all of their respective interests in the joint venture without any pre-emptive rights or change of control restrictions applying (although certain principles and restrictions will apply depending on the nature and extent of the disposal). The right to vote on the Owners' Council can, however, only be exercised by a person with an economic interest of more than 25 per cent of the joint venture, except in the unlikely scenario where neither party holds an economic interest above 25 per cent. Neither party will be entitled to sell the underlying assets or interests separately from the joint venture interest, and rights to create security interests over the underlying assets and interests are limited.

## Group financial performance

Guy Elliott, chief financial officer



We are continuing to focus on achieving a single "A" credit rating, through measures such as completing divestments of non core assets.

For further financial information please see the Financial review on pages 58 and 59 and the Financial statements from page 130.

2008	
Prices	
Exchange rates	
Volumes	
General inflation	
Energy	
Other cash costs	
Exploration and evaluation costs (including disposals of undeveloped properties)	
Interest, tax, other	
Profits on disposal of interests in businesses	
Net impairment charges	
Exchange differences and derivatives	
Chinalco break fee	
Restructuring/severance costs from global headcount reduction	
Other	
2009	

	Underlying earnings US\$m	Net earnings US\$m
	10,303	3,676
(6,879)		
484		
652		
(172)		
318		
742		
890		
(40)		
	(4,005)	(4,005)
		(971)
		6,854
		(815)
		(182)
		(174)
		489
	6,298	4,872

The Group uses a number of key performance indicators ("KPI's) to monitor financial performance. These are summarised and discussed on pages 14 and 15 of this report.

### Net earnings and underlying earnings

In order to provide additional insight into the performance of its business, Rio Tinto presents underlying earnings.

2009 underlying earnings of US\$6,298 million and net earnings of US\$4,872 million were US\$4,005 million below and US\$1,196 million above the comparable measures for 2008. The principal factors explaining the movements are set out in the table above.

### Prices

The effect of price movements on all major commodities in 2009 was to decrease earnings by US\$6,879 million compared with 2008. Prices declined for nearly all of Rio Tinto's major commodities: average copper

and aluminium prices were 28 per cent and 35 per cent lower, respectively, while average molybdenum prices were 65 per cent lower than 2008. Gold prices in 2009 were 11 per cent higher than 2008. Diamond prices were severely impacted by the global economic downturn.

During 2009, Rio Tinto settled 2009 iron ore supply contracts with customers in Japan, Korea and Taiwan, with prices for fines declining 33 per cent and prices for lump declining 44 per cent on the prior year. Approximately half of the iron ore that Rio Tinto produced in the first six months of 2009 was sold on a spot market basis. In the second half of the year, deliveries to Chinese customers were priced primarily on a provisional basis in line with settlements with other Asian customers.

Thermal coal contracts for 2009 were settled in the US\$70-72 per tonne range, a decrease of approximately 44 per cent on

the record levels of the previous year. Coking coal contracts for 2009 were settled in the US\$115-130 per tonne range, a decline of approximately 60 per cent on the record levels of 2008.

### Exchange rates

There was significant movement in the US dollar in 2009 relative to the currencies in which Rio Tinto incurs the majority of its costs. Compared with 2008, on average, the US dollar strengthened by eight per cent against the Australian dollar and by six per cent against the Canadian dollar. The effect of all currency movements was to increase underlying earnings relative to 2008 by US\$484 million.

### Volumes

Higher sales volumes from the expansion of iron ore capacity in the Pilbara region of Western Australia and higher copper and gold grades at Kennecott Utah Copper and Grasberg were partly offset by production

cutbacks at Rio Tinto Alcan, Alcan Engineered Products, Diamonds, Iron & Titanium and Minerals in response to the economic downturn. The overall impact of volume movements was an increase in underlying earnings of US\$652 million relative to 2008.

#### **Energy, other cash costs and exploration**

A reduction in cash costs during 2009 increased underlying earnings by US\$742 million compared with 2008. Controllable operating cost savings of US\$2.6 billion were achieved in 2009, exceeding the target set in December 2008 and delivered one year in advance. Lower unit costs in the Copper group, notably at Kennecott Utah Copper, were driven by higher production and a bottom-up cost reduction programme. The Iron Ore group benefited from lower unit cash costs in line with higher sales volumes and a reduction in contractor and maintenance costs. Decreased costs at Rio Tinto Alcan were driven by the major cost cutting initiatives undertaken in response to the global financial crisis including reduction of all non-critical, discretionary spending along with programmes to reduce operating costs across the production sites.

Lower energy costs across the Group boosted underlying earnings by a further US\$318 million, reflecting the impact of a lower oil price. Evaluation work at many of the Group's advanced projects was scaled back in 2009 and the central exploration budget was reduced by 60 per cent, which, together with the divestment of some exploration and evaluation properties, resulted in a favourable impact to underlying earnings of US\$890 million compared with 2008. In line with Rio Tinto's exploration policy, the US\$797 million gain on disposal of the undeveloped potash properties in Argentina and Canada has been recognised within underlying earnings. This is reflected in the exploration variance in the table below net of the US\$483 million gain on disposal of the undeveloped Kintyre uranium project in 2008.

#### **Interest, tax, other**

The effective tax rate on underlying earnings, excluding equity accounted units, was 24.8 per cent compared with 31.6 per cent in 2008. The decrease largely related to the one-off non taxable profit on disposal of the potash assets which was recognised in 2009. The Group interest charge was US\$452 million lower than in 2008, mainly reflecting a decline in interest rates, and lower debt in 2009 following completion of the rights issues.

#### **Exclusions from underlying earnings**

	2009 US\$m	2008 US\$m
<b>Underlying earnings</b>	<b>6,298</b>	<b>10,303</b>
<i>Items excluded from underlying earnings</i>		
Profits on disposal of interests in businesses	499	1,470
Net impairment charges <sup>2</sup>	(1,552)	(8,406)
Exchange differences and gains/losses on derivatives	28	843
Chinalco break fee <sup>1</sup>	(182)	-
Restructuring/severance costs from global headcount reduction	(231)	(57)
Other	12	(477)
<b>Net earnings</b>	<b>4,872</b>	<b>3,676</b>

1 The Chinalco break fee was US\$195 million pre-tax

2 Net impairment charges include impairment charges of US\$1,103 million (2008: US\$7,579 million) and loss after tax of discontinued operations of US\$449 million (2008: US\$827 million)

In 2009, the Group completed the divestments of its interests in the Ningxia aluminium smelter, the Corumbá iron ore operation, the Jacobs Ranch coal mine, Alcan Composites and the sale of 52 per cent of the Group's interest in Cloud Peak Energy Resources LLC. Net gains on these transactions totalling US\$0.5 billion have been excluded from underlying earnings as divestments of interests in businesses are considered to be outside the underlying activities of the Group.

The sale of the majority of the Alcan Packaging businesses to Amcor was completed on 1 February 2010. The sale of the Alcan Packaging Food Americas division to Bemis Company, Inc for a total all cash consideration of US\$1.2 billion was completed on 1 March 2010. The sale of Maules Creek to Aston Resources was completed on 18 February 2010. The sale of the Alcan Packaging Medical Flexibles operations remains subject to regulatory approvals and other customary closing conditions. These divestments have not been reflected in the 2009 results, and will be reflected in the period in which the sales are completed.

Of the Group's total post-tax impairment charge of US\$1.6 billion, US\$0.5 billion relates to Alcan Engineered Products, US\$0.5 billion relates to Alcan Packaging, US\$0.2 billion relates to the Group's upstream aluminium businesses and US\$0.4 billion relates to the Group's diamond businesses. All impairments have been measured based upon an assessment of fair value less costs to sell. These impairments have been caused by continued weakness in the economic environment.

In 2009, Rio Tinto paid a break fee of US\$195 million (US\$182 million post-tax) to Chinalco which has been excluded from underlying earnings.

During 2009, the Group incurred restructuring and severance costs of US\$231 million associated with its global headcount reduction programme.

**Guy Elliott**  
*Chief financial officer*

#### **Group financial results by product group**

	2009 US\$m	2008 US\$m
Iron Ore	4,126	6,017
Aluminium	(578)	1,271
Copper	1,866	1,597
Energy	1,420	2,581
Diamonds & Minerals	800	474
Other operations	(188)	(133)
Inter-segment transactions	(28)	25
Other items	(547)	(366)
Central exploration and evaluation	5	(133)
Net interest	(578)	(1,030)
<b>Group underlying earnings</b>	<b>6,298</b>	<b>10,303</b>
<b>Exclusions from underlying earnings</b>	<b>(1,426)</b>	<b>(6,627)</b>
<b>Net earnings</b>	<b>4,872</b>	<b>3,676</b>

# Sustainable development review

## We are focused on long term sustainable development

Our focus on sustainable development provides the framework in which our business operates. It allows us to maintain a highly regarded reputation that ensures ongoing access to people, capital and mineral resources. This in turn helps us to deliver better return for our shareholders, manage risk effectively, reduce environmental impacts, cut operating costs, attract and retain high calibre employees and provide more business development opportunities.



[View more about our approach to sustainable development at \[www.rwtinto.com\]\(http://www.rwtinto.com\)](http://www.rwtinto.com)

### Strategy

Sustainable development is an integral part of the way in which Rio Tinto conducts its business, with leadership coming from the board of directors and the chief executive.

Our global code of business conduct, *The way we work*, reinforces our commitment to integrate sustainable development thinking in the way we make decisions about finding, acquiring, developing, and operating assets around the world. To assist our people to understand what is expected of them, we launched *Leading at Rio Tinto* in 2009. This requires seven leadership competencies to be demonstrated at each level of our organisation and includes promoting sustainable development. It is being incorporated in our recruitment and selection, performance management and development planning processes.

Sound governance and high standards of conduct are sources of competitive advantage for us. They contribute to long term business success by securing access to talent and capital, enhancing reputation and improving operational performance and supply chain management. Environmental performance, community relations, employee wellbeing and transparency are just as important to us as the technical aspects of mining and processing.

We remain an active member of the International Council on Mining and Metals (ICMM) ([www.icmm.com](http://www.icmm.com)), which evolved from the Global Mining Initiative in 1998 and which aims to provide leadership on scientific and policy matters, maintain dialogue with all stakeholders, and promote best practice performance standards employing sustainable development principles.

### Key achievements

- *The way we work*, our global code of business conduct, and *Speak-OUT*, our confidential whistleblowing programme, were revised.
- Of the electricity we used in 2009, 70 per cent was from low carbon sources, mainly hydro.
- We achieved a 16 per cent reduction in our all injury frequency rate during 2009.
- We completed the health, safety and environment integration of Rio Tinto Alcan.
- Rio Tinto remains the largest private sector employer of indigenous Australians.
- Our new global leadership competency model, *Leading at Rio Tinto*, was launched.

### Materiality assessment

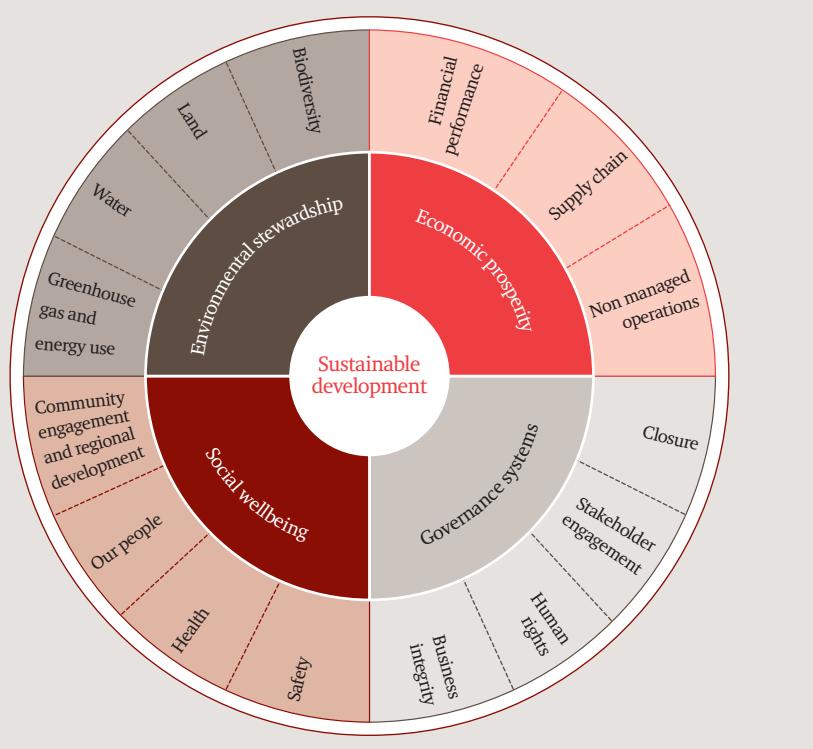
We use a materiality assessment to focus our report on our most significant sustainable development impacts.

Our assessment process has been developed in line with the Global Reporting Initiative (GRI) G3 guidance on materiality and completeness. It involves identifying issues affecting our business and its stakeholders, prioritising their importance over the next three years from internal and external perspectives and validating issue prioritisation.

Performance data for our most material sustainable development issues are subject to external assurance.

Omission from the issues covered in our report does not mean that the issue is not managed by the company.

In line with the outcomes of our assessment, we have also further discussed the most material issues – financial performance, safety and greenhouse gas emissions – in the product group operating and financial reviews within this *Annual report*.



- *Why gender matters*, a resource guide for our Communities work, was published.
- Our Pandemic Influenza Preparedness Plan was developed and rolled out to manage the swine influenza (H1N1) pandemic.
- We retained our listing on the FTSE4Good, Dow Jones Sustainability Indexes and Climate Disclosure Leadership Index, and ranked first on the Resources Global Professionals corporate governance survey.

### Key priorities

- Continue to reduce injury rates toward our goal of zero, including zero fatalities.
- Implement our improved contractor safety management system and our new health, safety and environment framework for major project development.
- Implement our wellbeing strategy to guide development of a global framework for local health and wellbeing programmes.
- Expand our employee diversity focus to address ethnicity and nationality.
- Continue engaging on and preparing for evolving energy and greenhouse gas (GHG) emission regulation.
- Embed our energy use and GHG emissions intensity reduction programmes.
- Explore ecosystem service values of our non operational landholdings, in particular carbon, water and biodiversity opportunities.
- Continue to strengthen our management systems by developing and implementing strategies to manage our key sustainable development risks and improve performance.
- Support our new Group wide health, safety, environment and communities performance targets, building on the successes and challenges of our previous targets.

### Goals and targets

We have set 2008 – 2013 targets for a range of sustainable development metrics including:

- Measuring progress towards our goal of zero injuries and zero fatalities through our all injury frequency rate.
- Thirty per cent reduction in the rate of new cases of occupational illness.
- Ten per cent reduction in the rate of employees exposed to an eight hour noise dose of more than 85 decibels.
- Operations having in place locally appropriate, publicly reported social performance indicators that demonstrate a positive contribution to the economic

- development of the communities and regions where we work which are consistent with the Millennium Development Goals.
- Six per cent reduction in total greenhouse gas emissions per unit of production. We are also targeting a further four per cent reduction by 2015, to deliver an overall ten per cent reduction.
- Six per cent reduction in our freshwater use per tonne of product.

### Performance data

Rio Tinto's sustainable development data are reported for calendar years and, unless otherwise stated, our inventories represent 100 per cent of the parameter at each managed operation, even though Rio Tinto may have only partial ownership.

Data reported in previous years may be modified if verification processes detect material errors, or if changes are required to ensure comparability over time.

Wherever possible, data for operations acquired prior to 1 October of the reporting period are included. Divested operations are included in data collection processes up until the transfer of management control.

Former Alcan operations (with the exception of the Engineered Products and Packaging divisions, which are in the process of being divested) have adopted our reporting definitions and have been included in our inventories since 1 January 2008.

We report in line with the Global Reporting Initiative (GRI) G3 guidelines at Application level A+.

We have implemented ICMM's ten sustainable development principles and disclosed the alignment of our policies, strategies, standards and practices with ICMM's principles and position statements on our website.

The remainder of this section details the status and implementation of our systems and approaches to manage our material sustainable development issues and our performance in these areas. Further information on our data definitions, reporting criteria, our GRI report and our target setting and assurance processes can be found on our website [www.riotinto.com](http://www.riotinto.com).

### Governance systems

*The way we work* reaffirms our commitment to corporate responsibility. It covers issues related to the workplace, human rights, communities and environment, business integrity, Group assets and information management and government, media and investor relations.

*The way we work* does not stand alone; it is supported by the Group policies, standards and guidance notes, which are available on our website, local laws and voluntary commitments. We are subject to the local laws of the many countries in which we operate. We build on compliance with these laws and where our policies and procedures are more stringent, we operate to those standards regardless of where our operations are located.

All employees are required to complete online or classroom training on *The way we work* every two years. Online training is available in 12 languages. We complete a variety of internal and external assurance activities to verify implementation of our Group wide systems and controls, see page 32.

### Business integrity

Rio Tinto conducts its business with integrity, honesty and fairness, building from a foundation of compliance with relevant local laws, regulations and international standards wherever we operate.

Business integrity training is required for all managers, of which 6,279 completed training covering anti-bribery, anti-corruption and political involvement during 2008 and 2009. We do not directly or indirectly participate in party politics and we do not make payments to political parties or individual politicians.

Mining is a heavily regulated industry and we maintain continuous dialogue with governments and public authorities at national, provincial and municipal levels. We make representations on matters affecting our business interests and those of our stakeholders.

We were a founding supporter of the United Nations Global Compact ([www.unglobalcompact.org](http://www.unglobalcompact.org)), a voluntary initiative for businesses to align their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption.

We are active in promoting transparency and high standards of corporate governance more widely, and support a number of voluntary initiatives designed to counter bribery and corruption, to promote transparency and to protect human rights. In particular, through ICMM we are a company endorsing member of the Extractive Industries Transparency Initiative (EITI) ([www.eitransparency.org](http://www.eitransparency.org)). We engage in the promotion and implementation of the EITI in candidate countries where we operate.

Additionally, we have a long standing partnership with the Dundee University Centre for Energy, Petroleum and Mineral Law and Policy to sponsor postgraduate

# Sustainable development review continued

studies contributing to the creation of a stable international legal and investment environment ([www.dundee.ac.uk](http://www.dundee.ac.uk)).

### **Human rights**

We support and respect human rights consistent with the United Nations Universal Declaration of Human Rights and we actively seek to ensure that we are not complicit in abuses committed by others. Rio Tinto endorses several international commitments and standards on human rights and remains dedicated to meeting them.

Training on human rights is provided for employees at the general manager level or above as well as our contract security personnel. Human rights training was completed by 2,797 employees during 2008 and 2009. There were no reported incidents of breaches of our human rights policy during 2009.

Richards Bay Minerals concluded its Broad Based Black Economic Empowerment transaction with a consortium of local businesses and community groups during 2009. It is now fully empowered in accordance with the South African Mining Industry Charter five years ahead of the required date in 2014.

Rio Tinto operates in a manner consistent with the UN Declaration on Indigenous Peoples and sovereign obligations. We respect the land connection of indigenous communities and work with them on their land in a spirit of reciprocity, transparency and recognition of their culture. We recognise that every indigenous community is unique and reach specific agreements with affected communities on how they want to engage with us in the development and performance of our operations.

### **Stakeholder engagement**

Genuine engagement with stakeholders is a critical element of successful business practice. Issues such as climate change, water and poverty alleviation 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 operations. We engage with a broad range of organisations and individuals including our employees, investors, governments, communities, academia, industry bodies, and civil society groups to help us identify and manage risks. We then implement internal controls to minimise threats and capitalise on opportunities presented through this exchange of sustainable development thinking.

We provide clear and timely communication concerning business performance and corporate developments through meetings, newsletters, websites, videos, and social media such as Twitter ([www.twitter.com/riotinto](http://www.twitter.com/riotinto)) and YouTube ([www.youtube.com/RioTintoVideos](http://www.youtube.com/RioTintoVideos)).

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](http://www.wbcsd.org)) and maintain active partnerships with other organisations to achieve our shared goals more effectively. We work closely with international and non governmental organisations to develop appropriate standards and guidelines for our industry.

During 2009 the US\$1 million annual Rio Tinto Prize for Sustainability continued to recognise significant contributions made by non profit, non governmental or civil society organisations promoting and implementing sustainable development. Trees, Water and People ([www.treeswaterpeople.org](http://www.treeswaterpeople.org)), based in the US and working in Central America, Haiti and the American West, was the most recent recipient of the prize.

### **Closure**

We have a multidisciplinary approach to closure planning, involving communities, human resource, environmental, engineering and financial specialists. Integrating closure planning into all aspects of our business, from the earliest stages of project development to the decommissioning of facilities, is essential to leave a positive legacy of sustainable development, minimise unforeseen financial impacts and ensure stakeholder expectations are met. Achieving a reputation for positive closure outcomes assists us to gain access for future projects.

At the end of 2009 our close down and restoration provisions were US\$6,916 million. Our closure management plans are updated every five years to ensure they address key risks, incorporate sustainable development opportunities and include accurate financial provisions. Since 2005 43 closure management plans have been completed, including eight in 2009. Guidance and best practice examples are shared across the Group to improve performance.

During 2009 our closure standard and guidance were updated to incorporate considerations for long life industrial type facilities following the Rio Tinto Alcan integration.

We have established a team of specialists to manage our legacy sites, the majority

of which were introduced to us through acquisitions, to ensure our closure standard and sustainable development principles are applied in these areas.

Our closure standard and communities standard require our operations to engage regularly with stakeholders, including employees, traditional land owners, local communities and governments. Together, we identify preferred sustainable development options for closure and seek stakeholders' endorsement. Examples include:

- Argyle diamond mine engages with Traditional Owners on rehabilitation methods for waste rock dumps and preferred vegetation types as it transitions to an underground operation.
- Kestrel coal mine, still with more than 20 years of predicted life, has surveyed local communities and employees on their expectations for closure and incorporated outcomes in post-closure land use plans as part of Rio Tinto Coal Australia's Mine Life Planning programme.
- Rio Tinto Alcan applied a "regional industrial development" process during the decommissioning of the Lannemezan and Anglesey smelters. This involved engaging with stakeholders and encouraging new post-closure uses for industrial facilities so as to maintain regional socio-economic benefits.

We continue to participate in initiatives to enhance closure planning guidance for our industry through recognised bodies such as the International Council on Mining and Metals, the Responsible Jewellery Council ([www.responsiblejewellery.com](http://www.responsiblejewellery.com)) and the Minerals Council of Australia ([www.minerals.org.au](http://www.minerals.org.au)).

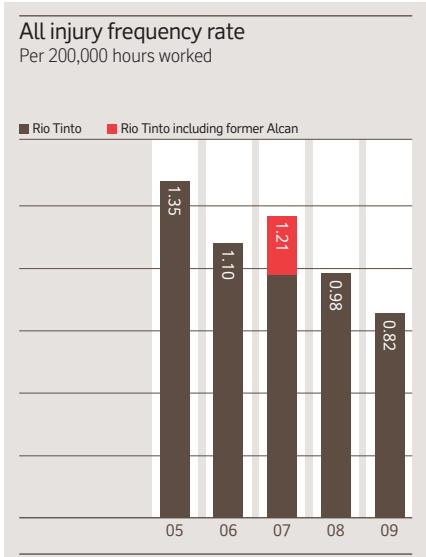
### **Social wellbeing**

We are committed to providing a safe and healthy workplace for our employees where their rights and dignity are respected. We set out to build enduring relationships with our neighbours that demonstrate mutual respect, active partnership, and long term commitment.

In 2009 we set new five year targets for a range of social wellbeing metrics which are discussed in the following sections.

### **Safety**

Our goal is to achieve zero injuries and zero fatalities. We believe that all injuries are preventable and our aim is for everyone to go home safe and healthy at the end of each day. We strive to create a culture where everyone



feels that they can make a difference in an environment where all employees and contractors have the knowledge, competence and desire to work safely.

Regrettably we did not meet our goal of zero fatalities in 2009. Four people were fatally injured while working at Rio Tinto managed operations. The fatal incidents occurred at the Lugo di Vicenza aluminium packaging operation in Italy, the Palabora copper mine and the Richards Bay Minerals titanium dioxide feedstock mine in South Africa, and at the Awaso bauxite mine in Ghana. We continue to provide support and counselling to the families and workmates who are impacted by these incidents. We shared the lessons from these and other serious incidents across our business.

We measure progress toward our goal of zero injuries through the all injury frequency rate (AIFR) which includes data for employees and contractors. At the end of 2009 our AIFR was 0.82, an improvement of 16 per cent from 2008. Over the last five years we have reduced our AIFR by 46 per cent. Our lost time injury frequency rate has also improved and was 0.43 per 200,000 hours worked in 2009.

Low injury rates do not mean that serious incidents will not happen. Our Semi Quantitative Risk Assessment (SQRA) process provides a rigorous approach to the identification and evaluation of higher consequence / lower frequency hazards. The risk reduction resulting from application of the SQRA process is used as a Group wide leading indicator for safety performance. Additionally we undertook seven process safety reviews of our higher risk facilities in 2009.

We have also implemented a significant potential incident reporting measure which promotes identification, investigation and sharing of lessons learnt from critical incidents and introduced streamlined root cause identification training for leaders to reinforce our incident investigation processes.

Contractor safety was a particular area of focus for us in 2009. Following a review of internal and external best practices, we strengthened our health, safety, environment (HSE) and quality management systems for supplier and contractor management and met with senior leadership of major contract companies to raise the profile of our HSE management expectations.

Our Safety Leadership Development Programme continued to be a pillar of our sustainable safety process. An updated programme focused on developing HSE skills within the Group was launched in 2009.

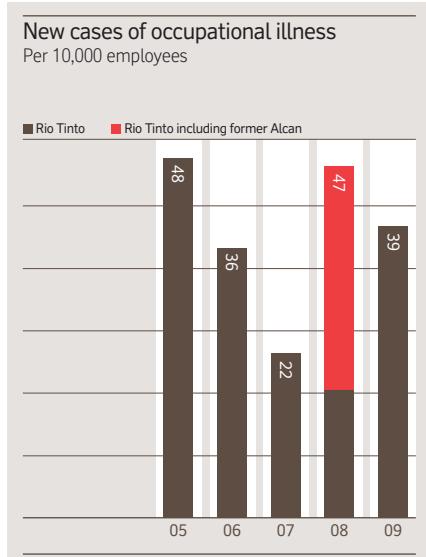
Rio Tinto has taken an active role in the Flight Safety Foundation, the world's foremost independent aviation safety organisation. We co-championed development of new aviation standards for the global mining and onshore resources industry. These new standards are being supported by a growing number of major mining companies and are expected to improve aviation safety for everyone involved in our industry.

We also support the Australian Royal Flying Doctor Service. The Rio Tinto Life Flight provides free of charge emergency jet services to patients in need of evacuation when time and distance are critical.

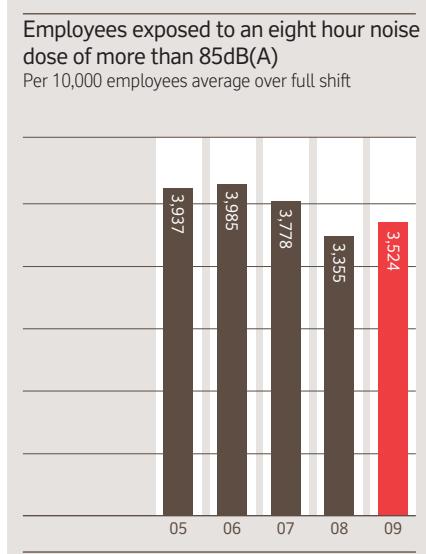
We are developing a framework to ensure new projects are managed safely and in line with our sustainable development requirements throughout their development life cycle. This framework will define our expectations for implementation of Group standards and systems, requirements for and training of leaders, and the assurance process for health, safety and environment engagements.

### Health

Our goal is no new cases of occupational illness. Whilst we have significantly reduced the number of occupational illness cases reported over the last five years, we have set a new Group target to further reduce the rate of new cases of occupational illness per 10,000 employees by 30 per cent between 2008 and 2013. The 2008 baseline for this target excludes operations that were divested or flagged for divestment during 2009. In 2009 we achieved a 21 per cent improvement.



Reported illnesses are mostly related to stress, musculo-skeletal disorders, and noise induced hearing loss. Therefore ongoing reductions will require further improvements in the management of risks posed by manual handling and noise exposure, as well as supporting healthy lifestyles through workplace wellbeing programmes.



We have also set a new Group target of a ten per cent reduction in the number of employees exposed to an eight hour noise dose of more than 85 decibels by 2013 from a 2008 baseline. In 2009, the number of employees reported as exposed increased by six per cent per 10,000 employees, primarily due to further improvements in monitoring programmes and operational changes such as moving from surface to underground

### Sustainable development review continued

activities, leading to changed exposure profiles at a number of our operations.

Assessing major noise sources and then implementing practical and cost effective noise controls is complex, particularly for heavy mobile equipment and noise sources in smelters. We have therefore established a community of practice to share learning and assist with the development of more effective noise reduction methods, including engineering solutions and alternative ways of working.

During 2009 our Pandemic Influenza Preparedness Plan was revised to incorporate the lessons we learned from the first wave of the H1N1 pandemic virus. Our European and North American sites were affected by the second wave, and the plan assisted them to manage the situation with minor disruptions to their daily activities.

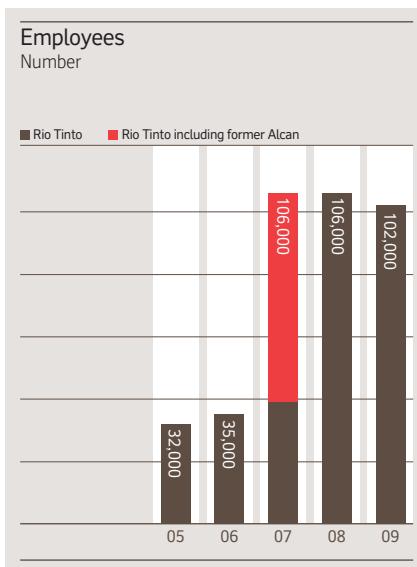
We believe that supporting healthy lifestyles will reduce health related risks such as fatigue, stress and obesity, with resultant improvements in health and safety performance and productivity.

Our new health and wellbeing strategy will result in greater support for our employees to lead healthier lives. We have continued to roll out our "Achieve Health" programme at our Australasian businesses and more than 3,000 of our people around the world signed up for our Be Active challenge in 2009. Four months after the challenge ended 65 per cent of people surveyed rated their health as above average or excellent, compared with only 33 per cent before the challenge started.

Rio Tinto operates in countries where the prevalence of HIV, tuberculosis and malaria is high. We are working closely with the international community engaged with these problems not only in Africa, but globally. 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.

#### Our people

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, religion or disability. Group companies employ disabled people and accept the need to maintain and develop careers for them. If an employee becomes disabled and, as a result, is unable to perform his



or her current duties, every effort is made to offer suitable alternative employment and to assist with retraining. We do not employ forced, bonded or child labour and we actively favour local employment where local candidates meet job requirements and laws allow. We recognise the right of all employees to choose to belong to a union and seek to bargain collectively. We strive to build a workforce that is aligned with our values, and that represents the diverse communities and geographies in which we operate.

In 2009, we employed 102,000 people, including the Group's proportionate share of consolidated companies and equity accounted units. Of these approximately 28,000 were located in North America, 28,000 in Europe, 20,000 in Australia and New Zealand, 8,000 in Africa and 7,000 in Latin America.

As a result of the impact of the global financial crisis on Rio Tinto, we reported a planned reduction of 14,000 roles globally (8,500 contractor and 5,500 employee roles) in 2008. The workforce was reduced by around 16,000 with careful monitoring to ensure no discrimination occurred and that the organisation has the talent necessary to deliver shareholder value in the future.

A diverse and skilled workforce is critical to our business success in the long term. Excluding the chief executive, 20 per cent of the chief executive's executive committee are women. However, we have not met our target of 20 per cent representation of women in senior management by 2009, achieving a 13 per cent representation. In 2010, our diversity focus will be expanded to address ethnicity and nationality.

By engaging with our employees about the business and their career aspirations, implementing individual development planning, coaching and feedback processes and valuing each individual's contribution, we position the organisation to achieve change and improvement in this key risk area.

Our total rewards strategy is designed to attract, retain and motivate our workforce. Base pay is reviewed regularly and adjusted taking into account the individual's role and local market trends as necessary. We also offer allowances, bonuses, share plans and healthcare benefits appropriate to the local markets. Short term incentive plans allow individuals to participate in the financial success of the business, while long term incentive plans help align individual objectives with shareholder interests.

As a result of the first Group wide employee engagement survey in 2008, targeted actions were implemented across the Group to increase levels of employee engagement in the areas of business leadership and direction, image and corporate social responsibility, and safety. The impact of these actions will be measured in a further survey in 2010.

Approximately 380,000 attendances were recorded for training courses in health, safety, environment, sustainable development and technical/operational skills in 2009. This is a significant increase on 2008 and is primarily due to increased availability of technology based learning.

We employ graduates from many disciplines including mining and process engineering; geology and geosciences; finance; human resources; health, safety and environmental sciences. In 2009, 200 graduates attended our Graduate Development Programme and we employed over 600 apprentices. Our targeted representation of women in the graduate intake fell slightly to 29 per cent in 2009.

Our local employment commitments are often managed through directly negotiated community benefit agreements. For example, in 2009:

- We remained the largest private sector employer of indigenous Australians and maintained our proportion of indigenous Australian employees at eight per cent of our Australian workforce.
- In Madagascar a transparent job seeker database was developed to assist with employment of local people. We now have 512 local employees and a Malagasy managing director.

- In Oman, where there is not an established pool of highly skilled potential employees, we almost met our five year commitment to locally hire 70 per cent of the Sohar Aluminium smelter workforce within its first year of operation.

Rio Tinto expects all employees to treat each other and external contacts with integrity, fairness and respect in line with our values. Our *Speak-OUT* programme was revised and reinforced in 2009, providing employees with an independent and confidential means of reporting concerns to senior managers.

### **Community engagement and regional economic development**

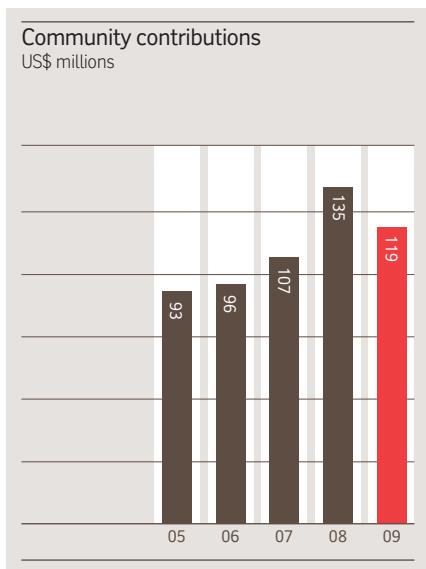
By understanding our socio-economic interaction in the regions where we operate, we optimise benefits and reduce negative impacts for communities and our operations alike. This interaction includes relationships with local suppliers, training and local employment, support for small to medium enterprises, optimal distribution of taxes and royalties, and support for multilateral socio-economic programmes. Infrastructure developed for our mines or processing plants can also benefit local communities and local businesses and governments.

Increased cash availability and wealth resulting from our presence in regions where there was previously little can inflate the price of goods and services locally. We manage such scenarios to avoid these negative outcomes. At our mineral sands project in Madagascar, for example, we developed and implemented influx and inflation mitigation strategies together with the local community.

Women in communities often disproportionately bear the burden of change brought about by mining and other developments. In recognition of this, we have launched *Why gender matters*, a guide to better incorporate gender considerations in our communities work. The guide is available on our website, [www.riotinto.com](http://www.riotinto.com).

To enable us to target the delivery of socio-economic programmes reflecting the priorities of local communities, we conduct community baseline, social impact and social risk assessments to identify potential positive and negative impacts of our presence, including human rights impacts. We use this information along with community input to develop multi-year communities plans at each operation.

During 2009 we completed 19 site managed community assessments, and we improved how we monitor progress



of findings and corrective actions identified through these assessments.

We have systems that actively involve communities in decision making processes about issues affecting them. At our Weipa bauxite mine, land management processes ensure that all relevant traditional landowners are consulted and their inputs sought together with our staff about land clearing on the mining lease.

In 2009, Rio Tinto businesses supported 2,479 socio-economic programmes covering a wide range of activities including health, education, business development, housing, environmental protection and agricultural development.

We spent an estimated US\$119 million on community assistance programmes in 2009 and payments into benefits receiving trusts set up in directly negotiated community impact benefit agreements. This is in addition to direct and multiplier economic contributions.

Without a planned approach to local enterprise development, local and sustainable supply chain opportunities can be eroded by a global approach to procurement. Accordingly, Rio Tinto Procurement developed a strategy to specifically nurture local business linkages in 2009. Similarly, Rio Tinto Alcan's regional industrial development programme seeks to facilitate downstream and diversified economic development.

In 2009 we established a Communities target, which requires all operations to have in place by 2013 locally appropriate, publicly reported social performance indicators that

demonstrate a positive contribution to the economic development of the communities and regions where we work, consistent with the Millennium Development Goals.

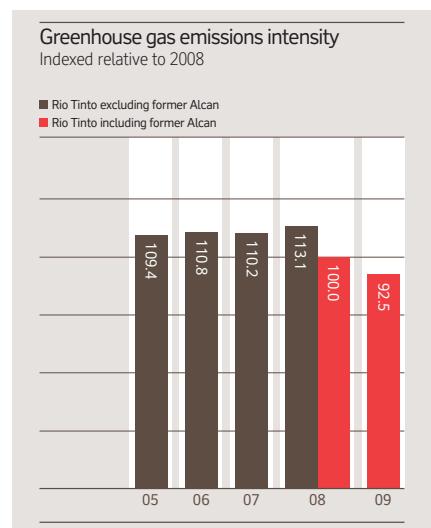
### **Environmental stewardship**

We continue to proactively manage 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, and are supported by our external partnerships with BirdLife, Earthwatch, Fauna & Flora International and Royal Botanic Gardens, Kew.

In 2009 we set new five year targets for a range of environmental metrics which are discussed in the sections below. We also made progress with the development of a formal relationship with IUCN.

### **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. Reducing the greenhouse gas (GHG) emissions intensity of our production is a key performance indicator for the Group and we aim to improve the energy intensity of all our operations. We are also working to identify step change opportunities to improve our performance over the longer term.



As a result of the Alcan integration, the emissions intensity of our production decreased by ten per cent between 2007 and 2008, reflecting the high percentage of low carbon energy within Alcan's smelter portfolio. Removing the effect of this acquisition, our intensity would have increased in 2008.

### Sustainable development review continued

In 2009 we set a new target to reduce our total GHG emissions intensity by six per cent between 2008 and 2013. A further four per cent reduction is targeted to give an overall ten per cent reduction by 2015 as a result of the expected completion of planned capital projects. We index our performance relative to 2008 as the base year.

During 2009, our GHG emissions intensity reduced by 7.5 per cent, largely as a result of divesting the Ningxia aluminium smelter in China, which is powered by coal based electricity, and reduced production at a number of operations with a higher than average emissions intensity. We expect some reversal of this positive performance in future years as production levels increase.

Our total GHG emissions, defined as the sum of on site emissions and those from the net purchase of electricity and steam minus net carbon credits voluntarily purchased from, or sold to, recognised sources, were 41.0 million tonnes of carbon dioxide equivalent, nearly nine million tonnes lower than in 2008. This is the result of asset divestments and reduced levels of production at some operations. Rio Tinto's on site emissions were 26.1 million tonnes in 2009.

We operate in an energy intensive sector and we seek to improve the greenhouse gas emissions over the full life cycle of our products. For instance, Rio Tinto Alcan is a leader in the development of energy efficient aluminium smelting technology. While it represents 71 per cent of the Group's energy use, it only produces 64 per cent of our total GHG emissions due to its low carbon energy portfolio.

We recognise that there are significant GHG emissions associated with the transportation, processing and use of Rio Tinto's products. In 2009, the three most significant sources of indirect emissions associated with our products were:

- Approximately 4.5 million tonnes of CO<sub>2</sub>-e associated with third party transport of our products and raw materials.
- An estimated 120 million tonnes of CO<sub>2</sub>-e associated with customers using our coal in electricity generation and steel production.
- Approximately 330 million tonnes of CO<sub>2</sub>-e associated with customers using our iron ore to produce steel. These emissions are not in addition to the coal use emissions above, as some customers use both our iron ore and our coal to produce steel.

Emissions associated with third party transport and combustion of our coal reduced significantly in 2009 with the divestment of Rio Tinto Energy America.

Due to global demand, coal is likely to remain a significant source of energy for the foreseeable future. We are therefore investing in developing and commercialising carbon capture and storage (CCS) technology. In particular, we continued to progress our studies on the Hydrogen Energy California project, a joint venture with BP. Rio Tinto is a founding member of the Global CCS Institute and supports other collaborative efforts to deploy the technology, such as the CO2CRC's Otway Basin geosequestration project in Australia.

Where we can influence our customers, we work to develop efficient downstream processes, and our metals and minerals can bring energy and emissions benefits. For example:

- Uranium is used in low carbon power generation.
- Our high purity ductile iron is used in the production of wind turbines.
- Aluminium makes cars lighter, reducing the amount of fuel used during their operation, and it can be efficiently recycled.

During 2009 climate change legislation was debated in a number of jurisdictions in which we operate. Rio Tinto continued to participate in collaborative efforts to promote effective public policy frameworks to address climate change, including the US Climate Action Partnership and submissions on proposed legislation to governments in Australia, the US, the EU and Canada. A comprehensive programme is under way to prepare the Group for climate legislation.

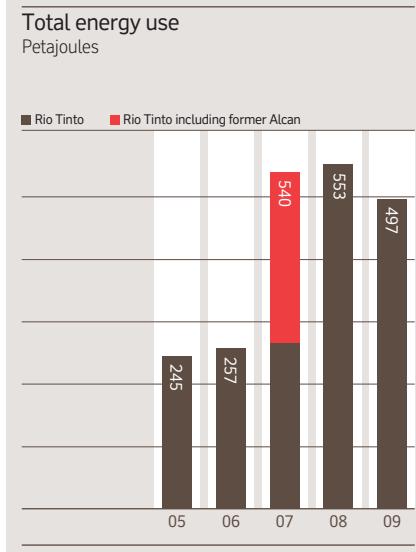
Rio Tinto's operations are exposed to the physical risks of climate change. In 2009 our Energy & Climate Strategy group commenced a review of progress in identifying, managing and communicating these risks to better coordinate and support the integration of projected physical climate change risks in project planning and operations.

#### Energy use

Rio Tinto both consumes energy in its operations and produces it, with significant electricity generation at our hydropower facilities in Canada and in other locations. Our smelting and mineral processing operations are energy intensive and depend on hydroelectricity, nuclear power, coal, oil, diesel and gas to keep them running.

This year our energy use decreased from 553 to 497 petajoules. This change has been influenced by the divestment of the energy intensive Ningxia aluminium smelter and reduced production for some commodities.

Rio Tinto uses a significant portfolio of hydro, nuclear and other renewable power sources



in its energy mix, which represented 70 per cent of our electricity use in 2009. A number of new projects and technology upgrades that are either under way or planned will ensure that we use electricity available from our hydroelectric sources with greater efficiency.

To drive improvement in energy efficiency our businesses have set a range of local energy targets that cover nearly three quarters of the Group's energy use.

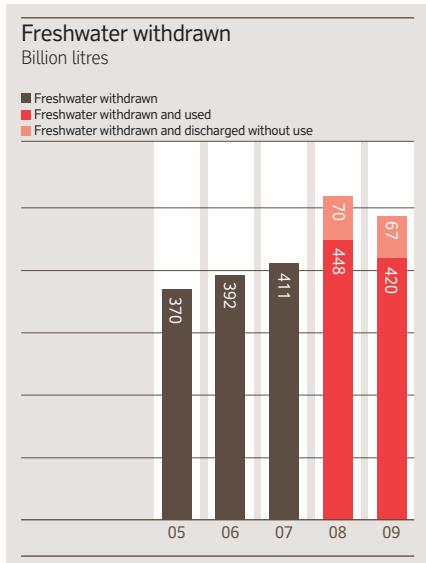
The Group is working to reduce the energy intensity of new projects through demand reduction using asset design and the development of alternative sources of energy supply. We are also currently developing step change technologies for several of our products, including the drained cathode cell for aluminium production. This has the potential to significantly reduce the amount of energy required to produce aluminium.

#### Water

Our water strategy provides a framework for addressing water related business risk and improving performance, and we focus on ways to minimise the amount of water we remove from the environment, reuse it whenever we can, and return it to the environment meeting regulatory limits.

Following the increase arising from the inclusion of water withdrawal data for the former Alcan operations in 2008, our freshwater withdrawal decreased by six per cent to 487 billion litres in 2009, with lower water demand at a number of operations where production was reduced.

We set a new Group water target to reduce our freshwater use per tonne of product



by six per cent by 2013 from a 2008 baseline. Freshwater use excludes water that is extracted for ground control and discharged without use in our processes. In 2009 we increased our freshwater use per tonne of product by four per cent. Although total freshwater use did decrease this year, the scale efficiencies achieved with high production rates in 2008 were not maintained as water use is not directly related to production rates at all operations. Internal local recycling and ecological targets support the Group water target.

We continued to support the development of water strategies at our businesses aligned with the Rio Tinto water strategy, and supported new projects to ensure that efficient practices are in place at mine commencement. Our water risk reviews support this strategic work and a total of 40 operations and new projects have completed reviews since 2005, including five in 2009.

Rio Tinto engages with governments on emerging water policy. We chair a water working group as part of the Minerals Council of Australia with the main focus in 2009 being development of a water account for Australian industry as part of a government-industry project to report on consistent water metrics across industry. We also engage on key water initiatives with organisations committed to sustainable water management such as the World Economic Forum.

## Land

We manage just over 41,000 square kilometres of land, excluding our exploration leases. At the end of 2009 our activities had impacted nine per cent of this area. Our disturbance

footprint doubled in 2009, primarily because the land utilised for Rio Tinto Alcan's hydroelectric dams in Quebec was reported for the first time in terms of Rio Tinto's reporting definitions, following full implementation of our land use stewardship standard by former Alcan operations.

In line with leading practice, we aim to rehabilitate land as it comes out of mining use rather than waiting until all operations at the site have ceased. By the end of 2009, 24 per cent of our disturbed land (excluding land disturbed for hydroelectricity dams) had been rehabilitated. An internal rehabilitation target helps to drive performance improvements.



In 2009 we formalised a programme to explore the threats and opportunities for the Group arising from emerging green markets in biodiversity, carbon, water and other ecosystem services. The Natural Capital Project has commenced exploring the ecosystem service values of our extensive non operational landholdings. Through our collaboration with the IUCN economics group we have undertaken a preliminary assessment of the biodiversity value of forest conservation projects in Madagascar. This groundbreaking work is being developed as a pilot project as part of the WBCSD Ecosystem Valuation Initiative. Rio Tinto also sponsored an IUCN paper on the cost of Reducing Emissions from Deforestation and Degradation (REDD). This paper was published as part of the Copenhagen Climate Change discussions in December 2009.

## Biodiversity

The potential for impact on biodiversity makes our projects sensitive for external

stakeholders and employees. Rio Tinto's future success depends on our ability to manage these issues. Our biodiversity strategy, launched in 2004, provides this management framework with a goal to have a "net positive impact" (NPI) on biodiversity.

We continue to work with our conservation partners to improve implementation of the strategy and have commenced piloting offset methodologies in Madagascar and the Hunter Valley, Australia.

Tools and methodologies have been developed to assess the biodiversity values of Rio Tinto's landholding. In 2009 a methodology for developing biodiversity action plans (BAPs) was completed in collaboration with Fauna & Flora International (FFI). A public version of this methodology is available on the FFI website ([www.fauna-flora.org](http://www.fauna-flora.org)).

Thirty two per cent of our operations where the baseline biodiversity status had been fully assessed ranked as having very high biodiversity values and 21 per cent ranked with high values in 2009. Our biodiversity values assessment has now been rolled out to the former Alcan operations, enabling implementation of our biodiversity strategy.

2009 also saw a strong focus on the implementation of BAPs at sites with very high and high biodiversity values. Rio Tinto Coal Australia completed regionally focused BAPs for five sites in New South Wales and Queensland. BAPs are under development at a further 23 sites in seven countries. Biodiversity action planning will continue through 2010 at sites that have been ranked as having very high and high biodiversity values. An internal target supports our goal of achieving NPI at these sites.

## Economic prosperity

We use our expertise to harness resources, creating prosperity for our shareholders, employees, communities, governments and business partners.

Our direct economic contribution into the local and regional economies where we operate was US\$44,844 million in 2009. This amount includes:

- US\$6,696 million spent on wages and salaries.
- US\$21,363 million in value add, equivalent to the sum of all labour payments, the taxes and royalties disbursed to governments and others, plus all returns to capital.

## Supply chain

We adopt a life cycle view of our products so as to maximise the value to society while minimising negative impacts of products,

### Sustainable development review continued

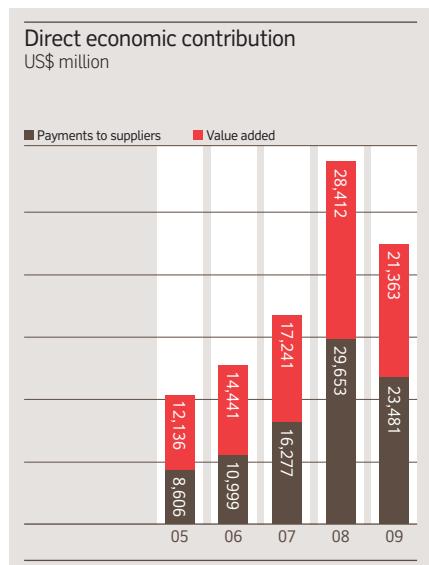
and encouraging those along the supply chain to adopt similar practices.

In 2009, we spent US\$23,481 million on goods and services with over 58,000 suppliers, a US\$6,172 million reduction compared to last year, due to reduced capital spending, capacity curtailment and cost reductions. Our programme of supplier engagement includes sustainable development criteria in its contracts, and our statement of procurement principles is available on our website.

Payments to suppliers are a major benefit to the economy, generating employment and creating wealth. As an example in 2009 a US\$200 million mining contract was awarded to a joint venture between native title holders the Eastern Guruma and a mining services company, NRW. The contract to build, mine and transport iron ore from Rio Tinto's Western Turner Syncline deposit is the first significant mining joint venture for the Eastern Guruma people, and continues the comprehensive Rio Tinto commitment to indigenous contracting in the Pilbara region of Western Australia.

We develop and regularly update lifecycle assessments for all our major products, including aluminium, iron ore, copper, coal, uranium, gold and silver. By understanding the health and environmental impacts and benefits of our products over their complete life cycle, we gain knowledge on how to improve our processes, expand our information to the marketplace, and differentiate our products from our competitors.

This knowledge is also used to ensure compliance with new chemicals regulations, such as the European Union Registration, Evaluation, Authorisation and Restriction of



Chemicals legislation and the UN Globally Harmonized System of Classification and Labelling of Chemicals.

Rio Tinto is engaged in industry wide stewardship initiatives to support responsible production and help develop leading practices and recognised standards. We are an active member of the Responsible Jewellery Council, and of stewardship initiatives for other commodities such as uranium, copper, steel and aluminium.

The supply of our products often involves marine transportation which can impact oceans, and we have joined the World Ocean Council to help create a responsible ocean business community. We completed a strategic review of environmental risk related to our shipping activities as part of our marine stewardship programme.

#### Non managed operations

Rio Tinto holds ownership interests in companies it does not manage. However, we remain closely engaged through membership of the boards of directors and of technical committees. We believe that the principles in *The way we work* are universal. In our dealings with joint venture partners and non controlled companies in which we participate, we therefore make every effort to ensure that the standards of conduct in *The way we work* are respected at all times.

Examples include Escondida copper mine in Chile, the Grasberg copper-gold mine in Indonesia, and the Oyu Tolgoi copper project in Mongolia.

Rio Tinto has a 30 per cent interest in Escondida, which is managed by BHP Billiton. Our seats on the mine's Owners' Council allow us regular input on strategic and policy matters. We also played a part in establishing the Escondida Foundation, which is funded by one per cent of the mine's pre-tax profits and is the vehicle through which Escondida fulfils some of its social responsibilities.

The Grasberg mine is majority 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. There were two fatalities at Grasberg in 2009.

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 these principles. At least one per cent of the mine's net sales are committed to support village based programmes which represents cumulative funding of US\$400 million since 1996.

The mine continues to refine its management of its tailings discharge, including containment, understanding revegetation and long term closure options. There have been significant improvements in tailings management at the Grasberg mine, including construction of lateral dikes to limit the surface area disturbed by tailings deposition in the lowlands and protect adjacent river systems, diversion of the Ajkwa river system to preserve its water quality and enhance tailings retention within the deposition area, successful progressive rehabilitation of the now inactive tailings within the Ajkwa diversion area and of new islands forming at the mouth of the diversion area, and completion of an ecological risk assessment.

Rio Tinto and Ivanhoe signed an Investment Agreement with the Mongolian Government to develop the Oyu Tolgoi copper-gold project in 2009. As a result we increased our stake in Ivanhoe to 19.7 per cent.

This 30 year agreement commits all parties to supporting the regional development of the South Gobi region. It also commits Oyu Tolgoi to employing a minimum of 60 per cent Mongolian workers, including contractors, during construction and 75 per cent Mongolian workers, including contractors, during operations. It further commits Oyu Tolgoi to no less than a 90 per cent Mongolian workforce as direct employees of the business throughout the life of the operation. There was one fatality at Oyu Tolgoi in 2009.

#### Assurance

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

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

In addition, we engaged an independent external assurance organisation, PricewaterhouseCoopers (PwC), to provide the board of directors of Rio Tinto plc and Rio Tinto Limited assurance on selected sustainable development subject matter, as explained below.

PwC's assurance statement satisfies the requirements of subject matters one through four of the ICMM assurance procedure while our online GRI report has been checked by GRI, satisfying subject matter five of the ICMM procedure.



## Independent Assurance Report to the Directors of Rio Tinto plc and Rio Tinto Limited on selected sustainable development subject matter

For the purposes of this Report, the Group comprises Rio Tinto plc and Rio Tinto Limited and the entities they control as at 31 December 2009 (hereafter "Rio Tinto").

As a founding member of the International Council on Mining and Metals ('ICMM') Rio Tinto has committed to obtaining assurance over specified subject matter in its Report in line with ICMM's *Sustainable Development Framework: Assurance Procedure* ('the ICMM Assurance Framework').

We have been engaged to provide limited assurance on selected sustainable development subject matter (the "selected subject matter") included in the Sustainable Development Review Section ("SDR Section") of Rio Tinto's *Annual report* (the "Annual Report") for the year ended 31 December 2009.

### The selected subject matter

The selected subject matter was chosen by Rio Tinto with consideration given to the subject matters contained within the ICMM Assurance Framework ("ICMM Subject Matters"). It comprises the following information reported within the SDR Section of the *Annual report*:

- Rio Tinto's assertion that it has incorporated the requirements of the ten Sustainable Development principles of the ICMM into its own policies, strategies and standards ("ICMM Subject Matter 1")
- Rio Tinto's assertions regarding the approach that it has adopted to identify and prioritise its material sustainable development risks and opportunities included within the SDR Section of the *Annual report* ("ICMM Subject Matter 2")
- Rio Tinto's assertions regarding the existence and status of implementation of systems and approaches used to manage the following sustainable development risk areas ("ICMM Subject Matter 3"):
  - Safety
  - Health
  - Greenhouse gas emissions
  - Energy use
  - Water
- The following performance data related to the material sustainable development risks identified under ICMM Subject Matter 3 ("ICMM Subject Matter 4"):
  - All injury frequency rate
  - Lost time injury frequency rate
  - Number of fatalities

- New cases of occupational illness per 10,000 employees
- Employees exposed to an 8 hour noise dose of more than 85 dB(A) per 10,000 employees average over a full shift.
- Total greenhouse gas emissions
- Total energy use
- Total freshwater withdrawn

We note that the selected subject matter did not extend to:

- Rio Tinto's self declared application level of the Global Reporting Initiative ("GRI") G3 Sustainability Reporting Guidelines ("ICMM Subject Matter 5") or
- The alignment of Rio Tinto's sustainability policies against ICMM position statements.

### Respective responsibilities of Rio Tinto management and PricewaterhouseCoopers

The directors of Rio Tinto are responsible for preparing the selected subject matter based on Rio Tinto Criteria for Reporting on Sustainable Development Performance (the "Reporting Criteria"). The Reporting Criteria are available on Rio Tinto's website [www.riotinto.com/ourapproach](http://www.riotinto.com/ourapproach).

Our responsibility is to express a conclusion on the selected subject matter based on our procedures. The procedures selected depend on our judgment, including an assessment of the risks of material misstatement.

We read other information included within the SDR section in the *Annual report* and consider whether it is consistent with the knowledge obtained through our procedures. We consider the implications for our report if we become aware of any apparent material inconsistencies with the selected subject matter. Our responsibilities do not extend to any other information.

This report, including the conclusion, has been prepared for Rio Tinto to assist the directors in reporting Rio Tinto's sustainable development performance. We consent to the inclusion of this report within the *Annual report* to enable Rio Tinto's members to verify that the Directors have discharged their governance responsibilities by commissioning an independent assurance report in connection with the selected subject matter. We do not accept or assume responsibility for our work or this report to anyone other than the directors as a body and to Rio Tinto save where terms are expressly agreed and with our prior consent in writing.

### Inherent limitations

Non-financial performance information is often subject to more inherent limitations than financial information, given the

characteristics of the subject matter and the methods adopted for the definition and gathering of information. Qualitative interpretations of relevance, materiality and the accuracy of sustainable development data and assertions are subject to individual assumptions and judgements. It is important to read the subject matter in the context of Rio Tinto's Reporting Criteria.

### Assurance work performed

We conducted our assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised)

- "Assurance Engagements other than Audits and Reviews of Historical Financial Information" issued by the International Auditing and Assurance Standards Board ("ISAE 3000"). Our procedures applied to the selected subject matter primarily comprised:

- Making enquiries of relevant management of Rio Tinto
- Evaluating the design of the key processes and controls for managing and reporting the subject matter
- Testing, on a selective basis, the preparation and collation of the subject matter prepared by the management of Rio Tinto
- Undertaking analytical procedures over the reported data
- Reviewing a sample of relevant management information and documentation supporting assertions made in the subject matter

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement under ISAE 3000. It generally excludes procedures such as testing the operating effectiveness of controls and corroborative data testing.

### Conclusion

Based on our review, which is not an audit, nothing has come to our attention which causes us to conclude that the selected subject matter for the year ended 31 December 2009 has not been prepared in all material respects in accordance with the Reporting Criteria.

*PricewaterhouseCoopers*

PricewaterhouseCoopers

*Liza Maimone*

Liza Maimone, Partner

Melbourne, 5 March 2010

Liability Limited by a Scheme under Professional Standards Legislation

# Aluminium

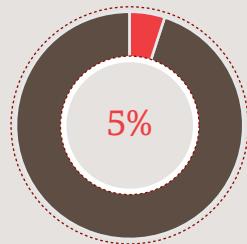
Jacynthe Côté, chief executive, Rio Tinto Alcan



## 2009 Operational highlights

US\$ million	
Revenue	12,038
Operating cash flow	688
Underlying earnings	(578)
Capital expenditure	1,690
Net operating assets	35,992

### Operating cash flow contribution



### Underlying earnings contribution\* 2007 – 2009 US\$m

	2007	2008	2009
1,040			
(207)			
(55)			
1,073			
(86)			
(495)			
1,271			
(2,243)			
(4)			
(41)			
233			
206			
(578)			

Price and exchange  
Inflation  
Volume  
Costs  
Tax and other  
Price and exchange  
Inflation  
Volume  
Costs  
Tax and other

2007 comparatives have been restated to remove Engineered Products.

\* A reconciliation of the net earnings with underlying earnings for 2008 and 2009 as determined under EU IFRS is set out on page 22. All amounts presented by the product groups exclude net interest and other centrally reported items.

## Transforming the Aluminium business

The Aluminium product group, Rio Tinto Alcan, is a global leader in the aluminium industry. Its operations are closely integrated across the globe, and include mining high quality bauxite, refining alumina for both primary aluminium production and specialty alumina markets, and producing primary aluminium at some of the lowest cost, most technologically advanced smelters in the industry. Rio Tinto Alcan is renowned for its technology leadership as well as its advantaged position among aluminium producers in generating clean, renewable hydroelectricity.

For production and reserves see page 62

### Strategy

- Deliver on our baseline commitments including customer service, sustainable development, and ensuring the safety of our employees.
- Continue our journey of transformation and deliver on cost improvements.
- Surpass our synergy target and complete the integration process, which includes accelerating our cultural integration.
- Protect and enhance our superior growth options while preserving cash.

### Achievements

- Reduction of 22 per cent in the all injury frequency rate from 2008 to 2009.
- Delivered after tax synergy benefits of US\$924 million during 2009 with an annualised sustainable run rate of US\$1.1 billion at the end of 2009.
- Transformational change to both administrative and production costs drove further efficiencies across the entire organisation.
- Strategically managed sustaining capital expenditure allocations, and completed value improvement exercises at major capital project sites to improve long term costs.
- Adjusted production of bauxite, alumina and aluminium to align with the downturn in market demand.

### Key priorities

- Improve safety performance towards the objective of zero harm.
- Maintain focus on transformational change to enhance margins, reduce operating costs and optimise efficiencies at all operations worldwide.
- Continue to align production levels with market requirements.
- Drive additional value growth initiatives such as capital efficiency projects and research and development programmes.
- Strategically progress key projects including the Yarwun 2 expansion project (Australia), Kitimat Modernisation Project, AP50 pilot plant and Shipshaw optimisation (Canada).

### Outlook

- Rio Tinto Alcan remains committed to delivering on operational efficiencies and improving its baseline cost structure.
- Major cost reduction measures and further aligning production with market demands are expected to position Rio Tinto Alcan to continue to lead the restructured global aluminium industry going forward.
- To build stronger margins and remain long in bauxite and alumina, the group holds the world's largest bauxite reserves and a competitive position in the alumina sector.
- Carbon trading and emissions regulations will factor strongly in the coming years, particularly in OECD countries, and the group's AP technology and clean energy sources are expected to provide advantages in a carbon constrained marketplace.

## Performance

In 2009, Rio Tinto Alcan's annual bauxite production was 30.7 million tonnes, down from 35.0 million tonnes in 2008 mainly due to production curtailments at Weipa, Australia. The group has a leading position in alumina refining and full ownership or participation in 21 aluminium smelters with a total annual capacity of nearly 4.0 million tonnes (Rio Tinto's share), the vast majority of which are located in OECD countries.

In the current environment of weaker than average demand, the group retains a competitive advantage, as about 80 per cent of its aluminium is produced in the first half of the industry cost curve and it has curtailed higher cost production. Rio Tinto Alcan's favourable cost position, especially with regard to energy inputs, has benefited the business during the current global economic downturn.

In 2009, Rio Tinto Alcan's contribution to underlying earnings was a negative US\$578 million, a decrease of US\$1,849 million from 2008. This is mainly due to the sharp decline in LME prices experienced during the first half of 2009, coupled with the continuing economic downturn in most markets. The effects of the LME and market conditions were partially reduced by improved raw material costs through negotiation of prices, lower oil prices, and lower cash costs due to cash initiatives, production curtailments, and ongoing synergy benefits. Second half EBITDA improved by over US\$1 billion compared to the first half as transformational initiatives enabled Rio Tinto Alcan to be well positioned for the aluminium price recovery.

The average aluminium market price in 2009 was US\$1,701 per tonne compared with US\$2,620 per tonne in 2008. The group's average realised price for ingot products in 2009 was US\$1,833 compared to US\$2,753 in 2008.

## Strategy

Rio Tinto Alcan will continue to deliver on its baseline commitments, including customer service, sustainable development and ensuring employee safety. The group will also remain focused on delivering value through large scale, long term cost competitive assets.

Financial performance will be founded on continued transformational change, a reduced cost structure, and robust cash management. Cash preservation and optimisation of working capital remain key ongoing priorities. Synergy targets and completing integration, including cultural integration by aligning systems

and exchanging personnel with other Rio Tinto businesses, will also be key.

Strategically protecting and enhancing our superior growth options has meant slowing growth oriented capital expenditures. Value improvement projects at selected sites are targeting 20-30 per cent reductions in capital costs for major projects. In the medium term, previously announced modernisations or closures are expected to move our portfolio even further down the industry cost curve. This will allow us to create value throughout future economic cycles and reduce our global carbon footprint.

Our business strategy also includes being long in bauxite and alumina. This supports our growth and ensures that the group is not exposed to the asymmetric alumina pricing risk when the global alumina market falls into deficit. Expansion of the Yarwun refinery in Australia will increase alumina production by two million tonnes per annum. Slowing of construction has resulted in a revised completion date for the second half of 2012.

## Key achievements

Synergies from the integration of Alcan were delivered ahead of target despite economic pressures and capital constraints. This was achieved using only 70 per cent of the planned operational expenditure, and 23 per cent of the planned capital expenditure. Furthermore, full recurring synergies delivered are expected to exceed the previously stated US\$1.1 billion target.

At the end of 2009, Rio Tinto Alcan had closed, sold or curtailed approximately ten per cent of its aluminium smelting production, which represents the removal of a significant portion of its capacity in the top half of the cost curve. The group has also slowed selected projects, using the delay to complete value improvement exercises aimed at improving costs for the long term.

Transformational change to both administrative and production costs drove further efficiencies across the entire organisation.

In addition to completion of the Ningxia joint venture sales transaction in China, strategic divestments included the sale of the group's 80 per cent interest in the Ghana Bauxite Company, including the Awaso bauxite mine, as it was not aligned with our long term strategy. The sale was completed on 1 February 2010.

The Sohar Aluminium smelter in Oman, which poured its first metal in 2008, reached its full capacity of 360,000 tonnes per annum in 2009. The state of the art

smelter uses Rio Tinto Alcan's benchmark AP36 technology – a highly efficient and environmentally friendly smelting technology.

Energy efficiency improved by one per cent over last year in North America due to aggressive improvement targets at each of the group's smelters, energy self audits to reduce natural gas consumption at anode baking furnaces, and auxiliary natural gas consumption reductions. These initiatives required no additional investment from Rio Tinto Alcan.

Despite economic pressures, safety was a top priority and overall, the group achieved a 22 per cent reduction in the all injury frequency rate from 2008 to 2009.

## Safety

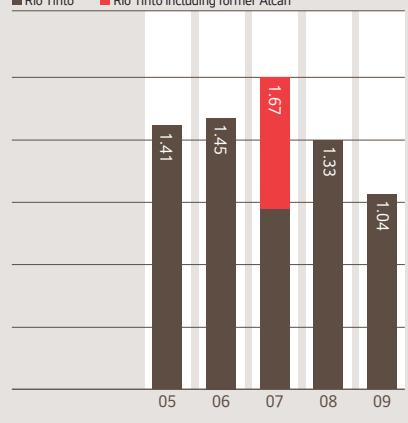
Rio Tinto Alcan and its employees have integrated Rio Tinto safety performance standards and risk management practices throughout its businesses. The ultimate goal remains zero harm. Regrettably, one fatality occurred at the Ghana Bauxite Company site in August 2009.

A key priority has been the reduction of major risks through the implementation of Rio Tinto HSE performance standards and risk management practices. At critical sites, Process Safety Management to prevent collapse, fire, and explosion as well as the release of toxic, reactive, flammable, or explosive materials has progressed significantly.

During 2009, the integration process was successfully completed including key elements of the Rio Tinto HSEQ management system and deployment of the Safety Leadership Development Programme.

All injury frequency rate  
Per 200,000 hours worked

■ Rio Tinto ■ Rio Tinto including former Alcan



### Aluminium continued

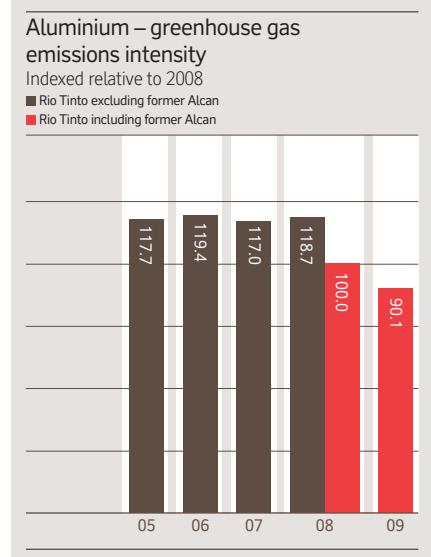
Completion of this work lays the foundation for establishing clear global priorities and common business standards.

Rio Tinto Alcan's all injury frequency rate (AIFR) of 1.04 at the end of 2009 represented a 38 per cent reduction over the 2007 integrated former Rio Tinto Aluminium and Alcan baseline.

#### Greenhouse gas emissions

Total greenhouse gas emission intensity at Rio Tinto Alcan reduced by 9.9 per cent for aluminium. This is the result of the divestment of the Ningxia joint venture smelter in China, closure of some older operations, curtailment of production at selected facilities and increased operational efficiency.

Rio Tinto Alcan is a leader in the generation of low GHG intensity power, with projects in place to continue improvements to overall site performance, as well as leverage energy efficiency, best practice sharing, and research and development efforts to achieve both GHG reductions and low carbon targets.



Rio Tinto Alcan contributes 64 per cent of Rio Tinto's total GHG emissions. Our achieved and continued reductions also contribute significantly to the Rio Tinto Group's overall intensity improvements.

Furthermore, Rio Tinto Alcan products play an important role in attaining sustainable downstream GHG savings across numerous commercial and civilian sectors, notably in automobiles, trucks, buses and trains. Aluminium can also be recycled indefinitely without compromising its quality.

#### Integration of Alcan

The integration of Alcan delivered after tax synergy benefits of US\$924 million during 2009 with an annualised sustainable run rate of US\$1.1 billion at the end of 2009. Despite economic turbulence and capital constraints, the integration programme has successfully achieved its US\$1.1 billion target for 2010 using only 70 per cent (US\$173 million) of the planned operational expenditure, and 23 per cent (US\$122 million) of the planned capital expenditure. As remaining projects realise their full potential in 2010, the full recurring synergies delivered are expected to be US\$1.2 billion per year, which exceeds the stated target of US\$1.1 billion.

The delivered benefits are derived from a range of business areas such as logistics and operations. The operating synergies are driven primarily by cost reduction initiatives in procurement and combining knowledge and resources between business units, by optimising Australian bauxite production which, when ramped up, is expected to result in synergies of US\$24 million annually. Within the worldwide Primary Metal Research & Development function, optimisation and coordination of research project streams generated annualised savings of US\$22 million.

As we conclude the integration programme, synergies will become embedded into normal business operations. Deferred projects will be transferred to Business Improvement teams for future realisation, and best practices will continue to be shared across Rio Tinto.

#### Review of operations

In addition to meeting synergies and integration targets, cash preservation and optimisation of working capital remain key priorities. Improvement programmes and reductions have targeted both structural and cyclical elements such as the cost of key inputs including coke, caustic and pitch. To sustain input cost reductions over the longer term, Rio Tinto Alcan widened its specification ranges, capitalised on logistic opportunities, and leveraged its position as a part of the Rio Tinto Group during procurement negotiations.

Rio Tinto Alcan permanently closed or divested higher cost facilities to centre its asset base on top tier, large scale assets. The Beauharnois smelter in Quebec ceased smelting operations in April and the Anglesey Aluminium Metal joint venture in the UK closed in September. Regional industrial development teams have assisted both sites to reduce the impact of the closure on the

community and identify potential long term projects such as a remelt and recycling centre at Beauharnois and a standalone casting centre at Anglesey. The sale of Rio Tinto Alcan's share of the Ningxia smelter in China was completed in 2009.

The group also temporarily curtailed production capacity at selected facilities worldwide. Globally, the business has closed, sold or curtailed approximately ten per cent of its aluminium smelting production as at the end of 2009, which represents the removal of a significant portion of its capacity in the first half of the cost curve.

Bauxite and alumina production was also adjusted to align with market demand and internal requirements. Bauxite production was curtailed by 12 per cent globally, including a 3.8 million tonne reduction at Weipa, and alumina capacity was curtailed by two per cent. Cost reduction and cash conservation initiatives included slowing construction of the Yarwun alumina refinery expansion in Australia, introducing a flexible production model at the Jonquière (Vaudreuil) refinery in Canada and lowering operating costs. At year end, 76 per cent of bauxite production and 36 per cent of alumina production were situated in the lower half of their respective cost curves.

Primary Metal operations in North America delivered 182 per cent on anticipated synergies and integration targets. Efficiency was greatly improved by a strong commitment to Business Improvement and quick, integrated deployment of Improving Performance Together (IPT) asset management and LEAN methodologies. Primary Metal, Asia Pacific also exceeded its synergy targets by 47 per cent at its smelting operations.

To further global competitiveness, a restructuring programme is under way in France to improve productivity by 20 per cent and align production costs with the global industry average. This will position both the smelters and alumina operations to take advantage of potential carbon constraints and the benefits of nuclear electricity.

After registering a low of US\$1,367 per tonne in February, average monthly LME prices trended upward during the rest of the year, reaching US\$2,213 per tonne in December. Automobile production in the US, Japan and Western Europe has begun to increase. Industrial production and semis shipments in these regions have also moved upward since reaching a trough in the April-June 2009 period.

The Chinese aluminium market moved from being a slight net exporter during the last five years to a net importer. But as a result of slower economic growth earlier in the year and dramatic capacity curtailments in the domestic aluminium industry, an energy surplus has emerged, pushing down the cost of production and encouraging restarts of aluminium capacity. It is likely that the energy situation will prove to be temporary. Ongoing urbanisation and increases in standards of living will drive competition for energy, moving China back into an energy deficit and placing upward pressure on costs.

Because the aluminium industry took a significant amount of high cost capacity offline in 2009, average industry costs have declined, resulting in a flattening of the aluminium cost curve. This is likely to be temporary and to reverse as demand picks up and causes some restarts of higher cost smelters. If this occurs, a steeper cost curve will emerge, favouring low cost producers such as Rio Tinto Alcan.

The group has therefore prioritised the protection and enhancement of its superior growth initiatives, although no new capacity is planned before 2012 and large scale projects worldwide have been slowed. This delay has been used to complete value improvement exercises aimed at reducing costs for the long term. Both the AP50 pilot plant in Quebec and the Kitimat Modernisation Project in British Columbia are working to implement the latest in low energy consumption technology, maximise their use of existing infrastructure, and apply lean construction principles in the years ahead.

Rio Tinto Alcan has also signed a memorandum of understanding with the Government of Cameroon in preparation for a greenfield project that includes a hydropower dam, aluminium smelter and port facilities. Construction is expected to begin toward the end of 2011, with first metal in 2016.

The Shipshaw power station optimisation is on budget and on schedule, and is expected to improve this major component of Rio Tinto Alcan's extensive hydroelectric network in Quebec, which has a total installed capacity of approximately 2,900 megawatts.

## Outlook

In the short term, Rio Tinto Alcan remains committed to delivering on operational excellence and improving its baseline cost structure. By maintaining major cost reduction measures made in 2009, we expect that the business will be in a strong position to lead the restructured global aluminium industry going forward. Rio Tinto Alcan will continue aligning production with sales and marketing needs. As part of an ongoing reorganisation of its operating structure in France, the group will adopt cost reduction measures for selected European aluminium and specialty alumina operations.

Global aluminium consumption growth is expected to grow in the range of four to six per cent during the next decade, supported by China's continued urbanisation, industrialisation and economic development, as well as that of developing economies such as India, Indonesia and Brazil. Our analysis suggests that by 2020, meeting increased demand will require the equivalent of one new Quebec smelting system every nine months, as well as the equivalent of a fully expanded Yarwun every year, and a Weipa every three years.

Because Rio Tinto Alcan's energy costs are believed to be less linked to pricing on the London Metal Exchange than other large producers, we are well positioned to capture value when prices rise. The group intends to leverage this advantage through growth and additional efficiency initiatives.

Carbon trading and emissions regulations will factor strongly for aluminium in the coming years, particularly in OECD countries. The New Zealand government has a legislated Emissions Trading Scheme, expected to include the NZAS joint venture from July 2010, and the Australian government has proposed a carbon pollution reduction scheme to commence in July 2011. As of 2013, Rio Tinto Alcan sites within the European Union will join the European Trading Scheme and therefore be covered by all applicable regulations.

Rio Tinto Alcan's growth portfolio includes projects that centre on clean energy sources as well as high performance technologies as means of reducing emissions. Our comprehensive, proprietary AP technology suite also makes Rio Tinto Alcan a partner of choice for project development, driven by a disciplined, proven engineering and technology delivery process. We continue to develop the next generation of our smelting technology as an ideal complement to strong, renewable power assets. An AP50 pilot

plant is under construction in the Saguenay, Quebec, Canada, and the AP-Xe suite is being designed to be retrofitted to previous AP series cells.

In addition to its modern, low cost smelting fleet, Rio Tinto Alcan is a fully integrated aluminium producer. The group can leverage various supply chain benefits from mine to metal, and expects sufficient supplies to sustain its long term growth strategy. It holds interests in three of the four largest bauxite mines in the world (Weipa, Porto Trombetas and Sangaredi), situated in the top three bauxite reserve countries (Australia, Brazil and Guinea). This provides optionality through size, expandability and proximity to key growth markets.

Rio Tinto Alcan's bauxite reserves in north eastern Australia, Weipa and Gove mines, and alumina refineries at Gove, Yarwun, and Queensland Alumina have made this region in particular a hub for future optimisation opportunities.

# Copper

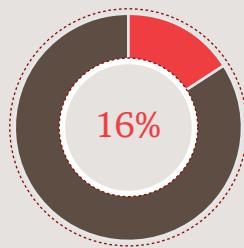
Andrew Harding, chief executive, Copper



## 2009 Operational highlights

US\$ million	
Revenue	6,206
Operating cash flow	2,223
Underlying earnings	1,866
Capital expenditure	553
Net operating assets	5,028

### Operating cash flow contribution



### Underlying earnings contribution\* 2007 – 2009 US\$m

	2007	2008	2009
3,479			
(185)	Prices and exchange		
(49)	Inflation		
(963)	Volume		
(620)	Costs		
(66)	Tax and other		
1,597			
(487)	Price and exchange		
(40)	Inflation		
556	Volume		
304	Costs		
(64)	Tax and other		
1,866			

\* A reconciliation of the net earnings with underlying earnings for 2008 and 2009 as determined under EU IFRS is set out on page 22. All amounts presented by the product groups exclude net interest and other centrally reported items.

## Growth through innovation

Rio Tinto's Copper group is a world leader in copper production. Operations include Kennecott Utah Copper in the US and interests in the producing copper mines of Escondida in Chile, Grasberg in Indonesia, Northparkes in Australia and Palabora in South Africa. In 2009, the group produced approximately 800,000 tonnes of copper, which places it among the top five copper producers in the world. Gold and molybdenum are also valuable by-products of the group's mines. In addition to its producing assets, the group has interests in three of the world's largest undeveloped greenfield copper projects. The group also includes major nickel deposits in the US and Indonesia.

For production and reserves see page 62

### Strategy

- Deliver shareholder value by significantly increasing copper production in the medium term.
- Be an innovative, disciplined acquirer and developer of value creating assets.
- Optimise and develop the group's existing assets.
- Continue to invest in innovative technologies such as block caving and sulphide leaching to maintain leadership in the mines of the future.
- Leverage the diverse portfolio of producing and developing mines to adapt to changing economic conditions.

### Achievements

- At Kennecott Utah Copper (KUC), the concentrator set multiple plant production records, including total ore milled and copper in concentrate produced.
- Also at KUC, the resource development team identified a new copper-molybdenum-gold porphyry system.
- KUC and Escondida both successfully negotiated new mutually beneficial collective bargaining agreements with their work forces in 2009.
- A landmark investment agreement with the Government of Mongolia progressed the development of the Oyu Tolgoi project. Rio Tinto increased its stake in Ivanhoe Mines to 19.7 per cent.
- Kennecott Eagle Nickel successfully addressed certain key legal challenges to its mine permits in the US.

### Key priorities

- Exceed the improved safety performance in 2009 with a focus on embedding process safety risk reviews.
- Development of the world class Oyu Tolgoi copper-gold deposit in Mongolia.
- At KUC, progress the molybdenum autoclave project and continue life of mine extension through local drilling programmes.
- Complete the Northparkes E48 development and ramp up to full production.
- The Copper Projects function will maintain and maximise options around key projects and pursue opportunities to accelerate the start of production.

### Outlook

- Industry fundamentals support a strong outlook on price, with robust long term demand and supply side constraints.
- Continued price volatility with upside potential.
- Industry will be challenged by mines of increasing depth, decreasing grade profiles and increasing exposure to higher risk regions.
- Gradual transition to underground mines which require higher capital costs and investment in innovative technologies.

## Performance

As markets recovered from the turbulence of 2008, the Copper group achieved an increase in underlying earnings of 17 per cent in 2009. This was achieved through cost reductions and higher volumes.

Performance highlights included mined copper production in 2009 up 15 per cent over 2008 and refined copper production up 28 per cent over 2008, following higher grades and a further improvement in performance at Kennecott Utah Copper.

The Copper group's contribution to underlying earnings increased by US\$269 million to US\$1,866 million due to higher production at Kennecott Utah Copper and Grasberg as well as cost improvements across the product group. This was offset by lower copper and molybdenum prices.

## Strategy

The Copper group's strategy is to deliver shareholder value through significantly increasing copper production in the medium term. This will be achieved by continuing to optimise and develop the group's existing assets and by proactively seeking opportunities to grow the copper portfolio. Key components of the strategy include exploring opportunities to improve and expand existing operations, accelerating the development of key projects, maintaining an emphasis on exploration activities, and pursuing other opportunities for growth.

The group's strategy is based on industry fundamentals that support a strong outlook on prices, particularly in the medium term. Emerging economies, particularly China and India, are expected to continue to drive copper demand over the coming decade. On the supply side, the challenges associated with finding and developing new projects will mean that copper supply will likely be constrained in the medium to long term.

The group has a set of world class operating assets and a strong portfolio of long term greenfield projects that allows it the flexibility to adapt to changing economic conditions. Investment plans are rigorously evaluated in light of evolving market conditions.

While certain investments have been delayed in response to recent macro-economic conditions, Rio Tinto believes it has the capability and experience to develop and expand its portfolio of assets when economic conditions improve further. Rio Tinto is investing in the application of innovative technologies including block caving, automation, flash converter smelting and sulphide leaching. As copper mining shifts

from open pit to underground, Rio Tinto's block caving expertise will enable mine life extensions through access to new high grade deposits at greater depths. Rio Tinto has developed its block caving expertise through its interests in Northparkes, Palabora and Grasberg. Future developments are expected to rely on large scale block caving and include Oyu Tolgoi, Resolution and Bingham Canyon.

The Copper group is not constrained by geographic considerations and can work where development opportunities exist. It is committed to the principles of Rio Tinto's code of conduct *The way we work*, with a focus on responsible environmental performance and a commitment to strong community relations.

## Key achievements

The group saw significant achievements at operations and projects during 2009. At KUC, the Copperton concentrator set multiple plant production records, including total ore milled (7.6 per cent increase) and copper in concentrate produced (28 per cent increase over the previous year). Gold and silver in concentrate exceeded 2008 levels by 58 per cent and 43 per cent respectively.

KUC and Escondida both successfully negotiated new mutually beneficial collective bargaining agreements with their workforces in 2009.

At Grasberg, expansion of the currently producing Deep Ore Zone mine to 80,000 tonnes per day is essentially complete.

At the Oyu Tolgoi project, the Investment Agreement with the Government of Mongolia was completed in October and subsequently Rio Tinto increased its stake in Ivanhoe Mines to 19.7 per cent with fixed price options to further increase the stake to 43 per cent.

At Palabora, the Broad Based Black Economic Empowerment transaction required under South Africa's new Mining Charter is progressing well. In April, Palabora submitted a Transaction Framework Agreement bearing the signatures of its Broad Based Black Economic Empowerment partners.

At the Kennecott Eagle nickel project, a judge affirmed the Michigan Department of Environmental Quality's issuance of key permits for the mine. This put all of the necessary state permits for the project into effect. Production is being targeted for 2013.

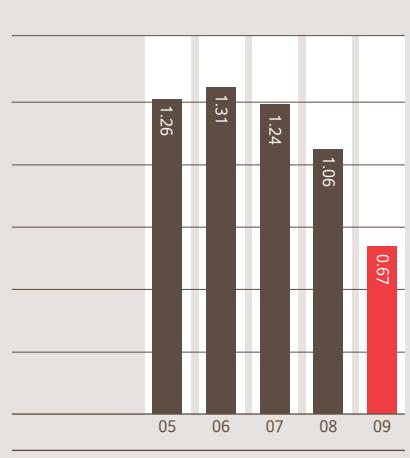
## Safety

Safety continued to be a major focus in 2009 at all operations. Despite the continued emphasis, there was one fatality at Copper group managed operations during the year,

which occurred at Palabora. Overall, the group realised a significant improvement in the all injury frequency rate (AIFR) in 2009 with an annual rate of 0.67 compared to 1.06 in 2008.

At KUC, the safety strategy is defined in a three year safety plan which is supported by improvement action plans at the plant, department and individual level. Key safety improvement achievements during 2009 included implementation of the Rio Tinto Significant Potential Incident (SPI) reporting and investigation process; development and roll out of a substantial front line safety leadership skills improvement programme; and implementation of new safety controls for delivery drivers. During 2010, KUC will continue safety improvement efforts with specific focus on process safety and contractor safety.

All injury frequency rate  
Per 200,000 hours worked



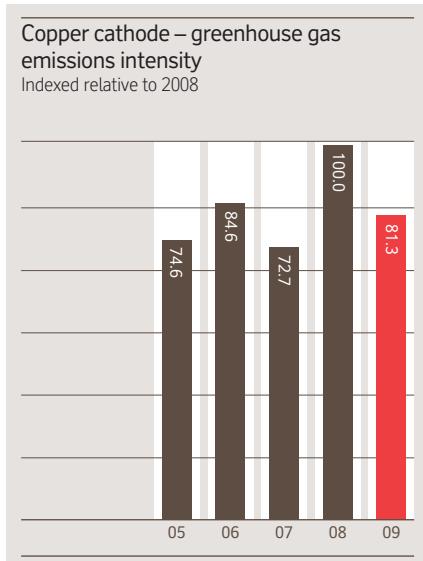
## Greenhouse gas emissions

The Copper group is committed to continual improvements in energy management and efficiency. Spending on improvement projects in 2009 led to substantial progress on embedding behavioural energy management initiatives such as reductions in idling of light duty vehicles and improving electrical energy demand management systems at KUC.

In 2009, KUC reported for the first time to the Climate Registry, a multi-state voluntary greenhouse gas reporting system. KUC's overall greenhouse gas emissions intensity decreased, primarily due to efficiencies associated with higher copper production.

In 2010, the Copper group anticipates additional progress in greenhouse gas and energy management across the business portfolio.

### Copper continued



#### Operations

##### Kennecott Utah Copper (Rio Tinto: 100 per cent)

KUC operates the Bingham Canyon mine, Copperton concentrator and Garfield smelter and refinery complex near Salt Lake City, Utah.

In 2009 the Copperton concentrator set multiple plant production records. Milled ore of just under 53 million tonnes topped the record established in 2008 by 7.6 per cent. Copper in concentrate also reached a new high in 2009 of 303,536 tonnes, a 28 per cent increase over the previous year. Gold and silver in concentrate improved in 2009, exceeding 2008 levels by 58 per cent and 43 per cent respectively, whilst molybdenum concentrate production increased 11 per cent.

Recent exploration at the Bingham Canyon mine has identified a new copper-molybdenum-gold porphyry system beneath the current open pit (disclosed in March 2009). The molybdenum deposit is between 450-550 million tonnes at a grade of 0.1-0.15 per cent molybdenum. The average grade of the molybdenum in the open pit reserve is 0.045 per cent molybdenum.

Current ore reserves are expected to enable open pit operations to continue until 2020 with additional mineral resources potentially extending the open pit mine life to 2032.

Evaluation of open pit expansion options at the mine continued through the Keystone project. A pre-feasibility study is expected to be completed in 2010 potentially allowing conversion of significant open pit resource to reserve. Study of the underground expansion option was temporarily halted in 2009 due to the global economic downturn.

##### Escondida (Rio Tinto: 30 per cent)

The Escondida copper mine located in Chile's Atacama Desert is the largest copper mine in the world in terms of annual production. BHP Billiton owns 57.5 per cent of Escondida and is the operator and product sales agent.

During the first half of 2009, concentrate production was impacted by the Laguna Seca SAG mill being operated at a reduced rate to limit the risk of failures. These problems were successfully resolved during a 32 day full stoppage of the concentrator in July and August. The combined effect of lower ore head grade and increased ore hardness resulted in lower recoveries and reduced concentrate production. This was partially offset by an increase in cathode production due to improved recoveries and increased ore stacking on the leach stockpiles.

Future growth options at Escondida are driven by current brownfield exploration activities. There is a significant exploration drilling programme on a number of potential deposits around the Escondida lease area, with positive results already announced at Pampa Escondida.

##### Grasberg

##### (Rio Tinto: 40 per cent of joint venture production)

Grasberg, located in the province of Papua in Indonesia, is one of the world's largest copper and gold mines in terms of reserves and production. It is owned and operated by Freeport Indonesia (PTFI), which is 91 per cent owned by US based Freeport-McMoRan Copper & Gold Inc. The Government of Indonesia owns the remaining nine per cent of PTFI. The joint venture gives Rio Tinto a 40 per cent share of production above specified levels until 2021 and 40 per cent of all production after 2021, as well as representation on operating and technical committees.

Operations in 2009 accelerated mining higher grade sections of the Grasberg pit, resulting in higher grades than in 2008. Grasberg's 2009 production levels were well above the level at which metal becomes attributable to Rio Tinto, and were substantially higher than in 2008. The expansion of the currently producing Deep Ore Zone mine to 80,000 tonnes per day is essentially complete.

##### Palabora (Rio Tinto: 57.7 per cent)

Palabora Mining Company is a publicly listed company on the Johannesburg Stock Exchange and operates a mine and smelter complex in South Africa. Palabora achieved a 42 per cent rate of employing

historically disadvantaged South Africans in management positions. This key milestone is a crucial step in securing New Order Mineral Rights in terms of the Mining Charter. The Minerals and Petroleum Resource Development Act required mines in South Africa to be at least 15 per cent owned by historically disadvantaged South Africans by April 2009. This requirement will increase to 26 per cent by 2014. On 30 April, 2009 Palabora signed and submitted a Transaction Framework Agreement bearing the signatures of its Broad Based Black Economic Empowerment partners. Palabora is working with the other parties to the transaction to finalise this agreement and present it to shareholders of Palabora for approval in the first half of 2010.

Copper concentrate production was 5.5 per cent lower than 2008 mainly due to a 58 per cent decrease in tonnes of low grade concentrate reclaimed from settling ponds. Diamond drilling has been re-initiated to delineate the copper reserves immediately below the current mining horizon.

##### Northparkes Mines

##### (Rio Tinto: 80 per cent)

The Northparkes copper-gold mine in central New South Wales, Australia, operates both underground block cave mines and open-cut mines on its mining leases. Northparkes is a joint venture with the Sumitomo Group (20 per cent). In November 2006, the joint venture partners approved the development of the E48 block cave project, which is expected to cost US\$160 million and extend the mine's life to 2023. As a response to economic conditions at the end of 2008 the completion of the E48 project was deferred but restarted in October 2009. Copper production at Northparkes exceeded 2008 production by 38 per cent. Underground production was largely sourced from the E26 Lift 2 North block cave, with production from the E48 block cave project in the last quarter. Open cut production was used to maintain full mill capacity. The E22 open pit produced 6.8 million tonnes, which exceeded plan by 14 per cent during the year. The E22 mining sequence is expected to be completed by August 2010. Higher volumes of ore were processed in 2009 due to a higher proportion of softer underground ore.

## Development projects

### **Resolution Copper (Rio Tinto: 55 per cent)**

The Resolution copper deposit is located in Arizona, US and within the most prolific copper producing belt in North America. Though evaluation is ongoing, the Resolution project appears to host the largest copper deposit in North America, capable of producing an estimated 600,000 tonnes of copper per annum. Although the ultimate size of the deposit has not been fully defined, it is characterised by consistent plus one per cent copper mineralisation over an area of at least two kilometres in an east-northeast direction and 1.5 kilometres in a north-northwest direction. Before the pre-feasibility studies can be completed and the mine developed, Resolution Copper needs to acquire title to the small Oak Flat area that lies adjacent to existing unpatented mining claims hosting the mineralisation. In return for this land, Resolution Copper will transfer to the US government over 2,200 hectares of high priority conservation lands. The Southeast Arizona Land Exchange and Conservation Act has been formally introduced in both houses of Congress to achieve this goal. The 2010 work programme will focus primarily on completing studies to support the preparation of an environmental impact study in order to satisfy the terms of the land exchange bill.

### **La Granja (Rio Tinto: 100 per cent)**

The La Granja copper project is located in the Cajamarca region of northern Peru and is in the pre-feasibility study phase.

As part of the pre-feasibility study that is in progress, recent drilling results at La Granja further confirm the mineral resource estimate and enable a wider range of mining and processing options than previously considered. The full extent of the porphyry, breccia and skarn-hosted deposit has yet to be determined, and drilling is planned to continue during 2010 with investigation of the options, both to improve the business case and to define the potential size and life of a mining operation.

Previously the pre-feasibility study focused on demonstrating the possibility of recovering copper metal from various porphyry systems in which chalcopyrite dominant ore would use heap leach technology. The study wound down in 2009 due to financial constraints, and evaluation work entered a divergent phase to assess the potential of the new geological discoveries and to identify higher value, lower risk options for development. Other options now being investigated include concentrator only and hybrid (heap leach

and concentrator) concepts, with initial indications of enhanced value.

### **Kennecott Eagle Minerals (Rio Tinto: 100 per cent)**

The Eagle deposit located in Michigan, US, is nearing readiness to commence construction and has the potential to form the foundation of a profitable long term nickel business for Rio Tinto. The project is located in North America near well developed infrastructure. Rio Tinto's privately owned mineral title of about 182,000 hectares in this region is extensive and is highly prospective for the discovery of additional deposits of greater size and equal or better mineralisation. By late 2009, Eagle was successful in addressing legal challenges to issued mine permits by local opponents and received final approval of all necessary state permits.

### **Sulawesi Nickel (Rio Tinto: 100 per cent)**

The Sulawesi Nickel project is on the island of Sulawesi in Indonesia. Rio Tinto was granted a mining permit (IUP) from the Indonesian Ministry of Energy and Mineral Resources on 25 February 2010. This tenure was granted under the new mining law (Minerba) which came into effect in mid January 2009.

Rio Tinto will now move forward with reviewing development options for the project with increased certainty. Rio Tinto is also working closely with the regional governments and communities as planning for the project progresses.

### **Oyu Tolgoi (Rio Tinto: 19.7 per cent interest in Ivanhoe Mines Limited)**

In October 2006 Rio Tinto purchased a stake of just under ten per cent in Ivanhoe Mines Limited in order to jointly develop the Oyu Tolgoi copper-gold resource in Mongolia's South Gobi region. Ivanhoe Mines owns 66 per cent of Oyu Tolgoi. In October 2009 Rio Tinto completed its second tranche with Ivanhoe Mines Limited to increase its ownership by 9.8 per cent to 19.7 per cent. On 1 March 2010 Rio Tinto agreed to acquire a further 2.7 per cent to bring its ownership to 22.4 per cent. Rio Tinto has the right to progressively increase its stake to 43 per cent over the next three years at pre-determined prices.

Also in October 2009 Rio Tinto signed an Investment Agreement with the Mongolian Government. The agreement outlines substantial benefits to the local community and the people of Mongolia. Since the initial discovery, more than 4,000 Mongolians have been employed and currently 90 per cent of the project workforce is Mongolian as

promised in the agreement. Oyu Tolgoi has a potential average production rate of 450,000 tonnes of copper per year over the mine life with significant gold by-products. It is also geographically positioned to supply growing Asian copper markets.

## Outlook

There is significant opportunity for a long term increase in copper demand, with growth in China being a major driver. Prices may be volatile, but this highlights the value of long life assets. Copper supply will be constrained in the long term and trends in copper mining may also lend support to higher prices. The industry will be challenged by decreasing grade profiles, new developments in higher risk regions and deeper deposits, leading to increased production from underground workings.

Although global copper reserves and resources are sufficient for several decades, reserve and resource grades are progressively declining. Greenfield exploration in under explored countries offers some potential to reverse this trend through new surface copper discoveries. However, the full potential of these countries to support major production may be undermined by sovereign risk factors.

Deeper discoveries are appearing in known districts as exploration occurs around surface deposits such as Bingham Canyon. Some of these brownfield discoveries have unusually high copper and by-product grades. Innovation in mining and processing technology may reduce the costs of production from underground resources.

Given future demand forecasts, future copper prices will depend on the relative success of greenfield discovery, brownfield discovery and innovation in mining and processing. With Rio Tinto's portfolio of world class assets, combined with its strategy of significantly increasing copper production, the group is expected to remain an industry leader for years to come.

# Diamonds & Minerals

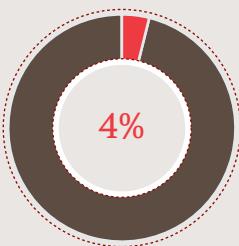
Harry Kenyon-Slaney, chief executive, Diamonds & Minerals



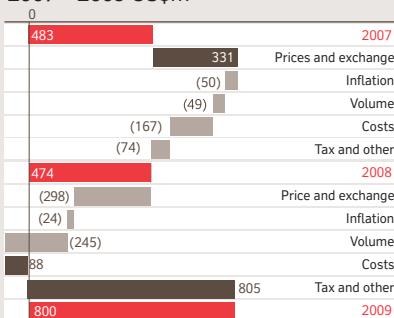
## 2009 Operational highlights

US\$ million	
Revenue	2,618
Operating cash flow	528
Underlying earnings	800
Capital expenditure	519
Net operating assets	4,612

### Operating cash flow contribution



### Underlying earnings contribution\* 2007 – 2009 US\$m



\* A reconciliation of the net earnings with underlying earnings for 2008 and 2009 as determined under EU IFRS is set out on page 22. All amounts presented by the product groups exclude net interest and other centrally reported items.

## Differentiation in the marketplace

The Diamonds & Minerals group comprises diamonds, borates, talc, titanium dioxide feedstock, high purity iron, metal powders, zircon and rutile mining and refining operations. Rio Tinto Diamonds (RTD) accounts for about six per cent of the world's production of rough diamonds by value. Its business model is to be the preferred supplier of rough diamonds. The Minerals part of the group comprises Rio Tinto Minerals (RTM), a global leader in borates and talc supply and of the science behind their use, and Rio Tinto Iron & Titanium (RTIT), a market leader in titanium dioxide feedstock, high purity iron, zircon, rutile and metal powders production.

For production and reserves charts see page 62-63.

### Strategy

- To safely and efficiently maximise shareholder value.
- To be the preferred supplier of natural rough diamonds, borates, talc and titanium dioxide.
- To be responsible and transparent in relations with neighbouring communities.
- To differentiate in the marketplace through superior service and technical support.
- To continue to invest in growth projects in the existing businesses and seek Tier 1 development opportunities in new mineral sectors.

### Key achievements

- First shipments of ilmenite from QIT Madagascar Minerals (QMM).
- Broad Based Black Economic Empowerment restructuring completed at Richards Bay Minerals.
- EBITDA for RTM maintained at 2008 levels through strong cost reductions and positive pricing despite significantly lower volumes.
- Licences renewed for Jadar lithium-borate development project in Serbia.
- Potasio Rio Colorado (PRC) project in Argentina and a second potash project near Regina in Canada sold to Vale for a combined gain of US\$797 million, included in underlying earnings.
- Construction of Diavik Diamonds underground mine in Canada substantially completed.
- Progressed the Bunder hard rock diamond discovery in India.

- Business improvement programmes delivered significant cost reductions in response to global economic conditions.

### Key priorities

- Continue to strive for zero harm to people across all operations.
- Manage production and maximise cash flow in line with global economic recovery.
- Continue to operate in a responsible and sustainable manner.
- Continue to differentiate Rio Tinto from other diamond and industrial minerals suppliers by providing superior product quality, supply reliability and customer service.
- Retain and continue to develop the best people.

### Outlook

- The diverse markets being served by the group's operations continue to be affected by the health of the global economy.
- In Diamonds, rough prices are expected to improve during 2010 although this is dependent on the recovery in the US and consumption from emerging markets.
- Market weakness in the minerals business in 2009 is expected to slowly reverse in 2010, with more rapid recovery in Asia and emerging economies.
- Declines in the housing and automotive sectors will be offset to some degree by government incentive programmes, but will continue to affect sales.

## Strategy

The Diamonds & Minerals group's core purpose is to safely and efficiently maximise shareholder value from mining and marketing diamonds and minerals. The group focuses its resources on efficiency and sustainability in its operations and developments; responsibility and transparency in its relations with neighbouring communities; and differentiation in the marketplace through superior services and technical support. The group has a long and successful track record in developing large scale, long life, cost competitive assets.

Our business model focuses on being the preferred supplier of natural rough diamonds, borates, talc and titanium dioxide and associated by-products of high purity iron, steel, metal powders and zircon. We intend to continue to invest in growth projects in the existing businesses and seek Tier 1 development opportunities in new mineral sectors.

## Diamonds

Rio Tinto's strategy is to be the preferred global supplier of natural rough diamonds and to continue to operate, manage and develop world class diamond resources safely, efficiently and to the highest possible environmental standards.

Rio Tinto has been in the diamond business for 25 years, following the discovery and development of the Argyle mine in Western Australia. Rio Tinto Diamonds is managed from London with a facility in Antwerp undertaking the sale and marketing of rough diamonds. Rio Tinto Diamonds also has representative offices in Mumbai and New York. Rio Tinto's high value pink diamond sales from the Argyle mine are managed from Perth in Western Australia.

Rio Tinto is essentially a wholesaler of rough diamonds, providing support for its customers in their downstream activities.

In 2009 the unprecedented financial turmoil severely affected demand for rough diamonds which is highly reliant on the US economy. Rio Tinto acted quickly to minimise operating and capital costs and slowed the transition to underground mining at both the Argyle and Diavik mines, as well as reducing production.

In the second half of 2009 the diamond market began to recover as both prices and sales volumes improved. The medium to long term fundamentals for the diamond industry are positive with an anticipated material supply shortfall which will drive future price growth.

## Minerals

The strategy of the minerals businesses focuses on optimising volumes and product mix to supply high value growth sectors in both mature and emerging markets. RTM's foundation businesses have been leaders in the borate and talc industries for more than a century while RTIT's subsidiary, QIT, was the first company to produce titanium dioxide slag at its site in Sorel, Quebec in 1950.

Minerals markets include automotive, construction, telecommunications, agriculture and consumer products industries. This close tie to consumer purchasing patterns resulted in a 30 per cent decline in demand for minerals products in 2009. The businesses reduced production and instituted stringent cost control and business improvement efforts early in the year to maintain their resilience in response to the downturn. Economic recovery and government subsidies helped to stabilise these markets toward the end of 2009.

The group maintains R&D facilities in Europe, Canada and the US to develop new products and support customers.

## Key achievements

### Diamonds

Construction of the Diavik underground mine was substantially completed during 2009. First ore production from the new mine is expected in 2010. Argyle successfully implemented a major cost cutting exercise.

A bulk sample processing plant was commissioned at the Bunder project in Madhya Pradesh, India. Capable of processing ten tonnes per hour, the plant will help further assess the value and grade of the diamond deposit.

The completion of a new processing module at the Murowa mine will ensure the continued viability of the mining operation in the face of hardening ore.

### Minerals

The first shipments of ilmenite ore from QMM to Canada, and of finished titanium slag product to a customer, were made in 2009. These were major landmarks in a project which, notwithstanding many complex environmental, social and technical challenges, could become a model for future projects in the developing world.

In December 2009, RTIT concluded a Broad Based Black Economic Empowerment transaction at Richards Bay Minerals (RBM) in South Africa. Under this transaction, 24 per cent of the equity of RBM was sold to a

consortium of historically disadvantaged groups, with a further two per cent transferred to a trust for the benefit of RBM employees. The remaining 74 per cent is split equally between BHP Billiton and Rio Tinto with Rio Tinto having been appointed as the manager. Through this transaction, RBM has met the ownership requirements of South Africa's Mining Industry Charter five years ahead of the required empowerment date of 2014.

The greenfield Potasio Rio Colorado (PRC) project in Argentina and a second potash project near Regina in Canada were sold to Vale for a combined gain of US\$797 million, included in underlying earnings.

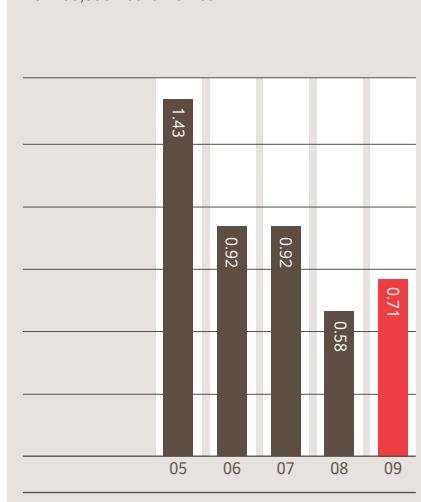
Efforts to divest the borate and talc businesses were constrained by economic conditions in 2009; the talc divestment process will be renewed in 2010. Rio Tinto intends to retain ownership of the borates business.

## Safety

Safety performance and awareness continued to be a major focus of all operations. In 2009 the all injury frequency rate (AIFR) was 0.71 compared to 0.58 in 2008. The group mourned the loss of a colleague at Richards Bay Minerals who died in a fatal incident in December 2009.

RTIT's Rio Tinto Fer et Titane (RTFT) improved its safety performance with AIFR improving by six per cent. QMM and RTM's injury rates deteriorated year on year, but remain low.

All injury frequency rate  
Per 200,000 hours worked



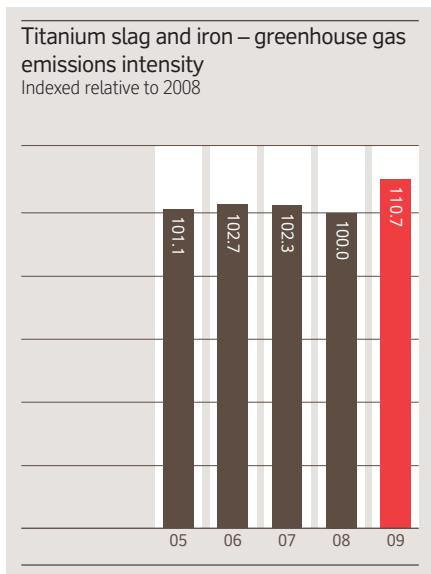
For Diamonds, the AIFR improved to 0.66 compared to 0.93 in 2008. The Diavik mine with an AIFR of 0.72 achieved its best

### Diamonds & Minerals continued

safety performance since the mine began production in 2003. The Bunder project in India remained injury free in 2009.

#### Greenhouse gas emissions

As part of the group planning process each business unit submits a greenhouse gas (GHG) performance review.



RTM's global operations reduced greenhouse gas emissions by three per cent per tonne of product from 2003 to 2008 and set new reduction targets in 2009. During 2009 RTT sites undertook audits to identify opportunities for GHG and energy reduction.

At Argyle, greenhouse gas intensity per carat produced increased in 2009 as a result of processing lower grade ore. Argyle is investigating increasing the use of hydroelectricity in mine operations and improving the diesel efficiency of the power station. Greenhouse gas intensity per carat produced at Diavik increased in 2009 as construction of the underground mine continued. Diavik is working on various projects focused on reducing fuel consumption.

#### Review of operations

Sales revenue of the Diamonds & Minerals group was US\$2,618 million in 2009, US\$1,202 million less than in 2008 largely as a result of the global economic downturn and the impact it had on consumer confidence and spending. Underlying earnings of US\$800 million (US\$474 in 2008) included a contribution of US\$797 million from the sale of potash assets in Argentina and Canada.

The borates and talc businesses secured price increases which partially offset the 20 to 30 per cent declines in demand related to the sluggish housing and automotive sectors. Titanium dioxide feedstock prices held steady, however RTT's revenue decreased by 33 per cent mainly due to lower volumes of titanium dioxide and a reduction in the price of metallics resulting in reduced margins on iron, steel and powder products. The minerals businesses experienced a significantly stronger fourth quarter as major markets started to show signs of economic recovery. Decreased rough diamond prices and sales volumes across all producing diamond assets adversely affected earnings and cashflow during 2009. All operations implemented stringent cost reduction efforts through the year.

An impairment charge of US\$348 million after tax was recognised on the diamonds portfolio assets to reduce their carrying value to an estimated recoverable amount. This is not included in underlying earnings.

#### Rio Tinto Diamonds

##### Argyle (Rio Tinto: 100 per cent)

The Diamonds group owns and operates the Argyle diamond mine in Western Australia. Argyle owns a niche polished pink diamonds business which sells and markets the loose polished pink diamonds. Production from Argyle's open pit mine is expected to continue through to 2012 after which it is anticipated that the mine will transition to underground operations. Underground mining is expected to operate until at least 2018.

During 2009 construction of the underground project was slowed by reducing the project workforce and delaying completion of development under a programme referred to as the Low Cost Continuation Plan. First production from the underground operation is now expected in 2012. In addition, processing in the surface operations was suspended for 12 weeks due to the deterioration in global market conditions.

##### Diavik (Rio Tinto: 60 per cent)

The Diamonds group operates the Diavik Diamond Mine, located approximately 300 kilometres north east of Yellowknife, Northwest Territories, Canada. It is an unincorporated joint venture between Rio Tinto and Harry Winston Diamond Corporation. Production from Diavik's open pit operations will continue through to 2012 after which the mine will transition to full production from the underground. Construction on the underground project was substantially completed during 2009.

First ore is expected during the first quarter of 2010 with full production expected to be achieved in 2013.

In 2009, operations at Diavik were suspended for six weeks in July as a result of the deterioration in global market conditions.

This suspension, together with lower grade feed ore reduced diamond production in 2009 to 3.3 million carats (Rio Tinto share) from 2008 production of 5.5 million carats. Open pit mining in A154 neared completion in 2009, with activity transitioning to the lower grade A418 pipe. A successful winter road transportation season saw the movement of 2,779 truck loads of supplies and materials to the site.

##### Murowa (Rio Tinto: 77.8 per cent)

The Murowa mine has been operating as a small open pit since 2004 and is owned by Rio Tinto (77.8 per cent) and Rio Zim Limited (22.2 per cent), a listed entity.

The Diamond group's share of production in 2009 of 97,000 carats was below the 205,000 in 2008 as a result of lower ore grade and a delayed project to deal with changing ore characteristics.

Murowa is considering expanding the existing open pit to increase production. The previous feasibility study for this expansion is currently being reviewed and discussions are being held with the Zimbabwean Government on the investment environment that is required to underpin this project.

##### Bunder (Rio Tinto: 100 per cent)

The Bunder diamond project in India was transferred from Rio Tinto Exploration to the Diamonds group in November 2008 upon completion of the order of magnitude study. During 2009 a ten tonnes per hour bulk sampling treatment plant was commissioned. The plant has commenced processing of bulk samples for further evaluation work.

#### Rio Tinto Minerals

##### Rio Tinto Minerals (Rio Tinto: 100 per cent)

The business comprises borates and talc mines, refineries, and shipping and packing facilities on five continents that operate under the Rio Tinto Minerals banner.

Approximately 815,000 tonnes of refined borates are produced at Boron Operations, the principal borate mining and refining operation in California's Mojave Desert.

The business operates talc mines – including the world's largest, in southern

France – and processing facilities in Austria, Australia, Belgium, Canada, France, Italy, Japan, Mexico, Spain and the US.

In 2009 total borates production fell by 30 per cent from 610,000 tonnes of boric oxide in 2008 to 424,000 tonnes in 2009, with reduced demand in Asia Pacific and in the North American housing industry. Total talc production declined by 24 per cent from 1,163,000 tonnes in 2008 to 888,000 tonnes in 2009, with sales in Europe offsetting volume declines in North America.

### Rio Tinto Iron and Titanium

#### Rio Tinto Fer et Titane

(formerly QIT) (Rio Tinto: 100 per cent),

#### Richards Bay Minerals

(Rio Tinto: 37 per cent)

#### QIT Madagascar Minerals

(Rio Tinto: 80 per cent)

RTIT comprises the wholly owned Rio Tinto Fer et Titane (RTFT) in Quebec, Canada, an 80 per cent share in the QMM ilmenite project in Madagascar and a 37 per cent interest in and management of Richards Bay Minerals (RBM) in KwaZulu-Natal, South Africa.

Both RTFT and RBM produce titanium dioxide feedstock used by customers to manufacture pigments for paints and surface coatings, plastics and paper and the production of titanium metal. They also produce iron, steel and zircon co-products. QMM produces ilmenite from beach sands which is shipped to Canada for onward processing into titanium dioxide slag.

The QMM project was completed on schedule; however, cost inflation and foreign exchange effects increased the cost to US\$1.16 billion from the original estimate of US\$1.03 billion. First ilmenite production occurred at the end of 2008 and in 2009 the first shipments were made to RTIT's facilities in Canada for processing into titanium dioxide feedstocks.

In 2009, titanium dioxide production decreased by 25 per cent compared with 2008 as RTIT responded to reduced demand in its markets following the knock on effect of the slump in construction activity and the weak automotive sector in the second half of the year. This included an eight week summer shutdown of the ilmenite mine and smelting operations at RTFT.

Markets for iron and steel co-products weakened from 2008, resulting in a significant decrease in earnings. A modest recovery in metallics pricing has been evident in late 2009 and early 2010.

### Outlook

The diverse markets being served by the group's operations continue to be affected by the health of the global economy albeit differentially due to both geography and market sector. However, steps towards recovery have been seen in a number of these market sectors.

### Diamonds

Rough prices recovered in the second half of 2009 though not to the high levels seen in the middle of 2008. The market will continue to be dependent on the recovery of US consumer sentiment though the robust growth of jewellery consumption in the smaller but important Chinese and Indian markets will provide some underlying support to both prices and volumes.

### Minerals

The minerals businesses experienced a significant slowdown during 2009, and this market weakness is expected to slowly reverse in 2010.

Sales volumes are forecast to partially recover, with more rapid demand recovery in Asia and emerging economies. Demand is improving in electronics (eg flat panel displays, circuit boards, and other components) and insulation fibreglass, paints and coatings. Building products are expected to improve slowly in terms of both volumes and prices as the housing and automotive markets recover.

# Energy

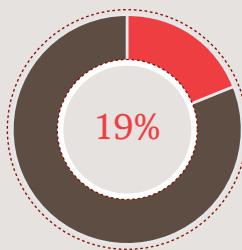
Doug Ritchie, chief executive, Energy



## 2009 Operational highlights

US\$ million	
Revenue	6,709
Operating cash flow	2,576
Underlying earnings	1,420
Capital expenditure	686
Net operating assets	2,538

### Operating cash flow contribution



### Underlying earnings contribution\* 2007 – 2009 US\$m

	2007	2008	2009
498	498	2,581	1,420
1,623	1,623	(592)	(584)
(51)		(54)	
177	177	(67)	136
257	257	(54)	
77	77	(67)	
Prices and exchange		Price and exchange	
Inflation		Inflation	
Volume		Volume	
Costs		Costs	
Tax and other		Tax and other	

\* A reconciliation of the net earnings with underlying earnings for 2008 and 2009 as determined under EU IFRS is set out on page 22. All amounts presented by the product groups exclude net interest and other centrally reported items.

## Strong production and sales

The Energy group comprises thermal coal, coking coal and uranium operations. Its coal interests are located in Australia and the US and supply the seaborne traded and Australian and US domestic markets. These interests comprise: Rio Tinto Coal Australia (RTCA) which manages the group's interests in eight coal mines in Queensland and New South Wales; and the open cut mine Colowyo in Colorado, US and an interest in Cloud Peak Energy in Montana and Wyoming, US. Rio Tinto Uranium produces uranium oxide from its majority owned mines in Australia and Namibia for electric power utilities worldwide.

For production and reserves charts see page 63.

### Strategy

- The Energy group's core purpose is to maximise the value it creates for shareholders from supplying the world's mineable energy needs.
- The group focuses its resources on excellence in operations; large scale, long life, cost competitive assets.
- Opportunities for brownfield expansions are being progressed across the business.

### Achievements

- Australian thermal and semi soft coal production of 37.4 million tonnes (Rio Tinto share 23.1 million tonnes) – a five per cent increase on 2008.
- Record production and sales results throughout the year from many operations.
- Safety performance improved at most operations.
- Successful divestment of numerous energy assets in line with the Group divestment strategy.
- Separation from Rio Tinto Energy America (RTEA) and transition to a standalone business in 2009 by Colowyo Coal Company.
- A milestone achievement of 100 indigenous employees at Energy Resources of Australia (ERA), representing almost 20 per cent of ERA's workforce.
- Continued delivery of operational excellence programmes in all businesses to systematically eliminate waste, reduce process variability, and engage and empower our workforce.

### Key priorities

- Continuing to improve HSE performance, including contractor safety.

- Maximising free cash flow and continuing to operate in a responsible and sustainable manner.
- Timely delivery of current expansion projects.
- Continuing work with industry, government and infrastructure providers to resolve coal supply chain bottlenecks and increase export capacities.
- Positioning the group as the supplier of choice as the global economy recovers.
- Retaining and continuing to develop the best people.
- Aligning business growth strategies with climate change and energy strategy.

### Outlook

- Rio Tinto believes the outlook for seaborne coal remains very positive.
- The supply-demand balance for both thermal and metallurgical coals remains tight and towards the end of 2009 prices were increasing across all types of coal.
- The rising domestic prices in China have supported the demand for imported coal, while traditional importing markets continue to increase imports in line with a broader economic recovery.
- A global resurgence in nuclear power is under way, driven in large part by the need for energy security and baseload electricity generation that minimises emissions of greenhouse gases.
- Uranium prices are likely to increase if many new uranium projects, which were looking less financially attractive due to the effect of weaker uranium prices, are delayed.

## Performance

The Energy group's 2009 sales revenue was US\$6,709 million and its contribution to underlying earnings was US\$1,420 million, a reduction of 45 per cent from 2008, due to lower realised Australian coal prices which were partially offset by an increase in US thermal coal price.

Rio Tinto Coal Australia's (RTCA) 2009 contribution to underlying earnings was US\$1,013 million, US\$708 million lower than in 2008, attributable to lower prices and a changed sales mix partly compensated by a weaker Australian dollar and increased efficiencies. RTCA's total coal production was 46.6 million tonnes (Rio Tinto share 30.6 million tonnes).

Hard coking coal production was 9.2 million tonnes, in line with 2008. Higher production of other coal was achieved at Blair Athol despite loss of volume in January and February due to severe flooding.

In the Hunter Valley total production in 2009 was slightly higher than 2008 levels. Production of semi soft coal recovered strongly in the second half of 2009 in response to firming global demand, and was one per cent lower than the rate of semi soft coking coal production in 2008. Vessel queues in New South Wales (NSW) were relatively stable in 2009, but began to increase in the second half of the year.

In the US, earnings from all coal interests of US\$257 million were US\$110 million above 2008, with improved prices and lower cash costs offsetting the impact of lower volumes in line with Rio Tinto's reduced ownership. Colowyo Coal Company's 2009 production totalled 3.2 million tonnes. The reduction was a result of the need to have adequate reserves to satisfy the remaining long term sales contracts out to 2017 from its existing reserve base.

The contribution of Energy Resources of Australia (ERA) in 2009 to underlying earnings was US\$138 million, US\$3 million below 2008. Higher market prices and the expiration of older contracts containing price caps contributed to an average realised price at ERA in 2009 of US\$50.84 per pound, an increase of 56 per cent compared to 2008. In 2009 ERA also increased sales of 12.1 million pounds compared to the 2008 volume of 11.6 million pounds.

Rössing Uranium earnings of US\$24 million were US\$77 million below 2008 attributable to lower realised prices, due to a decline in the uranium price over the year, and adverse exchange rate movements. Earnings recovered in the second half of the year when

some sales occurred from volumes deferred from the first half. Rössing has continued on its growth path, producing 9.15 million pounds in 2009, which was slightly higher than the 2008 production (8.97 million pounds), which was a 20 year high.

## Strategy

Rio Tinto believes the abundance, reliability and affordability of coal will see it continue to be a major part of the global energy mix, and a key source of energy for many developed and developing countries. A key part of the Energy group's strategy is to ensure it is a leading advocate of, and investor in, the sustainable future uses of coal. In 2009 the group continued to dedicate resources and funds to the development of low emission coal technology through investment in the carbon capture and storage technology on the Hydrogen Energy California project, the COAL21 voluntary levy to support low emission coal projects managed by Technology & Innovation in Australia, and in several low emission coal research organisations in the US and Australia.

A resurgence globally in nuclear power is under way, driven in large part by the need for energy security and baseload electricity generation that minimises emissions of greenhouse gases. Rio Tinto aims to maintain its position as one of the world's leading uranium suppliers to power this growth.

A number of opportunities for brownfield expansions exist at the Coal & Allied operations in the Hunter Valley and the Hail Creek mine in Queensland.

A number of opportunities for further low cost brownfield expansions are under consideration at ERA's Ranger mine and at Rössing. ERA owns the Jabiluka deposit; the second largest undeveloped uranium deposit in the world, while adjacent to the Rössing lease, a significant new discovery has been made by Extract Resources Ltd in which Rio Tinto has a stake through its 14.7 per cent interest in Extract Resources Ltd and 13.5 per cent interest in Kalahari Minerals plc.

## Key achievements

Australian thermal and semi soft coal production was up five per cent on 2008. Australian hard coking coal production in 2009 and full year uranium production was comparable with the prior year.

Significant progress was made on the development of the Clermont coal mine, which is on track to meet its first scheduled production in 2010, while construction continued on an extension of the Kestrel underground coal mine.

ERA's Ranger mine achieved a total sales milestone of 100,000 tonnes of uranium oxide since commencing operations. The Rössing mine is the only other mine in the world to reach this level of total sales.

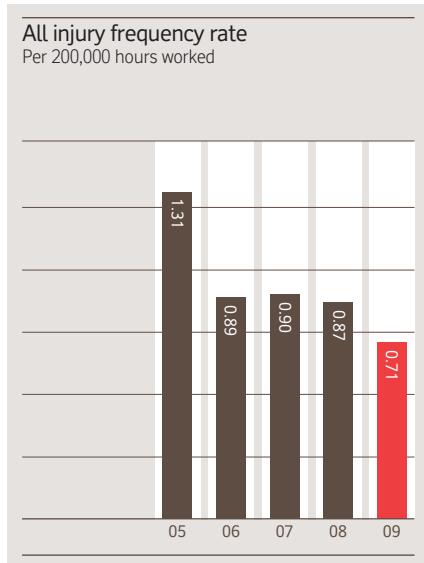
ERA has begun preparing an Environmental Impact Statement for a proposed heap leach facility at the Ranger mine, targeting the extraction of 33 million to 44 million pounds of uranium oxide from low grade ores, and has started planning for an underground exploration decline to further define the Ranger 3 Deeps mineral resource.

During 2009 the group successfully sold a number of its energy assets in line with Rio Tinto's divestment strategy. Transactions included:

- The sale of Rio Tinto Energy America's (RTEA) Jacobs Ranch mine to Arch Coal for a cash consideration of US\$764 million, completed on 1 October 2009.
- The balance of RTEA's assets (excluding Colowyo) were transferred to Cloud Peak Energy Resources LLC (CPER). Rio Tinto received total proceeds of US\$741 million in connection with Cloud Peak Energy Inc's initial public offering and related transactions. As a result, Rio Tinto now indirectly holds a 48.3 per cent interest in the Antelope, Cordero Rojo and Spring Creek mines and a 24.1 per cent interest in the Decker mine.
- The sale of Coal & Allied's Maules Creek project to Aston Resources, a private Australian company, for A\$480 million (US\$379 million) was completed on 18 February 2010.
- Coal & Allied's Vickery asset was sold to Whitehaven Coal (ASX listed) for A\$31.5 (US\$26.5) million, with an effective date of 4 February 2010.

# Energy continued

## Safety



Safety performance and awareness continued to be a major focus for all operations. The group's all injury frequency rate (AIFR) in 2009 improved, and was 0.71 compared to 0.87 in 2008.

RTCA recorded a 11 per cent improvement on its AIFR compared with 2008; ERA achieved a 39 per cent improvement; and Rössing achieved a 20 per cent improvement. Colowyo's AIFR increased in 2009 however it achieved a significant reduction in injury severity rate.

## Greenhouse gas emissions

The Energy group is continuing to dedicate resources to the development of clean coal technology.

On a life cycle basis, nuclear power generation emits very low levels of greenhouse gases. Rio Tinto is positioning its uranium business for the strong demand for uranium which will arise as the world moves to lower greenhouse gas emissions.

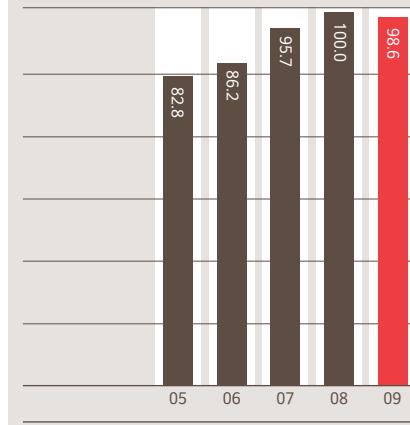
As part of the group planning process each business unit submits a greenhouse gas (GHG) performance review. This includes a discussion on targets and performance and a list of proposed and implemented projects noting project progress, savings, costs and NPV (net present value). All businesses have a number of NPV positive optimisations and energy reduction projects being researched or implemented. For example, Colowyo Coal began design and implementation of haul road optimisation work with a targeted reduction in GHG of two per cent, while Coal & Allied's Mount Thorley Warkworth

operation is conducting a coal seam methane trial to assess the potential to significantly reduce greenhouse gas emissions.

Greenhouse gas emissions intensity remained flat across the Australian coal businesses.

## Australian coal – greenhouse gas emissions intensity

Indexed relative to 2008



## Review of operations

### Rio Tinto Coal Australia (Rio Tinto: 100 per cent)

Rio Tinto Coal Australia manages the group's Australian coal interests. These include, in Queensland: the Blair Athol (Rio Tinto: 71 per cent), Kestrel (Rio Tinto: 80 per cent), and Hail Creek (Rio Tinto: 82 per cent) coal mines and the Clermont mine development (Rio Tinto: 50.1 per cent).

RTCA also provides management services to Coal & Allied Industries (Coal & Allied) for operation of its four mines located in the Hunter Valley in NSW. Coal & Allied (Rio Tinto: 75.7 per cent) is publicly listed on the Australian Securities Exchange and had a market capitalisation of A\$6.9 billion (US\$6.2 billion) at 31 December 2009. Coal & Allied wholly owns Hunter Valley Operations, has an 80 per cent interest in Mount Thorley Operations, a 55.6 per cent interest in the contiguous Warkworth mine, and a 40 per cent interest in the Bengalla mine which abuts its wholly owned Mount Pleasant development project. Coal & Allied also has a 36.5 per cent interest in Port Waratah Coal Services which operates the Koongal Coal Terminal and Carrington Coal Terminal in Newcastle.

The global economic crisis impacted traditional markets for thermal coal, reducing demand within the Asian region in the first

half of the year. The second half saw demand in developed nations begin to recover.

China's demand for imported coal in 2009 was particularly strong and this supported improved prices by year end, however prices were lower than the records achieved in 2008. Global steel demand was also weak in the first half of 2009 for most markets other than China, but improved in the second half of the year and has led to strong demand for coking and semi soft coking coal.

Hard coking coal production was comparable with 2008, despite a planned longwall changeover at the Kestrel mine in October 2009. There was a five per cent increase in the production of other coal in 2009 compared with 2008, primarily attributable to an increase in port allocation in the fourth quarter of 2009.

The group's main coal development projects in Australia are the extension of the Kestrel mine, and the construction of the new Clermont mine to replace the nearby Blair Athol mine which will cease operations in 2016. Both projects have supply contracts in place. Due to the economic slowdown, work on the Kestrel mine extension was slowed in 2009 however the project remains on track to meet its first scheduled production in 2012. Clermont is due to start production in mid 2010.

In 2008, Coal & Allied completed an engineering feasibility study on the Mount Pleasant coal mine project located adjacent to the Bengalla coal mine near Muswellbrook in the Hunter Valley. As certainty regarding infrastructure capacity has grown significantly, Coal & Allied is initiating a revised pre-feasibility study to define a development path with lower capital demand.

An investment programme by the owners and operators of the coal ports at Newcastle and Dalrymple Bay on the eastern seaboard of Australia is expected to result in additional capacity from 2010.

Coal & Allied has entered into long term take or pay contracts for port allocation with Port Waratah Coal Services which take effect from 1 January 2010. It follows the signing of new port access agreements between the state government, Port Waratah Coal Services and Newcastle Infrastructure Group which provide for long term contracts to underpin future expansion. Similar long term take or pay contracts to secure equivalent rail track access and rail freight are still being negotiated.

### **Colowyo Coal Company** (Rio Tinto: 100 per cent)

Colowyo Coal Company produces thermal coal in north west Colorado. The company intends to fulfil long term contracts with two power generators located in north west Colorado until 2017, with the intention to cease production in 2018.

### **Energy Resources of Australia** (Rio Tinto: 68.4 per cent)

Energy Resources of Australia (ERA) is a publicly listed company and had a market capitalisation of A\$4.6 billion (US\$4.1 billion) at 31 December 2009.

Since 1980 ERA has mined ore and produced uranium oxide at its Ranger open pit mine, 250 kilometres east of Darwin in Australia's Northern Territory. ERA also has title to the adjacent Jabiluka mineral lease, which in 2003 was put on long term care and maintenance. Ranger and Jabiluka are surrounded by, but remain separate from, the World Heritage listed Kakadu National Park. ERA's operations are subject to stringent environmental requirements, and governmental oversight.

The Ranger mine is the second largest uranium mine in the world and ERA is the fourth largest producer.

ERA's capital expansion projects to radiometrically sort low grade ores and process laterite ore were commissioned during 2008 and 2009 respectively. The laterite processing plant will contribute approximately 0.88 million pounds per annum of uranium oxide to production from 2008 through to 2014. The radiometric sorter will upgrade lower grade ore and allow an additional 2.4 million pounds of uranium oxide to be produced over a five year period from 2008.

ERA continued to work with the Mirarr, traditional owners of the land on which the mining lease is located. The Mirarr continued delivery of a cultural awareness programme to all new ERA employees and participated in environmental and cultural heritage management programmes. Increasing indigenous employment is a significant focus including the provision of training and employment opportunities.

ERA continued studies into a proposed heap leach facility at Ranger, targeting the recovery of 33 million to 44 million pounds of uranium oxide from low grade ores. ERA commenced the formal environmental approval processes for the proposed facility with the Australian and Northern Territory governments and intends to lodge an Environmental Impact Statement during 2010.

The company also began detailed planning for a proposed underground exploration decline, to conduct close spaced exploration drilling to further define the extent of the Ranger 3 Deeps mineral resource identified in late 2008.

### **Rössing Uranium** (Rio Tinto: 68.6 per cent)

Rössing Uranium produces and exports uranium oxide from Namibia to power utilities globally. Its core purpose is to maximise the value delivered to shareholders by being a safe, significant and growing long term supplier of uranium.

Rössing continues to play a major role in the Namibian economy, both in terms of GDP contribution of around 3.8 per cent as well as employment, education and training opportunities. Through the various education and training programmes of the Rössing Foundation, the company is recognised as a major contributor to national human capital development.

In August 2009 the Rössing board of directors approved the latest Life of Mine operating plan, which extends the mine life to 2023.

A technical improvement project was initiated during 2009 to secure improvements in resource estimation, grade control and operational throughput. In parallel, the construction of a heap leach pilot plant is close to completion, with commissioning planned for 2010. The heap leach project will remain a key focus as a way of reducing operating costs. Associated projects to support this include a new tailings facility and a new acid plant.

Deep drilling commenced in 2009 to investigate the extent of ore below the current pit and to firm up geological/geotechnical knowledge that will improve the mine plan and design.

In response to the financial crisis the company implemented numerous efficiency improvements and significantly reduced capital expenditure and reduced costs on a number of key major consumables, whilst continuing with key projects which will provide for future growth.

### **Outlook**

Energy markets have been adversely affected by the global economic downturn, however this has been muted compared to other commodity sectors due to electric power demand being relatively inelastic. This is especially true for low cost, base load power stations such as those fired by uranium or low cost thermal coal.

The Energy group continues to respond to the economic downturn by focusing management attention on cash conservation. Non essential capital expenditures have been deferred wherever possible, and a range of initiatives are in place which focus on working capital reductions, operating cost efficiencies, procurement efficiencies, and some head count reductions.

Demand for thermal and coking coal in both domestic (US) and seaborne traded coal markets, and globally for uranium remains robust. Prices for seaborne traded coals, both thermal and coking, are expected to be higher for 2010 than for 2009. Outlook for the uranium market remains positive, with uranium prices in the longer term expected to remain well above the levels seen for most of the last two decades.

# Iron Ore

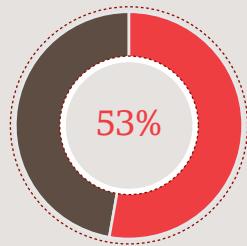
Sam Walsh, chief executive, Iron Ore and Australia



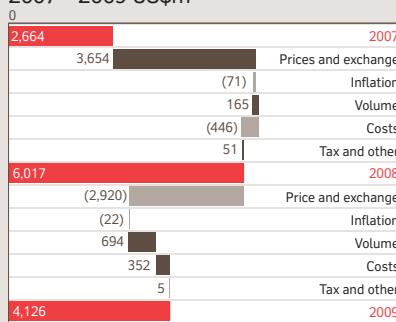
## 2009 Operational highlights

US\$ million	
Revenue	12,598
Operating cash flow	7,389
Underlying earnings	4,126
Capital expenditure	2,148
Net operating assets	11,263

### Operating cash flow contribution



### Underlying earnings contribution\* 2007 – 2009 US\$m



\* A reconciliation of the net earnings with underlying earnings for 2008 and 2009 as determined under EU IFRS is set out on page 22. All amounts presented by the product groups exclude net interest and other centrally reported items.

## Record performance, strong outlook

Rio Tinto's Iron Ore group is the second largest producer supplying the global seaborne iron ore trade, having expanded its capacity over the past decade in tandem with the rise of China as the world's largest and fastest growing single market. The group is the largest single contributor to Rio Tinto's earnings, and remains ideally placed to take advantage of the continued recovery and growth of the world's leading economies.

For production and reserves see page 63.

### Strategy

- The strategy is to maximise the return to shareholders from iron ore assets worldwide.
- Focus will remain on reducing costs and building on cash generation initiatives.
- Increasing or maintaining return from existing assets through brownfield developments where possible, particularly to contribute to sustaining capacity.
- Advancement of expansions under study to achieve 330 million tonnes per annum capacity in the Pilbara by 2015, within ongoing capital expenditure constraints.
- Continue detailed planning on integration for implementation of the proposed Pilbara production joint venture with BHP Billiton, as various regulatory approvals are sought.
- Building on 2009's success in removing bottlenecks to achieve sustained production at or above nameplate capacity.
- Fully extracting benefits from operations integration through advances such as the Operations Centre and improved planning and scheduling.
- Continuing to improve the business' safety performance, notwithstanding the escalation of business activity and expansion work.
- Securing approval for and implementing the proposed production joint venture in the Pilbara with BHP Billiton.
- Advancing the Orissa, India, and Simandou, Guinea, development projects.

### Achievements

- Global iron ore production of more than 217 million tonnes (Rio Tinto share 171.5 million tonnes), a 12 per cent increase on 2008.
- Maintained integrity of operations despite weather and global financial crisis setbacks.
- Milestone of three billion tonnes exported from Rio Tinto's operations in the Pilbara.
- Yandicoogina became the first mine in Australia to record 50 million tonnes annual production.
- Operations Centre established for remote control of mines, rail and ports.

### Key priorities

- Achieving a proper, expeditious and fair resolution of the case of the four Shanghai colleagues detained by China in July 2009.

- ### Outlook

  - The outlook for global iron ore remains very positive, with seaborne iron ore trade continuing to expand to meet major Asian demand.
  - Growth fundamentals remain unchanged from before the financial crisis, and continue to be dominated by the rise of China, where urbanisation continues apace.
  - China's increase in steel intensity is following or exceeding market expectations, and Rio Tinto expects steel consumption to double by 2020. India is expected to follow that same path, though at a less rapid pace.
  - Growth in the more stable markets of Japan, Korea, Taiwan, Western Europe and North America should remain relatively constant.

## Performance

Rio Tinto's global iron ore business achieved a record performance in 2009, despite the severe and sudden impact of the global financial crisis and significant weather related interruptions in the Pilbara early in the year.

Across operations, rapid measures were taken to reduce expenditure in the face of the downturn in markets, putting in place cash preservation efficiencies and managing operations so as to enable a quick ramp up as markets recovered. Pilbara iron ore production managed to run in excess of nameplate capacity throughout the second half of the year, despite the disruptions.

Iron Ore's contribution to 2009 underlying earnings was US\$4,126 million, US\$1,891 million lower than in 2008, mainly due to lower benchmark and spot prices, partly offset by higher volumes from the recently completed expansions and lower unit cash costs.

Sales volumes from the Pilbara region of Western Australia set a new record in 2009 at 204 million tonnes (100 per cent basis), an increase of 19 per cent on 2008. Shipments to all major markets, including the largest single market, China, were maintained at a high level throughout 2009. In the first half of the year approximately half of Rio Tinto's iron ore production was sold on a spot market basis. In the second half, sales were primarily priced on a benchmark or its equivalent basis.

In September 2009, Rio Tinto completed the sale of the Corumbá operation and the associated river logistics operations in Paraguay for US\$750 million. The profit on disposal from this divestment has been excluded from underlying earnings.

The Iron Ore Company of Canada (Rio Tinto 58.7 per cent) completed a five week Summer shutdown and all pellet lines have resumed production. The HiSmelt® plant in Kwinana, south of Perth, remained on care and maintenance throughout 2009.

## Strategy

The 2010 strategy is linked to the pace of recovery in world iron ore markets. The business will aim to achieve superior returns and cash flow, focusing on continuous improvement to build on the previous year's record performance.

As China continues to comprise more than 90 per cent of the global iron ore trade, Rio Tinto will seek to protect and enhance its market share in this and other key markets, seeking an improvement in relationships with China. Expansion options will be identified to optimise the development sequence of mines, for example using brownfield developments to increase or maintain return from existing assets.

An ongoing priority will be the early identification and adoption of technologies that improve performance and deliver value from operations, as was the case with the Operations Centre in 2009. Early returns from the Autonomous Haulage System trial (with Komatsu) of driverless trucks and the autonomous drill and blast projects at West Angelas mine show great promise. Rio Tinto remains committed to establishing its Mine of the Future™ vision in the Pilbara and elsewhere.

Planning for the implementation of an integrated production joint venture with BHP Billiton remains the most important strategic consideration of 2010.

## Key achievements

Besides the binding agreement to form a production joint venture with BHP Billiton – which required a massive commitment of organisational resources – the key achievement of 2009 was maximising efficiency through a year of unprecedented change.

Not only were new production and sales records set – notably global iron ore production in excess of 217 million tonnes (Rio Tinto share 171.5 million tonnes), a 12 per cent increase on 2008 – but they were achieved despite a very challenging first half. Major flooding through the west Pilbara cut off most mines from ports, necessitating a significant reconstruction effort. Operations were able to make up the shortfall allowing in bound ore supply to meet all contractual obligations.

The first stage of the Operations Centre in Perth was successfully completed, enabling the management of all mine, port and rail assets from a single location for the first time.

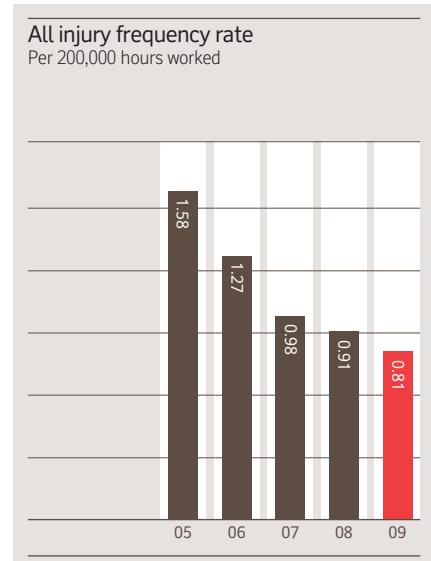
The finalisation of the sale of the Corumbá iron ore mine to Vale was also a significant achievement. The group completed negotiations for a mine gate sales agreement with Pilbara junior company Iron Ore Holdings (IOH) for up to 1.5 million tonnes a year from its Phil's Creek project to be fed into production. The agreement also included a six months' exclusive right to examine IOH's Iron Valley asset strategically placed near the Yandicoogina mine.

Efforts were intensified to maximise the participation of Traditional Owners and other indigenous Australians in the Pilbara operations. Already among the largest private sector employers of Aboriginals, a historic decision late in 2009 saw Rio Tinto award a A\$200 million contract for the Western Turner Syncline project to a joint venture involving the Eastern Guruma people.

Rio Tinto continued its longstanding support for community organisations as well as launching new partnerships with the Kings Park Botanical Gardens and the Royal Flying Doctor Service, the latter to provide the first aeromedical jet to service remote Western Australia.

## Safety

There was a significant improvement in safety performance for the Iron Ore group in 2009, with the all injury frequency rate (AIFR) dropping to 0.81, an 11 per cent improvement on 2008. The AIFR achieved was better than the year's target of 0.86, and compares with the 0.91 AIFR achieved in 2008.



A Chief Executive's Safety Award was presented to the Expansion Projects division for achieving an outstanding all injury frequency rate (AIFR) of 0.57 and implementing a number of safety initiatives. One of these was reporting and recording significant potential incidents (SPIs), a programme started at Iron Ore operating divisions in 2009.

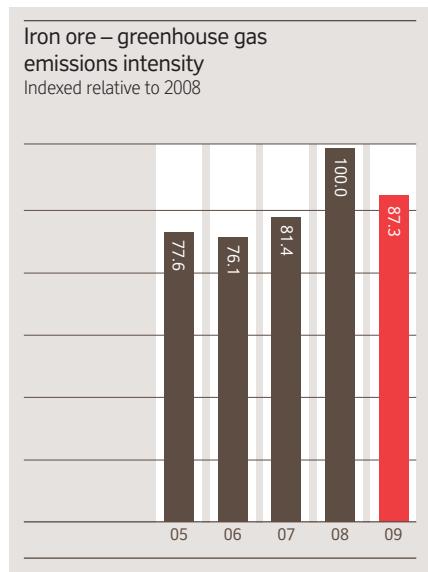
Expansion Projects achieved the outstanding rate of three SPIs reported per 100 site employees, and started the Fatality Prevention Programme to identify, eliminate or control potentially fatal events. Management worked with construction contractors to provide a strong focus on safety leadership, including safety forums and inductions with a focus on group interaction and learning.

The Safety Leadership Development Programme was implemented across iron ore sites in Western Australia.

### Iron Ore continued

#### Greenhouse gas emissions

The Iron Ore group's total greenhouse gas (GHG) emissions intensity improved to 9.1 kilograms of carbon dioxide equivalent per tonne of iron ore in 2009, from 10.5 in the previous year.



Progress continued on the replacement of ageing power infrastructure in the Pilbara, with a new generation plant ready for commissioning in 2010. Implementation of the cleaner technology will result in 25 per cent less GHG at the same production level compared with the existing steam power generation. Four gas turbines will be progressively commissioned in 2010 with the option to retrofit combined cycle equipment to further reduce GHG emissions.

Another technological improvement occurred with the integration of 51 Evolution™ Series locomotives into the Pilbara railway fleet. The new generation General Electric diesel electric locomotives replace the less efficient Dash 7 and 8 locomotives.

A number of localised innovative projects to reduce GHG emissions continued across the group. At the Tom Price mine, locally produced biodiesel has been secured to provide fuel for drilling blasts in 2010. Energy efficient devices continue to be introduced to housing and buildings on sites and in towns. Research into electricity generation, hybrid engines and alternative fuels continue through the Mine of the Future™ programme.

#### Review of operations

From November 2008 through to February 2009, the sudden impact of the global financial crisis on world iron ore demand

forced the business to re-cast its options and priorities for the year ahead.

Rio Tinto's Iron Ore business rapidly implemented a series of measures designed to curtail operating costs and capital expenditure, as its customers' liquidity challenges and its own corporate priorities demanded.

Most expansion work was suspended, and a number of assets were put on temporary shutdown or prolonged care and maintenance to preserve cash and protect shareholder value.

The proposed strategic relationship with Chinalco, announced in February, involved a significant commitment of management resources, as did from June the agreement for an operational joint venture with BHP Billiton.

An early priority of the realignment of the business was the focus on preserving operations in good shape for market recovery, and therefore a number of maintenance projects were brought forward to capitalise on the downturn. For example, a new ship loader was installed at the East Intercourse Island terminal at Dampier, several months ahead of schedule.

The focus on maximising the return from existing assets continued through the year, with the ramping up of Hope Downs mine (Rio Tinto share 50 per cent) the most significant single development, feeding 20.6 million tonnes into overall production.

The rapid repair of the rail track that was flood damaged in February allowed the Mesa J mine at Pannawonica to produce 25.2 million tonnes in 2009, a marginal increase on the previous year.

Expansion work continued on two new mines in the Pilbara – Mesa A in the Robe Valley (Rio Tinto share 53 per cent) and Brockman 4 near Tom Price (Rio Tinto share 100 per cent). Both mines are expected to be producing ore by mid 2010.

Work continued on the US\$500 million power station at Dampier and work started on adding incremental tonnage at Dampier port.

Hearings before the Australian Competition Tribunal on the issue of third party rail access to Rio Tinto's rail operations in the Pilbara continued through the latter part of 2009, with a decision expected in 2010.

In September state authorities upheld the validity of Rio Tinto's tenure of the Rhodes Ridge joint venture (Rio Tinto share 50 per cent), confirming its claim of occupancy rights on a key project for future development of the Pilbara.

Studies were completed on the Hope Downs 4 project in the east Pilbara, and environmental

approval is being sought as the 50:50 joint venture partners Rio Tinto and Hancock Prospecting consider development options.

In late 2009 Rio Tinto relaunched its expansion plans, covering two incremental five million tonne expansions in Dampier port capacity, and outlining a two step process to arrive at an overall Pilbara annual capacity of 330 million tonnes by 2015. The key components include a second wharf at Cape Lambert, six new mine developments or expansions and a major increase in supporting infrastructure and workforce developments.

At Iron Ore Company of Canada the sale of pellets was lower than the previous year, reflecting the summer shutdown and the slower recovery of traditional markets. Improved production later in the year followed the resumption of pellet lines and the benefit of additional heavy mobile equipment.

The Orissa joint venture project (Rio Tinto share 51 per cent) in India is close to finalisation, providing a potentially valuable foothold in an under explored world class province, with great capacity to service India's growing domestic market.

The Simandou project (Rio Tinto share 95 per cent) in the west African nation of Guinea, a potential development of world class significance and one which would confirm its status as a Pilbara class iron ore province, remains a work in progress. A number of issues related to security of tenure remain to be resolved with the new Government of Guinea.

Discussions continue following the negotiation of a binding agreement with BHP Billiton in December 2009 for a production joint venture. A series of regulatory approvals and related processes is under way. The joint venture, to be chaired by Iron Ore chief executive Sam Walsh, is a critical project for both partners, aiming to unlock more than US\$10 billion in synergies and realise the full potential of their iron ore assets in the Pilbara.

The joint venture encompasses the iron ore resources, capabilities and infrastructure of both companies, but marketing arrangements will remain completely separate and competitive.

#### Minerals

##### Dampier Salt (Rio Tinto: 68.4 per cent)

In 2008 Iron Ore took responsibility for Dampier Salt (DSL). DSL achieved record underlying earnings of US\$88 million in 2009, up from US\$40 million in 2008.

Salt production for DSL was 8.6 million tonnes (100 per cent), marginally down on nine million tonnes in 2008. The downturn

was mainly attributable to the softening in Asian markets in response to the global financial crisis.

The Dampier site achieved record shipments of four million tonnes despite a first quarter impacted by bad weather. The site also established a new nameplate capacity of 4.4 million tonnes per annum resulting from various process improvements. At the end of the year the 100 millionth tonne of salt was shipped from Dampier since salt production began there in 1972.

A new 3,500 tonnes per hour shiploader and feed conveyor system was installed at Port Hedland to replace the original port infrastructure. The salt transport function in the harvest process at Port Hedland was successfully brought in house from a contractor, improving the business risk profile.

In April Lake MacLeod celebrated 40 years of salt and gypsum production.

### Marine

In early 2009, the Iron Ore business assumed responsibility for Rio Tinto Marine operations (Group ship ownership and contracting).

The centralised Marine group consists of approximately 75 shipping professionals, located principally in Melbourne, Singapore, London and Montreal, supporting Rio Tinto businesses globally in assisting with vessel selection, operational safety, scheduling, port efficiency and cost management. During 2009, Rio Tinto Marine managed 168 million tonnes of seaborne volume consisting of iron ore, coal, salt, bauxite, alumina and other dry cargo, a 68 per cent increase on 2008 volume.

Rio Tinto Marine leverages the Group's substantial cargo base to obtain a low cost mix of short, medium and long term freight cover. It seeks to create value by improving the competitive position of the Group's products through freight optimisation. Rio Tinto's product diversity and global coverage affords Rio Tinto Marine the ability to combine internal and complementary external trade flows to increase vessel utilisation and profitability.

The group's HSE and vessel assurance standards for freight are set and maintained by Rio Tinto Marine, one of three equal shareholders in RightShip, a ship vetting specialist, promoting safety and efficiency in the global maritime industry. Rio Tinto Marine will continue safety improvement efforts to instil a high standard of safety performance aboard vessels under management and throughout the organisation.

During 2009 Rio Tinto Marine took possession of two new bulk carriers, RTM *Twarra* and RTM *Gladstone*, being the final two vessels in a series of five. These vessels will be used principally for the transportation of bauxite from Rio Tinto Alcan's mine at Weipa, Queensland. The purpose built ships deliver volume and efficiency advantages on niche trade routes, guaranteeing supply and eliminating freight cost variability.

### Outlook

Rio Tinto remains positive about the outlook for iron ore in 2010 as markets continue their recovery in the medium and longer term. It is important to retain some caution, as the recovery is strong but not without fragility. In particular, the sustaining benefit of the various government stimulus packages remains to be seen.

Despite this, the outlook remains far better than it appeared this time a year ago. Not only has China weathered the financial crisis better than other major markets, its greater steel consumption as a result of demographic shifts towards urbanisation has resulted in continued strong underlying demand for iron ore.

While the near future will see steel consumption stimulated by financial measures focused on infrastructure development and exports, longer term growth is expected to continue to be driven by urbanisation in coastal provinces, later spreading inland to the rural economy.

This strong demand has left China increasingly reliant on lower cost iron ore imports, emphasising the importance of Rio Tinto's position in the lowest quartile of cost per tonne for iron ore production.

There has been a resurgence in the iron ore spot price, however Rio Tinto has emphasised its willingness to align with customers' supply requirements. While Rio Tinto has long been an advocate for a robust benchmark pricing system – one able to accommodate the realities of the demand-supply balance while helping support future expansions of capacity – it does not limit itself to one preferred avenue of delivery.

The outlook for pellets is improving as the steel industry capacity utilisation has started rising at IOC's traditional North American and European markets.

# Exploration

## *Adding value through discovery*

The Group has had a sustained commitment to exploration since 1946 and considers exploration to be one of its core competencies. Mature Group operations, such as Weipa, the Pilbara and Rössing, were Tier 1 greenfield discoveries by Rio Tinto. The value of these discoveries is still being realised by both mine production and successful brownfield exploration after more than 40 years.

Continuing this legacy, since 2000, the Exploration group has identified two of the largest copper opportunities in the world at Resolution in Arizona, US and La Granja in Peru. Exploration has also delivered one of the world's largest known undeveloped high grade iron ore deposits, at Simandou in Guinea, as well as the Caliwingina channel iron deposits in the Pilbara, Australia. Exploration identified the Sulawesi nickel laterite deposit in Indonesia, the Mutamba titanium deposit in Mozambique and the potash deposits at Potasio Rio Colorado and Regina, in Argentina and Canada respectively, which Rio Tinto sold to Vale in 2009. In 2009, Exploration handed over to the Diamonds & Minerals product group for further evaluation the Jadar lithium borate deposit in Serbia.

A significant proportion of the Exploration group's expenditure is returned to Rio Tinto through the sale of Tier 2 discoveries. Over the ten year period 2000 to 2009, divestment of Exploration group projects has returned US\$1,209 million for a net pre tax spend of approximately US\$78 million. Over the period this translates to an average Tier 1 discovery cost of less than US\$10 million per deposit.

The following table shows the Exploration group's Tier 1 discoveries since 2000:

Year	Discovery	Commodity	Location
2000	Potasio Rio Colorado	Potash	Argentina
2002	Resolution	Copper	US
2004	Simandou	Iron ore	Guinea
2005	La Granja	Copper	Peru
2005	Caliwingina	Iron ore	Australia
2008	Sulawesi	Nickel	Indonesia
2008	Mutamba	Titanium	Mozambique
2009	Jadar	Lithium / Borates	Serbia

At the end of 2009, the Exploration group was actively exploring in 17 countries, and assessing opportunities in a further five, for a broad range of commodities including bauxite, copper, coking coal, iron ore, diamonds, nickel and uranium.

### Strategy

The purpose of Exploration is to add value to the Group by discovering or acquiring resources that can increase future cash

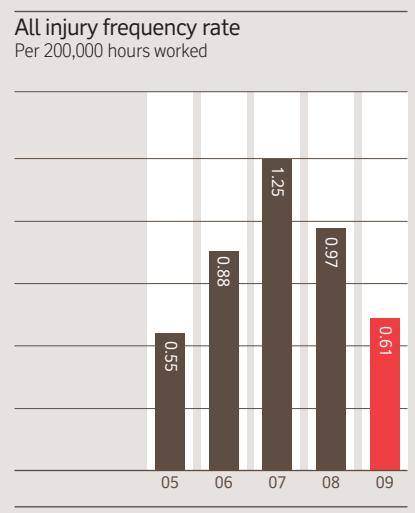
flows. A fundamental element of the Group's business strategy is a clear focus on finding and mining only the largest, lowest cost, resources that are profitable at all parts of the natural price cycle and that deliver a sustainable competitive advantage. These are described as Tier 1 resources.

The Exploration group is organised geographically into regional multi-commodity teams, with head offices in London, Salt Lake City and Brisbane. Greenfield exploration, which aims to establish completely new operating business units, involves geographic or commodity diversification away from existing Group operations. Brownfield exploration is directed at sustaining or growing existing Group business units. The Exploration group manages and is accountable for greenfield programmes and provides technical assistance to the business units on brownfield programmes.

Greenfield exploration programmes are prioritised on a global basis so that only the most attractive opportunities are pursued. Investment decisions are driven not by location or choice of commodity but rather by the quality of each opportunity.

### Safety

The Exploration group all injury frequency rate has fallen from 0.97 at the end of 2008 to 0.61 at the end of 2009. This improvement has in part come from a reduction in the scope of field activities, but also reflects a focus on reducing injuries through enhanced contractor management.



### 2009 operating performance

The Tier 1 greenfield lithium borate deposit at Jadar, Serbia, was transferred to the Diamonds & Minerals product group for

further evaluation. The Crowsnest coking coal deposit in British Columbia, Canada, was identified as a non core asset and has been prepared for divestment. Options for progressing the Altai Nuurs coking coal deposit in Mongolia continue to be assessed.

In response to Group cost reduction targets for 2009, activity at order of magnitude projects Tamarack in the US (nickel-copper) and Amargosa in Brazil (bauxite) was curtailed. These projects have now been reinvigorated and are expected to be advanced to a decision point in 2010.

In the brownfield environment, Exploration handed over the Leisker iron ore deposit in the Pilbara, Australia, to Rio Tinto Iron Ore. In Utah, US, drilling within three kilometres of the Bingham Canyon copper mine identified a new copper-molybdenum-gold porphyry system. Delineation drilling is now under way with numerous other geophysical targets within the Bingham mine orbit to be tested in 2010.

Gross cash expenditure on exploration and evaluation in 2009 was US\$514 million. The decrease of US\$620 million over 2008 gross expenditure reflects steps taken across the Group to reduce controllable costs. Gross expenditures are offset by US\$894 million (pre-tax) proceeds from the divestment of exploration properties, including US\$818 million pre-tax (US\$797 million post-tax) from the divestment of undeveloped potash assets in Argentina and Canada.

### Outlook

The Exploration group will explore for a range of commodities across at least 17 countries in 2010. Continued improvement in commodity demand forecasts will underpin the reactivation of major drilling programmes on the Tamarack nickel-copper and Amargosa bauxite projects. Focus will also be placed on reinvigorating the early stage target generation and testing required for sustained exploration success.

Divestment of Tier 2 assets will continue where real value can be realised, with a target of 100 per cent of the annual greenfield exploration budget being returned to the Group.

The next crop of potential discoveries:

Project	Commodity	Country	Stage
Tamarack	Nickel/copper	US	Order of magnitude
Amargosa	Bauxite	Brazil	Order of magnitude

## Progress of a project

The evolution of a project from target testing to commissioning can take ten to 20 years involving a series of study stages to reach investment approval and implementation. Sustainable development decision making criteria are applied throughout the project development cycle.

The early stages represent a progressive increase in confidence in the technical and economic parameters used to determine whether the project meets Rio Tinto's investment criteria. Early stages of project evolution are broadly termed Exploration. These stages of work are the responsibility of the Exploration group.

Target generation and testing involves the progression from concept to proof of mineralisation at the prospect.

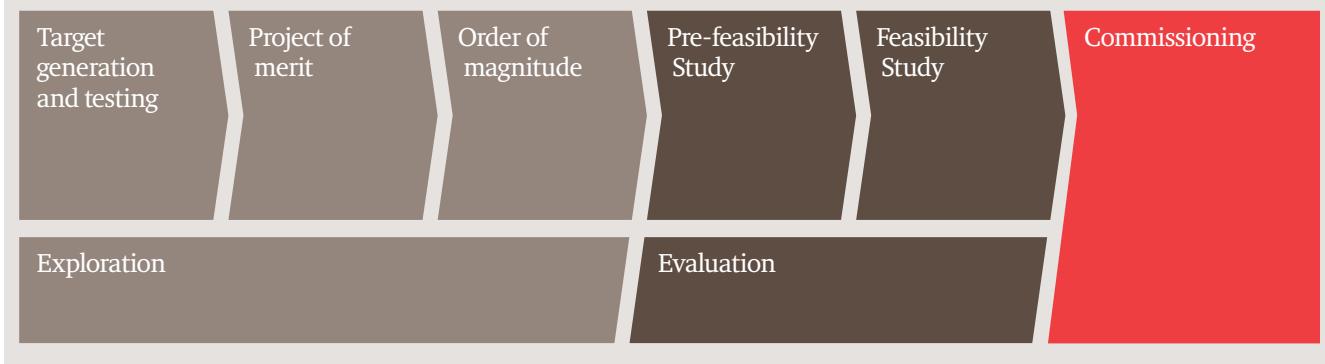
A Project of Merit is defined where mineralisation has been identified through drilling to be of a grade and quantity sufficient to be potentially economic by analogy with peer deposits currently in production.

Projects which attract the interest of the relevant Rio Tinto product group are progressed to Order of Magnitude Study. This involves an assessment of all possible options to establish if there could be a viable project, and whether its potential value is sufficient to justify committing significant sums of money to a detailed investigation programme. Any potential "showstoppers" are identified during this stage.

A successful Order of Magnitude Study results in the declaration of a discovery and the transfer of project management from the Exploration group to the relevant Rio Tinto product group. Further work on these projects is broadly defined as Evaluation.

The two main Evaluation Study phases are Pre-feasibility and Feasibility Studies. Pre-feasibility involves an evaluation of project options, yielding a far clearer understanding of the preferred project concept and the key issues. The Feasibility Study sees the focus switch to optimisation and engineering of a single scenario identified through the Pre-feasibility Study. This finally freezes and fully defines the scope in order to tie the project down with a high degree of certainty as to the specifications of what will be constructed.

### Opportunities are tested and screened by several different stages of work



# Technology & Innovation

## *Step change to confer advantage*

Technology & Innovation (T&I) consists of a central team of technology professionals and a number of technology centres that develop leading practice and promote improvements in mining, processing, asset management, strategic production planning, energy use, and project development, execution and evaluation. Emphasis is given to shared and visible measures of operational effectiveness, the improvement of analytical tools and development of staff capabilities.

Most work is focused on improving current technologies and operations. In addition, the Innovation Centre focuses on technology step changes that will confer competitive advantage in development of orebodies likely to be available to the Group in the future. The Energy & Climate Strategy Centre focuses on improving the Group's use of energy, reducing greenhouse gas emissions and understanding the effects of climate change on the Group's operations and prospects.

The total number of employees in T&I at year end was 267 compared with 351 at year end 2008. As a result of the global downturn T&I has focused staff on delivery of the most value accretive opportunities.

### Strategy

T&I's strategy is to:

- Maintain and promote a safe working environment.
- Continue to embed operational excellence in business units.
- Maximise the contribution of technology to the Group's vision of industry leadership.
- Deploy technology solutions that increase earnings.
- Design and build valuable new investment projects.
- Position the Group to unlock orebodies that require innovative mining solutions.
- Lead the Group's response to climate change.

### Safety

T&I is committed to the safe operation of its facilities and to the safe deployment of its personnel. As a consequence of a single, low severity medical treatment case, the T&I 2009 all injury frequency rate was 0.32 compared with 0.24 in 2008.

### 2009 operating performance

#### Key achievements

The Improving Performance Together (IPT) asset management programme was key to Rio Tinto Alcan cultural integration

and value delivery in 2009, resulting in significant improvement in maintenance work management performance, higher plant reliability and lower maintenance costs.

The IPT processing programme was instrumental in improving operational performance at processing plants across the Group by focusing on core metallurgical capability and delivery. For example at Kennecott Utah Copper, the collaborative IPT engagement improved underlying concentrator performance by up to 14 per cent through a combination of sustainable improvements in throughput, recovery and cost reductions.

The IPT payload management initiative delivered further improvements across many of the Group's mines in 2009. The average load carried by the Group's haul truck fleet increased by an annualised rate of more than 100 million tonnes – more than the annual tonnes mined by the Mount Tom Price iron ore mine. The initiative reduced load variability by five per cent from 2008. At several of the Pilbara Iron sites this improved control of loading was the key factor in increasing the design capacity of new truck bodies.

The T&I gross cost in 2009 was US\$134 million, compared with US\$158 million in 2008.

#### Innovation

T&I's Innovation Centre identifies, evaluates and implements value accretive step change mining technologies with Group wide application.

The Group continues to pursue the strategic Mine of the Future™ programme, which is a set of interlinking projects aimed at delivering demonstrable step change improvements in productivity, cost and environmental performance, and product quality in surface and underground mining operations and associated mineral recovery technologies.

A breakthrough delivered through the Mine of the Future™ programme is the development and deployment of autonomous blast hole drilling technologies in the Pilbara. The programme had three autonomous drill rigs at the end of 2009 and remains an exciting test programme with the potential to deploy a world first autonomous drilling solution Rio Tinto wide. Results indicate a significant improvement in blast drill accuracy plus associated hole quality, lower cost of consumables, and the ability to better utilise skilled operator resources by remotely supervising multiple autonomous drills.

The surface Mine of the Future™ programme is currently focused on the operation of the first significantly autonomous iron ore mine,

designated "Pit A", which is located at the West Angelas mine in the Pilbara. Pit A combines autonomous drilling, semi-autonomous blast loading with autonomous trucks, and a wide range of advanced sensing and telecommunications technologies. The Pit A site is fully integrated with the Iron Ore Operations Centre in Perth. The Pit A trial programme moved into full trial operation in the second quarter of 2009 and continued throughout 2009 with a zero lost time injury record. The autonomous haul fleet moved approximately 16.2 million tonnes in 2009.

In September 2009, Rio Tinto announced the formation of the "Rio de Cobre" technology alliance with the Chilean copper producer Codelco. The alliance allows for an unparalleled level of technical collaboration to take place between the two companies, which will help develop solutions to tackle the challenges posed by the need for massive, increasingly underground, copper production in the decades to come.

The Group's capabilities in the field of mineral recovery were enhanced by the formation of a long term partnership with the Julius Kruttschnitt Mineral Research Centre in Brisbane, Australia. The Rio Tinto Centre for Advanced Mineral Sorting will continue work on advancing breakthrough technology targeted to remove barren material, initially from copper ore, in order to either significantly lift current head grades or recover economically viable head grade feed from mineralised waste streams.

#### Energy & Climate Strategy

The Energy & Climate Strategy Centre was established in 2008 to lead the Group's response to the challenges of climate change. The team engages with governments and other stakeholders on the design of climate policy, develops internal strategies to reduce energy usage and greenhouse gas emissions, and identifies low carbon pathways for the Group's products.

The Group recognises that climate policy will require significant business changes, but believes that concerted government action in the near term will allow a transition which minimises long term costs. Clarity on the direction of climate policy will also reduce risks associated with long term investment in new assets.

The year 2009 was an important one for climate policy, with the Copenhagen Climate talks in December, and legislative proposals in Australia, New Zealand, the US and Europe. The Group continued actively to support the development of legislation through direct engagement with governments

and involvement in advocacy groups such as the US Climate Action Partnership.

The Energy & Climate Strategy team also supported the business units in preparing for future emissions trading systems. The quality of the Group's reporting was again recognised by the Carbon Disclosure Project. Rio Tinto scored top in the FTSE 350 materials sector and second in the Global 500 materials sector.

The Energy & Climate Strategy team manages the Group's work on carbon capture and storage (CCS). In late 2009 the Group decided to focus the majority of its investment in carbon capture and storage (CCS) technology on the Hydrogen Energy California project, a proposed new hydrogen powered electricity facility that will capture and store most of its carbon related emissions to produce clean electricity. This decision necessitated a restructuring of the broader Hydrogen Energy joint venture with BP. Rio Tinto sold its 50 per cent interest in Hydrogen Energy International Ltd, which owns an interest in the Hydrogen Power Abu Dhabi project, to BP for an undisclosed sum.

### **Mineral Technology Services**

The Mineral Technology Services Centre comprises a central team of technology professionals deployed from six regional offices in North America, Australia and the UK who partner with business units in the delivery of large, measurable increases in earnings and value. This team provides technical service to business units in the areas of geology, mining, mineral processing, geotechnics, hydrometallurgy, process control, asset management and the environment.

The Centre is also responsible for the delivery of the IPT processing solution that focuses on identifying, understanding and reducing product losses that occur during mineral processing. The sustainability of improvements is monitored through the use of shared, global performance measures for concentrators and other fixed plants. The IPT processing programme continued to deliver strong results in 2009 and assisted the operating units in realising over US\$300 million in pre-tax cash flow benefits.

### **Asset Management**

The Asset Management Centre focuses on the effective choice and deployment of the Group's equipment for mining and processing. During 2009, it focused on the continued reliability and performance of equipment across the Group, including the implementation of asset management standards, standard business processes and work practices, technical systems and

global metrics to compare and monitor the performance of both heavy mobile equipment and fixed plant equipment.

The IPT programme for Asset Management continued to deliver strong results in 2009, assisting the business units to realise over US\$200 million in pre-tax cash flow benefits. There was also a significant effort to work jointly with Rio Tinto Alcan to deploy the programme across sites in North America, Europe and Australia resulting in additional pre-tax cash flow benefits of over US\$50 million.

### **Mining Technology**

The focus of the Mining Technology Centre is to establish leading practice and develop, share and implement Group wide solutions in the core mining production processes of surface mining, underground mining, strategic resource development, resource and reserve estimation, orebody knowledge and mine planning. IPT mining initiatives in 2009 included payload management, drill and blast and off road tyre demand reduction. The IPT programme for mining technology continued to deliver strong results in 2009 and assisted business units in realising over US\$150 million in pre-tax cash flow benefits in 2009.

The Mining Technology Centre also includes a Strategic Production Planning (SPP) team, which focuses on developing and establishing leading practice. A key element of the SPP process is cooperation with business units to develop comprehensive plans and valuations of strategic development options. Results from SPP provide a logical resource development framework for more detailed studies and investment decision making. The Centre also oversees the Group's resource and reserves estimation and reporting process as well as the core technical systems.

### **Project Development**

The Project Development Centre provides guidance, support and training for all aspects of capital projects, from pre-feasibility through to execution and commissioning. It also performs a governance function by conducting project reviews and reporting back to Group operations. The Centre manages feasibility studies and the execution of capital projects on behalf of the business units. At the end of 2009 it was responsible for the implementation of the Argyle Diamonds underground project, Kestrel mine extension, Clermont coal mine project, Yarwun 2 project and the feasibility study for the Energy Resources of Australia heap leach project. During 2009, the Centre continued to make improvements in overall safety performance at these projects.

### **Technical Risk Evaluation**

The Technical Risk Evaluation Centre ensures that Rio Tinto's investment decisions are based on independent, thorough technical review and evaluation and provides advice on the adequacy of risk identification and management at key points in the project approvals process. The Centre also sets standards for Risk Analysis and Management more generally across the Group. In 2009 it began implementation of a Group wide risk management and reporting system that will ensure the Group understands, manages and reports its risk effectively.

### **Outlook**

In 2010 T&I will continue to maintain a culture that places a high priority on safety and safety improvements. T&I will continue to work with Group businesses to deliver measurable increases in earnings and will continue to assist from a technology viewpoint in the selection of the most attractive investment opportunities. T&I will continue to focus on the safe and efficient implementation of projects and will build systems to support management of projects across the Group. The pursuit of the Mine of the Future™ programme and the development of innovative alliances and relationships that will create competitive advantage for the Group remain a significant focus in the coming year. T&I will also focus efforts on delivering improvements in the Group's energy efficiency, long term business decarbonisation options, compliance processes and performance, and carbon markets participation.

## Financial review

### Cash flow

A full consolidated cash flow statement is contained in the 2009 Financial statements. Cash flow from operations, including dividends from equity accounted units, was US\$13,834 million, 33 per cent lower than 2008, primarily as a consequence of lower prices.

Tax paid for 2009 decreased to US\$3,076 million, US\$823 million lower than for 2008 largely due to the decrease in taxable profits. Net interest paid of US\$1,136 million for 2009 was US\$402 million lower than 2008, largely due to lower amounts of debt, following the repayment of part of the US\$40 billion Alcan acquisition facility, using the US\$14.8 billion net proceeds from the rights issues in July 2009.

Capital expenditure on property, plant and equipment and intangible assets was US\$5,388 million in 2009, a decrease of US\$3,186 million over 2008. This included the Brockman 4 and Mesa A iron ore mine developments in Western Australia, the expansion of the Yarwun alumina refinery, the construction of the Clermont thermal coal mine, the expansion of the Kestrel coking coal mine, the development of the underground diamond mines at Diavik and Argyle, and the completion of the Madagascar ilmenite mine.

Net cash proceeds from disposals and acquisitions in 2009 were US\$2,028 million, and related to the disposal of Corumba, Jacob's Ranch mine and Alcan Composites; along with the proceeds from the initial public offering of Cloud Peak Energy Inc and related transactions; partly offset by the payment to acquire an additional 9.8 per cent in Ivanhoe Mines. Net disposals were US\$2,563 million in 2008 and related to Cortez, Greens Creek and Alcan's aerospace service centres business.

Dividends paid in 2009 of US\$876 million were US\$1,057 million lower than dividends paid in 2008, following the cancellation of the interim dividend. Other financing cash flows include the net proceeds of the rights issues of US\$14.8 billion, repayments of borrowings of US\$22.2 billion and proceeds from additional borrowings of US\$5.8 billion.

### Statement of financial position

Net debt decreased from US\$38.7 billion to US\$18.9 billion following receipt of the proceeds from the divestment programme, strong operating cash flows and net proceeds of US\$14.8 billion from the rights issues. Net debt to total capital was 29.1 per cent at 31 December 2009 (2008: 63.3 per cent), and interest cover was nine times compared to ten times in 2008.

In addition, the Group's share of the third party net debt of equity accounted units totalled US\$1.1 billion at 31 December 2009.

Provisions for post-retirement benefit plans increased owing to an increase in the value of the obligations resulting from lower discount rates, as well as liabilities relating to Alcan Packaging's pension plans that were reclassified from Assets Held For Sale into continuing operations. This was offset, to some extent, by the increase in the value of assets held in the pension plans. This increase in the provision resulted in an actuarial loss of US\$1.0 billion being recognised directly in equity.

Net assets attributable to Rio Tinto shareholders increased by US\$23.2 billion. The increase reflected the net proceeds from the rights issues of \$14.8 billion, profit after tax attributable to Rio Tinto shareholders of US\$4.9 billion, less US\$0.9 billion of dividends paid. In addition, there was a positive currency translation effect of US\$4.9 billion as the Australian dollar, the Canadian dollar and the Euro all strengthened against the US dollar at year end, compared with 2008.

### Financial risk management

The Group's policies with regard to financial risk management are clearly defined and consistently applied. They are a fundamental part of the Group's long term strategy covering areas such as foreign exchange risk, interest rate risk, commodity price risk, credit risk, liquidity risk and capital management. Further details of our financial risk management are disclosed in note 33 "Financial risk management", to the 2009 Financial statements.

The Group's *2009 Annual report and financial statements* show the full extent of its financial commitments, including debt. The principal risks and uncertainties, to which the Group is subject, that are thought to be of particular importance are summarised on pages 16 to 19. The effectiveness of internal control procedures continues to be a high priority in the Rio Tinto Group. The boards' statement on internal control is set out on page 102.

### Liquidity and Capital risk management

Details of our Liquidity and Capital risk management are contained within note 33 "Financial risk management", part (v), to the 2009 Financial statements.

### Dividends and capital management

Dividends paid on Rio Tinto plc and Rio Tinto Limited shares are equalised on a net cash basis; that is without taking into account any associated tax credits. Dividends are determined in US dollars. Rio Tinto plc dividends are declared and paid in pounds sterling and Rio Tinto Limited dividends are declared and paid in Australian dollars, converted at exchange rates applicable to the US dollar two days prior to the announcement of dividends. Holders of American Depository Receipts (ADRs) receive a US dollar dividend at the rate declared. Changes in exchange rates could result in a reduced sterling or Australian dollar dividend in a year in which the US dollar value is maintained or increased.

On announcing the US\$15.2 billion rights issues on 5 June 2009, the Group stated that the interim dividend for 2009 had been cancelled. Following satisfactory trading results, good progress with the divestment programme and prevailing market conditions, the boards have approved a final dividend for 2009 of 45 US cents per share, a total payout of US\$882 million. Rio Tinto Limited shareholders will be paid dividends which will be fully franked. The boards expect Rio Tinto Limited to be in a position to pay fully franked dividends for the reasonably foreseeable future.

The boards expect that the total cash dividend for the 2010 financial year will be at least equal to the total cash dividend payment for 2008 of US\$1.75 billion, albeit over an increased number of shares. The interim dividend for 2010 is expected to be 45 US cents per share. From that point on, the boards are committed to a progressive dividend policy over the longer term.

### Treasury management and financial instruments

Details of our Treasury management and financial instruments are contained within the introductory paragraphs of note 33 Financial risk management, to the 2009 Financial statements.

## Off balance sheet arrangements and contractual commitments

Information in relation to our material off balance sheet arrangements, principally contingent liabilities, commitments for capital expenditure and other expenditure, and commitments under operating leases at 31 December 2009, is provided in note 35 Contingent Liabilities and Commitments to the financial statements. We expect that these contractual commitments for expenditure, together with other expenditure and liquidity requirements will be met from internal cash flow and, to the extent necessary, from the existing facilities described in note 33 Financial risk management, part (v), to the 2009 Financial statements.

Information regarding the Group's pension commitments and funding arrangements is provided in note 50 to the 2009 Financial statements.

Information regarding the Group's close-down and restoration obligations is provided in note 27 to the 2009 Financial statements.

## Foreign exchange

Details of our exposure to foreign currency fluctuations and currency derivatives, and our approach to currency hedging, are contained within note 33 Financial risk management, part (i), to the 2009 Financial statements.

## Interest rates

Details of our exposure to interest rate fluctuations are contained within note 33 Financial risk management, part (ii), to the 2009 Financial statements.

## Commodity prices

Details of our exposure to commodity price fluctuations are contained within note 33 Financial risk management, part (iii), to the 2009 Financial statements.

## Credit risks

Details of our exposure to credit risks relating to receivables, financial instruments and cash deposits, are contained within note 33 Financial risk management, part (iv), to the 2009 Financial statements.

## Disposals and acquisitions

Information regarding disposals and acquisitions is provided in note 41 Purchases and sales of subsidiaries, joint ventures, associates and other interests in businesses, to the 2009 Financial statements and on the next page.

## Critical accounting policies and estimates

Many of the amounts included in the financial statements involve the use of judgement and/or estimation. These judgements and estimates are based on management's best knowledge of the relevant facts and circumstances, having regard to previous experience, but actual results may differ from the amounts included in the financial statements. Information about such judgements and estimation is contained in note 1 Principal accounting policies to the 2009 Financial statements, and/or the other notes to the 2009 Financial statements. The key areas are summarised below.

- Dual listed company reporting
- Asset carrying values
- Asset lives
- Ore reserve estimates
- Close down, restoration and clean up obligations
- Overburden removal costs
- Deferred tax on fair value adjustments
- Exploration
- Functional currency
- Underlying earnings
- Post retirement benefits
- Deferred tax potentially recoverable on Group tax losses
- Contingencies
- Acquisition accounting

## Alcan businesses earmarked for divestment

The following businesses, which were acquired as part of Alcan Inc., have been identified for divestment, and therefore, are not included within the analyses relating to the Aluminium product group. Alcan Engineered Products is included within Other operations, and Alcan Packaging is included within assets held for sale.

## Alcan Engineered Products

Alcan Engineered Products is a global sector-leading business, with 73 operating sites in 30 countries, strongly committed to developing innovative, value-added aluminium products for a broad range of markets and applications. The current portfolio consists of four downstream manufacturing businesses: Global Aerospace, Transportation & Industry; Specialty Sheet; Extrusions & Automotive Structures; and Cable, as well as a global sales organisation, International Network.

On 30 November 2009, Rio Tinto completed the sale of Alcan Composites to Schweiter Technologies of Switzerland for a total consideration of US\$349 million. The sale process for the remaining Alcan Engineered Products businesses is ongoing.

The rapid collapse in market conditions experienced in the latter stages of 2008, persisted through most of 2009. Sales revenues fell 35 per cent year on year, as demand reached historically low levels, with those businesses serving the aerospace, automotive, road transport, and industrial markets being the hardest hit. Alcan Engineered Products responded to the difficult environment by aggressively pursuing a wide range of countermeasures that generated approximately \$300 million of cost savings.

## Alcan Packaging

Alcan Packaging is a global leader in value-added specialty packaging, with 130 operating sites in 31 countries around the world. It ranks first in flexible food, flexible pharmaceutical, plastic cosmetics and tobacco packaging. Alcan Packaging's strategy is to achieve operating excellence, moving towards fewer, larger, more specialised plants and to grow its business through innovation, partnership with multinational customers and development in emerging countries and regions. The business delivers innovative packaging solutions using plastics, engineered films, aluminium, paper, paperboard and glass to customers worldwide.

On 1 February 2010, Rio Tinto announced that it had completed the sale of the Alcan Packaging global pharmaceuticals, global tobacco, food Europe and food Asia divisions, to Amcor. A binding offer was made by Amcor on 16 August 2009, and it was accepted by Rio Tinto on 23 December 2009.

On 1 March 2010, Rio Tinto announced that it had completed the sale of its Alcan Packaging Food Americas division to Bemis Company, Inc. for a total all cash consideration of US\$1.2 billion. The Group had previously announced on 6 July 2009 that it had signed an agreement to sell its Alcan Packaging Food Americas division to Bemis Company, Inc.

The process for the sale of the remaining Beauty sector is in progress.

## Acquisitions and divestments

During 2009 Rio Tinto acquired an additional interest in Ivanhoe Mines, owner of the Oyu Tolgoi copper-gold project in Mongolia. The Group announced asset sales totalling US\$7.2 billion of which US\$3.7 billion completed in 2009. Since February 2008, Rio Tinto has announced agreed asset sales of US\$10.3 billion.

### Acquisitions

Asset	Cost US\$m	Status
<b>Acquired in 2009</b>		
Copper – Ivanhoe Mines	388	The purchase of an additional 9.8% interest increasing the Group's total holding to 19.7%
<b>Acquired in 2008</b>		
None	–	
<b>Acquired in 2007</b>		
Aluminium – Alcan Inc.	38,652	Acquisition of Alcan Inc announced in July 2007 and completed in October 2007
Energy – Hydrogen Energy (Rio Tinto: 50%)	35	Joint venture with BP
Iron Ore – Dampier Salt (Rio Tinto: 3%)	19	The purchase of a 3% interest in Dampier Salt from a minority shareholder that increased the Group's total interest to 68.4%

### Divestments

Asset	Proceeds US\$m	Status
<b>Divested in 2009</b>		
Energy – Jacobs Ranch	764	Sold to Arch Coal, Inc
Iron Ore – Corumbá mine	814	Sold to Vale
Diamonds & Minerals – Exploration projects in Argentina and Canada	850	Sold to Vale
Aluminium – Ningxia smelter (Rio Tinto: 50%)	125	Sold to Qingtongxia Aluminium Group
Exploration – sundry assets	68	Sold to multiple parties
Energy – Cloud Peak	741	IPO and connected debt offering
Alcan Engineered Products – composites	349	Sold to Schweiter Technologies
<b>Divested in 2008</b>		
Energy – Kintyre project	495	Sold to a joint venture
Copper – Greens Creek mine (Rio Tinto: 70%)	750	Sale completed to Hecla Mining, the Group's minority partner
Copper – Cortez Joint Venture (Rio Tinto: 40%)	1,695	Sold to Barrick Gold, the Group's majority partner, for cash plus a deferred bonus payment and contingent royalty interest
Exploration – sundry assets	134	Sold to multiple parties
<b>Divested in 2007</b>		
Diamonds & Minerals – Lassing and Ennsdorf	6	Rio Tinto Minerals disposed of its operations at Lassing and Ennsdorf in Austria

# Capital projects

## Capital and major evaluation projects

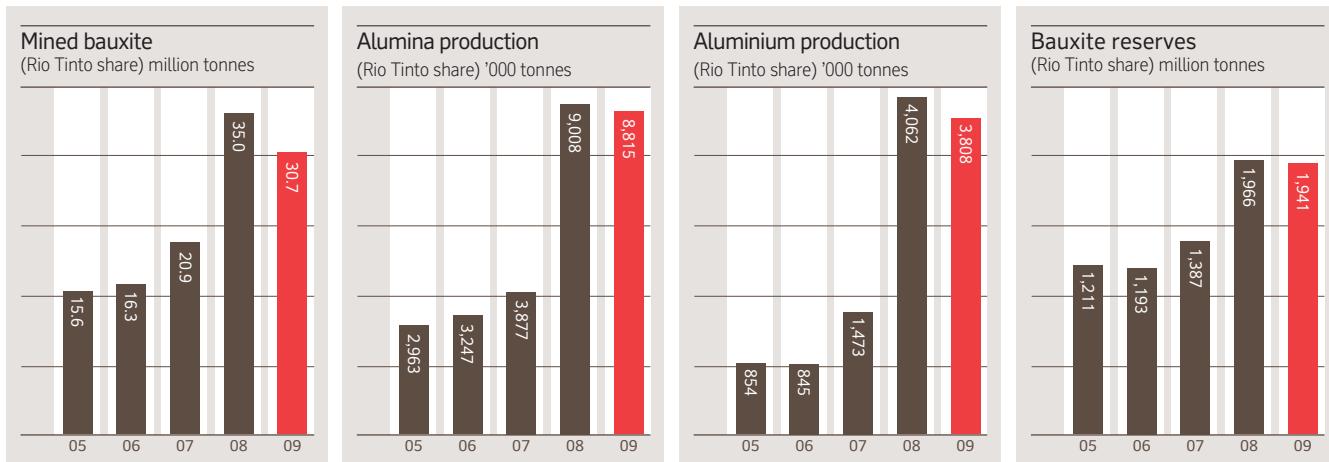
Capital expenditure for 2010 is expected to be at least US\$5 billion with potential for a further US\$1 billion for new investments. The focus for 2010 will be on the following capital projects:

Capital project Rio Tinto share 100% unless stated US\$ billion	Approved project funding US\$bn	Estimated capital spend in 2010 US\$bn	Status / milestones
Iron ore – sustaining and expansion of Pilbara iron ore mines and infrastructure capacity beyond 220mtpa	3.6	1.1	Expansion of Hope Downs from 22mtpa to 30mtpa (US\$350 million on 100% basis – Rio Tinto share is 50%) was completed during the first half of 2009. Work progressed on or ahead of schedule on the Mesa A and Brockman 4 mines. Mesa A came onstream in early February 2010 and Brockman 4 is expected to commence production in the second quarter of 2010.
Alumina – expansion of Yarwun alumina refinery from 1.4 to 3.4mtpa	1.8	0.3	Work has been slowed in response to market demand. The change to the construction schedule will result in a completion date in the fourth quarter of 2012.
Aluminium – construction of a new 225MW turbine at the Shipshaw power station in Saguenay, Quebec, Canada	0.2	0.1	Approved in October 2008, the project remains on budget and on schedule to be completed in December 2012.
Aluminium – modernisation of the Kitimat smelter in British Columbia, Canada	0.5	0.1	The project timing has been slowed. Intensive value improvement exercise exploring all options for reducing cost, and optimising project capital expenditures and returns.
Aluminium – AP50 pilot plant in Saguenay, Quebec, Canada	0.4	0.1	The project has been slowed. Construction of the electrical substation to be completed along with site preparation for potrooms and foundation of the busbars room.
Coking coal – Kestrel (Rio Tinto share 80%) extension and expansion	1.0	0.4	The project continues to target scheduled production of coal in 2012.
Thermal coal – Clermont (Rio Tinto 50.1%) replacement of Blair Athol	1.3	0.2	The project remains on track with first coal expected in the first quarter of 2010, ramping up to full capacity of 12.2mtpa by 2013.
Diamonds – Argyle underground development, extending life to 2018	1.5	0.1	The project has been slowed to critical development activities. The project continues through 2010 and is being reviewed to determine the appropriate ramp-up timing.
Diamonds – Diavik (Rio Tinto 60%) underground development	0.8	–	The project has been largely completed with first production expected in early 2010

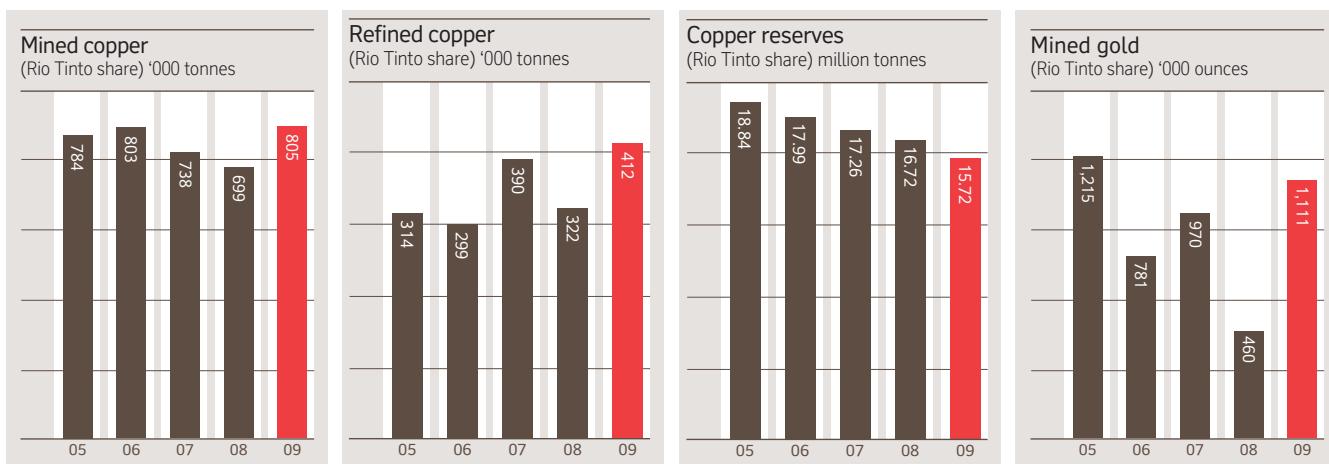
Sustaining capital expenditure for 2010 is estimated to be US\$2.1 billion (Rio Tinto funded). In addition to these capital projects, the Group will continue to fund a number of major evaluation projects in 2010. Studies will continue into the step change expansion of iron ore production capacity in the Pilbara to 330 million tonnes per annum by 2015. Detailed design and engineering work of the Cape Lambert port expansion are scheduled to be completed by the end of 2010. Other major evaluation projects include the Simandou iron ore project and the La Granja and Resolution copper projects.

# Summary

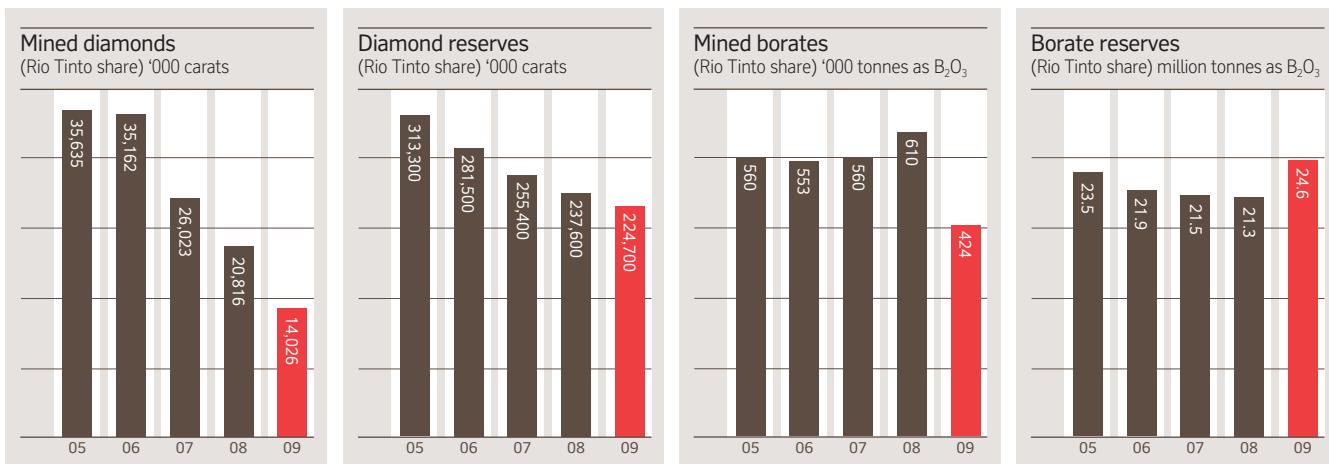
## Aluminium



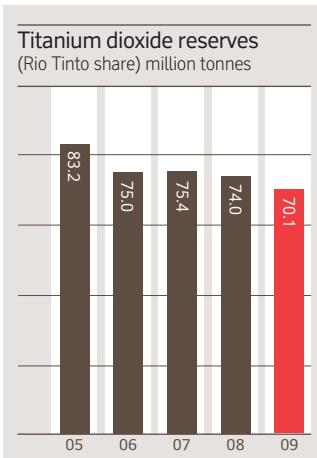
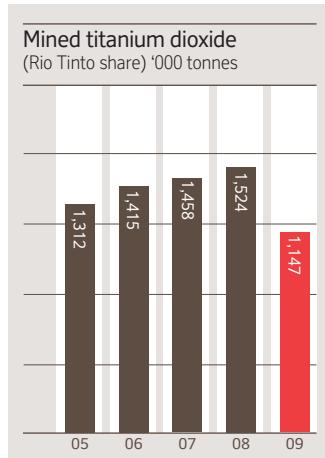
## Copper



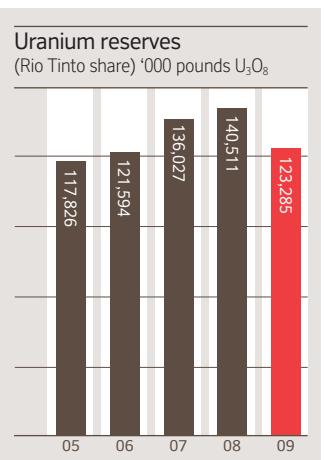
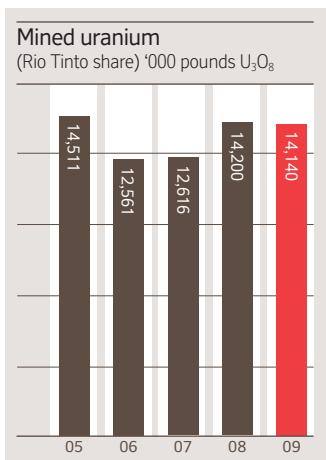
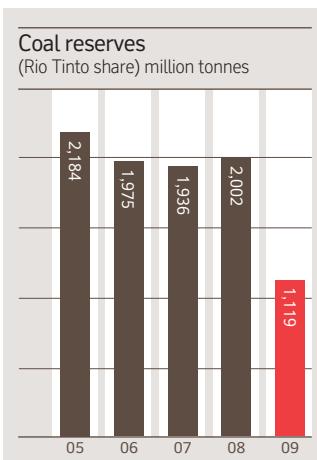
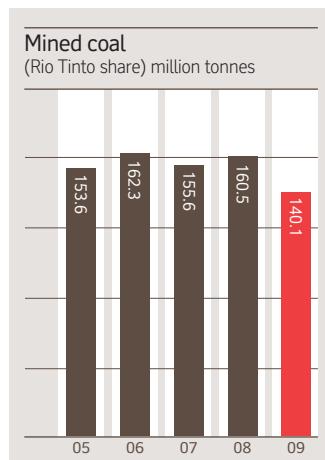
## Diamonds & Minerals



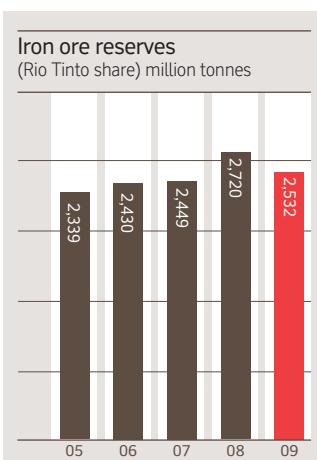
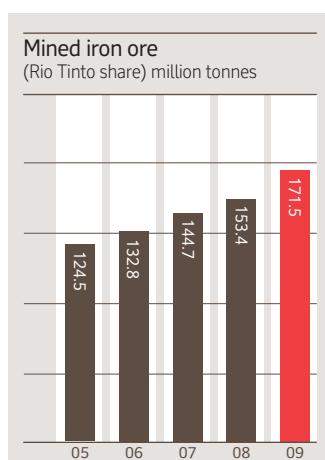
## Diamonds & Minerals continued



## Energy



## Iron Ore



# Metals and minerals production

	2009 Production		2008 Production		2007 Production	
	Rio Tinto % share (a)	Total	Rio Tinto share	Total	Rio Tinto share	Total
<b>ALUMINA ('000 tonnes)</b>						
Gardanne (France) (b) (c)	100.0	—	—	38	38	21
Gove (Australia) (b)	100.0	2,519	2,519	2,325	2,325	405
Jonquière (Vaudreuil) (Canada) (b)	100.0	1,125	1,125	1,370	1,370	252
Queensland Alumina (Australia) (b) (d)	80.0	3,959	3,167	3,842	3,074	3,816
São Luis (Alumar) (Brazil) (b)	10.0	1,657	166	1,504	150	288
Yarwun (Australia)	100.0	1,347	1,347	1,293	1,293	1,260
Specialty Plants (Canada/France/Germany) (b) (c)	100.0	492	492	758	758	144
<b>Rio Tinto total</b>			<b>8,815</b>		<b>9,008</b>	<b>3,877</b>
<b>ALUMINIUM ('000 tonnes)</b>						
Alma (Canada) (b)	100.0	435	435	424	424	80
Alouette (Sept-Îles) (Canada) (b)	40.0	573	229	572	229	109
Alucam (Edéa) (Cameroon) (b)	46.7	73	34	91	43	19
Anglesey (UK) (e)	51.0	106	54	118	60	147
Arvida (Canada) (b)	100.0	171	171	172	172	32
Beauharnois (Canada) (b) (f)	100.0	11	11	50	50	10
Bécancour (Canada) (b)	25.1	420	105	415	104	80
Bell Bay (Australia)	100.0	177	177	178	178	177
Boyne Island (Australia)	59.4	556	331	556	330	548
Dunkerque (France) (b)	100.0	244	244	254	254	49
Grande-Baie (Canada) (b)	100.0	215	215	212	212	40
ISAL (Reykjavík) (Iceland) (b)	100.0	190	190	187	187	35
Kitimat (Canada) (b)	100.0	224	224	247	247	47
Lannemezan (France) (b) (g)	100.0	—	—	5	5	5
Laterrière (Canada) (b)	100.0	235	235	234	234	44
Lochaber (UK) (b)	100.0	38	38	43	43	8
Lynemouth (UK) (b)	100.0	109	109	165	165	33
Ningxia (Qingtongxia) (China) (b) (h)	—	10	5	163	81	15
Sebree (US) (b)	100.0	193	193	197	197	37
Shawinigan (Canada) (b)	100.0	99	99	100	100	18
Sohar (Oman) (i)	20.0	351	70	49	10	—
SORAL (Husnes) (Norway) (b)	50.0	98	49	171	86	32
Saint-Jean-de-Maurienne (France) (b)	100.0	101	101	130	130	25
Tiwai Point (New Zealand)	79.4	271	215	316	250	351
Tomago (Australia) (b)	51.6	528	272	523	270	97
<b>Rio Tinto total</b>			<b>3,808</b>		<b>4,062</b>	<b>1,473</b>
<b>BAUXITE ('000 tonnes)</b>						
Awaso (Ghana) (b) (j)	80.0	440	352	796	637	216
Gove (Australia) (b)	100.0	7,185	7,185	6,245	6,245	985
Porto Trombetas (MRN) (Brazil) (b)	12.0	15,645	1,877	18,063	2,168	3,392
Sangaredi (Guinea) (b)	(k)	11,216	5,047	13,181	5,931	2,502
Weipa (Australia)	100.0	16,235	16,235	20,006	20,006	18,209
<b>Rio Tinto total</b>			<b>30,696</b>		<b>34,987</b>	<b>20,900</b>
<b>BORATES ('000 tonnes) (L)</b>						
Rio Tinto Minerals – Boron (US)	100.0	411	411	591	591	541
Rio Tinto Minerals – Tincalayu (Argentina)	100.0	13	13	19	19	19
<b>Rio Tinto total</b>			<b>424</b>		<b>610</b>	<b>560</b>
<b>COAL – HARD COKING ('000 tonnes)</b>						
Rio Tinto Coal Australia						
Hail Creek Coal (Australia)	82.0	6,308	5,173	6,049	4,960	5,012
Kestrel Coal (Australia)	80.0	2,868	2,294	3,089	2,471	2,586
<b>Rio Tinto total hard coking coal</b>			<b>7,467</b>		<b>7,431</b>	<b>6,179</b>

 See notes on page 67

	Rio Tinto % share (a)	Total	Rio Tinto share	Total	Rio Tinto share	Total	Rio Tinto share
<b>COAL – OTHER* ('000 tonnes)</b>							
<b>Rio Tinto Coal Australia</b>							
Bengalla (Australia)	30.3	5,466	1,655	5,357	1,622	5,155	1,561
Blair Athol (Australia)	71.2	11,325	8,068	10,194	7,262	7,924	5,645
Hunter Valley Operations (Australia)	75.7	11,232	8,504	10,751	8,139	10,094	7,642
Kestrel Coal (Australia)	80.0	849	679	929	744	1,035	828
Mount Thorley Operations (Australia)	60.6	3,342	2,024	2,949	1,786	2,924	1,771
Tarong Coal (Australia) (m)	—	—	—	262	262	4,510	4,510
Warkworth (Australia)	42.1	5,162	2,172	6,039	2,540	5,775	2,430
<b>Total Australian other coal</b>		<b>23,103</b>			<b>22,356</b>		<b>24,388</b>
<b>US Coal</b>							
Antelope (US) (n)	48.3	30,865	29,031	32,474	32,474	31,267	31,267
Colowyo (US) (o)	100.0	3,214	3,214	4,446	4,446	5,077	5,077
Cordero Rojo (US) (n)	48.3	35,687	33,361	36,318	36,318	36,712	36,712
Decker (US) (n)	24.1	4,161	2,017	5,939	2,970	6,340	3,170
Jacobs Ranch (US) (p)	—	26,537	26,537	38,206	38,206	34,565	34,565
Spring Creek (US) (n)	48.3	16,035	15,360	16,341	16,341	14,291	14,291
<b>Total US coal</b>		<b>109,520</b>			<b>130,755</b>		<b>125,083</b>
<b>Rio Tinto total other coal</b>		<b>132,623</b>			<b>153,111</b>		<b>149,471</b>
<b>COPPER (mined) ('000 tonnes)</b>							
Bingham Canyon (US)	100.0	303.5	303.5	238.0	238.0	212.2	212.2
Escondida (Chile)	30.0	1,061.2	318.3	1,281.7	384.5	1,405.5	421.6
Grasberg – Joint Venture (Indonesia) (q)	40.0	269.3	107.7	17.8	7.1	70.9	28.4
Northparkes (Australia)	80.0	34.3	27.4	24.8	19.8	43.1	34.5
Palabora (South Africa)	57.7	82.6	47.6	85.1	49.1	71.4	41.2
<b>Rio Tinto total</b>		<b>804.7</b>			<b>698.5</b>		<b>737.9</b>
<b>COPPER (refined) ('000 tonnes)</b>							
Escondida (Chile)	30.0	327.2	98.2	257.5	77.3	238.4	71.5
Kennecott Utah Copper (US)	100.0	274.2	274.2	200.6	200.6	265.6	265.6
Palabora (South Africa)	57.7	69.4	40.0	75.9	43.8	91.7	52.9
<b>Rio Tinto total</b>		<b>412.4</b>			<b>321.6</b>		<b>390.0</b>
<b>DIAMONDS ('000 carats)</b>							
Argyle (Australia)	100.0	10,591	10,591	15,076	15,076	18,744	18,744
Diavik (Canada)	60.0	5,565	3,339	9,225	5,535	11,943	7,166
Murowa (Zimbabwe)	77.8	124	97	264	205	145	113
<b>Rio Tinto total</b>		<b>14,026</b>			<b>20,816</b>		<b>26,023</b>
<b>GOLD (mined) ('000 ounces)</b>							
Barneys Canyon (US)	100.0	2	2	5	5	11	11
Bingham Canyon (US)	100.0	582	582	368	368	397	397
Cortez/ Pipeline (US) (r)	—	—	—	72	29	538	215
Escondida (Chile)	30.0	144	43	144	43	187	56
Grasberg – Joint Venture (Indonesia) (q)	40.0	1,072	429	—	—	1,058	423
Greens Creek (US) (s)	—	—	—	18	12	68	48
Northparkes (Australia)	80.0	34	27	32	26	79	63
Rawhide (US) (t)	100.0	19	19	18	9	19	10
Others		13	8	14	8	19	11
<b>Rio Tinto total</b>		<b>1,111</b>			<b>501</b>		<b>1,233</b>
<b>GOLD (refined) ('000 ounces)</b>							
Kennecott Utah Copper (US)	100.0	479	479	303	303	523	523

\* Coal – other includes thermal coal and semi-soft coking coal.

 See notes on page 67

## Production and reserves

### Metals and minerals production

	Rio Tinto % share (a)	2009 Production		2008 Production		2007 Production	
		Total	Rio Tinto share	Total	Rio Tinto share	Total	Rio Tinto share
<b>IRON ORE ('000 tonnes)</b>							
Corumbá (Brazil) (u)	—	1,509	1,509	2,032	2,032	1,777	1,777
Hamersley Iron – six wholly owned mines (Australia)	100.0	106,808	106,808	95,553	95,553	94,567	94,567
Hamersley – Channar (Australia)	60.0	11,041	6,625	10,382	6,229	10,549	6,330
Hamersley – Eastern Range (Australia)	(v)	9,318	9,318	8,186	8,186	6,932	6,932
Hope Downs (Australia) (w)	50.0	20,634	10,317	10,936	5,468	64	32
Iron Ore Company of Canada (Canada)	58.7	13,844	8,129	15,830	9,295	13,229	7,768
Robe River (Australia)	53.0	54,417	28,841	50,246	26,631	51,512	27,301
<b>Rio Tinto total</b>		<b>171,547</b>		<b>153,394</b>		<b>144,707</b>	
<b>LEAD ('000 tonnes)</b>							
Greens Creek (US) (s)	—	—	—	4.6	3.2	17.0	11.9
<b>MOLYBDENUM ('000 tonnes)</b>							
Bingham Canyon (US)	100.0	11.3	11.3	10.6	10.6	14.9	14.9
<b>PIG IRON ('000 tonnes)</b>							
HIs melt® (Australia)	60.0	—	—	144	87	115	69
<b>SALT ('000 tonnes)</b>							
Dampier Salt (Australia) (x)	68.4	8,555	5,848	8,974	6,135	7,827	5,242
<b>SILVER (mined) ('000 ounces)</b>							
Bingham Canyon (US)	100.0	4,871	4,871	3,414	3,414	3,487	3,487
Escondida (Chile)	30.0	5,424	1,627	6,167	1,850	7,870	2,361
Grasberg – Joint Venture (Indonesia) (q)	40.0	3,685	1,474	549	220	1,193	477
Greens Creek (US) (s)	—	—	—	1,815	1,275	8,646	6,075
Others	—	757	596	655	417	914	602
<b>Rio Tinto total</b>		<b>8,569</b>		<b>7,176</b>		<b>13,002</b>	
<b>SILVER (refined) ('000 ounces)</b>							
Kennecott Utah Copper (US)	100.0	4,050	4,050	3,252	3,252	4,365	4,365
<b>TALC ('000 tonnes)</b>							
Rio Tinto Minerals – talc (Australia/Europe/North America) (y)	100.0	888	888	1,163	1,163	1,281	1,281
<b>TITANIUM DIOXIDE FEEDSTOCK ('000 tonnes)</b>							
Rio Tinto Iron & Titanium (Canada/South Africa) (2) (aa)	100.0	1,147	1,147	1,524	1,524	1,458	1,458
<b>URANIUM ('000 lbs U<sub>3</sub>O<sub>8</sub>)</b>							
Energy Resources of Australia (Australia)	68.4	11,500	7,865	11,773	8,052	11,713	8,011
Rössing (Namibia)	68.6	9,150	6,275	8,966	6,149	6,714	4,605
<b>Rio Tinto total</b>		<b>14,140</b>		<b>14,200</b>		<b>12,616</b>	
<b>ZINC ('000 tonnes)</b>							
Greens Creek (US) (s)	—	—	—	13.9	9.8	50.8	35.7

 See notes on page 67

**Production data notes:**

Mine production figures for metals refer to the total quantity of metal produced in concentrates, leach liquor or doré bullion irrespective of whether these products are then refined onsite, except for the data for bauxite and iron ore which represent production of marketable quantities of ore.

- (a) Rio Tinto percentage share, shown above, is as at the end of 2009 and has applied over the period 2007 – 2009 except for those operations where the Rio Tinto ownership has varied during the year; the weighted average ownership for each year is shown below. The Rio Tinto share varies at individual mines and refineries in the "others" category and thus no value is shown.

**Rio Tinto share %**

Operation	See Note	2009	2008	2007
Queensland Alumina	(d)	80.0	80.0	46.3
Antelope	(n)	94.0	100.0	100.0
Cordero Rojo	(n)	94.0	100.0	100.0
Decker	(n)	47.0	50.0	50.0
Spring Creek	(n)	94.0	100.0	100.0
Dampier Salt Limited	(x)	68.4	68.4	67.0

- (b) Rio Tinto acquired the operating assets of Alcan with effect from 24 October 2007; production is shown as from that date. The Rio Tinto assets and the Alcan assets have been combined under the Rio Tinto Alcan name.
- (c) Production of smelter grade alumina at Gardanne ceased at the end of 2008. Production continues from the Gardanne specialty alumina plant.
- (d) Rio Tinto held a 38.6 per cent share in Queensland Alumina until 24 October 2007; this increased to 80.0 per cent following the Alcan acquisition.
- (e) The Anglesey smelter ceased smelting operations at the end of the third quarter of 2009.
- (f) The Beauharnois smelter ceased smelting operations in the second quarter of 2009.

- (g) The Lannemezan smelter closed in the first quarter of 2008.
- (h) Rio Tinto sold its 50 per cent interest in the Ningxia aluminium smelter with an effective date of 26 January 2009.
- (i) Production at the Sohar smelter commenced in the third quarter of 2008.
- (j) Rio Tinto Alcan had an 80 per cent interest in the Awaso mine but purchased the additional 20 per cent of production. Rio Tinto Alcan sold its interest in Ghana Bauxite Company, owner of the Awaso mine, with an effective date 1 February 2010.
- (k) Rio Tinto has a 22.95 per cent shareholding in the Sangaredi mine but receives 45.0 per cent of production under the partnership agreement.
- (l) Borate quantities are expressed as B<sub>2</sub>O<sub>3</sub>.
- (m) Rio Tinto sold its 100 per cent interest in Tarong Coal with an effective date of 31 January 2008; production data are shown up to that date.
- (n) As a result of the initial public offering of Cloud Peak Energy Inc. on 20 November 2009, Rio Tinto now holds a 48.3 per cent interest in the Antelope, Cordero Rojo and Spring Creek mines and a 24.1 per cent interest in the Decker mine. These interests were formerly reported under Rio Tinto Energy America but are now managed by Cloud Peak Energy.
- (o) During 2008, Rio Tinto acquired a 100 per cent interest in the Colowyo mine, having previously held a partnership interest. All of Colowyo's production was already included in Rio Tinto's share of production.
- (p) Rio Tinto sold its 100 per cent interest in the Jacobs Ranch mine with an effective date of 1 October 2009. Production data are shown up to that date.
- (q) Through a joint venture agreement with Freeport-McMoRan Copper & Gold (FCX), Rio Tinto is entitled to 40 per cent of additional material mined as a consequence of expansions and developments of the Grasberg facilities since 1998. Total production reflects the total quantities attributable to the joint venture.
- (r) Rio Tinto sold its 40 per cent interest in the Cortez/Pipeline joint venture effective within the end of February 2008. Production data are shown up to that date.
- (s) Rio Tinto sold its 70.3 per cent share in the Greens Creek joint venture with an effective date of 16 April 2008. Production data are shown up to that date.
- (t) On the 28 October 2008, Rio Tinto increased its shareholding in the Rawhide Joint Venture from 51 per cent to 100 per cent. The previous Joint Venture shareholder continued to be entitled to 49 per cent of production until 31 December 2008; thereafter Rio Tinto has been entitled to 100 per cent.
- (u) Rio Tinto sold its 100 per cent interest in the Corumbá mine with an effective date of 18 September 2009. Production data are shown up to that date.
- (v) Rio Tinto's share of production includes 100 per cent of the production from the Eastern Range mine. Under the terms of the joint venture agreement (Rio Tinto 54 per cent), Hamersley Iron manages the operation and is obliged to purchase all mine production from the joint venture.
- (w) Hope Downs started production in the fourth quarter of 2007.
- (x) Rio Tinto increased its shareholding in Dampier Salt Limited to 68.4 per cent at the beginning of July 2007.
- (y) Talc production includes some products derived from purchased ores.
- (z) Quantities comprise 100 per cent of Rio Tinto Fer et Titane and 50 per cent of Richards Bay Minerals' (RBM) production until late 2009 when RBM concluded a Broad Based Black Economic Empowerment transaction. Rio Tinto Iron & Titanium's share of RBM production reflects a decrease from 50 to 37 per cent with effect from 9 December 2009.
- (aa) Ilmenite mined in Madagascar is being processed in Canada with effect from June 2009.

Production figures are sometimes more precise than the rounded numbers shown, hence an apparent small difference may result where the Rio Tinto share is totalled.

## Ore reserves

Ore reserves and mineral resources for Rio Tinto managed operations are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, December 2004 (the Australian Joint Ore Reserves Committee (JORC) Code) as required by the Australian Securities Exchange (ASX). Codes or guidelines similar to JORC with only minor regional variations have been adopted in South Africa, Canada, the US, Chile, Peru, the Philippines, the UK, Ireland and Europe. Together these Codes represent current best practice for reporting ore reserves and mineral resources.

The JORC Code envisages the use of reasonable investment assumptions, including the use of projected long term commodity prices, in calculating reserve

estimates. However, for US reporting, the US Securities and Exchange Commission require historical price data to be used. For this reason, some reserves reported to the SEC in the Form 20-F may differ from those reported below.

Ore reserve and mineral resource information in the tables below is based on information compiled by Competent Persons (as defined by JORC), most of whom are full time employees of Rio Tinto or related companies. Each has had a minimum of five years relevant estimation experience and is a member of a recognised professional body whose members are bound by a professional code of ethics. Each Competent Person consents to the inclusion in this report of information they have provided in the form and context in which

it appears. Competent Persons responsible for the estimates are listed on page 77, by operation, along with their professional affiliation, employer and accountability for reserves and/or resources. Where operations are not managed by Rio Tinto the reserves are published as received from the managing company.

The ore reserve figures in the following tables are as of 31 December 2009. Summary data for year end 2008 are shown for comparison. Metric units are used throughout. The figures used to calculate Rio Tinto's share of reserves are often more precise than the rounded numbers shown in the tables, hence small differences might result if the calculations are repeated using the tabulated figures.

Type of mine (a)	Proved ore reserves at end 2009		Probable ore reserves at end 2009		Total ore reserves 2009 compared with 2008				Rio Tinto share	
	Tonnage	Grade	Tonnage	Grade	Tonnage		Grade		Interest %	Recoverable mineral
	millions of tonnes	% Al <sub>2</sub> O <sub>3</sub>	millions of tonnes	% Al <sub>2</sub> O <sub>3</sub>	2009	2008	2009	2008		millions of tonnes
<b>BAUXITE (b)</b>										
<b>Reserves at operating mines</b>										
Gove (Australia)	O/P	140	49.4	46	49.2	186	175	49.4	49.4	100.0
Porto Trombetas (MRN) (Brazil)	O/P	150	49.7	64	49.2	214	205	49.6	50.6	12.0
Sangaredi (Guinea)	O/P			130	52.4	130	133	52.4	52.4	23.0
Weipa (Australia)	O/P	339	51.9	1,360	53.0	1,699	1,736	52.7	52.4	100.0
<b>Total</b>										1,699
										1,941
Marketable product										
<b>BORATES (c)</b>										
<b>Reserves at operating mines</b>										
Rio Tinto Minerals – Boron (US) (d)	O/P	14.8		9.8		24.6	21.3			100.0
										24.6
<b>COAL (e)</b>										
Coal type (f)	Reserves		Marketable Reserves		Marketable reserves		Marketable coal quality		Avg. % yield to give marketable reserves	Marketable reserves
	Proved	Probable	Proved	Probable	Total 2009	Total 2008	(g)	(g)		
	millions of tonnes	millions of tonnes	millions of tonnes	millions of tonnes	millions of tonnes	millions of tonnes	Calorific value MJ/kg	Sulphur content %		
<b>Rio Tinto Coal Australia</b>										
Bengalla (Australia)	O/C	SC	86	81	64	62	126	132	28.21	0.47
Blair Athol (Australia) (h)	O/C	SC	21	0.5	18	0.3	18	29	26.17	0.31
Hail Creek (Australia) (i)	O/C	MC	108	302	61	149	209	167	32.20	0.35
Hunter Valley Operations (Australia) (j)	O/C	SC + MC	314	89	218	60	278	330	28.99	0.54
Kestrel Coal (Australia)	U/G	SC + MC	56	97	47	81	128	131	31.60	0.59
Mount Thorley Operations (Australia)	O/C	SC + MC	31	5	21	3	24	24	29.41	0.43
Warkworth (Australia)	O/C	SC + MC	228	185	149	121	270	278	30.68	0.44
<b>Sub-total</b>										663

 See notes on page 71

## COAL continued (e)

Type of mine (a)	Coal type (f)	Reserves		Marketable Reserves		Marketable reserves		Marketable coal quality		Avg. % yield to give marketable reserves	Rio Tinto share Interest %	Rio Tinto share Marketable reserves	
		Proved	Probable at end 2009	Proved	Probable at end 2009	Total 2009	Total 2008	(g)	(g)				
		millions of tonnes	millions of tonnes	millions of tonnes	millions of tonnes	millions of tonnes	millions of tonnes	Calorific value MJ/kg	Sulphur content %			millions of tonnes	
<b>US Coal (US)</b>													
Antelope (US) (l)	O/C	SC	255	10	255	10	265	296	20.59	0.24	100	48.3	128
Colowyo (US) (m)	O/C	SC	14	3	14	3	17	20	23.92	0.44	100	100.0	17
Cordero Rojo (US) (k)	O/C	SC	289	84	289	84	372	365	19.54	0.29	100	48.3	180
Decker (US) (n)	O/C	SC	2		2		2	9	21.87	0.40	100	24.1	1
Jacobs Ranch (US) (o)	O/C	SC	-	-	-	-	-	346	-	-	-	-	-
Spring Creek (US) (k)	O/C	SC	234	38	234	38	272	287	21.75	0.33	100	48.3	131
<b>Sub-total</b>													<b>456</b>
<b>Total reserves at operating mines</b>													<b>1,119</b>
<b>Other undeveloped reserves (p)</b>													
<b>Rio Tinto Coal Australia</b>													
Clermont (Australia)	O/C	SC	193	5	185	4	189	189	27.90	0.33	96	50.1	95
Mount Pleasant (Australia)	O/C	SC		459		350	350	26.73	0.51		76	75.7	265
<b>Total undeveloped reserves</b>													<b>360</b>

	Proved ore reserves at end 2009		Probable ore reserves at end 2009		Total ore reserves 2009 compared with 2008				Average mill recovery %	Recoverable metal		
	Tonnage	Grade	Tonnage	Grade	2009		2008					
					millions of tonnes	%Cu	millions of tonnes	%Cu				
<b>COPPER</b>												millions of tonnes
<b>Reserves at operating mines</b>												
Bingham Canyon (US) (q)	O/P	317	0.53	207	0.39	524	618	0.47	0.47	85	100.0	2.105
Escondida (Chile)												
- sulphide	O/P	726	1.15	933	1.00	1,659	1,690	1.07	1.10	82	30.0	4.375
- sulphide leach	O/P	640	0.58	1,738	0.53	2,377	2,202	0.54	0.54	33	30.0	1.274
- oxide (r)	O/P	66	0.69	56	0.96	121	137	0.81	0.94	68	30.0	0.201
Grasberg (Indonesia)	O/P + U/G	816	1.12	1,774	0.95	2,590	2,665	1.00	1.01	89	(s)	7.061
Northparkes (Australia)												
- open pit and stockpiles	O/P	9.9	0.47	0.4	0.44	10.3	9.8	0.47	0.48	85	80.0	0.033
- underground (t)	U/G			70	0.89	70	81	0.89	0.83	89	80.0	0.442
Palabora (South Africa) (u)	U/G	75	0.60			75	91	0.60	0.62	88	57.7	0.228
<b>Total</b>												<b>15.719</b>
<b>Reserves at development projects</b>												
Eagle (US)	U/G			3.6	2.93	3.6	3.6	2.93	2.93	95	100.0	0.102
Oyu Tolgoi (Mongolia) (v)												
- Southern Oyu	O/P	127	0.58	803	0.48	930	930	0.50	0.50	87	19.7	0.794
<b>Total</b>												<b>0.896</b>
												Recoverable diamonds
<b>DIAMONDS (b)</b>		millions of tonnes	carats per tonne	millions of tonnes	carats per tonne	millions of tonnes	millions of tonnes	carats per tonne	carats per tonne			millions of carats
<b>Reserves at operating mines</b>												
Argyle (Australia)	O/P + U/G	23	1.1	62	2.4	85	89	2.1	2.1			100.0
Diavik (Canada)	O/P + U/G	9	3.1	11	2.9	20	20	3.0	3.1			60.0
Murowa (Zimbabwe)	O/P			21	0.7	21	21	0.7	0.7			10.8
<b>Total</b>												<b>224.7</b>

See notes on page 71

## Production and reserves

### Ore reserves continued

Type of mine (a)	Proved ore reserves at end 2009		Probable ore reserves at end 2009		Total ore reserves 2009 compared with 2008				Rio Tinto share		
	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	Average mill recovery %	Interest %	Recoverable metal millions of ounces
	millions of tonnes	grammes per tonne	millions of tonnes	grammes per tonne	millions of tonnes	millions of tonnes	grammes per tonne	grammes per tonne			
<b>GOLD</b>											
Reserves at operating mines											
Bingham Canyon (US) (q)	O/P	317	0.27	207	0.22	524	618	0.25	0.27	62	100.0
Grasberg (Indonesia)	O/P + U/G	816	1.07	1,774	0.77	2,590	2,665	0.86	0.89	69	(s)
Northparkes (Australia)											13.006
- open pit and stockpiles	O/P	9.9	0.33	0.4	0.29	10.3	9.8	0.33	0.34	76	80.0
- underground (t)	U/G			70	0.34	70	81	0.34	0.31	73	80.0
<b>Total</b>											16.149
Reserves at development projects											
Eagle (US) (w)	U/G			3.6	0.29	3.6	-	0.29	-	73	100.0
Oyu Tolgoi (Mongolia) (v)											
- Southern Oyu	O/P	127	0.93	803	0.27	930	930	0.36	0.36	71	19.7
<b>Total</b>											1.497
											1.522
											Marketable product
<b>IRON ORE</b> (b)	millions of tonnes	%Fe	millions of tonnes	%Fe	millions of tonnes	millions of tonnes	%Fe	%Fe			millions of tonnes
Reserves at operating mines											
Corumbá (Brazil) (x)	O/P	-	-	-	-	-	209	-	67.0	-	-
Hamersley wholly owned (Australia)											
- Brockman 2 (Brockman ore) (y)	O/P	13	62.7	3	62.8	15	20	62.7	62.7	100.0	15
- Brockman 4 (Brockman ore)	O/P	366	62.2	255	61.9	621	621	62.0	62.0	100.0	621
- Marandoo (Marra Mamba ore) (z)	O/P	39	61.8	10	60.3	49	59	61.5	61.7	100.0	49
- Mt Tom Price (Brockman ore)	O/P	34	63.8	59	63.5	93	93	63.6	64.4	100.0	93
- Mt Tom Price (Marra Mamba ore) (aa)	O/P	20	61.4	3	59.0	23	34	61.1	61.2	100.0	23
- Nammuldi (Marra Mamba ore) (bb)	O/P	16	61.4	2	60.1	18	24	61.2	61.3	100.0	18
- Paraburadoo (Brockman ore)	O/P	9	63.1	5	63.1	15	14	63.1	63.4	100.0	15
- Paraburadoo (Marra Mamba ore)	O/P			-	-	-	0.9	-	63.1	100.0	-
- Turee Syncline Central (Brockman Ore) (cc)	O/P			74	61.9	74	-	61.9	-	100.0	74
- Western Turner Syncline (Brockman ore)	O/P	222	62.5	92	60.5	314	313	61.9	61.9	100.0	314
- Yandicoogina (Pisolate ore HG)	O/P	206	58.5	3	58.5	209	229	58.5	58.5	100.0	209
- Yandicoogina (Process Product) (dd)	O/P	102	58.9			102	146	58.9	58.2	100.0	102
Hamersley - Channar (Australia)											
- Brockman ore	O/P	59	63.1	21	62.7	81	89	63.0	63.3	60.0	48
Hamersley - Eastern Range (Australia)											
- Brockman ore (ee)	O/P	55	62.8	16	62.9	71	85	62.8	63.0	54.0	38
Hope Downs 1 (Marra Mamba ore) (ff)	O/P	26	61.7	327	61.4	353	343	61.4	61.4	50.0	176
Hope Downs 4 (Brockman Ore) (gg)	O/P	73	63.0	64	63.2	136	-	63.1	-	50.0	68
Iron Ore Company of Canada (Canada) (hh)	O/P	440	65.0	144	65.0	584	571	65.0	65.0	58.7	343
Robe River (Australia)											
- Pannawonica (Pisolate ore)	O/P	230	57.3	37	56.9	267	287	57.3	57.2	53.0	141
- West Angelas (Marra Mamba ore)	O/P	174	62.1	173	61.3	347	373	61.7	61.8	53.0	184
<b>Total</b>											2,532
											Recoverable metal
<b>MOLYBDENUM</b>	millions of tonnes	%Mo	millions of tonnes	%Mo	millions of tonnes	millions of tonnes	%Mo	%Mo			millions of tonnes
Reserves at operating mine											
Bingham Canyon (US) (q) (ii)	O/P	317	0.044	207	0.044	524	618	0.044	0.044	69	100.0
<b>NICKEL</b>	millions of tonnes	%Ni	millions of tonnes	%Ni	millions of tonnes	millions of tonnes	%Ni	%Ni			
Reserves at development project											
Eagle (US)	U/G		3.6	3.47	3.6	3.6	3.47	3.47	87	100.0	0.110

 See notes on page 71

Type of mine (a)	Proved ore reserves at end 2009		Probable ore reserves at end 2009		Total ore reserves 2009 compared with 2008				Rio Tinto share			
	Tonnage	Grade	Tonnage	Grade	Tonnage		Grade	2009	2008	Average mill recovery %	Interest %	Recoverable metal
	millions of tonnes	grammes per tonne	millions of tonnes	grammes per tonne	millions of tonnes	millions of tonnes	grammes per tonne	grammes per tonne	2008		millions of ounces	
<b>SILVER</b>												
Reserves at operating mines												
Bingham Canyon (US) (q)	O/P	317	2.33	207	1.71	524	618	2.08	2.16	73	100.0	25.715
Grasberg (Indonesia)	O/P + U/G	816	4.24	1,774	4.16	2,590	2,665	4.18	4.26	70	(s)	79.698
<b>Total</b>												105.413
<b>TALC (c)</b>												
Reserves at operating mines												
Rio Tinto Minerals – talc (Europe/North America/Australia)	O/P + U/G	24.5		9.0		33.5	30.6				100.0	33.5
<b>TITANIUM DIOXIDE FEEDSTOCK (c)</b>												
Reserves at operating mines												
RTFT (Canada)	O/P	27.9		23.5		51.4	52.1				100.0	51.4
QMM (Madagascar)	D/O	11.4		0.5		11.9	12.2				80.0	9.5
RBM (South Africa) (jj)	D/O	9.5		15.5		24.9	24.3				37.0	9.2
<b>Total</b>												70.1
<b>URANIUM</b>												
Reserves at operating mines												
Energy Resources of Australia (Australia)												
- Ranger #3	O/P	24.6	0.122	3.1	0.242	27.7	30.2	0.135	0.146	82.80	68.4	0.021
Rössing (Namibia)	O/P	25.5	0.030	167.2	0.031	192.7	190.3	0.031	0.034	85.00	68.6	0.035
<b>Total</b>												0.056

#### Notes

- (a) Type of mine: O/P: open pit, O/C: open cut, U/G: underground, D/O: dredging operation.
- (b) Reserves of iron ore, bauxite and diamonds are shown as recoverable reserves of marketable product after accounting for all mining and processing losses. Mill recoveries are therefore not shown.
- (c) Reserves of industrial minerals are expressed in terms of marketable product, ie after all mining and processing losses. In the case of borates, the marketable product is  $\text{B}_2\text{O}_3$ .
- (d) RTM Boron reserve tonnage increased due to resource conversion as part of a pit design update.
- (e) For coal, the yield factors shown reflect the impact of further processing, where necessary, to provide marketable coal.
- (f) Coal type: SC: steam/thermal coal, MC: metallurgical/coking coal.
- (g) Analyses of coal from the US were undertaken according to "American Standard Testing Methods" (ASTM) on an "As Received" moisture basis whereas the coals from Australia have been analysed on an "Air Dried" moisture basis in accordance with Australian Standards.
- (h) Blair Athol reserve depletions were due to production.
- (i) Hail Creek reserves increased as a result of a major model update including an upgrade of some resources to reserves.
- (j) Hunter Valley Operations reserves decreased due to production and mine design updates.
- (k) As a result of the IPO of Cloud Peak Energy Inc. on 20 November 2009, Rio Tinto now holds a 48.3 per cent interest in the Antelope, Cordero Rojo and Spring Creek mines and a 24.1 per cent interest in the Decker mine. These interests were formerly reported under Rio Tinto Energy America but are now managed by Cloud Peak Energy.
- (l) Antelope reserves decreased following production as well as a model update.
- (m) Colwoyo reserves were depleted through production.
- (n) Decker reduced reserves through production and a contract buy out.
- (o) Rio Tinto completed the sale of its 100 per cent interest in the Jacobs Ranch mine on 1 October 2009.
- (p) The term "other undeveloped reserves" is used here to describe material that is economically viable on the basis of technical and economic studies but for which mining and processing permits may have yet to be requested or obtained. There is a reasonable, but not absolute, certainty that the necessary permits will be issued and that mining can proceed when required.
- (q) Bingham Canyon reserve tonnages decreased through production and mine design changes including updated geotechnical inputs.
- (r) Escondida oxide reserve changes followed updating of economic considerations, geometallurgical inputs and material reclassification.
- (s) Under the terms of a joint venture agreement between Rio Tinto and FCX, Rio Tinto is entitled to a direct 40 per cent share in reserves discovered after 31 December 1994 and it is this entitlement that is shown.
- (t) Northparkes underground reserves declined due to production and revision of the mining model.
- (u) The reduction in Palabora reserves follows production.
- (v) Rio Tinto has increased its interest in the Oyu Tolgoi project from 9.9 per cent to 19.7 per cent.
- (w) The Eagle gold reserve is reported for the first time following a model update.
- (x) Rio Tinto completed the sale of its 100 per cent interest in the Corumbá mine, effective 18 September 2009.
- (y) Brockman 2 (Brockman ore) reserves reduced due to production.
- (z) Marandoo (Marra Mamba ore) reserves declined after production and updating of the geological model.
- (aa) Mt Tom Price (Marra Mamba ore) reserves declined following production as well as incorporation of a new geological model and pit design changes.
- (bb) Nammuldi (Marra Mamba ore) reserve tonnage lessened following production.
- (cc) Turee Syncline Central (Brockman Ore) is reported for the first time following economic and geological studies.
- (dd) Yandicogina (Process Product) reserve tonnage reduced from production and model updates incorporating new factors based on reconciliation.
- (ee) Hamersley – Eastern Range (Brockman ore) reserve tonnes have reduced following production, update of the geological model, inclusion of reconciliation data and subsequent pit design revisions.
- (ff) Hope Downs 1 (Marra Mamba ore) was reported as Hope Downs in 2008.
- (gg) Hope Downs 4 (Brockman Ore) is reported for the first time after economic and geologic studies were completed.
- (hh) Reserves at Iron Ore Company of Canada are reported as marketable product, at a natural moisture content of 2 per cent using process upgrade factors derived from current IOCC concentrating and pellet operations and a modelling cut off grade of 16 per cent concentrate weight yield. The in situ mined material equivalent is 1,369 million tonnes at 38.0 per cent iron; made up of proved ore reserves of 1,028 million tonnes at 38.1 per cent iron and probable ore reserves of 341 million tonnes at 37.5 per cent iron.
- (ii) Molybdenum grades interpolated from exploration drilling assays have been factored based on a long reconciliation history to blasthole and mill samples.
- (jj) During the fourth quarter of 2009, Richards Bay Minerals concluded a Broad Based Black Economic Empowerment transaction. The table above reflects a change from 50 per cent to 37 per cent in Rio Tinto's interest in RBM, with effect from 9 December 2009.

## Mineral resources

As required by the Australian Securities Exchange, the following tables contain details of other mineralisation that has a reasonable prospect of being economically extracted in the future but which is not yet classified as Proved or Probable Reserves. This material is defined as Mineral Resources under the JORC Code. Estimates of such material are based largely on geological information with only preliminary consideration of mining, economic and other factors. While in the

judgement of the Competent Person there are realistic expectations that all or part of the Mineral Resources will eventually become Proved or Probable Reserves, there is no guarantee that this will occur as the result depends on further technical and economic studies and prevailing economic conditions in the future. As in the case of reserves, managed operations' estimates are completed using or testing against Rio Tinto long term pricing and market forecasts/scenarios.

Resources are stated as additional to the reserves reported earlier. Where operations are not managed by Rio Tinto the resources are published as received from the managing company. Where new project resources or reserves are footnoted as being reported for the first time, additional information about them can be viewed on the Rio Tinto website, in the section titled "What we produce" – "Exploration".

Likely mining method (a)	Measured resources at end 2009		Indicated resources at end 2009		Inferred resources at end 2009		Total resources 2009 compared with 2008				Rio Tinto interest %
	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	2009	2008	2009	2008	
	millions of tonnes	% Al <sub>2</sub> O <sub>3</sub>	millions of tonnes	% Al <sub>2</sub> O <sub>3</sub>	millions of tonnes	% Al <sub>2</sub> O <sub>3</sub>	millions of tonnes	millions of tonnes	% Al <sub>2</sub> O <sub>3</sub>	% Al <sub>2</sub> O <sub>3</sub>	
<b>BAUXITE</b>											
Gove (Australia)	O/P	13	49.4	32	49.4	4	50.1	49	46	49.4	49.7
Porto Trombetas (MRN) (Brazil) (b)	O/P	6	45.3	2	45.4	433	49.2	441	401	49.2	50.0
Sangaredi (Guinea) (c)	O/P	84	48.7	177	48.3	230	48.3	491	448	48.4	48.4
Weipa (Australia) (d)	O/P	66	52.0	1,377	50.9	446	51.9	1,889	2,056	51.2	50.8
<b>BORATES</b>											
Rio Tinto Minerals – Boron (US) (e)	O/P					0.1		0.1	5.4		100.0
Jadar (Serbia) (f)	U/G					16.2		16.2	15.0		100.0
<b>COAL</b>											
Chapudi (South Africa)	O/C	SC			90	220	730				59.1
<b>Rio Tinto Coal Australia (Australia)</b>											
Bengalla	O/C + U/G	SC + MC			30	81	59				30.3
Blair Athol	O/C	SC			6	1		7	7		71.2
Clermont	O/C	SC			11		4		15	15	50.1
Hail Creek (h)	O/C	MC			11	28	98		136	435	82.0
Hunter Valley Operations	O/C + U/G	SC + MC			93	569	751		1,413	1,331	75.7
Kestrel Coal	U/G	SC + MC			6		3		9	9	80.0
Kestrel West	U/G	SC				106	33		139	153	80.0
Lake Elphinstone (i)	O/C	SC + MC				120	42		162	78	82.0
Maules Creek (j)	O/C	SC + MC			57	218	123		398	398	75.7
Mount Pleasant	O/C + U/G	SC + MC			200	218	281		699	699	75.7
Mount Thorley Operations (k)	O/C + U/G	SC + MC			1	54	74		129	113	60.6
Oaklands	O/C	SC			480	800			1,280	1,280	75.7
Valeria (l)	O/C	SC				698	64		762	440	71.2
Vickery (m)	O/C + U/G	SC + MC			100	200			300	300	75.7
Warkworth (n)	O/C + U/G	SC + MC			4	244	282		530	603	42.1
Winchester South (o)	O/C	SC + MC				17	175		192	97	75.0
<b>US Coal (US)</b>											
Antelope (p)	O/C	SC			22	38	12		73	73	48.3
Colowyo (q)	O/C	SC			43	14	0.1		57	250	100.0
Cordero Rojo (p) (r)	O/C	SC			61	97			159	144	48.3
Decker (p) (s)	O/C	SC							–	39	24.1

 See notes on page 76

Likely mining method (a)	Measured resources at end 2009		Indicated resources at end 2009		Inferred resources at end 2009		Total resources 2009 compared with 2008				Rio Tinto interest %
	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	2009	2008	2009	Grade	
	millions of tonnes	%Cu	millions of tonnes	%Cu	millions of tonnes	%Cu	millions of tonnes	millions of tonnes	%Cu	%Cu	
<b>COPPER</b>											
Bingham Canyon (US)	O/P		173	0.55	474	0.44	647	649	0.47	0.47	100.0
Eagle (US)	U/G		0.5	2.15	0.4	2.07	0.9	0.9	2.12	2.12	100.0
Escondida (Chile)											
- sulphide	O/P	52	0.73	97	0.75	593	0.85	742	703	0.83	0.88
- sulphide leach	O/P	174	0.45	408	0.44	3,292	0.47	3,874	4,162	0.47	0.47
- oxide (t)	O/P					34	0.78	34	31	0.78	0.81
Grasberg (Indonesia)	O/P + U/G	626	0.65	1,996	0.57	240	0.28	2,863	2,838	0.56	0.56
La Granja (Peru)	O/P					2,770	0.51	2,770	2,770	0.51	0.51
Northparkes (Australia) (v)	U/G	13.6	0.91	3.7	0.71			17	11	0.86	0.90
Oyu Tolgoi (Mongolia) (w)											80.0
- South Oyu	O/P				189	0.43	267	0.34	456	456	0.38
- Heruga	U/G						760	0.48	760	760	0.48
- Hugo South	U/G						490	1.05	490	490	1.05
- Hugo North	U/G				703	1.82	723	0.97	1,426	1,426	1.39
- Hugo North Extension	O/P + U/G				117	1.80	96	1.15	213	213	1.51
Palabora (South Africa)											
- stockpiles		6.4	0.31					6.4	7.1	0.31	0.29
Resolution (US) (x)	U/G					1,624	1.47	1,624	1,341	1.47	1.51
<b>DIAMONDS</b>											
Argyle (Australia)		millions of tonnes	carats per tonne	millions of tonnes	carats per tonne	millions of tonnes	carats per tonne	millions of tonnes	carats per tonne	carats per tonne	
- AK1 pipe (y)	U/G	11	3.5	23	3.7	6	3.6	40	77	3.6	2.9
- Alluvials (z)	O/P	-	-	-	-	-	-	-	28	-	0.2
Bunder (India)	O/P					37	0.7	37	37	0.7	0.7
Diavik (Canada)	O/P + U/G	3.6	2.8	0.4	2.6	3.5	3.1	7.5	8.1	3.0	3.1
Murowa (Zimbabwe)	O/P					1.4	0.4	1.4	1.4	0.4	0.4
<b>GOLD</b>											
Bingham Canyon (US)	O/P			173	0.22	474	0.17	647	649	0.18	0.18
Eagle (US)	U/G			0.5	0.18	0.4	0.19	0.9	0.9	0.19	0.19
Grasberg (Indonesia)	O/P + U/G	626	0.57	1,996	0.51	240	0.28	2,863	2,838	0.51	0.49
Northparkes (Australia) (v)	U/G	13.6	0.30	3.7	0.13			17	11	0.26	0.29
Oyu Tolgoi (Mongolia) (w)											80.0
- South Oyu	O/P				189	0.27	267	0.23	456	456	0.25
- Heruga	U/G						760	0.55	760	760	0.55
- Hugo South	U/G						490	0.09	490	490	0.09
- Hugo North	U/G				703	0.39	723	0.30	1,426	1,426	0.34
- Hugo North Extension	U/G				117	0.61	96	0.31	213	213	0.48
Wabu (Indonesia)	O/P						43	2.56	43	43	2.56
											(u)

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## Production and reserves

### Mineral resources continued

Likely mining method (a)	Measured resources at end 2009		Indicated resources at end 2009		Inferred resources at end 2009		Total resources 2009 compared with 2008				Rio Tinto interest %
	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	2009	2008	2009	2008	
	millions of tonnes	%Fe	millions of tonnes	%Fe	millions of tonnes	%Fe	millions of tonnes	millions of tonnes	%Fe	%Fe	
<b>IRON ORE</b>											
Corumbá (Brazil) (aa)	O/P	-	-	-	-	-	-	583	-	62.7	-
Hamersley wholly owned (Australia)											
- Brockman 2 (bb)	O/P	8	62.5	13	62.0	7	61.9	28	10	62.1	62.9
- Brockman 4	O/P	17	62.1	13	61.9	5	62.6	35	35	62.1	62.1
- Marandoo Marra Mamba	O/P	322	62.8	30	61.3	23	60.8	375	405	62.6	62.8
- Mt Tom Price high grade (cc)	O/P	36	63.2	67	63.7	9	64.2	112	130	63.6	63.5
- Mt Tom Price low grade	O/P	27	56.9	25	55.6	3	55.0	55	60	56.2	56.2
- Mt Tom Price Marra Mamba	O/P	17	61.8	2	62.6			19	20	61.9	61.9
- Nammuldi Detrital	O/P	4	60.4	78	60.7			82	80	60.7	60.7
- Nammuldi Marra Mamba	O/P	130	62.7	145	62.7	5	59.4	280	275	62.6	62.7
- Paraburadoo Brockman	O/P	27	62.9	38	63.4	37	63.4	102	105	63.3	63.3
- Paraburadoo Marra Mamba (dd)	O/P			1	59.4			1	-	59.4	-
- Turee Syncline (ee)	O/P			10	61.6			10	-	61.6	-
- Western Turner Syncline	O/P	40	62.4	15	62.0	5	61.8	60	60	62.2	62.2
- Yandicoogina-Junction	O/P	262	58.0	354	58.0	36	57.5	652	670	58.0	58.0
Hamersley undeveloped resources (ff)											
- High Grade Brockman ore	O/P	42	62.6	1,086	62.6	2,313	62.5	3,441	3,650	62.5	62.5
- Brockman Process ore (gg)	O/P	283	57.6	351	57.8	655	56.7	1,289	1,160	57.2	57.3
- Marra Mamba	O/P			681	62.2	1,655	61.9	2,336	2,215	62.0	62.2
- Channel Iron deposits (hh)	O/P			281	57.8	1,729	57.1	2,010	1,750	57.2	57.0
- Detrital deposits (ii)	O/P	3	63.4	130	61.6	83	61.0	216	165	61.4	61.8
Hamersley – Channar (Australia)											
- Brockman	O/P	28	61.8	6	61.7	1	61.5	35	35	61.8	61.8
Hamersley – Eastern Range (Australia)											
- Brockman	O/P	15	61.6	6	62.2	10	62.2	31	30	61.9	61.7
Hope Downs (Australia)											
- Hope Downs 1 Marra Mamba	O/P	7	61.7	76	61.9	14	59.7	97	105	61.6	61.6
- Hope Downs 1 Detritals (jj)	O/P			4	60.1	4	58.8	8	15	59.5	59.7
- Hope Downs 4 Brockman (kk)	O/P	10	62.1	24	62.5	129	62.5	163	-	62.5	-
Hope Downs undeveloped resources											
- Brockman (ll)	O/P			68	61.4	86	61.5	154	475	61.5	62.1
- Brockman Process ore	O/P	57	57.0	33	58.0	90	57.5	180	185	57.4	57.5
- Marra Mamba and Detritals	O/P					225	61.0	225	220	61.0	61.1
Iron Ore Company of Canada (Canada) (mm)	O/P	275	39.4	841	38.0	1,424	37.6	2,540	3,121	37.9	38.4
Palabora (South Africa)	O/P			236	55.9			236	240	55.9	55.9
Robe River (Australia)											
- Marra Mamba	O/P	78	61.9	129	62.0	3	61.0	210	200	61.9	62.1
- Pisolite	O/P	86	57.0	1	57.5	20	56.8	107	105	57.0	56.9
Robe River undeveloped resources											
- Marra Mamba (nn)	O/P			261	61.5	121	59.7	382	455	60.9	60.7
- Pisolite	O/P	52	58.9	987	58.5	594	56.9	1,633	1,535	57.9	58.2
- Detritals	O/P					33	61.0	33	35	61.0	61.0
Simandou (Guinea) (oo)	O/P			1,300	66.0	955	65.9	2,254	2,254	66.0	66.0
<b>LITHIUM</b>											
Jadar (Serbia) (f)	U/G						125.3	1.8	125.3	114.6	1.8
<b>MOLYBDENUM</b>											
Bingham Canyon (pp)	O/P			173	0.036	474	0.033	647	649	0.034	0.034
Oyu Tolgoi (Mongolia) (w)							760	0.015	760	760	0.015
- Heruga	U/G						1,624	0.037	1,624	1,341	0.037
Resolution (US) (x)	U/G									0.040	55.0

 See notes on page 76

Likely mining method	Measured resources at end 2009		Indicated resources at end 2009		Inferred resources at end 2009		Total resources 2009 compared with 2008				Rio Tinto interest %	
	(a)	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	
		millions of tonnes	%Ni	millions of tonnes	%Ni	millions of tonnes	%Ni	millions of tonnes	millions of tonnes	%Ni	%Ni	
<b>NICKEL</b>												
Eagle (US)	U/G			0.5	3.15	0.4	2.28	0.9	0.9	2.77	2.78	100.0
Sulawesi (Indonesia)	O/P					162	1.62	162	162	1.62	1.62	100.0
<b>POTASH</b>												
Potasio Rio Colorado (Argentina) (qq)	S/M	–	–	–	–	–	–	–	1,026	–	32.0	–
<b>SILVER</b>												
Bingham Canyon (US)	O/P			173	2.3	474	2.0	647	649	2.1	2.1	100.0
Grasberg (Indonesia)	O/P + U/G	626	3.4	1,996	3.4	240	1.5	2,863	2,838	3.3	3.2	(u)
Wabu (Indonesia)	O/P					43	2.5	43	43	2.5	2.5	(u)
<b>TALC</b>												
Rio Tinto Minerals – talc (rr) (Australia/Europe/N America)	O/P + U/G	17		25		28		70	81			100.0
<b>TITANIUM DIOXIDE FEEDSTOCK</b>												
RTFT (Canada)	O/P	4.1						4.1	4.1			100.0
QMM (Madagascar)	D/O	0.2		36.1		1.8		38.1	37.9			80.0
RBM (South Africa) (ss)	D/O			1.3		1.7		3.0	1.3			37.0
<b>URANIUM</b>												
Energy Resources of Australia (Australia)												
- Jabiluka	U/G	1.2	0.887	13.9	0.520	10.0	0.545	25.1	25.1	0.547	0.547	68.4
- Ranger #3	O/P	66.0	0.056	53.2	0.115	8.0	0.124	127.2	128.3	0.085	0.090	68.4
Rössing (Namibia)	O/P	6.7	0.023	80.5	0.023	16.7	0.023	104.0	114.5	0.023	0.021	68.6
<b>ZINC</b>												
La Granja (Peru)	O/P							2,770	0.10	2,770	2,770	0.10
												100.0

 See notes on page 76

### Mineral resources continued

#### Notes:

- (a) Likely mining method: O/P = open pit; O/C = open cut; U/G = underground; D/O = dredging operation; S/M = solution mining.
- (b) Changes to Porto Trombetas resources are due to a re-start of an exploration programme on the lease and model updates. Resources, like reserves are as product presentable to the refinery.
- (c) Following technical and economic studies, resources for the Bidikoum and Silidara plateaus at Sangaredi have increased. Bauxite resources here are essentially in situ material as pre-refinery processing is minimal.
- (d) The geological models for Weipa and Ducie-Wenlock have been amalgamated into one reporting entity. Australian bauxite resources are reported as matched to their refining entities where the Gove figures reflect an essentially in situ material as it reports immediately to the site refinery. The Weipa resource is tabulated as a product suitable for shipping to the refining operation. The Weipa tonnage decrease follows re-modelling including updated economic and geological inputs.
- (e) Boron resources are reported as in situ  $B_2O_3$ , rather than marketable product as in reserves. Measured resources were converted to reserves following inclusion of updated geotechnical constraints in a new pit design.
- (f) In 2008 a marketable product figure for Jadar borate was reported, after metallurgical recovery from in situ mineralised material. The table now reports the in situ mineral content for the resource, to align with the Boron (US) estimates. The Jadar lithium resource is expressed as in situ tonnes of mineralised material.
- (g) Coal type: SC=steam/thermal coal, MC=metallurgical/ coking coal
- (h) A major update of Hail Creek reserves and resources was undertaken, including an upgrade of some resources to reserves and transfer of other resource tonnage to inventory.
- (i) Lake Elphinstone underwent a model update which led to an increase in resource tonnage.
- (j) Rio Tinto sold its 75.7 per cent interest in the Maules Creek property with transfer being effective on 18 February 2010.
- (k) Resources at Mount Thorley Operations increased following a pit shell re-design.
- (l) Valeria resource tonnes increased following a model update.
- (m) Rio Tinto sold its 75.7 per cent interest in the Vickery property with transfer being effective on 4 February 2010.
- (n) A pit shell re-design and update of economic models has resulted in a decrease in resources attributed to Warkworth.
- (o) An updated geological model and mining study led to an increase in resource tonnes at Winchester South.
- (p) On 20 November 2009, Rio Tinto completed the initial public offering of Cloud Peak Energy Inc. As a result Rio Tinto now holds a 48.3 per cent interest in the Antelope, Cordero Rojo and Spring Creek mines and a 24.1 per cent interest in the Decker mine. These interests were formerly reported under Rio Tinto Energy America but are now managed by Cloud Peak Energy.
- (q) As a part of the re-structuring of the US coal businesses, Colowyo revised its pit design and mine plans resulting in a decreased resource footprint.
- (r) Cordero Rojo resources increased by seven million tonnes through an acquisition, as well as by additions from a new drilling programme, then a model update followed by reclassification of reserve to resource.
- (s) Decker's current contracts expire in 2011 and the operation is seeking additional sales. Consequently no resources are reported.
- (t) The increase in Escondida oxide ore followed incorporation of updated economic assumptions in a remodelling exercise.
- (u) Under the terms of a joint venture agreement between Rio Tinto and FCX, Rio Tinto is entitled to a direct 40 per cent share in resources discovered after 31 December 1994.
- (v) Resource additions at Northparkes resulted from a re-examination of the mining model.
- (w) Rio Tinto's interest in Ivanhoe Mines has increased from 9.9 per cent to 19.7 per cent. Rio Tinto's interest in Hugo North Extension and Heruga, based on the current ownership structure of Ivanhoe and Entrée Gold, has increased from 13.5 per cent to 19.5 per cent.
- (x) Resource tonnage at Resolution increased following a new mining study including new geotechnical constraints and geological features, a lowering of the expected mining level and results of further drilling.
- (y) The resource at Argyle AK1 was reduced following economic studies.
- (z) Argyle alluvials resource tonnages have been removed following economic studies.
- (aa) Rio Tinto completed the sale of its 100 per cent interest in the Corumbá mine, effective 18 September 2009.
- (bb) The Brockman 2 resource has increased after additional drilling led to new resource models and pit design updates.
- (cc) Mt Tom Price high grade resource tonnes were lowered after model updates.
- (dd) Paraburadoo Marra Mamba is reported here for the first time after geological and economic studies were completed.
- (ee) Following economic and geological studies, Turee Syncline tonnes have moved from "undeveloped" resources to "developed" and now support reserves ahead of pending production.
- (ff) Resources in this category consist of 42 separate deposits, 24 of which are wholly owned by Hamersley Iron. The Shovelanna resource (50 per cent Hamersley Iron) is not included as mining lease applications are currently awaiting granting of tenure.
- (gg) Brockman Process ore resources increased from updating models and including new drilling results in places.
- (hh) Channel Iron Deposit resource tonnes rose as a result of remodelling which identified additional mineralisation.
- (ii) Detritals resources increased after a remodelling exercise and an update of economic inputs.
- (jj) Hope Downs 1 Detrital resources have decreased as a result of a larger pit design converting resource to reserve.
- (kk) Following economic and geological studies, Hope Downs 4 Brockman tonnes have moved from "undeveloped" resources to "developed" and now support reserves ahead of pending production.
- (ll) Resources decreased at Hope Downs Brockman following conversion to reserves and a change to some reporting boundaries.
- (mm) IOCC resources are quoted, for the first time, on an in-situ tonnes and grades basis. The equivalent marketable product is as follows: Measured – 123 million tonnes @ 65 per cent iron, Indicated – 370 million tonnes @ 65 per cent iron, Inferred – 580 million tonnes @ 65 per cent iron at a cut off grade of 14 per cent concentrate weight yield. Net resources decreased through remodelling using updated technical and economic criteria, as well as resource to reserve conversion.
- (nn) Robe Marra Mamba resources have decreased due to re-interpretation, a new resource block model and updating of input parameters.
- (oo) All resources reported for Simandou lie in blocks 3 and 4 of the Concession and reporting is thus not modified by challenge to tenure of blocks 1 and 2. Rights over blocks 3 and 4 have been reverted to an exploration status, but the Guinea Ministry of Mines has confirmed that they will be converted to both exploration and mining rights. The Simandou resource estimate has been completed and tested using Rio Tinto growth market scenario prices and costs selected specifically for this project. Such prices and costs are higher than is the case for other iron ore resources disclosed in this report.
- (pp) Molybdenum grades interpolated from exploration drilling assays have been factored based on a long reconciliation history to blasthole and mill samples.
- (qq) Rio Tinto completed the sale of its 100 per cent interest in Potasio Rio Colorado, effective 5 February 2009.
- (rr) Talc Resources declined after geological model updates and conversion of resources to reserves.
- (ss) Richards Bay Minerals resource tonnage improved following model updates including new drilling data and some material reclassification. During the fourth quarter of 2009, Richards Bay Minerals concluded a Broad Based Black Economic Empowerment transaction. The table above reflects a change from 50 per cent to 37 per cent in Rio Tinto's interest in RBM, with effect from 9 December 2009.

# Competent persons

Primary Commodity	Name	Association <sup>1</sup>	Employer	Accountability	Deposits
Bauxite	L McAndrew	AusIMM	Rio Tinto	Reserves	Rio Tinto Alcan – Weipa
	J Bower	AusIMM	Rio Tinto	Resources	Rio Tinto Alcan – Gove, Weipa, Sangaredi
	J P C de Melo Franco	AusIMM	MRN Consultant	Reserves, Resources	Rio Tinto Alcan – Porto Trombetas (MRN)
	R Wedmaier	AusIMM	Rio Tinto	Reserves	Rio Tinto Alcan – Gove
	L Fouché	AusIMM	Rio Tinto	Reserves	Rio Tinto Alcan – Sangaredi
Borates	L Karlsson	AusIMM	Rio Tinto	Reserves, Resources	Rio Tinto Minerals – Boron Operations
	K Preston	AusIMM	Rio Tinto	Resources	Rio Tinto Coal Australia – Bengalla, Blair Athol, Hail Creek, Kestrel, Warkworth (OC), Clermont, Kestrel West, Maules Creek, Mount Pleasant, Vickery, Winchester South
	J Buddee	AusIMM	Rio Tinto	Reserves	Rio Tinto Coal Australia – Bengalla, Hunter Valley Operations, Mount Thorley, Warkworth, Mount Pleasant
	G Carr	AusIMM	Rio Tinto	Reserves	Rio Tinto Coal Australia – Blair Athol, Kestrel, Clermont
	M Fitzsimmons	AusIMM	Rio Tinto	Reserves	Rio Tinto Coal Australia – Hail Creek
	J Bamberry	AIG	Rio Tinto	Resources	Rio Tinto Coal Australia – Hunter Valley Operations, Mount Thorley, Warkworth (UG resources)
	A Walther	AusIMM	Rio Tinto	Resources	Rio Tinto Coal Australia – Valeria, Lake Elphinstone, Oaklands
Coal	T Suchomel	AusIMM			
	J Trummel	AusIMM	Cloud Peak Energy	Reserves, Resources	Cloud Peak Energy – Antelope, Decker, Cordero Rojo, Spring Creek
	R Strid	AusIMM			
	G Munn	AusIMM	Rio Tinto	Reserves, Resources	Colowyo
	J Garcia	AusIMM	Rio Tinto	Resources	Rio Tinto Energy – Chapudi
	S Kristensen	AusIMM	Rio Tinto	Resources	Rio Tinto Energy – Chapudi
	K Mudge	AusIMM	Rio Tinto	Reserves	Kennecott Utah Copper – Bingham Canyon <sup>2,3,4</sup>
	J Vickery	AusIMM	Rio Tinto	Reserves, Resources	
	M Howson	IMMM	Rio Tinto	Resources	La Granja <sup>5</sup>
	A Lye	AIG	Rio Tinto	Reserves, Resources	Northparkes <sup>2</sup>
Copper	S Ngidi	SAIMM	Rio Tinto	Reserves	Palabora <sup>6</sup>
	D Pretorius	SAIMM	Rio Tinto	Resources	
	C Hehnke	AusIMM	Rio Tinto	Resources	Resolution <sup>3</sup>
	S Torr	AusIMM	Ivanhoe Mines	Reserves, Resources	Oyu Tolgoi <sup>2,3</sup>
	C Reygadas	AusIMM	BHP Billiton	Reserves	Minera Escondida
	O Cortés	AusIMM		Resources	
	A Issel	SME	PT Freeport	Resources	PT Freeport – Grasberg, Wabu <sup>2,4</sup>
	G MacDonald	AIPG		Reserves	
	R Platell	AusIMM	Rio Tinto	Resources	Argyle
	S Brennan	AusIMM	Rio Tinto	Reserves, Resources	
Diamonds	R Platell	AusIMM	Rio Tinto	Resources	Bunder
	C Yip	AusIMM		Reserves	
	D Eichenberg	NAPEGG	Rio Tinto	Resources	Diavik
	K Thompson	NAPEGG		Resources	
	A Davy	IMMM	Rio Tinto	Resources	Murowa
	A Kumar	AusIMM	Rio Tinto	Reserves	
	J Phillips	AusIMM	Rio Tinto	Resources	Rio Tinto Iron Ore – Hamersley, Hope Downs, Robe River
Iron Ore	R Taylor	AusIMM	Rio Tinto	Reserves	
	M Blake	APEGN		Resources	
	R Williams	AusIMM	Rio Tinto	Reserves	Iron Ore Company of Canada – Carol Lake
	T Leriche	APEGN		Reserves, Resources	
Lithium	R Turner	AIG	Rio Tinto	Resources	Rio Tinto Iron Ore Atlantic – Simandou
	A Duffin	BGS	Rio Tinto	Resources	Rio Tinto Minerals – Jadar <sup>7</sup>
	D Rennie	APEGBC	Roscoe Postle Assoc.	Reserves, Resources	Eagle <sup>2,8</sup>
Nickel	D Guibal	AusIMM	SRK Consulting	Resources	Sulawesi
	M Wurm	AIG	Rio Tinto	Reserves, Resources	Australian mines
Talc	J-F Robert	AusIMM	Rio Tinto	Reserves, Resources	European mines
	D Marek	CIMM	Rio Tinto	Reserves, Resources	North American mines
	E Ronald	SME	Rio Tinto	Reserves, Resources	
Titanium Dioxide Feedstock	J Dumouchel	APEGGA	Rio Tinto	Resources	Rio Tinto Fer et Titane
	Y Bourque	OIQ		Reserves, Resources	
	J Dumouchel	APEGGA	Rio Tinto	Reserves, Resources	QIT Madagascar Minerals
	C Ware	SACNASP	Rio Tinto	Reserves, Resources	Richard Bay Minerals
Uranium	A van der Heyden	AusIMM	Hellman & Schofield	Resources	Energy Resources of Australia – Ranger 3, Jabiluka II
	G Rogers	AusIMM	Rio Tinto	Reserves	Energy Resources of Australia – Ranger 3
	R Miller	AusIMM	Rio Tinto	Reserves	
	J Forkes	IMMM	Rio Tinto	Resources	Rössing SJ/SK4
	W-D Wieland	SAIMM	Rio Tinto	Reserves	

1. AusIMM: Australasian Institute of Mining and Metallurgy, AIG: Australasian Institute of Geoscientists, IMMM: Institute of Materials, Minerals and Mining, SAIMM: South African Institute of Mining and Metallurgy, SME: Society of Mining, Metallurgy and Exploration, AIPG: American Institute of Professional Geologists, NAPEGG: Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories, APEGN: Association of Professional Engineers and Geoscientists of Newfoundland, BGS: British Geological Society, APEGBC: Association of Professional Engineers and Geoscientists of British Columbia, CIMM: Canadian Institute of Mining and Metallurgy, APEGGA: Association of Professional Engineers, Geologists and Geophysicists of Alberta, OIQ: Ordre des Ingénieurs du Québec, SACNASP: South African Council for Natural Scientific Professions.

2. Includes gold, 3. Includes molybdenum, 4. Includes silver, 5. Includes zinc, 6. Includes iron ore, 7. Includes borates, 8. Includes copper.

Production  
and reserves

Governance

Financial statements

Shareholder information

# Mines and production facilities

## Group mines

(Rio Tinto's interest 100% unless otherwise shown)

Mine	Location	Access	Title/lease
<b>BAUXITE</b>			
CBG Sangaredi (23%)	Conakry, Guinea	Road and air	Lease expires in 2038
Gove	Gove, Northern Territory, Australia	Road, air and port	100% Leasehold (held in trust by the Commonwealth on behalf of the Traditional Owners until end of mine life)
MRN Porto Trombetas (12%)	Porto Trombetas, Brazil	Air or port	Mineral rights granted for undetermined period
Weipa/Ely	Weipa, Queensland, Australia	Road, air and port	The Weipa Queensland Government lease expires in 2041 with an option of 21 year extension, then two years' notice of termination; the Ely Alcan Queensland Pty. Limited Agreement Act 1965 expires in 2048 with 21 year right of renewal with a two year notice period
<b>COPPER</b>			
Escondida (30%)	Atacama Desert, Chile	Pipeline and road to deep sea port at Coloso; road and rail	Rights conferred by Government under Chilean Mining Code
Grasberg joint venture (40% of production)	Papua, Indonesia	Pipeline, road and port	Indonesian Government Contracts of Work expire in 2021 with option of two ten year extensions
Kennecott Utah Copper Bingham Canyon	Near Salt Lake City, Utah, US	Pipeline, road and rail	Owned
Northparkes (80%)	Goonumbla, New South Wales, Australia	Road and rail	State Government mining lease issued in 1991 for 21 years. Development consent approved in 2009 for extension of mine life to 2025
Palabora (57.7%)	Phalaborwa, Limpopo Province, South Africa	Rail and road	Lease from South African Government until deposits depleted. Base metal claims owned by Palabora
<b>DIAMONDS &amp; MINERALS</b>			
<b>Diamonds</b>			
Argyle Diamonds	Kimberley Ranges, Western Australia	Road and air	Mining tenement held under Diamond (Argyle Diamond Mines Joint Venture) Agreement Act 1981-1983; lease extended for 21 years from 2004
Diavik (60%)	Northwest Territories, Canada	Air, ice road in winter	Mining leases from Canadian Federal Government expiring in 2017 and 2018
Murowa (77.8%)	Zvishavane, Zimbabwe	Road and air	Claims and mining leases
<b>Industrial Minerals</b>			
Rio Tinto Minerals – Boron	California, US	Road, rail and port	Owned
Rio Tinto Minerals – Talc	Trimouns, France (other smaller operations in Australia, Europe and North America)	Road and rail	Owner of ground (orebody) and long term lease agreement to 2012
Rio Tinto Fer et Titane Lac Tio	Havre-Saint-Pierre, Quebec, Canada	Rail and port (St Lawrence River)	Mining covered by two concessions granted by State in 1949 and 1951 which, subject to certain Mining Act restrictions, confer rights and obligations of an owner
QIT Madagascar Minerals (80%)	Fort-Dauphin, Madagascar	Road and port	Mining lease
Richards Bay Minerals (37%)	Richards Bay, KwaZulu-Natal, South Africa	Rail, road and port	Long term renewable mineral leases: State lease for Reserve 4 initially runs to end 2022; Ingonyama Trust lease for Reserve 10 runs to 2022. Application made for both mineral leases to be converted to new order mining rights following transfer in December 2009 of 26% interest to investor groups of previously disadvantaged South Africans in terms of Mining Charter legislation

History	Type of mine	Power source
Bauxite mining commenced in 1973. Shareholders are 51% Halco and 49% Government of Guinea. Rio Tinto Alcan has held 45% of Halco since 2004. Current annual capacity is 13 million tonnes	Open cut	On site generation (fuel oil)
Bauxite mining commenced in 1970 feeding both the Gove refinery and export market capped at two million tonnes per annum. Bauxite export ceased in 2006 with feed intended for the expanded Gove refinery. Bauxite exports recommenced in 2008. Current production capacity about ten million tonnes per annum with mine life estimated to 2030	Open cut	Central power station located at the Gove refinery
Mineral extraction commenced in April 1979. Initial production capacity 3.4 million tonnes annually. From October 2003, production capacity up to 16.3 million tonnes per year. Capital structure currently: Vale (40%), BHP Billiton (14.8%), Rio Tinto Alcan (12%), CBA (10%), Alcoa/Abalco (18.2%) and Norsk Hydro (5%). Production 18 million tonnes of wet and dry bauxite annually	Open cut	On site generation (heavy oil, diesel)
Bauxite mining commenced in 1961 at Weipa. Major upgrade completed at Weipa in 1998. Rio Tinto interest increased from 72.4% to 100% in 2000 at Weipa. In 1997, Ely Bauxite Mining Project Agreement signed with local Aboriginal land owners. Bauxite Mining and Exchange Agreement signed in 1998 with Comalco to allow for extraction of ore at Ely. In 2004 a mine expansion was completed at Weipa that has lifted annual capacity to 21.5 million tonnes. Mining commenced on the adjacent Ely mining lease in 2006, in accordance with the 1998 agreement with Alcan. A second shiploader that increases the shipping capability was commissioned in 2006 at Weipa. First ore extracted at Ely in 2007	Open cut	On site generation; new power station commissioned in 2006
Production started in 1990 and expanded in phases to 2002 when new concentrator was completed; production from Norte started in 2005 and the sulphide leach produced the first cathode during 2006	Open pit	Supplied from SING grid under various contracts with local generating companies
Joint venture interest acquired 1995. Capacity expanded to over 200,000 tonnes of ore per day in 1998. Addition of underground production of more than 35,000 tonnes per day in 2003. Expansion to 50,000 tonnes per day in mid 2007 and target to increase to 80,000 tonnes by mid 2010	Open pit and underground	Long term contract with US-Indonesian consortium operated purpose built coal fired generating station
Interest acquired in 1989. Modernisation includes smelter complex and expanded tailings dam	Open pit	On site generation supplemented by long term contracts with Rocky Mountain Power
Production started in 1995; interest acquired in 2000	Open pit and underground	Supplied from State grid
Development of 20 year underground mine commenced in 1996 with open pit closure in 2003	Underground	Supplied by ESKOM via grid network
Interest increased from 59.7% following purchase of Ashton Mining in 2000. Underground mine project approved in 2005 to extend mine life to 2018	Open pit to underground in future	Long term contract with Ord Hydro Consortium and on site generation
Deposits discovered 1994-1995. Construction approved 2000. Diamond production started 2003. Second dike closed off in 2005 for mining of additional orebody. The underground mine is expected to start production in 2010, ramping up to full production in 2013	Open pit to underground in future	On site diesel generators; installed capacity 27MW with an upgrade under way
Discovered in 1997. Small scale production started in 2004	Open pit	Supplied by ZESA with diesel generator back up
Deposit discovered in 1925 and acquired by Rio Tinto in 1967	Open pit	On site co-generation units
Production started in 1885; acquired in 1988. Australian mine Three Springs acquired in 2001	Open pit	Supplied by Atel and on site generation units. Australian Three Springs mine power supplied by Western Power
Production started 1950; interest acquired in 1989	Open pit	Long term contract with Hydro-Quebec
Began as exploration project 1980s; construction approved 2005; ilmenite production started end of 2008	Mineral sand dredging	On site diesel generators
Production started 1977; interest acquired 1989. Fifth mining plant commissioned in 2000. One mining plant decommissioned in 2008	Beach sand dredging	Contract with ESKOM

## Production and reserves

### Mines and production facilities continued

#### Group mines continued

(Rio Tinto's interest 100% unless otherwise shown)

Mine	Location	Access	Title/lease
<b>ENERGY</b>			
Energy Resources of Australia (68.4%) Ranger	Northern Territory, Australia	Road	Mining tenure granted by Federal Government
<b>Rio Tinto Coal Australia</b>			
Bengalla (30.3%) Blair Athol (71.2%) Hail Creek (82%) Hunter Valley Operations (75.7%) Kestrel (80%) Mount Thorley Operations (60.6%) Warkworth (42.1%)	New South Wales and Queensland, Australia	Road, rail, conveyor and port	Leases granted by state
<b>Cloud Peak Energy</b>			
Antelope (48.3%) Cordero Rojo (48.3%) Decker (24.1%) Spring Creek (48.3%)	Wyoming, Montana, US	Rail and road	Leases from US and state governments and private parties, with minimum coal production levels, and adherence to permit requirements and statutes
Colowyo (100%)	Colorado, US	Rail and road	Leases from US and state governments and private parties, with minimum coal production levels, and adherence to permit requirements and statutes
Rössing Uranium (68.6%)	Namib Desert, Namibia	Rail, road and port	Federal lease
<b>IRON ORE</b>			
Hammersley Iron Brockman Marandoo Mount Tom Price Nammuldi Paraburadoo Yandicoogina Channar (60%) Eastern Range (54%)	Hammersley Ranges, Western Australia	Railway and port (owned by Hammersley Iron and operated by Pilbara Iron)	Agreements for life of mine with Government of Western Australia
Hope Downs joint venture (50% mine, 100% infrastructure)	Pilbara region, Western Australia	Railway owned and operated by Rio Tinto	Agreements for life of mine with Government of Western Australia
Iron Ore Company of Canada (58.7%)	Labrador City, Province of Labrador and Newfoundland	Railway and port facilities in Sept-Iles, Quebec (owned and operated by IOC)	Sublease with the Labrador Iron Ore Royalty Income Fund which has lease agreements with the Government of Newfoundland and Labrador that are due to be renewed in 2020 and 2022
Robe River Iron Associates (53%) Mesa J West Angelas	Pilbara region, Western Australia	Railway and port (owned by Robe River and operated by Pilbara Iron)	Agreements for life of mine with Government of Western Australia
Dampier Salt (68.4%)	Dampier, Lake MacLeod and Port Hedland, Western Australia	Road and port	State agreements (mining leases) expiring in 2013 at Dampier, 2018 at Port Hedland and 2021 at Lake MacLeod with options to renew in each case

#### Information on Group power plants

(Rio Tinto's interest 100% unless otherwise shown)

	Location	Title/lease	Plant type/product	Capacity as of 31 December 2009 (based on 100% ownership)
<b>ALUMINIUM</b>				
Gladstone power station (42%)	Gladstone, Queensland, Australia	100% freehold	Thermal power station	1,680 megawatts
Highlands power stations	Lochaber, Kinlochleven, UK	100% freehold	Hydroelectric power	80 megawatts
Lynemouth power station	Lynemouth, UK	100% freehold	Thermal power station	420 megawatts
Kemano power station	Kemano, British Columbia, Canada	100% freehold	Hydroelectric power	896 megawatts
Quebec power stations	Saguenay, Quebec, Canada (Chute-à-Caron, Chute-à-la-Savane, Chutes-des-Passes, Chute-du-Diable, Isle-Maligne, Shipshaw)	100% freehold except Périponka lease to 2058	Hydroelectric power	2,919 megawatts
Vigeland power station	Nr Kristiansand, Norway	100% freehold	Hydroelectric power	26 megawatts

History	Type of mine	Power source
Mining commenced 1981. Interest acquired through North in 2000. Life of mine extension to 2020 announced in 2007	Open pit	On site diesel/steam power generation
Production started for export at Blair Athol in 1984. Kestrel was acquired and recommissioned in 1999. Hail Creek started in 2003. Coal & Allied shares were first acquired in 1977, and management control gained in 1993. Successive acquisitions of surrounding assets results in the current portfolio	Open cut and underground (Kestrel)	State owned grid
Cloud Peak Energy formed in 2009 and includes the Cordero Rojo, Antelope and Spring Creek mines from the former Rio Tinto Energy America	Open cut	Supplied by IPPs and Cooperatives through national grid service
Colowyo was acquired in 1995	Open cut	Supplied by IPPs and Cooperatives through national grid service
Production began in 1978	Open pit	Namibian National Power
Annual capacity increased to 68 million tonnes during 1990s. Yandicoogina first ore shipped in 1999 and port capacity increased. Eastern Range started 2004	Open pit	Supplied through the integrated Hamersley and Robe power network operated by Pilbara Iron
Joint venture venture between Rio Tinto and Hancock Prospecting. Construction of Stage 1 to 22 million tonnes per annum commenced April 2006 and first production occurred November 2007. Stage 2 to 30 million tonnes per annum completed 2009	Open pit	Supplied through the integrated Hamersley and Robe power network operated by Pilbara Iron
Interest acquired in 2000 through North. Current operation began in 1962 and has processed over one billion tonnes of crude ore since. Annual capacity 17.5 million tonnes of concentrate of which 13.5 million tonnes can be pelletised	Open pit	Supplied by Newfoundland Hydro under long term contract
First shipment in 1972. Annual sales reached 30 million tonnes in late 1990s. Interest acquired in 2000 through North. West Angelas first ore shipped in 2002 and mine expanded in 2005. Current sales more than 50 million tonnes per year	Open pit	Supplied through the integrated Hamersley and Robe power network operated by Pilbara Iron
Construction of the Dampier field started in 1969; first shipment in 1972. Lake MacLeod was acquired in 1978 as an operating field. Port Hedland was acquired in 2001 as an operating field	Solar evaporation of seawater (Dampier and Port Hedland) and underground brine (Lake MacLeod); dredging of gypsum from surface of Lake MacLeod	Dampier supply from Hamersley Iron Pty Ltd; Lake MacLeod from Western Power and on site generation units; Port Hedland from Western Power

	Location	Title/lease	Plant type/product	Capacity as of 31 December 2009 (based on 100% ownership)
<b>COPPER</b>				
Phalaborwa power station (57.7%)	Phalaborwa, Limpopo Province, South Africa	100% freehold	Steam turbine running off waste heat boilers at the copper smelter	8 megawatts
Puncakjaya Power (22.12%)	Grasberg, Papua, Indonesia	Lease	Diesel power plant Coal fired power plant	193 megawatts
Kenncott Utah Copper	Magna, Salt Lake City, Utah, US	100% freehold	Thermal power station	175 megawatts

### Mines and production facilities continued

#### Group smelters and refineries

(Rio Tinto's interest 100% unless otherwise shown)

Smelter/Refinery	Location	Title/lease	Plant type/product	Capacity as of 31 December 2009 (based on 100% ownership)
<b>ALUMINIUM</b>				
Alma	Alma, Quebec, Canada	100% freehold	Aluminium smelter producing aluminium rod, t-foundry, molten metal, remelt	437,000 tonnes per year aluminium
Alouette (40%)	Sept-Îles, Quebec, Canada	100% freehold	Aluminium smelter producing aluminium high purity, remelt	600,000 tonnes per year aluminium
Alucam (46.7%)	Edéa, Cameroon	100% freehold	Aluminium smelter producing aluminium slab, remelt	100,000 tonnes per year aluminium
Arvida	Saguenay, Quebec, Canada	100% freehold	Aluminium smelter producing aluminium billet, molten metal, remelt	176,000 tonnes per year aluminium
Bécancour (25.1%)	Bécancour, Quebec, Canada	100% freehold	Aluminium smelter producing aluminium slab, billet, t-foundry, remelt	430,000 tonnes per year aluminium
Bell Bay	Bell Bay, Northern Tasmania, Australia	100% freehold	Aluminium smelter producing aluminium slab, molten metal, small form and t-foundry, remelt	180,000 tonnes per year aluminium
Boyne Smelters (59.4%)	Boyne Island, Queensland, Australia	100% freehold	Aluminium smelter producing aluminium, billet, EC grade, small form and t-foundry, remelt	559,000 tonnes per year aluminium
Dunkerque	Dunkerque, France	100% freehold	Aluminium smelter producing aluminium slab, small form foundry, remelt	262,000 tonnes per year aluminium
Gardanne	Gardanne, France	100% freehold	Refinery producing specialty aluminas and smelter grade aluminas	635,000 tonnes per year specialty aluminas (including 133,000 tonnes of smelter grade aluminas)
Gove	Gove, Northern Territory, Australia	100% leasehold. (Commonwealth land held in trust on behalf of Traditional Owners). Numerous lots with varying expiry dates starting 2011	Refinery producing alumina	2,519,000 tonnes per year alumina
Grande-Baie	Saguenay, Quebec, Canada	100% freehold	Aluminium smelter producing aluminium slab, molten metal, remelt	217,000 tonnes per year aluminium
ISAL	Reykjavik, Iceland	100% freehold	Aluminium smelter producing aluminium slab, remelt	188,000 tonnes per year aluminium
Jonquière (Vaudreuil)	Jonquière, Quebec, Canada	100% freehold	Refinery producing specialty aluminas and smelter grade aluminas	1,500,000 tonnes per year aluminas
Kitimat	Kitimat, British Columbia, Canada	100% freehold	Aluminium smelter producing aluminium billet, slab, remelt	252,000 tonnes per year aluminium
Laterrière	Saguenay, Quebec, Canada	100% freehold	Aluminium smelter producing aluminium slab, remelt, molten metal	238,000 tonnes per year aluminium
Lochaber	Fort William, Scotland, UK	100% freehold	Aluminium smelter producing aluminium slab, remelt	44,000 tonnes per year aluminium
Lynemouth	Lynemouth, Northumberland, UK	100% freehold	Aluminium smelter producing aluminium slab, remelt	181,000 tonnes per year aluminium
Queensland Alumina (80%)	Gladstone, Queensland, Australia	73.3% freehold; 26.7% leasehold (of which more than 80% expires in 2026 and after)	Refinery producing alumina	3,959,000 tonnes per year alumina
São Luis (Alumar) (10%)	São Luis, Maranhão, Brazil	100% freehold	Refinery producing alumina	3,500,000 tonnes per year alumina
Saint-Jean-de-Maurienne	Saint-Jean-de-Maurienne, France	100% freehold	Aluminium smelter producing aluminium slab, rod, remelt	138,000 tonnes per year aluminium
Sébree	Robards, Kentucky, US	100% freehold	Aluminium smelter producing aluminium billet, small form foundry, remelt	196,000 tonnes per year aluminium
Shawinigan	Shawinigan, Quebec, Canada	100% freehold	Aluminium smelter producing aluminium billet, remelt	101,000 tonnes per year aluminium
Sohar (20%)	Sohar, Oman	100% leasehold expiring 2039	Aluminium smelter producing aluminium remelt	362,000 tonnes per year aluminium
SORAL (50%)	Husnes, Norway	100% freehold	Aluminium smelter producing aluminium billet, remelt	171,000 tonnes per year aluminium
Tiwai Point (New Zealand Aluminium Smelters) (79.4%)	Invercargill, Southland, New Zealand	19.6% freehold 80.4% leasehold (expiring in 2029 and use of certain Crown land)	Aluminium smelter producing aluminium, billet, slab, small form foundry, super purity, remelt	365,000 tonnes per year aluminium
Tomago (51.6%)	Tomago, New South Wales, Australia	100% freehold	Aluminium smelter producing aluminium billet, slab, remelt	532,000 tonnes per year aluminium
Yarwun	Gladstone, Queensland, Australia	97% freehold, 3% leasehold (expiring 2101 and after)	Refinery producing alumina	1,400,000 tonnes per year alumina

## Group smelters and refineries

(Rio Tinto's interest 100% unless otherwise shown)

Smelter/Refinery	Location	Title/lease	Plant type/product	Capacity as of December 31, 2009 (based on 100% ownership)
<b>COPPER</b>				
Kennecott Utah Copper	Magna, Salt Lake City, Utah, US	100% freehold	Flash smelting furnace/Flash convertor furnace copper refinery	335,000 tonnes per year refined copper
Palabora (57.7%)	Phalaborwa, South Africa	100% freehold	Reverberatory Pierce Smith copper refinery	90,000 tonnes per year refined copper
<b>DIAMONDS &amp; MINERALS</b>				
Boron	California, US	100% freehold	Borates refinery	565,000 tonnes per year boric oxide
Rio Tinto Fer et Titane Sorel Plant	Sorel-Tracy, Quebec, Canada	100% freehold	Ilmenite smelter	1,100,000 tonnes per year titanium dioxide slag. 900,000 tonnes per year iron
Richards Bay Minerals (37%)	Richards Bay, South Africa	100% freehold	Ilmenite smelter	1,060,000 tonnes per year titanium dioxide slag
<b>IRON ORE</b>				
HIsmelt® (60%)	Kwinana, Western Australia	100% leasehold (expiring in 2010 with rights of renewal for further 25 year terms)	HIsmelt® ironmaking plant producing pig iron	800,000 tonnes per year pig iron
IOC Pellet Plant (59%)	Labrador City, Newfoundland and Labrador, Canada	100% leaseholds (expiring in 2020, 2022 and 2025 with rights of renewal for further terms of 30 years)	Pellet induration furnaces producing multiple iron ore pellet types	13,500,000 tonnes per year pellet

## Board of directors



### 1. Jan du Plessis

**Chairman**  
**B.Com, LLB, CA(SA), age 56**

Appointment and election:

Director of Rio Tinto plc and Rio Tinto Limited effective 1 September 2008. Jan was elected by shareholders at the 2009 annual general meetings. He was appointed chairman at the conclusion of the 2009 annual general meetings.

Skills and experience:

Jan was appointed chairman of the board of British American Tobacco plc in 2004 having been a non executive director since 1999. A former non executive director of Lloyds Bank Group plc, Jan was previously Group finance director of Richemont from 1988 until April 2004 and chairman of RHM plc between June 2005 and March 2007.

External appointments (current and recent):

Non executive director of Marks and Spencer Group plc since November 2008, chairman of the board of British American Tobacco plc from 2004 until October 2009, non executive director and chairman of the Audit committee of Lloyds Banking Group plc from 2005 and 2008 respectively until April 2009, chairman of RHM plc from 2005 until March 2007.

### 2. Tom Albanese

**Chief executive**  
**BS (Mineral Economics), MS (Mining Engineering), age 52**

Appointment and election:

Director of Rio Tinto plc and Rio Tinto Limited since 2006. Tom was last re-elected in 2008.

### (c)

Skills and experience:

Tom joined Rio Tinto in 1993 on Rio Tinto's acquisition of Nerco and held a series of management positions before being appointed chief executive of the Industrial Minerals group in 2000, after which he became chief executive of the Copper group and head of Exploration in 2004. He took over as chief executive with effect from May 2007.

External appointments (current and recent):

Director of Ivanhoe Mines Limited from 2006 to 2007, director of Palabora Mining Company from 2004 to 2006, member of the executive committee of the International Copper Association from 2004 to 2006.

### 3. Sir David Clementi

**Non executive director**  
**MA, MBA, age 61**

Appointment and election:

Director of Rio Tinto plc and Rio Tinto Limited since 2003. Sir David was appointed chairman of the Audit committee at the conclusion of the 2008 annual general meetings. Sir David was last re-elected by shareholders in 2009 and will retire at the conclusion of the annual general meetings in 2010.

Skills and experience:

Sir David was chairman of Prudential plc until December 2008, prior to which he was deputy governor of the Bank of England. His earlier career was with Kleinwort Benson where he spent 22 years, holding various positions including chief executive and vice chairman. A graduate of Oxford University and a

qualified chartered accountant, Sir David also holds an MBA from Harvard Business School.

External appointments (current and recent):

Non executive director of Foreign & Colonial Investment Trust plc since May 2008, chairman, King's Cross Central General Partnership since October 2008, chairman of Prudential plc from 2002 until 2008, member of the Financial Reporting Council between 2003 and 2007.

### 4. Vivienne Cox

**Non executive director**  
**MA (Oxon), MBA (INSEAD), age 50**

Appointment and election:

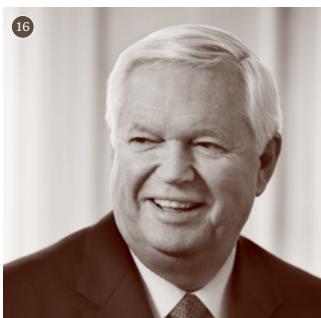
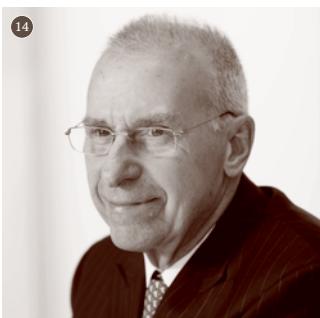
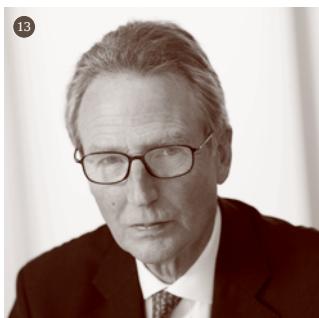
Director of Rio Tinto plc and Rio Tinto Limited since 2005. Vivienne was last re-elected in 2008.

Skills and experience:

Vivienne was executive vice president and chief executive officer, Alternative Energy for BP plc until June 2009. She became a member of the BP group chief executive's committee when she became chief executive of the Gas, Power and Renewables business. During her career at BP she worked in chemicals, exploration, finance and refining and marketing. Vivienne holds degrees in chemistry from Oxford University and in business administration from INSEAD.

External appointments (current and recent):

Non executive director of Climate Change Capital Limited since May 2008 and non executive chairman since November 2009, member of the supervisory board of Vallourec



since 23 February 2010, member of the board of INSEAD since May 2009, executive vice president for BP plc between 2004 and 2009.

#### **5. Sir Rod Eddington** *(c, d and e)*

Non executive director

B Eng, M Eng, D Phil (Oxon), age 60

##### Appointment and election:

Director of Rio Tinto plc and Rio Tinto Limited since 2005. Sir Rod was last re-elected by shareholders in 2009.

##### Skills and experience:

Sir Rod was chief executive of British Airways plc until the end of September 2005. Prior to his role with British Airways, Sir Rod was managing director of Cathay Pacific Airways from 1992 until 1996 and executive chairman of Ansett Airlines from 1997 until 2000.

External appointments (current and recent):  
Non executive chairman of JPMorgan Australia and New Zealand since 2006, director of CLP Holdings since 2006, director of News Corporation plc since 1999, director of John Swire & Son Pty Limited since 1997, chairman Infrastructure Australia since February 2008, director of Allco Finance Group Limited from 2006 until 2009, chief executive British Airways plc from 2000 until 2005, chairman of the EU/Hong Kong Business Co-operation Committee of the Hong Kong Trade Development Council from 2002 until 2006.

#### **6. Guy Elliott**

Chief financial officer

MA (Oxon), MBA (INSEAD), age 54

##### Appointment and election:

Chief financial officer of Rio Tinto plc and Rio Tinto Limited since 2002. Guy was last re-elected by shareholders in 2007 and stands for re-election in 2010.

##### Skills and experience:

Guy joined the Group in 1980 after gaining an MBA having previously been in investment banking. He has subsequently held a variety of commercial and management positions, including head of Business Evaluation and president of Rio Tinto Brasil.

External appointments (current and recent):  
Non executive director of Cadbury plc since July 2007 and senior independent director since July 2008. Chairman of the Audit committee until April 2009.

#### **7. Michael Fitzpatrick** *(a, b, c and e)*

Non executive director

B Eng, BA (Oxon), age 57

##### Appointment and election:

Director of Rio Tinto plc and Rio Tinto Limited since 2006. Michael was elected by shareholders in 2007 and stands for re-election in 2010.

##### Skills and experience:

Michael sold his interest in, and ceased to be a director of, Hastings Funds Management Ltd during 2005, the pioneering infrastructure asset management company which he founded in 1994. He is chairman of Treasury Group

Limited, an incubator of fund management companies. He is chairman of the Australian Football League, having previously played the game professionally, and is a former chairman of the Australian Sports Commission.

##### External appointments (current and recent):

Chairman of Treasury Group Limited since 2005, director of the Walter & Eliza Hall Institute of Medical Research since 2001, chairman of the Victorian Funds Management Corporation from 2006 to 2008, managing director of Hastings Funds Management Ltd from 1994 to 2005, director of Australian Infrastructure Fund Limited from 1994 to 2005.

#### **8. Yves Fortier** *(c, d and e)*

Non executive director

CC, OQ, QC, LLD, Av Em, age 74

##### Appointments and election:

Director of Rio Tinto plc and Rio Tinto Limited since 2007. Yves was elected by shareholders in 2008.

##### Skills and experience:

Yves Fortier was ambassador and permanent representative of Canada to the United Nations from 1988 to 1992. He is chairman emeritus and a senior partner of the law firm Ogilvy Renault and was chairman of Alcan from 2002 until 2007.

##### External appointments (current and recent):

Chairman emeritus and senior partner of Ogilvy Renault since June 2009, chairman of Ogilvy Renault from 1992 until May 2009, director of NOVA Chemicals Corporation

## Board of directors continued

from 1998 until April 2009, chairman and director of Alcan Inc. from 2002 until 2007, director of Royal Bank of Canada from 1992 to 2005, director of Nortel Corporation from 1992 to 2005, governor of Hudson's Bay Company from 1998 to 2006, trustee of the International Accounting Standards Committee from 2000 to 2006.

**9. Ann Godbehere** (a, c and e)

Non executive director

FCGA, age 54

Appointment and election:

Appointed a director of Rio Tinto plc and Rio Tinto Limited on 9 February 2010. Ann will stand for election by shareholders at the 2010 annual general meetings.

Skills and experience:

Ann will succeed Sir David Clementi as chairman of the Audit committee upon his retirement from the board at the conclusion of the 2010 annual general meetings. Ann has more than 25 years' experience in the financial services industry. She spent 10 years at Swiss Re, latterly as chief financial officer from 2003 until 2007 and from 2008 until January 2009 she was chief financial officer and executive director of Northern Rock.

External appointments (current and recent):

Non executive director of UBS AG since April 2009, non executive director of Atrium Underwriting Group Limited and Ariel Group Limited since November 2007, non executive director of Prudential since August 2007 and chairman of the Audit committee since October 2009, chief financial officer and executive director of Northern Rock from 2008 to 2009.

**10. Richard Goodmanson** (b, c, d and e)

Non executive director

MBA, BEc and BCom, B Eng (Civil), age 62

Appointment and election:

Director of Rio Tinto plc and Rio Tinto Limited since 2004. He was last re-elected by shareholders in 2008 and is chairman of the Committee on social and environmental accountability.

Skills and experience:

Richard was executive vice president and chief operating officer of DuPont until the end of September 2009. He was responsible for a number of the global functions, and for the non US operations of DuPont, with particular focus on growth in emerging markets. During his career he has worked at senior levels for McKinsey & Co, PepsiCo and America West Airlines, where he was president and CEO.

External appointments (current and recent):

Non executive director of Qantas Airways Limited since June 2008, economic adviser to the governor of Guangdong Province, China since 2003, executive vice president and chief operating officer of DuPont from 1999 until September 2009, director of the United Way of Delaware between 2002 and June 2009 (chairman between January 2006 and June 2007).

**11. Andrew Gould** (b, c and e)

Non executive director

BA, FCA, age 63

Appointment and election:

Director of Rio Tinto plc and Rio Tinto Limited since 2002. Andrew was appointed the senior independent non executive director and chairman of the Remuneration committee at the conclusion of the 2008 annual general meetings. Andrew was last re-elected by shareholders in 2009.

Skills and experience:

Andrew is chairman and chief executive officer of Schlumberger Limited, where he has held a succession of financial and operational management positions, including that of executive vice president of Schlumberger Oilfield Services and president and chief operating officer of Schlumberger Limited. He has worked in Asia, Europe and the US. He joined Schlumberger in 1975. He holds a degree in economic history from Cardiff University and qualified as a chartered accountant with Ernst & Young.

External appointments (current and recent):

Chairman and chief executive officer of Schlumberger Limited since 2003, member of the board of trustees of King Abdullah University of Science and Technology in Jeddah, Saudi Arabia since October 2008, member of the advisory board of the King Fahd University of Petroleum and Minerals in Dhahran, Saudi Arabia since 2007, member of the commercialisation advisory board of Imperial College of Science Technology and Medicine, London since 2002, member of the UK prime minister's Council of Science and Technology from 2004 to 2007.

**12. Lord Kerr of Kinlochard** (a, c, d and e)

Non executive director

GCMG, MA, age 68

Appointment and election:

Director of Rio Tinto plc and Rio Tinto Limited since 2003. He was last re-elected by shareholders in 2007 and stands for re-election in 2010.

Skills and experience:

Lord Kerr was in the UK Diplomatic Service for 36 years and headed it from 1997 to 2002

as permanent under secretary at the Foreign Office. Previous postings included being principal private secretary to two chancellors of the Exchequer, serving in the Soviet Union and Pakistan, and spells as ambassador to the European Union (1990 to 1995), and the US (1995 to 1997). He has been an independent member of the House of Lords since 2004.

External appointments (current and recent):

Director of Scottish Power Limited since July 2009, deputy chairman of Royal Dutch Shell plc since 2005, director of The Scottish American Investment Trust plc since 2002, advisory board member, BAE Systems since 2008, chairman of the Centre for European Reform (London) since 2008, vice president of the European Policy Centre (Brussels) since 2007, chairman of the Court and Council of Imperial College, London since 2005, trustee of the Rhodes Trust since 1997 and the Carnegie Trust for the Universities of Scotland since 2005, director of The "Shell" Transport and Trading Company plc from 2002 to 2005, advisory board member, Scottish Power (Iberdrola) from 2007 to July 2009, trustee of The National Gallery from 2002 to February 2010.

**13. David Mayhew** (c)

Non executive director

age 69

Appointment and election:

Director of Rio Tinto plc and Rio Tinto Limited since 2000. David was re-elected for a further one year term of office in 2009 and will retire at the conclusion of the annual general meetings in 2010.

Skills and experience:

David joined Cazenove in 1969 and in 1986 he became the partner in charge of the firm's Capital Markets Department. He became chairman of Cazenove Group Limited in 2001 and JPMorgan Cazenove in 2005 until January 2010 when he became vice chairman of JPMorgan.

External appointments (current and recent):

Vice chairman of JPMorgan effective January 2010, chairman of Cazenove Group Limited between 2001 and January 2010, chairman of JPMorgan Cazenove Holdings Limited (formerly Cazenove Group plc) between 2005 and January 2010.

**14. Hon. Paul Tellier** (a, b, c and e)

Non executive director

LL.B, LL.M(Oxon), LL.D, C.C. age 70

Appointment and election:

Director of Rio Tinto plc and Rio Tinto Limited since 2007. Paul was elected by shareholders at the 2008 annual general meetings.

**Skills and experience:**

Paul was clerk of the Privy Council Office and secretary to the Cabinet of the Government of Canada from 1985 to 1992 and was president and chief executive officer of the Canadian National Railway Company from 1992 to 2002. Until 2004, he was president and chief executive officer of Bombardier Inc.

**External appointments (current and recent):**

Chairman of Global Container Terminals since 2007, director of BCE Inc since 1999, director of McCain Foods since 1996, director of Bell Canada since 1996, trustee of the International Accounting Standards Foundation since 2007, co-chair of the Prime Minister of Canada's Advisory Committee on the Renewal of the Public Service since 2006, strategic advisor to Société Générale (Canada) since 2005, member of the advisory board of General Motors of Canada since 2005, non executive director of Alcan Inc. from 1998 to 2007.

**15. Sam Walsh****Executive director****B Com (Melbourne), age 60****Appointment and election:**

Director of Rio Tinto plc and Rio Tinto Limited effective 5 June 2009. Sam will stand for election at the 2010 annual general meetings.

**Skills and experience:**

Sam was appointed executive director and chief executive Iron Ore and Australia in June 2009. He joined Rio Tinto in 1991, following 20 years in the automotive industry at General Motors and Nissan Australia. He has held a number of management positions within the Group, including managing director of Comalco Foundry Products, CRA Industrial Products, Hamersley Iron Sales and Marketing, Hamersley Iron Operations, vice president of Rio Tinto Iron Ore (with responsibility for Hamersley Iron and Robe River) and from 2001 to 2004 chief executive of the Aluminium group and from 2004 to 2009 chief executive of the Iron Ore group. Sam is also a Fellow of the Australian Institute of Management, the Australasian Institute of Mining and Metallurgy and the Australian Institute of Company Directors.

**External appointments (current and recent):**

Director of Western Australian Newspaper Holdings Limited since December 2008, chair of Black Swan State Theatre Company Limited since March 2009, chair of WA chapter of Australian Business Arts Foundation since 2008, director of the Committee for Perth Ltd between 2006 and August 2009, director of the Australian Mines and Metals Association, between 2001 and 2005, director of the Australian Chamber of Commerce and Industry, between 2003 and 2005.

**16. Robert Brown****Non executive director****BSc, age 65****Appointment and election:**

Appointed a director of Rio Tinto plc and Rio Tinto Limited on 9 February 2010, to take effect from 1 April 2010. Bob will stand for election by shareholders at the 2010 annual general meetings.

**Skills and experience:**

Bob is chairman of Groupe Aeroplan Inc and serves on the board of Bell Canada Enterprises (BCE Inc), the holding company for Bell Canada. He was previously president and chief executive officer of CAE Inc, a world leader in flight simulation and training. Before that he spent 16 years at Bombardier Inc where he was first head of the Aerospace Group and then president and chief executive officer. He has also served as chairman of Air Canada and of the Aerospace Industries Association of Canada.

Bob was inducted to the Order of Canada as well as l'Ordre National du Québec. He has been awarded honorary doctorates from five Canadian universities.

**External appointments (current and recent):**

Non executive director of Groupe Aeroplan Inc since 2005 and chairman since January 2008, non executive director of Bell Canada Enterprises (BCE Inc) since May 2009, president and chief executive officer of CAE Inc from August 2004 until September 2009, non executive director of Nortel Corporation from 2000 to 2006, Allen Vanguard Corporation from 2003 to 2005 and Ace Aviation Holdings Inc from 2004 to April 2009.

**Directors who left the Group during 2009****Paul Skinner****BA (Hons) (Law), DpBA (Business Administration)**

Director of Rio Tinto plc and Rio Tinto Limited from 2001. Paul was chairman of the Group until his retirement at the conclusion of the 2009 annual general meetings.

**Skills and experience:**

He was previously a managing director of The "Shell" Transport and Trading Company plc and group managing director of The Royal Dutch/Shell Group of Companies, for whom he had worked since 1966.

External appointments (current and recent) upon leaving the Group:

Director of Air Liquide SA since 2006, director of the Tetra Laval Group since 2005, director of Standard Chartered plc since 2003, chairman of the Commonwealth Business Council since 2007, non executive member of the Defence Board of the UK Ministry of Defence since 2006, chairman of the International Chamber of Commerce (UK) from 2005 to 2008.

**Dick Evans****BS (Industrial Engineering), MS Management**

Director of Rio Tinto plc and Rio Tinto Limited from 2007 until his retirement at the conclusion of the 2009 annual general meetings.

**Skills and experience:**

Dick joined Rio Tinto following the acquisition of Alcan where he had held several senior management positions since 1997 including executive vice president and president and chief executive officer from 2006 to 2007.

External appointments (current and recent) upon leaving the Group:

Director of AbitibiBowater Inc. since 2003 and its chairman since February 2009, director of the International Aluminium Institute since 2001 and chairman since 2008, director of the Conference Board of Canada since 2007.

**Jim Leng****Appointment and election:**

Director of Rio Tinto plc and Rio Tinto Limited from January 2009 until February 2009. He resigned from the boards of Rio Tinto prior to his election at the 2009 annual general meetings.

**Skills and experience:**

Jim was chairman of Tata Steel Europe Limited and deputy chairman of Tata Steel of India, following the Corus takeover by Tata in April 2007. He was also chairman of Doncasters Group Ltd, an international specialist engineering company and a non executive director of Alstom SA, a senior adviser of HSBC and a member of their European Advisory Council and chairman of the European Advisory Board of AEA, a New York based Private Equity Partnership.

External appointments (current and recent) upon leaving the Group:

Director of TNK-BP since January 2009, chairman of Tata Steel Europe Limited since November 2008, deputy chairman of Tata Steel of India since 2007, chairman of Doncasters Group Limited since 2006, non executive director Alstom SA since 2003 and director of Corus Group Limited from 2001 to 2008.

**Notes**

- (a) Audit committee
- (b) Remuneration committee
- (c) Nominations committee
- (d) Committee of social and environmental accountability
- (e) Independent

## Executive committee



### 1. Hugo Bague

MA (Linguistics), age 49

#### Skills and experience:

Hugo Bague was appointed Group executive, People and Organisations in October 2009 having joined Rio Tinto as global head of Human Resources in 2007. Previously he worked for six years for Hewlett-Packard where he was the global vice president Human Resources for the Technology Solutions Group, based in the US. Prior to this he worked for Compaq Computers, Nortel Networks and Abbott Laboratories based in Switzerland, France and Germany.

#### External appointments (current and recent):

Member of the Advisory Council of United Business Institute in Brussels, Belgium since 1995.

### 2. Preston Chiaro

BSc (Hons) (Environmental Engineering), MEng (Environmental Engineering), age 56

#### Skills and experience:

Preston was appointed Group executive, Technology & Innovation in October 2009. He joined the Group in 1991 at Kennecott Utah Copper's Bingham Canyon mine as vice president, Technical Services. In 1995 he became vice president and general manager of the Boron operations in California and was chief executive of Rio Tinto Borax from 1999 to 2003. Preston then became chief executive of the Energy group and in November 2007, upon a management re-organisation, he also assumed responsibility for the Industrial Minerals group.

#### External appointments (current and recent):

Director of Rössing Uranium Limited from 2004 to 2009, director of the World Coal Institute between 2003 and 2009 (chairman from 2006 to 2008), chairman of the Coal Industry Advisory Board to the International Energy Agency between 2004 and 2006, director of Energy Resources of Australia Limited between 2003 and 2006, director of Coal & Allied Industries Limited between 2003 and 2006.

### 3. Bret Clayton

BA (Accounting), age 48

#### Skills and experience:

Bret was appointed Group executive, Business Support & Operations in October 2009. He joined the Group in 1995 and has held a series of management positions, including chief executive of the Copper and Diamonds groups, president and chief executive officer of Rio Tinto Energy America and chief financial officer of Rio Tinto Iron Ore. Prior to joining the Group, Bret worked for PricewaterhouseCoopers for nine years, providing auditing and consulting services to the mining industry.

#### External appointments (current and recent):

Director of Ivanhoe Mines Limited between 2007 and 2009, member of the executive committee of the International Copper Association between 2006 and 2009, member of the Coal Industry Advisory Board to the International Energy Agency (IEA) between 2003 and 2006, member of the board of directors of the US National Mining Association between 2002 and 2006.

### 4. Jacynthe Côté

BChem, age 52

#### Skills and experience:

Jacynthe became chief executive, Rio Tinto Alcan on 1 February 2009. She joined Alcan in 1988 and has significant operational and international experience in the aluminium industry. She was chief executive officer, Primary Metal, Rio Tinto Alcan, where she was responsible for all primary metal facilities and power generation installation worldwide. Her previous roles in Alcan include president and chief executive officer, Bauxite & Alumina business group and senior management roles in business planning, human resources and environment, health and safety. Jacynthe has a bachelor's degree in chemistry from Laval University in Quebec.

#### External appointments (current and recent):

Member of the Hautes Etudes Commerciales Board since June 2009, member of the

Quebec Council of Manufacturers since April 2008, member of the International Aluminium Institute since 2006.

### 5. Andrew Harding

BEng (Mining Engineering), MBA, age 43

#### Skills and experience:

Andrew was appointed chief executive of Rio Tinto Copper in October 2009. He joined Rio Tinto in 1992, initially working for Hamersley Iron. Andrew went on to hold operating roles within the Energy, Aluminium and Iron Ore product groups, including at the Mount Thorley, Hunter Valley, Weipa, Mount Tom Price, Marandoo and Brockman mines. In 2007, he became global practice leader, Mining within Rio Tinto's Technology & Innovation group. Prior to his current role, Andrew was president and chief executive officer, Kennecott Utah Copper.

External appointments (current and recent):  
Director of Ivanhoe Mines Limited since November 2009.

### 6. Harry Kenyon-Slaney

BSc (Hons) (Geology), age 49

#### Skills and experience:

Harry was appointed chief executive of Rio Tinto's Diamonds & Minerals product group in October 2009. He joined the Group in 1990 from Anglo American Corporation and has held management positions in South Africa, Australia and the UK. Harry spent his early career at Rio Tinto in marketing and operational roles in the uranium, copper and industrial minerals business. In 2004, he was appointed chief executive of Energy Resources of Australia, and prior to his current role, became managing director of Rio Tinto Iron & Titanium in 2007.

External appointments (current and recent):  
Chairman of the Australian Uranium Association from 2006 to 2007, chairman of the Copper Development Association, South Africa from 2000 to 2003, director of Energy Resources of Australia Limited from 2004 to 2007.



### 7. Doug Ritchie

LLB, FAusIMM, FAIM, FAICD, age 53

#### Skills and experience:

Doug was appointed chief executive of Rio Tinto's Energy group in October 2009. He has been with the Group since 1986 when he joined CRA as corporate counsel. Since then he has held various legal, commercial, business analysis, strategy, operational and project evaluation and development roles, including in the Aluminium, Energy and Diamonds & Minerals product groups, and within corporate functions. Doug's previous roles have included managing director of Dampier Salt, Rio Tinto Coal Australia and Rio Tinto Diamonds. Prior to his current role, he was managing director, Strategy of Rio Tinto.

External appointments (current and recent): Director of Australian Coal Association from 2006 to 2008, director of Dalrymple Bay Coal Terminal Pty Ltd from 2006 to 2007, director of Port Waratah Coal Services Ltd from 2006 to 2007, director of Queensland Resources Council from 2006 to 2007, member of the Coal Industry Advisory Board to the IEA from 2006 to 2008, director of Coal & Allied Industries Limited between 2006 and 2007 and since 2008, director of Rössing Uranium Limited since November 2009.



### 8. Debra Valentine

BA (History) JD, age 56

#### Skills and experience:

Debra was appointed Group executive, Legal & External Affairs in October 2009 having joined Rio Tinto as global head of Legal in January 2008. Debra previously worked at United Technologies Corporation in the US where she was vice president, deputy general counsel and secretary. Before then, she was a partner with the law firm O'Melveny & Myers, in Washington DC. Debra served as general counsel at the US Federal Trade Commission from 1997 to 2001.

External appointments (current and recent): Member, Council on Foreign Relations since 1993, American Law Institute 1991, commissioner, Congressional Antitrust Modernisation Commission from 2004 to 2007.

Tom Albanese, Guy Elliott and Sam Walsh were also members of the executive committee in 2009 through their positions as chief executive, chief financial officer and chief executive of the Iron Ore group respectively. Their biographies are shown on pages 84, 85 and 87.



## Company secretaries

### Ben Mathews

BA (Hons), FCIS, age 43

#### Skills and experience:

Ben joined as company secretary of Rio Tinto plc during 2007. Prior to joining Rio Tinto, he spent five years with BG Group plc, two of them as company secretary. He has previously worked for National Grid plc, British American Tobacco plc and PricewaterhouseCoopers LLP. Ben is a fellow of the Institute of Chartered Secretaries and Administrators.

External appointments (current and recent): None.

### Stephen Consedine

B Bus, CPA, age 48

#### Skills and experience:

Stephen joined Rio Tinto in 1983 and has held various positions in Accounting, Treasury, and Employee Services before becoming company secretary of Rio Tinto Limited in 2002. He holds a bachelor of business degree and is a certified practising accountant.

External appointments (current and recent): None.

# Directors' report

## Dual listed structure

An explanation of the dual listed companies structure (DLC), which unified Rio Tinto plc and Rio Tinto Limited in 1995, can be found on page 232. This section also provides a description of voting rights restrictions which may apply in respect of the shares of either Company under specified circumstances.

## Constitutional documents

Rio Tinto plc's articles of association were adopted by special resolution on 20 April 2009 and amended by special resolution passed on 20 April 2009, effective from 1 October 2009. Rio Tinto Limited's constitution was adopted by special resolution passed on 24 May 2000 and amended by special resolutions passed on 18 April 2002, 29 April 2005, 27 April 2007, 24 April 2008 and 20 April 2009, effective from 20 April and 1 October 2009.

## Activities and business review

Details of the Group's results, operations and principal activities, significant changes during the year, post balance sheet events and likely future developments are set out in the Overview and Performance sections from pages 2 to 61.

During 2009 and until the date of this report the significant changes and events affecting the Group have been:

- The announcement on 12 January 2009 of the appointment of Jacynthe Côté as chief executive, Rio Tinto Alcan, effective 1 February 2009.
- On 14 January 2009 Jim Leng was appointed as chairman designate and a non executive director. He subsequently resigned on 9 February 2009 and Paul Skinner agreed to remain as chairman. On 18 March 2009 it was announced that Jan du Plessis would be appointed chairman and that Paul Skinner would retire with effect from the conclusion of the 2009 annual general meetings.
- The announcement on 20 January 2009 that Rio Tinto Alcan planned to implement further production curtailments to align market production with customer demand bringing the total production decrease to approximately 11 per cent of its total annualised aluminium capacity.
- On 12 February 2009 a proposal for the formation of a strategic partnership with Chinalco was announced but on 5 June 2009, the Group announced that it had terminated the agreement with Chinalco and would pay the agreed break fee of US\$195 million.

- The announcement on 5 June 2009 of a non binding agreement between Rio Tinto and BHP Billiton to establish a production joint venture covering the entirety of both companies' Western Australian iron ore assets and the appointment of Sam Walsh to the board of Rio Tinto with immediate effect. On 15 October 2009 it was agreed that the partners would not proceed with any joint venture marketing activity. On 5 December 2009, binding agreements on the proposed joint venture that cover all aspects of how the joint venture will operate and be governed were signed.
- The announcement on 5 June 2009 of a fully underwritten rights issue to raise approximately US\$15.2 billion of gross proceeds.
- On 5 July 2009 four employees were detained for questioning by the Chinese authorities in Shanghai. On 11 February 2010 Rio Tinto was advised that the People's Procuratorate had transferred the case to the Shanghai Number One Intermediate Court for trial. The charges related to receiving bribes and stealing commercial secrets.
- The announcement on 6 July 2009 that Rio Tinto had signed an agreement to sell its Alcan Packaging Food Americas division to Bemis Company, Inc for a total consideration of US\$1.2 billion. The sale completed on 1 March 2010.
- The announcement on 18 August 2009 that a binding offer from Amcor had been received to acquire the majority of the Alcan packaging businesses, comprising Alcan packaging global pharmaceuticals, global tobacco, food Europe and food Asia divisions, for a total consideration of US\$2.025 billion which was accepted on 23 December 2009. On 1 February 2010 the majority of the sale completed for US\$1,948 million.
- On 15 September 2009, Rio Tinto announced that it had agreed to the sale of 56 per cent of Alcan Engineered Products Cable division to Platinum Equity, and on 1 December 2009, Rio Tinto completed the sale of Alcan Composites, part of the Alcan Engineered Products division, to Schweiter Technologies for a total consideration of US\$349 million. The sale of the Cable division was terminated on 1 December 2009.
- On 16 October 2009 a number of senior management appointments and changes to Rio Tinto's organisational structure were announced, with effect from 1 November 2009.
- With effect from 28 October 2009, Rio Tinto cancelled its listing on the New Zealand Stock Exchange.

As permitted by sections 299(3) and 299A(3) of the Australian Corporations Act 2001, information which is likely to result in unreasonable prejudice, regarding likely future developments in, and the expected results of the operations of the Group or its strategies and prospects, has been omitted. The Group's principal risks and uncertainties are described on pages 16 to 19.

## Share capital, buybacks and options

Details of the Group's share capital as at 31 December 2009 can be found at notes 28 and 29 to the financial statements. Details of the rights and obligations attached to each class of shares can be found on page 232 under the heading "Dual Listed Companies Structure – Voting rights". The voting rights of shares held beneficially by a third party in line with an employee share plan are set out on page 109.

Details of certain agreements triggered on a change of control can be found on page 232 under the heading "Dual Listed Companies Structure".

Details of certain restrictions on holding shares in Rio Tinto are described on page 233 under the heading "Dual listed companies Structure – Limitations on ownership of shares and merger obligations". There are no other restrictions on the transfer of ordinary shares in Rio Tinto plc save for:

- restrictions that may from time to time be imposed by laws and regulations (for example, those relating to market abuse and insider dealing);
- restrictions that may be imposed pursuant to the Listing Rules of the UK Financial Services Authority whereby certain employees of the Group require approval to deal in shares;

- restrictions on the transfer of shares that may be imposed under Rio Tinto plc's articles of association or under Part 22 of the UK Companies Act 2006, in either case following a failure to supply information required to be disclosed following service of a request under section 793 of the UK Companies Act 2006; and
- restrictions on the transfer of shares held under certain employee share plans while they remain subject to the plan.

Details of substantial shareholders of Rio Tinto plc and Rio Tinto Limited can be found on page 235.

At the Rio Tinto Limited annual general meeting held in April 2009 the shareholders renewed the authority to buy back up to all the Rio Tinto Limited shares held (indirectly) by Rio Tinto plc.

No shares were bought back during 2009 under the renewed authority or during the period from 1 January 2010 to 18 February 2010.

At the Rio Tinto plc annual general meeting shareholders approved an increase in authorised share capital from £142,123,283 to £170,000,000. However, in accordance with the UK Companies Act 2006, shareholders also approved an amendment to Rio Tinto plc's articles of association to reflect the abolition of the concept of authorised share capital with effect from 1 October 2010.

On 5 June 2009 the Group announced a fully underwritten rights issue consisting of a 21 for 40 rights issue of 524,460,478 new Rio Tinto plc shares at 1,400 pence per share and a 21 for 40 rights issue of 150,015,297 new Rio Tinto Limited shares at A\$28.29 per share. Rio Tinto plc received valid acceptances in respect of 508,577,688 shares representing 96.97 per cent of the total number of new shares and Rio Tinto Limited received valid acceptances in respect of 142,149,887 shares representing 94.76 per cent of the total number of new shares. The remaining shares over which valid acceptances were not received were placed in the market by the underwriters. The Group raised gross proceeds of approximately US\$15.2 billion from the issues. Net proceeds of US\$14.8 billion were used to pay down the Group's debt.

During 2009, in order to satisfy obligations under employee share plans, Rio Tinto plc issued 1,314,943 ordinary shares of which 874,925 ordinary shares were issued from treasury, and Rio Tinto Limited's registrar purchased on market and delivered 1,274,277 shares to plan participants.

Also during the year, the Companies' registrars purchased on market 241,889 Rio Tinto plc ordinary shares and 586,752 Rio Tinto Limited shares to satisfy obligations to shareholders under the dividend reinvestment plans.

For the period 1 January 2010 to 18 February 2010, Rio Tinto plc issued 699,915 shares in connection with employee share plans and Rio Tinto Limited's registrars purchased on market and delivered 556,359 shares to plan participants.

Awards over 3,460,646 Rio Tinto plc ordinary shares and 2,566,504 Rio Tinto Limited shares were granted under employee share plans during 2009. In addition, as a result of the rights issues, the awards over Rio Tinto plc shares were adjusted by 2,261,327 options and a further grant of 514,354 options over Rio Tinto Limited shares were made. As at 18 February 2010 there were options outstanding over 5,437,403 Rio Tinto plc ordinary shares and 2,380,868 Rio Tinto Limited shares. Upon vesting, awards may be satisfied by the issue of new shares, the purchase of shares on market, or, in the case of Rio Tinto plc, from treasury shares.

### Dividends

Further to the rights issues described above, the Group did not pay an interim dividend for 2009. The final and total dividend for 2009 will be US 45 cents. The final dividends payable to shareholders of 28.84 pence or 51.56 Australian cents per share will be paid on 1 April 2010. Full details of dividends paid and the dividend policy can be found on page 230.

### Purchases of shares

	(a) Total number of shares purchased	(b) Average price paid per share US\$	Rio Tinto plc (c) Total number of shares purchased as part of publicly announced plans or programmes	(a) Total number of shares purchased	(b) Average price paid per share US\$	Rio Tinto Limited (c) Total number of shares purchased as part of publicly announced plans or programmes	Rio Tinto Group (d) Approximate dollar value of shares that may yet be purchased under the plans or programmes US\$
<b>2009</b>							
1 Jan to 31 Jan	-	-	-	26,530	27.36	-	-
1 Feb to 28 Feb	-	-	-	175,937	31.44	-	-
1 Mar to 31 Mar	-	-	-	105,533	32.57	-	-
1 Apr to 30 Apr	241,889	31.62	-	652,598	38.11	-	-
1 May to 31 May	-	-	-	247,587	46.84	-	-
1 Jun to 30 Jun	-	-	-	377,811	57.36	-	-
1 Jul to 31 Jul	-	-	-	30,532	43.29	-	-
1 Aug to 31 Aug	-	-	-	16,526	49.66	-	-
1 Sep to 30 Sep	-	-	-	23,774	51.12	-	-
1 Oct to 31 Oct	-	-	-	58,135	61.09	-	-
1 Nov to 30 Nov	-	-	-	80,630	66.39	-	-
1 Dec to 31 Dec	-	-	-	65,436	66.67	-	-
<b>Total</b>	<b>241,889</b>	<b>31.62</b>	-	<b>1,861,029</b>	<b>45.38</b>	-	-
<b>2010</b>							
1 Jan to 31 Jan	-	-	-	270,326	71.96	-	-
1 Feb to 18 Feb	-	-	-	286,033	63.21	-	-

### Notes

1. Rio Tinto plc ordinary shares of 10p each; Rio Tinto Limited shares.
2. The average prices paid have been translated into US dollars at the exchange rate on the day of settlement.
3. Shares purchased by the Companies' registrars in connection with the dividend reinvestment plans and employee share plans are not deemed to form part of any publicly announced plan or programme.

# Directors' report continued

### Annual general meetings

The 2010 annual general meetings will be held on 15 April in London and on 22 April in Melbourne. Separate notices of the 2010 annual general meetings are produced for the shareholders of each Company.

### Directors

The names of the directors who served during the year, together with their biographical details and other information are shown on pages 84 to 87. Jim Leng was appointed a non executive director and chairman designate on 14 January 2009 but subsequently resigned on 9 February 2009. Paul Skinner and Dick Evans retired at the conclusion of the Rio Tinto Limited annual general meeting held on 20 April 2009. Jan du Plessis succeeded Paul Skinner as chairman of the board. Sam Walsh, Ann Godbehere and Robert Brown were appointed as directors with effect from 5 June 2009, 9 February 2010 and 1 April 2010, respectively. In line with the Group's constitutional documents, they will stand for election at the 2010 annual general meetings. Guy Elliott, Mike Fitzpatrick, and Lord Kerr retire by rotation and, being eligible, will offer themselves for re-election at those meetings. Sir David Clementi and David Mayhew have advised the board of their intention to retire at the conclusion of the 2010 annual general meetings. Details of directors' service contracts and letters of appointment can be found on page 114 and page 115.

A table of directors' attendance at board and committee meetings during 2009 is on page 96.

### Remuneration of directors and executives

The Remuneration report starting on page 104 forms part of the Directors' report and includes details of the nature and amount of each element of the remuneration (including share options) of each of the directors and of the key management personnel and highest paid executives below board level in respect of whom disclosures are required in 2009.

The 2008 Remuneration report was approved by shareholders at the annual general meetings in April 2009.

### Secretaries

Details of the company secretary of each of Rio Tinto plc and Rio Tinto Limited together with their qualifications and experience are set out on page 89.

### Corporate governance

A full report on corporate governance can be found on pages 94 to 103 and forms part of this Directors' report.

### Indemnities and insurance

The articles of association and constitution of the Companies require them to indemnify, to the extent permitted by law, officers of the Companies, including officers of wholly owned subsidiaries, against liabilities arising from the conduct of the Group's business, to the extent permitted by law. Deeds of Indemnity and Access have been provided to the directors and the company secretaries of the Companies, and to certain employees serving as directors of subsidiaries at the Group's request. No amount has been paid under any of these indemnities during the year.

The Group has purchased directors' and officers' insurance during the year. In broad terms, the insurance indemnifies individual directors' and officers' personal legal liability and legal defence costs for claims arising out of actions taken in connection with Group business. It is a condition of the insurance policy that detailed terms and premiums paid cannot be disclosed.

### Employment policies and communication

Information about the Group's employment policies and our employees is available on pages 28 and 29 of the Sustainable development review.

### Donations

During 2009, the Group spent US\$119 million on community assistance programmes and payments into benefit receiving trusts set up in directly negotiated community impact benefit agreements. Donations in the UK during 2009 amounted to £1.8 million (2008: £1.9 million) of which £0.3 million (2008: £0.4 million) was for charitable purposes as defined by the Companies Act 2006 and £1.5 million (2008: £1.5 million) for other community purposes. As in previous years, no donations were made for political purposes in the EU, Australia or elsewhere, as defined by the UK Companies Act 2006.

### Governmental regulations

Rio Tinto is subject to extensive governmental regulations affecting all aspects of its operations and consistently seeks to apply best practice in all of its activities. Due to Rio Tinto's product and geographical spread, there is unlikely to be any single governmental regulation that could have a material effect on the Group's business.

Rio Tinto's operations in Australia and New Zealand are subject to state and federal regulations of general application governing mining and processing, land tenure and use,

environmental requirements, including site specific environmental licences, permits and statutory authorisations, workplace health and safety, trade and export, corporations, competition, access to infrastructure, foreign investment and taxation. Some operations are conducted under specific agreements with the respective governments and associated acts of parliament.

In addition, Rio Tinto's uranium operations in the Northern Territory, Australia and Namibia are subject to specific regulation in relation to mining and the export of uranium.

US and Canada based operations are subject to local, state, provincial and national regulations governing land tenure and use, environmental aspects of operations, product and workplace health and safety, trade and export administration, corporations, competition, securities and taxation. In relation to hydro electric power generation in Canada, water rentals and royalties, as well as surplus power sales, are regulated by the Quebec and British Columbia provincial governments.

Rio Tinto's South African based operations are subject to black economic empowerment legislation which includes the requirement to transfer (for fair value) 26 per cent of the Group's South African mining assets to historically disadvantaged South Africans by 2014.

### Environmental regulation

Rio Tinto measures its performance against environmental regulation by rating incidents on a low, moderate, high, or critical scale of likelihood and consequence of impacting the environment. High and critical ratings are reported to the executive management team and the Committee on social and environmental accountability, including progress with remedial actions. Prosecutions and other breaches are also used to gauge Rio Tinto's performance.

In 2009, there were 12 high or critical environment incidents at Rio Tinto managed operations compared with 17 in 2008.

These incidents were of a nature to impact the environment or may have concerned local communities. Of these, eight resulted from water discharge and four were spills. Examples of these include:

- Spillage of caustic soda on to soil and into the adjacent river following overflow from a truck at port facilities in Saguenay, Canada.
- Release of untreated water from the treatment plant to a lake at Diavik, Canada.

- Discharge of water from a dam into a local creek in excess of licence conditions at Hail Creek, Australia.
- Hydrocarbon leakage to soil and groundwater at Havre St Pierre, Canada.
- Overflow of a storm water tank releasing leachate and surface run off into the surrounding environment at Alucam, Cameroon.
- Processing liquor releases to a sea water channel at Gove, Australia.
- Loss of lubrication oil into the local river following a valve failure on a generator at Kemano, Canada.
- Overflow of process water containing red mud from a holding pond into a local stream at Gardanne, France.

During 2009, two operations incurred fines amounting to US\$80,150 (US\$15,500 in 2008). An amount of US\$70,320 relates to a fine paid during 2009 that resulted from an incident that occurred in March 2006 at the port facility in Saguenay in Canada.

Australian corporations that exceed specified thresholds are required under the Australian National Greenhouse and Energy Reporting Act 2007 to register and report upon greenhouse emissions and energy use and production. Three Rio Tinto entities, Rio Tinto Limited, Alcan Gove Pty Limited and Pechiney Consolidated Australia Limited are separately covered by the Act. All three companies submitted their reports ahead of the required 31 October 2009 deadline following an external review of the data and internal strengthening of measurement and reporting systems.

The same three Rio Tinto entities have obligations under the Australian Energy Efficiency Opportunities Act 2006 (EEO). All three completed the second round of public reporting. Thirteen operations were scheduled for EEO assessments in 2009. The government was advised of the deferral of the HIsmelt® assessment, on account of suspension of operations. Assessment reports were completed for nine sites. The assessments for the remaining three sites scheduled for 2009 have been completed, and a draft public report prepared. EEO requirements were re-communicated to all sites covered by the Act, with internal reporting and compliance systems augmented.

Further information in respect of the Group's environmental performance is included throughout this *Annual report*, in the Sustainable development section on pages 29 to 31 and on the website.

## Legal proceedings

Neither Rio Tinto plc nor Rio Tinto Limited nor any of their subsidiaries is a defendant in any proceedings which the directors believe will have a material effect on either Company's financial position or profitability. Contingencies are disclosed in note 35 to the financial statements.

## Exploration, research and development

The Group carries out exploration, research and development in support of its activities as described more fully under Exploration, and Technology & Innovation on pages 54 to 57. Notwithstanding significant decreases in cash expenditure due to cost reduction initiatives, the amounts charged for the year generated a net profit for exploration and evaluation of US\$380 million (2008: net costs US\$645 million). Research and development costs were US\$193 million (2008: US\$307 million).

## Auditors

PricewaterhouseCoopers LLP and PricewaterhouseCoopers are the auditors of Rio Tinto plc and Rio Tinto Limited respectively. PricewaterhouseCoopers LLP have indicated their willingness to continue in office as auditors of Rio Tinto plc and a resolution to reappoint them as auditors of Rio Tinto plc will be proposed at the 2010 annual general meetings. The resolution will also seek authority for the Audit committee to determine their remuneration. PricewaterhouseCoopers will continue in office as auditors of Rio Tinto Limited. PricewaterhouseCoopers as the auditors of Rio Tinto Limited are required to provide an Auditor's Independence declaration to the directors under Section 307C of the Australian Corporations Act 2001. A copy is set out on page 224 in the financial statements.

## Principal auditor – audit and non audit fees and services

The amounts payable to the Group's principal auditors, were:

	2009 US\$m	2008 US\$m
Audit fees <sup>1</sup>	23.2	29.7
Audit services in connection with divestment programme <sup>2</sup>	22.0	24.4
Tax fees	2.1	3.3
All other fees <sup>3</sup>	14.8	37.8
	<b>62.1</b>	<b>95.2</b>

1. Audit fees relating to statutory audits.
2. Represents fee for audit of carve out financial statements
3. All other fees in 2009 include those relating to the capital raising, divestment programme and similar corporate projects. All other fees in 2008 including those relating to the divestment programme, the pre-conditional offer from BHP Billiton, and the acquisition of Alcan Inc.

Further information on audit and non audit fees is set out in note 43 to the financial statements.

A description of Rio Tinto's policies to uphold the independence of the Group's principal auditors is set out in the corporate governance section on page 96. Based on advice provided by the Audit committee as set out in the Report of the Audit committee on page 97, the directors are satisfied that the provision of non audit services by PricewaterhouseCoopers is compatible with the general standard of independence for auditors and the standards imposed by the Australian Corporations Act 2001.

## Financial instruments

Details of the Group's financial risk management objectives and policies and exposure to risk are described in the Financial review on page 58.

## Value of land

Most of the Group's interests in mining properties and leases, and in other land and buildings have been included in the financial statements at cost in accordance with its accounting policies. It is not possible to estimate the market value of such interests in land as this will depend on product prices over the long term which will vary with market conditions.

## Creditor payments

It is the Group's policy to agree terms of payments with suppliers when entering into contracts and to meet its obligations accordingly. The Group does not follow any specific published code or standard on payment practice.

At 31 December 2009, there were 47 days' (2008: 26 days) purchases outstanding in respect of the Group based on the total invoiced by suppliers during the year.

## Going concern

The directors report that these financial statements have been prepared on a going concern basis as the directors have satisfied themselves that the Companies and the Group are a going concern with adequate financial resources to continue in operational existence for the foreseeable future.

The Directors' report is made in accordance with a resolution of the board.

Jan du Plessis

Chairman

5 March 2010

# Corporate governance

The board of directors firmly believes that high standards of corporate governance form an essential underpinning to the delivery of Rio Tinto's core objective: to maximise total return to shareholders through a strategy of investing in and operating large, long term, cost competitive mines and businesses, driven not by choice of commodity but rather by the quality of each opportunity.

Rio Tinto is a dual listed company but structured as a single economic entity. It has adopted a unified approach to corporate governance to comply with the regulatory obligations associated with its three main stock exchange listings in the UK, Australia and the US.

In compiling this report, the directors have referred to The Combined Code on Corporate Governance, published by the UK Financial Reporting Council (the Code), the Australian Securities Exchange (ASX) Corporate Governance Principles and Recommendations 2nd edition (the ASX Principles), and the New York Stock Exchange (NYSE) Corporate Governance Standards (the NYSE Standards). Statements of compliance with the requirements of these codes are set out on page 103. Rio Tinto's website contains further information about the corporate governance framework.

## Board

Rio Tinto plc and Rio Tinto Limited have a common board of directors. The board is responsible for the success of the Group and is accountable to shareholders for the performance of the business.

## Membership

As of the date of this report, the board consists of 15 directors: the chairman, three executive directors and 11 non executive directors, of whom ten are deemed independent. Robert Brown was appointed as a non executive director on 9 February 2010, with effect from 1 April 2010. Bob's appointment will bring the number of board members to 16, 11 of whom are deemed independent. The names, skills and experience of each director together with their terms in office are shown in the biographical details on pages 84 to 87.

Details of changes to the board during 2009 and in the year to date are set out in the Directors' report on page 92.

Sir David Clementi and David Mayhew have announced their intention to retire from the boards upon the conclusion of the annual general meetings of Rio Tinto on 22 April 2010. The board will then comprise 14 directors of which ten will be independent non executive directors.

## Role and responsibilities

The principal role of the board is to set the Group's core objective and to regularly review its strategic direction. In doing this, the board also has responsibility for the establishment and maintenance of effective standards of corporate governance across the Group and oversees management's control and accountability framework. A formal schedule of matters specifically reserved for decision or consideration by the board as a whole has been agreed by the directors. This schedule covers areas such as the Group's strategy, major investments and acquisitions. It is available on the corporate governance section of the website.

In line with its principal role, the board is ultimately accountable to Rio Tinto's shareholders for the performance of the business. Responsibility for day to day management of the business is undertaken through delegated authority and rests with the chief executive who in turn has established an executive team, the Executive committee, with authorities delegated to individual executives within an agreed financial control framework. The board agrees annual performance targets, which include personal and business performance measures, under the Group's short term incentive plan (detailed on page 107 of the Remuneration report). These performance targets are determined by the Remuneration committee on behalf of the board for the chief executive based upon his proposals and objectives for the year. The chief executive establishes complementary targets for the other members of his Executive committee which are then cascaded throughout management teams. Further details of the process for the evaluation of the performance of the executive directors and other senior executives is discussed in the Remuneration report.

The board meets regularly in order to effectively conduct its business. In 2009, there were eight scheduled board meetings and eight board meetings convened and held at short notice. The number of meetings held in 2009 is a reflection of the considerable corporate activity of the board during the year, particularly in relation to mergers and acquisitions matters, including the proposed iron ore production joint venture and the recapitalisation of the Group's balance sheet. Details of the directors' attendance at all of the board and committee meetings held in 2009 is set out on page 96.

The board has regular discussions with the executive during the year on the Group's strategy. These discussions will typically include strategy presentations that are given by product group chief executives, other members of the Executive committee or global heads of functions. The board also holds an annual two day strategy setting meeting with the Executive committee which includes broader, detailed review sessions on the Group's strategic direction. The outputs from this annual event help underpin the board's annual budget planning exercise and provide direction and focus to the executive team and to the rest of Rio Tinto's people through effective allocation of the Group's resources.

Directors receive timely, regular and appropriate management and other information to enable them to fulfil their duties. They also have direct access to the advice and services of the company secretaries. In the event that they consider it to be required in the delivery of their fiduciary duties, the directors are also able to obtain independent professional advice at the Group's expense through the company secretaries.

In addition to these formal processes, directors are in regular informal communication with members of the Executive committee and other senior executives which encourages an open and regular exchange of knowledge and experience between management and the non executive directors.

To continue building on the formal induction programmes, which all new non executive directors undertake, they are encouraged to take every opportunity to make site visits to the Group's operations around the world and to meet local employees. In 2009, directors were able to benefit in this way by visits to the Group's operations in Australia and Canada. The board also takes the opportunity to combine attendance at the annual general meeting in Australia and at the two day strategy review meeting with site visits.

## **Chairman**

The chairman meets regularly with non executive directors without the executive directors being present at meetings of the Nominations committee, the membership of which comprises the chairman and other non executive directors.

## **Board performance evaluation**

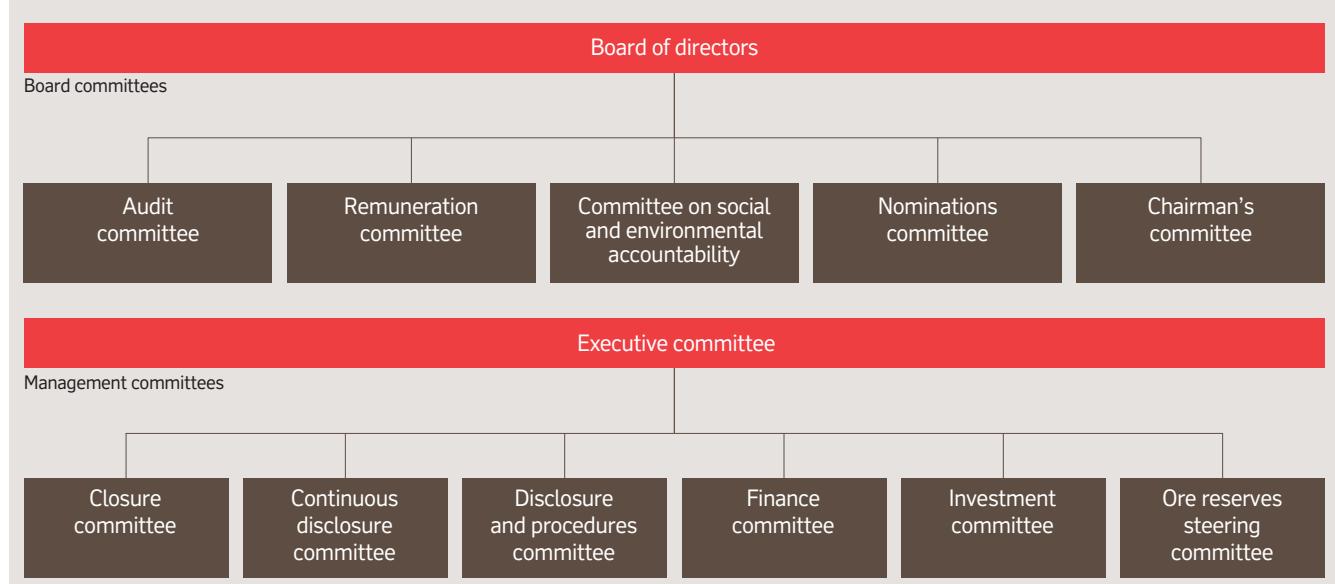
Each year, the board undertakes a process to evaluate its effectiveness and that of the board committees and individual directors. Each non executive director's performance is appraised personally by the chairman and, in a meeting chaired by the senior independent non executive director, the non executive directors assess the chairman's performance, taking into consideration the views of executive colleagues.

For 2009, the board and board committee evaluation process was overseen by Jan du Plessis in his capacity as chairman of the board. This process was supported by the company secretary and took the form of a detailed questionnaire circulated to all members of the board. The board questionnaire invited comments on a number of key areas, including board dynamics, board capability, board process, board structure, corporate governance, strategic clarity and alignment, and the performance of individual committees and directors. The results of the questionnaire formed the basis of discussions led by the

chairman with each individual director which also provided the chairman with an opportunity to provide feedback on their individual performance. Following the conclusion of this exercise, the board held a dedicated session at one of its scheduled meetings to discuss the output from its performance evaluation and to agree a number of actions. These actions, which are in the course of implementation, include practical measures to make board meetings more effective, including allowing more regular opportunities with members of the Executive committee during the year to review individual product group strategies as well as presentations by the Group's functional leaders in the areas of technology and innovation, risk management and climate change.

For the board committees, a similar questionnaire was produced in 2009 in agreement with the committee chairman and was circulated to each committee member and regular attendees. The questionnaire invited comments on a number of areas, including the role and responsibilities of the committee, its organisation and effectiveness and the qualifications of its members. The results of the questionnaires were collated and presented for discussion and debate at meetings of the Audit and Remuneration committees and the Committee on social and environmental accountability. Actions were agreed from this process, for example, the realignment of Committee meeting

## Governance structure



## Corporate governance continued

### Board committee membership and attendance at board and committee meetings during 2009

	Audit committee	Remuneration committee	Committee on social and environmental accountability	Nominations committee	Chairman's committee
Chairman	Sir David Clementi	Andrew Gould	Richard Goodmanson	Jan du Plessis	Jan du Plessis
Members	Vivienne Cox Michael Fitzpatrick Ann Godbehere Lord Kerr Paul Tellier	Sir David Clementi Michael Fitzpatrick Richard Goodmanson Paul Tellier	Sir Rod Eddington Yves Fortier Lord Kerr	All non executive directors	Tom Albanese Guy Elliott

1. Paul Skinner was chair of the Nominations committee and Chairman's committee until his retirement on 20 April 2009.
2. Upon his appointment as chairman, Jan du Plessis ceased to be a member of the Audit committee.
3. All non executive directors became members of the Nominations committee with effect from 1 January 2010.
4. David Mayhew attends the Audit committee in an advisory capacity.
5. Ann Godbehere became a member and chairman designate of the Audit committee upon her appointment on 9 February 2010. Ann will become chairman of the Audit committee upon Sir David Clementi's retirement at the conclusion of the 2010 annual general meetings.

	Board – scheduled		Board – short notice		Audit committee		Remuneration committee		Nominations committee		Committee on social and environmental accountability		Chairman's committee	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Tom Albanese	8	8	8	8									22	17
Sir David Clementi	8	7	8	5	10	10	8	7						
Vivienne Cox	8	8	8	6	10	8								
Jan du Plessis	8	8	8	8	4	3			2	2			15	15
Sir Rod Eddington	8	8	8	7					3	3	5	5		
Guy Elliott	8	8	8	8									22	20
Dick Evans	2	2	5	4										
Michael Fitzpatrick	8	8	8	7	10	8	8	7						
Yves Fortier	8	8	8	7					3	3	5	5		
Richard Goodmanson	8	8	8	5			8	8			5	5		
Andrew Gould	8	7	8	5			8	7	3	3				
Lord Kerr	8	8	8	6	10	9					5	5		
Jim Leng	1	1	1	1									1	1
David Mayhew	8	8	8	7					3	3				
Paul Skinner	2	2	5	5					1	1			8	8
Paul Tellier	8	8	8	7	10	10	8	8						
Sam Walsh	5	5												

#### Notes

A = Maximum number of meetings the director could have attended. B = Number of meetings attended.

schedules to allow greater time to be spent on areas affecting the Group, including risk management, executive remuneration policy and dedicated sessions on local community engagement practices.

In respect of the chairman's own performance evaluation, Andrew Gould, in his capacity as senior independent director discussed and agreed with the other non executive directors that no individual performance evaluation of the chairman would be undertaken for the period since his appointment to that role on 20 April 2009. Such an evaluation will be undertaken in 2010.

#### Independence

The tests of independence of a non executive director in the jurisdictions where Rio Tinto has listings are not wholly consistent. The board has therefore adopted a formal policy for the determination of the independence of its non executive directors. This policy, which includes materiality

thresholds for the measurement of independence to be approved by the board, is on the corporate governance section of the website. Among the key criteria are independence from management and the absence of any business relationship which could materially interfere with the director's independence of judgement and ability to provide a strong, valuable contribution to the board's deliberations, or which could interfere with the director's ability to act in the best interest of the Group. Where contracts in the ordinary course of business exist between Rio Tinto and a company in which a director has declared an interest, these are reviewed for materiality to both the Group, and the other party to the contract. "Material" is defined in the policy as being where the relationship accounts for more than two per cent of either Rio Tinto's or the other parties' consolidated gross revenue per annum, although the test also takes other circumstances into account. Applying these criteria, the board is satisfied

that all of its non executive directors, with the exception of David Mayhew, who is chairman of JP Morgan Cazenove Limited, one of Rio Tinto plc's corporate brokers, are independent in accordance with this policy.

David Mayhew has announced his intention to retire from the board at the conclusion of the annual general meetings in April 2010 following which all of the non executive directors will be independent in accordance with this policy.

Jan du Plessis, upon his original appointment to the board as a non executive director in September 2008, was deemed to be independent in accordance with the criteria set by the board's policy. At the time of his appointment as non executive chairman from 20 April 2009, the board determined that he continued to be independent under the policy. In the board's view, he continues to satisfy the tests for independence under the ASX Principles and the NYSE Standards.

## **Directors' conflicts of interest**

UK company law allows the board to authorise a "situation" in which there is, or may be, a conflict between the interests of Rio Tinto and the direct or indirect interests of a director or between the director's duties to Rio Tinto and to another person. In 2008, Rio Tinto shareholders approved changes to the Companies' constitutions to give directors the power to authorise such conflicts. The board has adopted procedures for ensuring that its powers to authorise conflicts operate effectively. For this purpose, a register of conflicts and any authorisation granted by the board is maintained by the company secretary and regularly reviewed by the board.

## **Executive directors' other directorships**

Executive directors may on occasion be invited to become non executive directors of other companies. The board has adopted a procedure under which approval may be given to accept such invitations recognising the benefit to be derived to the individual and to Rio Tinto from such exposure. For full details see page 113.

## **Election and re-election**

The directors may appoint additional members to join the board during the year. Directors appointed in this way will, upon the recommendation of the board, offer themselves for election by shareholders at the first annual general meetings after their appointment. Subject to that election and to satisfactory performance, directors will offer themselves for re-election at least once every three years. Non executive directors are normally expected to serve at least two terms of three years and, except in special circumstances, would not normally serve more than three such terms. The directors standing for election and re-election at the 2010 annual general meetings are set out in the Directors report on page 92.

## **Chairman and chief executive**

The roles of the chairman and chief executive are separate and the division of their respective responsibilities has been formally approved by the board.

## **Board committees**

There are five committees that have been established to assist the board in meeting its responsibilities: the Audit committee, Remuneration committee, Nominations committee, the Committee on social and environmental accountability and the Chairman's committee. Each committee plays a key role in helping the board ensure that high standards of corporate governance

are maintained throughout the Group. Each committee is governed by terms of reference which are reviewed annually by the committees and the board to ensure they continue to meet requirements and to be at the forefront of best practice. The current terms of reference for each committee can be viewed in the corporate governance section of the website.

## **Audit committee**

The primary function of the Audit committee, as set out in its terms of reference which are summarised below, is to assist the board in fulfilling its responsibilities by monitoring decisions and processes designed to ensure the integrity of financial reporting and sound systems of internal control and risk management. The scope of the Committee's responsibilities includes: financial reporting and internal controls over financial reporting; internal controls; corporate assurance; external auditors; risk management; and the whistle blowing programme.

In carrying out its responsibilities the Committee has full authority to investigate all matters that fall within its terms of reference. Accordingly, the Committee may:

- Obtain independent professional advice in the satisfaction of its duties at the cost of the Group;
- Have such direct access to the resources of the Group as it may reasonably require including the external and internal auditors.

## **Report of the Audit committee**

The Audit committee met ten times in 2009. The Audit committee terms of reference were reviewed in 2009 and changes were adopted to reflect evolving regulatory requirements and, in the light of external developments, to clarify that the Audit committee is the board committee responsible for oversight of risk management generally whilst accountability for risk management remains with the chief executive and his Executive committee.

In 2009, the Committee reviewed the independence of the external auditors, PricewaterhouseCoopers, who have been auditors to the Group since 1995. The effectiveness of the external auditors was also reviewed to ensure that the Group continues to receive an efficient and unbiased service from them. Having concluded its review, the Committee reported to the board that it is satisfied

that the provision of non audit services by the external auditors during 2009 is compatible with the general standard of independence for auditors and the standards imposed by the Australian Corporations Act 2001.

As part of its responsibility to foster open communication, the Committee met separately with management, the external auditors and the internal auditor during the year.

The Committee has reviewed and discussed with management the Group's audited financial statements for the year ended 31 December 2009.

The Committee discussed with the external auditors the matters described in the International Standard on Auditing (UK and Ireland) 260, Communication of Audit Matters with those charged with governance (ISA 260), including their judgements regarding the quality of

the Group's accounting principles and underlying estimates.

The Committee has discussed with the external auditors their independence, and received and reviewed their written disclosures, as required by the Public Company Accounting Oversight Board Rule 3526 "Communication with Audit Committees Concerning Independence".

Based on the reviews and discussions referred to above, the Committee has recommended to the board that the financial statements referred to above be approved.

On behalf of the Audit committee  
*Sir David Clementi (chairman)*

## Corporate governance continued

The Audit committee's main responsibilities include the review of accounting principles, policies and practices adopted in the preparation of public financial information, review with management of procedures relating to financial and capital expenditure controls, including internal audit plans and reports, review with external auditors of the scope and results of their audit, the nomination of auditors for appointment by shareholders, and the review of and recommendation to the board for approval of Rio Tinto's risk management policies and processes. Its responsibilities also include the review of the annual financial statements of Group sponsored pension and superannuation funds, and oversight of the whistleblowing programme.

To ensure the Committee discharges its responsibilities, it meets not less than four times per year and arranges occasional training sessions which may cover new legislation and other information relevant to the Committee's role. The Group's chief financial officer, other senior financial management, external and internal auditors regularly attend its meetings.

The members of the Committee are independent and free of any relationship that would interfere with impartiality in carrying out their responsibilities. The members meet the independence requirements of the Code, the ASX Principles and the NYSE Code, and the Committee meets the composition, operation and responsibility requirements of the ASX Principles.

### **Report of the Nominations committee**

The Committee's activities in 2009 covered the succession of the chairman, executive directorships, non executive succession and changes to the Executive committee.

In 2008, as the end of his second three year term of appointment as chairman approached, Paul Skinner notified the Committee of his intention to retire from the board. Under the guidance of the senior independent director, Andrew Gould, the Committee considered the desired skills and experience required for the appointment of a new, non executive chairman and developed and agreed a profile for this role. Consultants were engaged to assist the Committee in the identification of the new chairman as a result of which, following a formal assessment by the Committee, a recommendation was made to the board. Jim Leng was appointed as an independent non executive director and chairman designate on 14 January 2009.

The Committee is also bound by SEC requirements for audit committees' financial experts and the Code and ASX Principles requirement that at least one committee member should have recent and relevant financial experience. Following the retirement of Sir David Clementi as its chairman with effect from the conclusion of the 2010 annual general meetings, Ann Godbehere, currently a member of the Committee and who becomes its chairman at that time, and Mike Fitzpatrick are considered by the board to have recent and relevant financial experience and are therefore the Committee's financial experts. All other members of the Committee are deemed to be financially literate by virtue of their business experience in the opinion of the Audit committee.

### **Remuneration committee**

The Remuneration committee assists the Board to fulfil its oversight responsibility to shareholders to ensure that remuneration policy and practices reward fairly and responsibly and with a clear link to corporate and individual performance.

The report of the Remuneration committee which has been reviewed by the Committee and approved by the board can be found on pages 104 to 129.

### **Nominations committee**

The Nominations committee is governed by terms of reference which the Committee

regularly reviews and assesses and which are approved by the board. The terms of reference are set out in the corporate governance section of the website.

The Nominations committee is chaired by Jan du Plessis, chairman of the board and comprises all the other non executive directors. The Committee is responsible, on behalf of the board, for regularly assessing the balance of executive and non executive directors and the composition of the board in terms of the skills, diversity and capacity required to ensure it remains relevant and appropriately aligned to oversee the delivery of Rio Tinto's core objective and strategy. The Committee further reviews the time required to be committed to Group business by non executive directors and assesses whether non executive directors are devoting sufficient time to carry out their duties.

Taking into account these factors, the Committee develops and agrees the desired profiles of potential candidates for board membership. In consultation with external search consultants it then oversees the review and recruitment process to fill vacancies as they arise. The recruitment process itself includes identification of suitable candidates, followed by a formal assessment of each candidate, leading to a final selection process. Proposals for new board members are submitted to the full board for approval. On behalf of the board, the Committee also reviews proposals for senior executive appointments and monitors executive succession planning.

However, Mr Leng subsequently decided to resign from the board on 9 February 2009.

In response to Mr Leng's decision to resign from the board, a new process was immediately initiated by the senior independent director which was aimed at identifying a suitable successor to Paul Skinner based upon the previously agreed criteria for the role. This process was supported by all of the other non executive directors, together with external consultants. Taking into account the leadership skills and experience required in the role, the Committee discussed the opportunity with Jan du Plessis who, with the unanimous support of the Committee and all of the other members of the board, agreed to accept the nomination and was therefore appointed as chairman with effect from 20 April 2009, upon the retirement of Paul Skinner.

In accordance with its terms of reference, the Committee reviewed with the chief executive proposed changes to the Executive committee's organisation and an announcement concerning its revised membership was made on 15 October 2009. The Committee also reviewed non executive succession arrangements for the board, resulting most recently in an announcement to appoint Ann Godbehere and Robert Brown as additional non executive directors from 9 February 2010 and 1 April 2010 respectively. Further details of these appointments are contained in the *Annual report*.

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**On behalf of the Board**

*Ben Mathews, secretary  
Nominations committee*

The members of the Nominations committee are independent with the exception of David Mayhew. The chairman is considered independent under the ASX Principles. Under the Code he is not considered independent following his appointment as chairman, however the Code specifically allows the chairman to chair the Nominations committee. The composition of the Committee is therefore also compliant with the Code.

#### **Committee on social and environmental accountability**

The Committee on social and environmental accountability is governed by terms of reference which it reviews and assesses each year and which are approved by the board. The terms of reference are available in the corporate governance section of the website.

The Committee assists the board to oversee management processes, standards, and strategies designed to manage social and environmental risks and achieve compliance with social and environmental responsibilities and commitments. The Committee reviews the effectiveness of management policies and procedures relating to safety, health, employment practices, relationships with neighbouring communities, environment, human rights, land access, political involvement and sustainable development.

A report on the Group's sustainable development activities is set out on pages 24 to 33 of this of this report.

#### **Chairman's committee**

The Committee acts on behalf of the board between scheduled board meetings either in accordance with authority delegated by the board or as specifically set out within its terms of reference. It supports the functioning of the board and ensures that the business of the board and its committees is properly planned and aligned with management. When mandated by the board, the Chairman's Committee will consider urgent matters between board meetings, and deal with the implementation of board decisions on transactions and other corporate matters. Other than for the chairman of the board, the Committee performs the annual review of non executive directors' fees and makes a recommendation to the board as appropriate.

The membership of the Committee comprises the chairman, chief executive and chief financial officer.

#### **Australia and Canada forum**

An advisory forum has been established in each of Australia and Canada to advise the board and executive management on political, economic and social developments in those countries which could impact the successful development of Rio Tinto's businesses. Each forum meets twice annually and is attended by the chairman, chief executive, chief financial officer, local directors and senior management.

#### **Management**

On behalf of the board, the chief executive has delegated authority for the day to day management of the Group's operations. The chief executive, chief financial officer and the heads of the product and global support groups share management responsibility for the management of the business.

The chief executive is assisted by the work of management committees in monitoring performance and achieving Rio Tinto's strategy. The management committees are described below.

#### **Executive committee**

The Executive committee is responsible, under the leadership of the chief executive, for the day to day management of the business, setting performance targets and implementation of the Group's strategy and direction as determined by the board. The members of the Committee are: the chief executive, the chief financial officer, the product group chief executives, the Group executive Technology & Innovation, the Group executive Legal & External Affairs, the Group executive People and Organisation and the Group executive Business Support & Operations.

#### **Closure committee**

This Committee oversees the closure management programme in place to manage the significant financial, reputational and operational risk of site closures. The members of the Committee are: global head of Planning and Reporting, the global head of Health, Safety & Environment, Group executive, Legal & External Affairs, global practice leader Communities, senior vice president Human Resources, Health, Safety & Environment Rio Tinto Alcan and until his retirement in October 2009, the former Group executive Technology & Innovation. The activities of the Committee are supported by a sub committee working group to assist, coordinate and implement the closure management programme.

#### **Continuous disclosure committee**

The Committee is chaired by the chief financial officer and has ultimate responsibility for determining the information that requires disclosure to the markets under the continuous disclosure requirements in the jurisdictions in which Rio Tinto is listed. The members of the Committee are: the chief financial officer, company secretary of Rio Tinto plc, managing director of Rio Tinto Australia, head of Business Development, head of Investor Relations and global practice leader Media Relations.

# Corporate governance continued

### **Disclosure and procedures committee**

The primary role of this Committee is to assist the board, Audit committee and individual directors and officers who are required under various regulations to endorse the Group's shareholder reports and other public documents. The members of the Committee are: the company secretary of Rio Tinto plc, global head of Planning & Reporting, head of Compliance, head of Corporate Assurance and the global head of Health, Safety & Environment.

### **Finance committee**

The Finance committee is responsible, under the leadership of the chief financial officer, to review and advise on issues that arise in the day to day workings within the functional areas of the chief financial officer's direct reports. The members of the Committee are: the chief financial officer, global head of Planning and Reporting, global head of Treasury, global head of Taxation, head of Investor Relations and the head of business development.

### **Investment committee**

The purpose of the Investment committee is to review proposals for major capital decisions by the board and by Group companies to ensure that they accord with the strategic objectives established by the board. The members of the Committee are: the chief executive, chief financial officer, Group executive, Technology & Innovation and Group executive, Business Support & Operations.

### **Ore reserves steering committee**

The Ore reserves steering committee is the primary governance body over the ore reserve estimation and disclosure processes. The members of the Committee are: the Group executive Technology & Innovation, global head of Planning and Reporting, global practice leader, Strategic Production Planning Technology & Innovation, chief advisor, Evaluation, chief advisor, Orebody Knowledge, Technology & Innovation, chief advisor, Resources and Reserves Technology & Innovation, general manager, Resource Development Rio Tinto Iron Ore and consulting geologist Rio Tinto Exploration.

### **Communication**

Rio Tinto recognises the importance of effective timely communication with shareholders and the wider investment community.

To ensure that trading in its securities takes place in an informed market, the Group has adopted continuous disclosure standards which are overseen by the Continuous disclosure committee and form part of the Group's corporate governance standards. Rio Tinto makes immediate disclosure to the listing authorities of any information that a reasonable person would expect to have a material effect on its share price in accordance with their rules. All information released to the markets is posted on the media section of the website.

In addition to statutory documents, Rio Tinto's website features in depth information on health, safety and the environment, as well as general investor information, publications and policies and guidance. Full and half year results as well as any major presentations are also webcast. Presentation material from investor seminars is also made available on the website.

Full advantage is taken of the annual general meetings to inform shareholders of recent developments and to give shareholders the opportunity to ask questions. Generally, the chairs of all board committees will be available to answer questions raised by shareholders and all directors are expected to attend where possible. Rio Tinto's external auditor, PricewaterhouseCoopers attends the annual general meeting and is available to answer shareholder questions about the conduct of the audit and the preparation and content of the auditor's report. Rio Tinto Limited's shareholders may also submit written questions regarding the statutory audit report to the auditors. Any questions received and answers provided are made available at that meeting.

The main channels of communication with the investment community are through the chairman, chief executive and chief financial officer, who have regular meetings with the Companies' major shareholders. The senior independent director and other non executive directors are also available, as appropriate. The Group organises regular investor seminars which provide a two way communication opportunity with investors and analysts; the valuable feedback is communicated to the board. Surveys of major shareholders' opinions and perceptions of the Group are presented to the board by the Group's investor relations advisors on a regular basis.

### **Business practice**

#### **Statement of business practice**

*The way we work* is Rio Tinto's global code of conduct and one of the Group's most important documents. The global code was first launched in 1997 and was revised and reissued in 2009 to reflect Rio Tinto's changing environment and take into account the integration of Rio Tinto Alcan. Its objective is to help protect and promote Rio Tinto's reputation which plays a critical role in the success of the business and ability to generate shareholder value.

*The way we work* contains principles and standards of conduct which reaffirm the Group's commitment to corporate responsibility. It is inspired by our four core values: accountability, respect, teamwork and integrity. It is largely derived from, and supported by, Rio Tinto's extensive framework of policies and standards.

Core policies are adopted by the board after wide consultation, externally and within the Group. Once adopted, they are communicated to business units worldwide, together with mandatory standards and guidance notes to support implementation. Business units are required to devote the necessary effort by management to implement and report on these policies and standards.

Rio Tinto's core policies, addressed in *The way we work*, include: access to land; business integrity; communities; corporate governance; employment; environment; human rights; internal controls and reporting; occupational health; political involvement; safety; sustainable development and transparency. These are supported by policies in the areas of risk, information management and security.

Each policy is supported by standards expanding on the minimum expectations on topics such as antitrust, continuous disclosure, antibribery, compliance, cultural heritage and health, safety and the environment. Many of these standards are supplemented by guidance notes. These policies and standards apply to all Rio Tinto managed businesses. Where the Group does not have operating responsibility for a business, Rio Tinto's policies are communicated to its business partners and they are encouraged to adopt similar policies of their own. Rio Tinto employees are required to undertake mandatory online training about the requirements of *The way we work* and several other core policies.

#### **"Whistleblowing" programme**

The board has adopted a Groupwide whistleblowing programme called *Speak-OUT*. Employees are encouraged to report any concerns, including any suspicion of a violation of the Group's financial reporting or environmental procedures, through an independent third party and without fear of recrimination. A process has been established for the investigation of any matters reported with clear lines of reporting and responsibility in each Group business.

#### **Sustainable development**

Rio Tinto's report on sustainable development follows the guidelines of the Association of British Insurers and is set out on pages 24 to 33. In addition the performance of the Group and of its separate businesses has been disclosed on the website. Rio Tinto reports online in accordance with the Global Reporting Initiative guidelines.

#### **Dealing in Rio Tinto securities**

Rio Tinto has a set of rules which restrict the dealing in Rio Tinto securities by directors and employees with access to "inside information". These rules require those people to seek clearance from the chairman or the company secretary before any proposed dealing to ensure that they do not deal when in possession of inside information. Directors or members of the Executive committee will not be given clearance during "close periods" immediately preceding the announcement of annual and interim results. The rules prohibit the hedging of unvested options. The "Rules for dealing in Rio Tinto securities" can be viewed in the corporate governance section of the website.

#### **Risk management**

Rio Tinto's overriding objective is to maximise the overall long term return to shareholders through a strategy of investing in large, cost competitive mines and businesses. The directors recognise that creating shareholder return is the reward for taking and accepting risk. The directors have established a process for identifying, evaluating and managing the material business risks faced by the Group. This process was in place during 2009 and up to and including the date of approval of the *2009 Annual report*.

A description of some of the principal risks and uncertainties that could affect Rio Tinto are found on pages 16 to 19.

#### **Risk management policies and approach**

Rio Tinto recognises that risk is an integral and unavoidable component of the business, and that it is characterised by both threat and opportunity. The Group fosters a risk aware corporate culture in all decision making, and is committed to managing all risk in a proactive and effective manner through competent risk management. To support this commitment, risk is analysed in order to inform the management decisions taken at all levels within the organisation. The principles of the risk analysis and management process are set out in the Risk policy and standard which is in the corporate governance section of the website.

#### **Roles and responsibilities**

The Risk policy and standard is supported by an integrated framework of risk governance and reporting specifying how the Group organises the handling of risk. Together with the policy, the supporting roles and infrastructure, the framework makes up the complete Rio Tinto approach to risk analysis and management.

The directors are responsible for the Group's system of internal controls and for reviewing annually its effectiveness in providing shareholders with a return on their investments that is consistent with a responsible assessment and management of risks. This includes reviewing financial, operational and compliance controls and risk management procedures and their effectiveness. The directors have completed their annual review and assessment for 2009. Whilst the Audit committee is responsible for oversight of the effectiveness of the risk management process, accountability for identifying and managing risks rests with the chief executive and is cascaded throughout the Group through the Executive committee.

## Corporate governance continued

### **Internal risk control systems**

Two of the Group's management committees, the Executive committee and the Disclosures and procedures committee regularly review reports related to the Group's control framework. Each year, the leaders of the Group's businesses and administrative offices complete an internal control questionnaire that seeks to confirm that adequate internal controls are in place, are operating effectively and are designed to capture and evaluate failings and weaknesses, if any exist, and take prompt action, as appropriate. Once reviewed by the Executive committee, the results of this process are presented to the Audit committee and the board as a further part of their review of the Group's internal controls. Assurance functions, including internal auditors and sustainable development auditors, perform reviews of the integrity and effectiveness of control activities and provide regular written and oral reports to directors and management committees.

In 2009, information was reported by management to the Audit committee to enable it to assess the effectiveness of the internal controls and the management of material business risks. In addition, as part of their role, the board and its committees monitor the Group's material business risks. These reports and risk management processes satisfy the internal control requirements of the Code and ASX Principles.

Due to the limitations inherent in any risk management system, the process for identifying, evaluating and managing the material business risks is designed to manage rather than eliminate risk and to provide reasonable but not absolute assurance against material misstatement or loss. Certain risks, for example natural disasters, cannot be managed to an acceptable degree using internal controls. Such major risks are transferred to third parties in the international insurance markets, to the extent considered appropriate. The Group has material investments in a number of jointly controlled entities and associates. Where Rio Tinto does not have managerial control, it cannot guarantee that local management of mining and related assets will comply with Rio Tinto standards or objectives. Accordingly, the review of their internal controls is less comprehensive than that of the Group's managed operations.

This process for identifying, evaluating and managing the material business risks is continually reviewed and strengthened, as appropriate.

### **Auditors and internal assurance**

#### **Auditor independence**

As indicated in the Audit committee section on pages 97 to 98, Rio Tinto has adopted policies designed to uphold the independence of the Group's principal auditors by prohibiting their engagement to provide a range of accounting and other professional services that might compromise their appointment as independent auditors.

The engagement of the Group's principal auditors to provide statutory audit services, other services pursuant to legislation, taxation services and certain other services are pre-approved. Any engagement of the Group's principal auditors to provide other permitted services is subject to the specific approval of the Audit committee or its chairman.

Prior to the commencement of each financial year the Group's chief financial officer and its principal auditors submit to the Audit committee a schedule of the types of services that are expected to be performed during the following year for its approval. The Audit committee may impose a US dollar limit on the total value of other permitted services that can be provided. Any non audit service provided by the Group's principal auditors, where the expected fee exceeds a pre determined level, must be subject to the Group's normal tender procedures.

In exceptional circumstances the chief financial officer is authorised to engage the Group's principal auditors to provide such services without going to tender, but if the fees are expected to exceed US\$250,000 then the chairman of the Audit committee must approve the engagement.

The remuneration of the Group's principal auditors for audit services and other services, as well as remuneration payable to other accounting firms, has been set out in note 43 to the financial statements on page 199.

The board has established a policy that the principal auditors' engagement partners will rotate every five years.

#### **Corporate Assurance**

The Corporate Assurance function provides independent and objective assurance on the adequacy and effectiveness of the Group's systems for risk management, internal control, and governance together with ideas and recommendations to improve those systems. The function has adopted international auditing standards set by the Institute of Internal Auditors Inc.

The function operates independently of management, under a mandate approved by the Audit committee and the Committee on social and environmental accountability (CSEA) and has full access to all functions, records, property and personnel of the Group. The head of Corporate Assurance reports functionally to both the Audit committee and CSEA, providing each committee with information relevant to their specific terms of reference.

A risk based approach is used to focus assurance activities on high risk areas and audit plans are presented annually to the Audit committee and CSEA for approval.

In respect of its internal audit function, Rio Tinto has an external service provider. The Audit committee has a policy which addresses conflicts of interest in relation to management requested engagements of the service provider. The policy complies with the Institute of Internal Auditor's International Standards on independence. Certain services are pre-approved under the policy as they would not be in conflict with the internal auditor's role. There is a list of prohibited services which may not be undertaken without approval of the head of Corporate Assurance, and guidance on the consideration of services which may give rise to a conflict of interest.

### **Financial reporting**

#### **Internal control**

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed under the supervision of the chief executive and chief financial officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation and fair presentation of the Group's published financial statements for external reporting purposes in accordance with IFRS.

Because of its inherent limitations, internal control over financial reporting cannot provide absolute assurance, and may not prevent or detect all misstatements whether caused by error or fraud, if any, within each of Rio Tinto plc and Rio Tinto Limited.

The Group's internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; provide reasonable assurances that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that receipts

and expenditures are being made only in accordance with authorisation of management and the directors of the Companies; and provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

There were no significant changes in the internal controls or in other factors that could significantly affect internal controls of each of Rio Tinto plc and Rio Tinto Limited subsequent to the date of their most recent evaluation.

### **Financial statements**

The directors are required to prepare financial statements for each financial period which give a true and fair view of the state of affairs of the Group as at the end of the financial period and of the profit or loss and cash flows for that period. This includes preparing financial statements in accordance with UK company law which give a true and fair view of the state of the Company's affairs, and preparing a Remuneration report which includes the information required by Regulation 11, Schedule 8 of the Large and Medium Sized Companies and Groups (Accounts and Reports) Regulations 2008 and the Australian Corporations Act 2001.

The directors are responsible for maintaining proper accounting records, in accordance with the UK Companies Act 2006 and the Australian Corporations Act 2001. They have a general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities. The directors are also responsible for ensuring that appropriate systems are in place to maintain and preserve the integrity of the Group's website. Legislation in the UK governing the preparation and dissemination of financial statements may differ from current and future legislation in other jurisdictions. The work carried out by the auditors does not involve consideration of such developments and, accordingly, the auditors accept no responsibility for any changes, should any be made, to the financial statements after they are made available on the website.

The directors, senior executives, senior financial managers and other members of staff who are required to exercise judgement in the course of the preparation of the financial statements are required to conduct themselves with integrity and honesty and in accordance with the ethical standards of their profession and/or business.

The directors consider that the 2009 *Annual report* presents a true and fair view and have been prepared in accordance with applicable accounting standards, using the most appropriate accounting policies for Rio Tinto's business and supported by reasonable judgements and estimates. The accounting policies have been consistently applied. The directors have received a written statement from the chief executive and the chief financial officer to this effect. In accordance with the internal control requirements of the Code and the ASX Principles Recommendation 7.3, this written statement relies on a sound system of risk management and internal compliance and controls which implements the policies adopted by the board and confirms that the Group's risk management and internal compliance and control systems are operating efficiently and effectively in all material respects.

### **Disclosure controls and procedures**

Management, with the participation of the chief executive and chief financial officer, has evaluated the effectiveness of the design and operation of the Group's disclosure controls and procedures as of the end of the period covered by this report and have concluded that these disclosure controls and procedures were effective at a reasonable assurance level.

### **Compliance statements**

#### **The Code**

By virtue of its UK listing, Rio Tinto is required to state how it has applied the principles set out in Section 1 of the Code and which relate to its directors, remuneration, accountability and audit and relations with shareholders. This *Annual report* provides a statement to satisfy that obligation. Rio Tinto is also required to disclose whether it has complied with the provisions set out in Section 1 of the Code and to provide an explanation where it does not. Rio Tinto confirms that it has continued to comply fully with the detailed provisions of Section 1 of the Code throughout 2009.

#### **ASX Principles**

The Listing Rules of the ASX require Rio Tinto to report the extent to which it complies with the good practice recommendations in the ASX Principles and the reasons for any non compliance. Rio Tinto confirms that it has continued to comply fully with the ASX Principles throughout 2009.

### **NYSE Standards**

Rio Tinto plc, as a foreign issuer with American Depository Shares listed on the NYSE, is obliged by the NYSE Standards to disclose any significant ways in which its practices of corporate governance differ from the NYSE standards.

The Company has reviewed the NYSE Standards and believes that its practices are broadly consistent with them, with one exception. The NYSE Standards state that companies must have a nominating/corporate governance committee composed entirely of independent directors, with written terms of reference which, in addition to identifying individuals qualified to become board members, develops and recommends to the board a set of corporate governance principles applicable to the Company. Rio Tinto has a Nominations committee, information about which is set out on page 98. This committee does not develop corporate governance principles for the board's approval. The board itself performs this task and approves the Group's overall system of governance and internal controls.

# Remuneration report

## Introduction

This report to Rio Tinto's shareholders is aimed at helping to explain the activities of the Remuneration committee, its role and responsibilities and the implementation of measures so as to ensure that the Group's biggest asset – its people – are appropriately focused on driving continuous improvements in performance.

The report has been drawn up in accordance with the Combined Code on Corporate Governance, Schedule 8 of the Large and Medium sized Companies and Groups (Accounts and Reports) Regulations 2008, the UK Listing Authority Listing Rules, the Australian Corporation Act 2001 and Principle 8 of the revised Australian Securities Exchange Corporate Governance Principles and Recommendations 2nd edition (the ASX Principles).

International accounting standards require disclosures in respect of "key management personnel", being those persons having authority and responsibility for planning, directing and controlling the activities of the Group, including the directors. In addition the Australian legislation requires disclosures in respect of the five highest paid executives below board level selected from the senior managers who make, or participate in making, decisions that affect the whole, or a substantial part, of the business of the Group, or have the capacity to affect significantly the Group's financial standing. The Committee has determined that below board level, only members of the Executive committee constitute the group of senior managers that make decisions that affect the whole, or a substantial part, of the business of the Group. The Executive committee comprises the executive directors, product group chief executive officers (PGCEOs) and Group executives.

For the purposes of this report, the Committee has determined that the key management personnel are, in addition to the directors, those members of the Executive committee who served during 2009.

Throughout this report, the members of the Executive committee, including the executive directors, are collectively referred to as "executives". The name, position and date of appointment of each executive is set out in the executive services contract section on page 114.

### Remuneration committee responsibilities

The Remuneration committee's role is to fulfil the board's responsibilities to shareholders in relation to the establishment and implementation of executive remuneration policy. The Committee's responsibilities are set out in its terms of reference which may be viewed in the corporate governance section of the website. These responsibilities include:

- monitoring the effectiveness and appropriateness of executive remuneration policy and practice;
- recommending executive remuneration policy to the board;
- reviewing and determining the terms of service, including remuneration and any termination arrangements, for the chairman, executive directors, PGCEOs, Group executives and the company secretary of Rio Tinto plc;
- reviewing and confirming the remuneration and conditions of employment for other senior managers; and
- recommending share-based long term incentive plans to the board.

The Committee considers the level of pay and conditions throughout the Group when determining executive directors' remuneration.

The Committee is committed to ensuring that remuneration policy and practices reward fairly and responsibly with a clear link to corporate and individual performance.

During 2009, the Committee met eight times. The membership and meeting attendances are detailed in the corporate governance section on page 96. The Committee reviewed its terms of reference in 2009 and concluded that its responsibilities had been met and that these terms of reference remain appropriate.

The chairman and chief executive participated in meetings at the invitation of the Committee during 2009. In addition, the Committee is supported by members of senior management who regularly attend meetings to provide information as requested by the Committee. These people included Hugo Bague (Group executive People & Organisation), Jane Craighead (Global practice leader, Total Rewards) and Ben Mathews (company secretary, Rio Tinto plc). None of the attendees mentioned above were present when matters associated with their own remuneration were considered.

### Advisers

The independent advisers engaged by and reporting to the Committee during 2009 were Deloitte LLP. In addition to specialist remuneration advice, Deloitte LLP provided taxation advice related to Rio Tinto's share plans and other taxation matters. Deloitte LLP did not provide advice on executive remuneration matters other than to the Committee. The Committee has also drawn on the services and publications of a range of external service providers and remuneration consultants such as Towers Watson, Hay Group, Mercer and Port Jackson Partners in relation to market data and external validation of total shareholder return (TSR) performance.

## Executive remuneration

### Remuneration philosophy

Rio Tinto operates in global, as well as local markets, where it competes for a limited

resource of talented executives. It recognises that to achieve its business objectives, the Group needs high quality, committed people. Rio Tinto's remuneration philosophy is that its executive remuneration policy should

support its business goals by enabling it to attract, retain and appropriately reward executives of a necessary calibre. Our B-E-S-T approach set out below aims to align this philosophy with our policy:

<b>Business alignment</b>	Ensure remuneration directly supports the ultimate goal of meeting Rio Tinto's business objectives including superior long term shareholder value creation in a healthy, safe and environmentally appropriate way. This means providing remuneration, including incentive plans, that:
	<ul style="list-style-type: none"> <li>• Drive and reward behaviours to achieve annual, mid and long term business priorities consistent with shareholder value creation</li> <li>• Are competitive to attract and retain with stretching performance targets from a shareholder perspective</li> <li>• Align executives with shareholders through shareholding requirements</li> </ul>
<b>Empowerment</b>	Reward employees for doing their jobs well by differentiating top performers who deliver shareholder value and behave consistently with <i>The way we work</i> . This means providing incentive plan features that:
	<ul style="list-style-type: none"> <li>• Reward employees based on what they can control</li> <li>• Create a direct relationship between the payout from the plan and the individual's performance</li> <li>• Promote the right level of risk-taking from a shareholder perspective</li> </ul>
<b>Simplicity</b>	Keep the remuneration arrangements, including incentive plan design, simple. This means providing:
	<ul style="list-style-type: none"> <li>• Plan features that are easy to understand</li> <li>• Communication that is concise and comprehensive</li> </ul>
<b>Transparency</b>	Demonstrate internal equity to employees for greater buy-in and to ensure global mobility between businesses of key management. This means providing:
	<ul style="list-style-type: none"> <li>• Clear direction on the behaviour Rio Tinto is seeking</li> <li>• Open and timely information on performance targets and how rewards are determined</li> </ul>

### Remuneration policy

During 2009, Rio Tinto undertook a review of its short term incentive plan and the performance condition for its Mining Companies Comparative Plan. During the review process, the Company consulted with shareholders in making changes to remuneration arrangements to enhance alignment with business strategy and

shareholder value creation over the short, medium and long term and to be market competitive. Rio Tinto will review its long term incentive plan during 2010.

Offering remuneration which is appropriately competitive is an important part of Rio Tinto's remuneration policy. Rio Tinto's primary comparator market, for executives, is the median remuneration offered by other

large global organisations as represented by the FTSE 30 (excluding financial services). Consideration is also given to remuneration practices in the local market where each role is based.

The following provides details of the operation of the current remuneration arrangements and details of how they will operate from 2010 onwards:

	Objective of component	2009 policy	2010 onwards
<b>Salary (fixed)</b>	<ul style="list-style-type: none"> <li>• Provides the fixed element of the remuneration package</li> <li>• Target median of international companies of similar size, global reach and complexity, including other large natural resource companies</li> </ul>	<ul style="list-style-type: none"> <li>• Salaries frozen since March 2008</li> </ul>	<ul style="list-style-type: none"> <li>• Salaries will remain frozen in 2010 for executives</li> </ul>
<b>Short term incentive plan ("STIP") (at risk)</b>	<ul style="list-style-type: none"> <li>• Focuses participants on achieving calendar year performance goals which contribute to sustainable shareholder value</li> </ul>	<ul style="list-style-type: none"> <li>• Maximum STIP opportunity of 120 per cent of salary and 60 per cent of salary awarded for target performance</li> <li>• Payable wholly in cash</li> <li>• Performance targets include earnings, cash flow, safety and individual performance objectives</li> </ul>	<ul style="list-style-type: none"> <li>• Maximum STIP opportunity of 200 per cent of salary with 50 per cent payable in cash and 50 per cent delivered in shares (generally subject to continued employment) deferred for a three year period</li> <li>• Increased focus on financial (earnings and cash flow) targets</li> <li>• Safety continues to be an integral part of the STIP framework</li> </ul>
<b>Performance Options – Share Option Plan ("SOP") (at risk)</b>	<ul style="list-style-type: none"> <li>• Rewards participants for increasing the share price and delivering strong TSR performance against other companies</li> </ul>	<ul style="list-style-type: none"> <li>• Market value share options vest based on TSR performance against the HSBC Global Mining Index as at 31 December of the third year after grant</li> <li>• Target (and maximum) face value of 300 per cent of salary</li> <li>• Before awards vest the Committee must also satisfy itself that TSR performance is an appropriate reflection of the underlying performance of the business and can adjust vesting accordingly</li> </ul>	<ul style="list-style-type: none"> <li>• No changes</li> <li>• Whilst options will be granted to members of the Executive committee in 2010, the longer-term use of the SOP will be reviewed in the context of changing tax legislation in Australia</li> </ul>

## Remuneration report continued

	Objective of component	2009 policy	2010 onwards
<b>Performance Shares – Mining Companies Comparative Plan (“MCCP”) (at risk)</b>	<ul style="list-style-type: none"> <li>Rewards participants for increasing the share price and delivering strong TSR performance against other companies</li> </ul>	<ul style="list-style-type: none"> <li>Conditional share awards vest based on TSR ranking against a bespoke comparator group of eight other mining companies as at 31 December of the fourth year after grant</li> <li>Target award equal to face value of 200 per cent of base salary</li> <li>150 per cent of target award vesting for being ranked first (ie a maximum award of 300 per cent of base salary)</li> <li>23 per cent of the maximum potential award vests for median performance</li> <li>Before awards vest the Committee must also satisfy itself that TSR performance is an appropriate reflection of the underlying performance of the business and can adjust vesting accordingly</li> </ul>	<ul style="list-style-type: none"> <li>No changes to the length of the performance period or the overall individual/plan limits</li> <li>Performance measures amended to: <ul style="list-style-type: none"> <li>50 per cent – performance relative to the HSBC Global Mining Index</li> <li>50 per cent – performance relative to the Morgan Stanley Capital World Index (MSCI)</li> </ul> </li> <li>150 per cent of target award vesting for outperformance of the relevant index by eight per cent per annum (top quartile)</li> <li>23 per cent of the maximum potential award vesting for index performance</li> <li>0 per cent vesting below Index performance</li> <li>Before awards vest the Committee must also satisfy itself that TSR performance is an appropriate reflection of the underlying performance of the business and can adjust vesting accordingly</li> </ul>
<b>Service Awards Management Share Plan (“MSP”) (usually service based)</b>	<ul style="list-style-type: none"> <li>Enhance the Group's ability to attract and retain key staff in an increasingly tight and competitive labour market</li> </ul>	<ul style="list-style-type: none"> <li>Executive directors and PGCEOs are not eligible to participate in awards under this plan as a regular component of remuneration. Special awards, if any, will generally have performance conditions</li> <li>Shares to satisfy the awards are purchased in the market and no new shares are issued to satisfy awards</li> </ul>	<ul style="list-style-type: none"> <li>From 2010, MSP awards granted to Group executives will be subject to performance criteria, other than in exceptional circumstances (eg recruitment)</li> </ul>
<b>Post-employment Benefits (fixed)</b>	<ul style="list-style-type: none"> <li>Provides locally competitive post-employment benefits for participants in a cost efficient manner</li> </ul>	<ul style="list-style-type: none"> <li>Post-employment benefit arrangements offered</li> </ul>	<ul style="list-style-type: none"> <li>No change</li> </ul>
<b>Shareholding requirement</b>	<ul style="list-style-type: none"> <li>Provides alignment with shareholders' interests</li> </ul>	<ul style="list-style-type: none"> <li>Two times salary over a five year period for executive directors and PGCEOs</li> </ul>	<ul style="list-style-type: none"> <li>Requirement extended to the Executive committee</li> </ul>

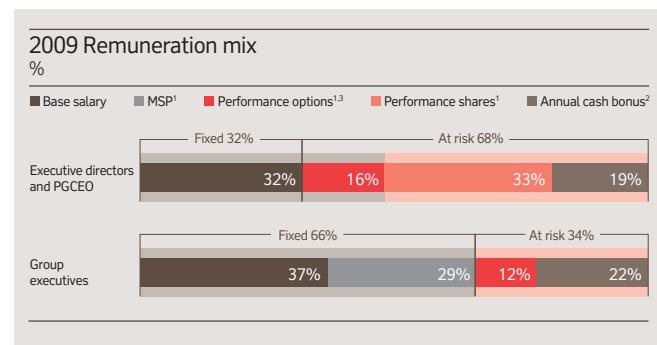
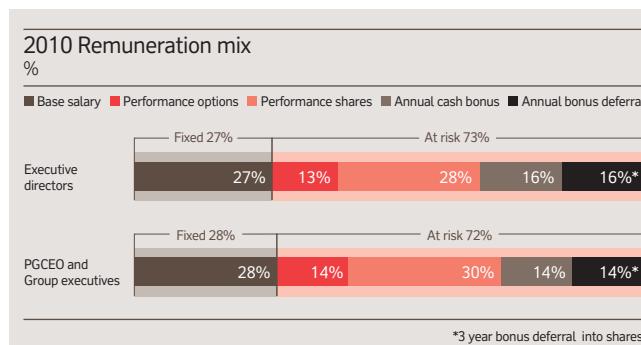
### Remuneration mix

Consistent with the Group's business strategy to utilise and develop high quality long term mining assets, the Group seeks to achieve a remuneration mix which best reflects the long term nature of the business. The total remuneration package is designed to provide an appropriate balance between fixed and

variable components. Fixed pay is base salary and the value of the MSP awards that are not related to Company performance. Variable pay is the STIP, SOP and MCCP respectively.

For 2010, the revised remuneration structure shifts the remuneration mix more towards variable pay for all executives. For Group executives in particular, the

Committee has taken steps during the year to align the fixed and variable elements of the total package with those of the other executives. The following tables illustrate the remuneration mix which is identical for each group of identified executives.



1. MSP, Performance options, Performance shares constitute long term incentives as detailed above.
2. Annual bonus constitutes STIP.
3. The performance options are the percentage of each executives remuneration that consists of options.

## Remuneration components

### Base salary

In order to reflect the prevailing economic climate and to move the mix of the package towards more variable pay, executive salaries will be frozen again in 2010.

### Short Term Incentive Plan ("STIP")

The STIP is an annual bonus plan, designed to support overall remuneration policy by focusing participants on achieving annual financial, strategic and operational goals which contribute to sustainable shareholder value.

### 2009 STIP

For 2009, the maximum annual bonus opportunity under the STIP for the executives is 120 per cent of salary (target opportunity of 60 per cent of salary). This amount is payable wholly in cash.

Bonuses payable under the STIP are based on performance against financial, safety and individual business objectives. Outcomes are based on a multiplicative approach. The financial objectives are balanced equally between earnings performance and cash flow performance. The Committee selected these measures as they are key performance indicators (KPIs) used in managing the business. Cash flow was added as a metric in 2009 in recognition of the importance of this measure to the business in more challenging economic times. In addition, the all injury frequency rate is also a KPI under the STIP.

As the potential impact of fluctuations in exchange rates and some prices are outside the control of the Group, for earnings and cash flow metrics, the Committee compares on an equal weighting the actual results (unflexed) and underlying performance flexed for prices and exchange rates.

Safety is an important Rio Tinto value. Its inclusion in STIP (measured in relation to all injury frequency rates, significant potential incidents rate and semi-quantitative risk assessment) is a strong reminder that employees are not to be put at risk when businesses target superior earnings and cash flow.

Individual performance metrics for executives are calibrated to be specific, measurable objectives which are aligned with Rio Tinto's strategy. These objectives are set with the Committee in the first quarter of each year. They consist of three to five performance objectives that are directly linked to strategic business priorities for the

year. The individual objectives for 2009 are summarised on pages 110 and 111.

The table below illustrates the balance of performance measures for 2009.

### Policy for 2010 onwards

In consultation with shareholders, the Committee reviewed the framework for the STIP and has decided to increase the maximum opportunity for executives under the STIP to 200 per cent of base salary from an existing maximum of 120 per cent. For the 2010 STIP and onwards, half of any bonus earned will be payable in cash with the remaining 50 per cent being deferred into shares which vest, generally subject to continued employment, three years after the deferral. The objective of this change to the STIP is to increase its competitiveness and to strengthen the link between the Group's short term strategic objectives and the medium term delivery of shareholder value.

The performance metrics for the STIP described above will be maintained as the Committee continues to believe that these are most appropriate for our business. Going forward, however, an additive model will be used for determining STIP awards with 70 per cent based on earnings, cash flow and safety and 30 per cent on individual measures. This represents an increased focus on financial and safety measures at this level. The Committee believes that this approach will increase simplicity and line of sight for participants. In the future, the Committee will consider supplementing the safety metrics to include measures relating to environmental factors in keeping with the responsibility that mining companies such as Rio Tinto have to limit the impact of mining on the environment.

The table below illustrates the balance of performance measures for 2010.

### STIP measures 2009

	Executive directors and Group executives %	PGCEOs %
<b>Business measures – Rio Tinto Group</b>	<b>50.00</b>	<b>20.00</b>
Earnings – flexed / unflexed (50% / 50%)	25.00	10.00
Cash flow – flexed / unflexed (50% / 50%)	25.00	10.00
<b>Business measures – Product group</b>		<b>30.00</b>
Earnings – flexed / unflexed (50% / 50%)		15.00
Cash flow – flexed / unflexed (50% / 50%)		15.00
<b>Total business weighting</b>	<b>50.00</b>	<b>50.00</b>
<b>Individual objectives</b>	<b>37.50</b>	<b>37.50</b>
<b>Safety – Rio Tinto Group / Product group</b>	<b>12.50</b>	<b>12.50</b>
All Injury Free Rate (AIFR)	6.25	6.25
Semi Quantitative Risk Assessment (SQRA)	3.75	3.75
Significant Potential Incidents (SPI)	2.50	2.50
<b>Total individual weighting</b>	<b>50.00</b>	<b>50.00</b>
<b>TOTAL (business + individual)</b>	<b>100.00</b>	<b>100.00</b>

### STIP measures 2010 onwards

	Executive directors and Group executives %	PGCEOs %
<b>Business measures – Rio Tinto Group*</b>	<b>52.50</b>	<b>21.00</b>
Earnings – flexed / unflexed (50% / 50%)*	26.25	10.50
Cash flow – flexed / unflexed (50% / 50%)*	26.25	10.50
<b>Business measures – Product group*</b>		<b>31.50</b>
Earnings – flexed / unflexed (50% / 50%)*		15.75
Cash flow – flexed / unflexed (50% / 50%)*		15.75
<b>Safety – Rio Tinto Group / Product group**</b>	<b>17.50</b>	<b>17.50</b>
All Injury Free Rate (AIFR)**	8.75	8.75
Semi Quantitative Risk Assessment (SQRA)**	5.25	5.25
Significant Potential Incidents (SPI)**	3.50	3.50
<b>Total business weighting</b>	<b>70.00</b>	<b>70.00</b>
<b>Individual objectives</b>	<b>30.00</b>	<b>30.00</b>
<b>Total individual weighting</b>	<b>30.00</b>	<b>30.00</b>
<b>TOTAL (business + individual)</b>	<b>100.00</b>	<b>100.00</b>

\* Financial measures are 75 per cent of the total business measures.

\*\* Safety is 25 per cent of the total business measures.

Sam Walsh is considered a PGCEO with regard to STIP performance measures.

## Remuneration report continued

### Long term incentives

The Group operates three long term incentive plans:

- The 2004 Share Option Plan – a market value share option plan which is subject to TSR performance and has been approved by shareholders.
- The 2004 Mining Companies Comparative Plan – a performance share plan which is subject to TSR performance and has also been approved by shareholders.
- The Management Share Plan – a plan which generally provides service based awards.

### Share Option Plan ("SOP")

Under the SOP, options are granted to purchase shares at an exercise price based on the share price at the date of grants. The maximum face value of grants under the SOP is three times base salary.

The vesting of options is subject to the achievement of a stretching total shareholder return performance condition, comparing Rio Tinto's TSR performance to that of the HSBC Global Mining Index as at 31 December of the third year after grant. If Rio Tinto's TSR performance is equal to the performance of the index, then the higher of one third of the actual grant or 20,000 options may vest. The full award will only vest if TSR performance is equal to or greater than the HSBC Global Mining Index plus five per cent per annum. Between these points, options will become exercisable on a sliding scale.

The Committee considers that TSR is an appropriate performance measure as it captures the return Rio Tinto delivers to shareholders.

Given the market nature of the performance condition for SOP awards, the Committee recognises the importance of ensuring that the level of vesting is commensurate with the underlying performance of the business. Therefore, when approving vesting, the Committee will look to satisfy itself that TSR performance is a genuine reflection of the value available to shareholders and the underlying performance of the Group and will adjust levels accordingly.

Rio Tinto believes that common remuneration arrangements should be used throughout the Group and while options are still considered to be an important part of the package for the Executive committee in 2010, a review of the SOP will be undertaken in 2010 in light of the potential changes to the taxation of option awards in Australia.

### Mining Companies Comparative Plan ("MCCP")

Rio Tinto's performance share plan, the MCCP, is designed to incentivise management to drive shareholder value creation. Awards under the plan can be made with a face value of up to 200 per cent of base salary. Awards vest subject to Rio Tinto's TSR performance compared to a bespoke comparator group as at 31 December of the fourth year after grant. The comparator group for MCCP awards has been reconstituted several times over the last few years due to continued consolidation in the comparator group.

The comparator group for the 2009 awards includes:

- |                  |                     |
|------------------|---------------------|
| • Alcoa          | • Freeport-McMoRan  |
| • Anglo American | • Newmont Mining    |
| • Barrick Gold   | • Vale do Rio Dolce |
| • BHP Billiton   | • Xstrata           |

The vesting profile for awards is as follows:

Rank in group	Percentage vesting %
1st	150
2nd	121.3
3rd	92.5
4th	63.8
5th	35
6th - 9th	0

The comparator group and the vesting profile for awards granted in 2005 – 2008 are broadly similar.

Where applicable, participants receive the cash amount of the dividends that would have been received had the recipient owned the shares between the grant date and the vesting date.

Due to the small number of comparator companies and the impact of corporate transactions, on such a small group, the Committee has decided to move away from a bespoke comparator group to two recognised market indices for awards made from 2010 onwards.

Vesting of MCCP awards will be subject to Rio Tinto TSR performance compared:

- 50 per cent to the performance of the HSBC Global Mining Index; and
- 50 per cent to the performance of the Morgan Stanley Capital World Index.

The use of the MSCI World Index reflects the fact that Rio Tinto competes against a global market for investors as well as within

the mining sector and is consistent with rewarding executives for providing stable returns over the long term relative to the broader market as well as the mining sector.

Vesting for awards is as follows:

Outperformance of the index by 8% per annum	150% of initial award vests
Performance between index and 8% out performance	Straight-line vesting
Performance equal to index	23% of maximum award

The outperformance required for maximum vesting has been calibrated to be equivalent to upper quartile performance against these indices and, as such, is considered by the Committee to be particularly stretching. Independent analysis carried out on behalf of the Committee illustrates that, over the last fifteen years, eight per cent per annum out performance against both of these indices would have led to maximum vesting occurring less than 15 per cent of the time.

The Committee believes that the revised performance condition provides a more robust approach to assessing the performance of Rio Tinto compared to key peers and are better aligned with our core business strategy of providing stable long term returns to investors.

Given the market nature of the performance condition for MCCP awards, the Committee recognises the importance of ensuring that the level of vesting is commensurate with the underlying performance of the business. Therefore, when approving vesting, the Committee will look to satisfy itself that TSR performance is a genuine reflection of the value available to shareholders and the underlying performance of the Group and will adjust levels accordingly.

### Management Share Plan ("MSP")

The primary focus of the MSP is to support the Group's ability to attract and retain key staff in an increasingly tight and competitive labour market. MSP awards are conditional awards which vest subject to continued employment and thus act as a strong retention tool. Generally, these awards do not have performance conditions. Executive directors and PGCEOs are not eligible to participate in the service based MSP awards. From 2010, MSP awards granted to Group executives will be subject to performance criteria, other than in exceptional circumstances (eg recruitment of key talent).

## All employee share plans

Executives may participate in broad based share and share option plans which are available to Group employees generally and for which performance conditions do not apply. These plans form part of standard remuneration practice whereby employees are offered participation in plans to encourage alignment with the long term performance of the Company. Executives may participate in the Rio Tinto plc Share Savings Plan or the Rio Tinto Limited Share Savings Plan depending on whether they are employed by Rio Tinto plc or Rio Tinto Limited. The Plans require the participant to save for a defined period before exercising options granted at a discount of up to twenty per cent to the market value at the time of grant. Grants made to executives under these plans are set out in Table 5 on pages 126 to 129.

The Share Ownership Plan is available to eligible employees in the UK who may receive

an annual award of shares up to five per cent of salary, subject to a cap of £3,000. Under this plan, employees may also make contributions from salary each month to purchase shares at the prevailing market price subject to a cap of £1,500 per annum. The Company matches the purchases on a one for one basis.

Where, under an employee share plan operated by the Company, participants are the beneficial owners of the shares, but not the registered owner, the voting rights are normally exercised by the registered owner at the direction of the participant.

## Dilution

Awards under the SOP and MCCP may be satisfied by treasury shares, the issue of new shares or the purchase of shares in the market. Currently, Rio Tinto plc satisfies awards by the issue of new shares or the transfer of shares from treasury. Rio Tinto

Limited satisfies awards by the purchase on market and delivery of shares to plan participants. Rio Tinto plc complies with the ABI guidelines in relation to the issue of new shares. All other share awards are satisfied by the use of shares which are purchased in the market. Further information in respect of the number of shares issued under plan arrangements can be found in note 49 to the financial statements.

## Post-employment benefits

Executives may participate in post-employment benefit arrangements offered by the Group. No post-employment benefits are provided to non executive directors. The following table details the post-employment benefit components for Rio Tinto's executive director population.

Details of executives' pension entitlements are set out in Table 2 on pages 118 and 119.

Country / Executive director Post-employment benefit

### UK

Tom Albanese	Plan membership – UK employer pension plans as provided to other UK-based employees. Pension is indexed to the UK Retail Price Index to a maximum of ten per cent per annum. Tom Albanese specific provision: <ul style="list-style-type: none"><li>Target defined benefit of 2/3rds of basic salary at age 60, inclusive of benefits accrued in the US.</li></ul>
Guy Elliott	Guy Elliott specific provision: <ul style="list-style-type: none"><li>Target defined benefit of 2.3 per cent of basic salary for each year of service with the Company to age 60.</li></ul>
Dick Evans	<ul style="list-style-type: none"><li>Retirement date – 31 December 2009.</li><li>Unfunded defined contribution benefit.</li><li>Company's contribution was 20 per cent of basic salary, plus interest.</li><li>Unfunded benefit will be used to purchase an annuity at retirement.</li><li>Also participated in the Alcan Employee Savings Plan (Canada) to which the Company pays a maximum contribution of 60 per cent of any employee contribution up to four per cent of base salary.</li></ul>

### Australia

Sam Walsh	<ul style="list-style-type: none"><li>Plan membership – Australian employer funded superannuation plan as provided to other Australian based employees.</li><li>Target defined benefit is a lump sum multiple of 4.05 times final basic salary at age 62.</li><li>Additional Company contribution on a defined contribution basis of 20 per cent of the lesser of 50 per cent of the annual STIP award or 20 per cent of basic salary. This is in line with typical market practice in Australia.</li></ul>
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## 2010 performance payment potential

Provided below is the minimum and maximum performance payment potential for each current member of the Executive committee in 2010 based on the new remuneration framework.

Executive	Annual bonus Potential range of cash bonus payments in March 2011 in respect of 2010		Annual bonus Potential range of bonus deferral in March 2011 in respect of 2010		Performance options (SOP) (% of March 2010 salary)		Performance shares (MCCP) (% of March 2010 salary)	
	Min	Max	Min	Max	Min	Max	Min	Max <sup>2</sup>
Tom Albanese	0	£907,500	0	£907,500	0	300	0	300
Guy Elliott	0	£675,500	0	£675,500	0	300	0	300
Sam Walsh	0	A\$1,475,000	0	A\$1,475,000	0	300	0	300
Hugo Bague	0	£360,000	0	£360,000	0	300	0	300
Preston Chiaro	0	US\$725,000	0	US\$725,000	0	300	0	300
Bret Clayton	0	US\$700,000	0	US\$700,000	0	300	0	300
Jacynthe Côté <sup>1</sup>	0	US\$825,000	0	US\$825,000	0	300	0	300
Andrew Harding	0	US\$650,000	0	US\$650,000	0	300	0	300
Harry Kenyon-Slaney	0	£360,000	0	£360,000	0	300	0	300
Doug Ritchie	0	A\$850,000	0	A\$850,000	0	300	0	300
Debra Valentine	0	US\$570,000	0	US\$570,000	0	300	0	300

1. In addition to the payments above, Jacynthe Côté has two special MSP grants which vest in 2010 as part of her legacy Alcan arrangements. See page 123.

2. Maximum reflects potential under the plan to vest 150 per cent of the original award for outstanding performance.

## Remuneration report continued

### Remuneration received in 2009

The table below provides a summary of the executives' remuneration actually received in 2009 stated in the currency in which they were paid. This information is provided by way of additional disclosure to assist shareholders in understanding actual remuneration outcomes. Tables 1a and 1b on pages 116 to 118 provide the statutory disclosures.

#### Actual remuneration received in 2009

Executive	Base salary paid	Other payments and benefits <sup>1</sup>	2009 STIP <sup>7</sup> payment	Total short term pay	Value of LTIP awards granted in 2009 <sup>2</sup>	Remuneration received for 2009
Tom Albanese	£907,500	£884,522	£589,285	£2,381,307	£1,415,700	£3,797,007
Guy Elliott	£675,500	£370,035	£552,444	£1,597,979	£1,053,780	£2,651,759
Dick Evans	US\$1,500,000	US\$5,278,915	US\$976,037	US\$7,754,952	US\$2,340,000	US\$10,094,952
Sam Walsh	A\$1,475,000	A\$510,860	A\$1,307,534	A\$3,293,394	A\$2,301,000	A\$5,594,394
Hugo Bague	£360,000	£437,251	£284,336	£1,081,587	£396,000	£1,477,587
Preston Chiaro	US\$725,000	US\$792,322	US\$389,955	US\$1,907,277	US\$1,131,000	US\$3,038,277
Bret Clayton	US\$700,000	US\$574,426	US\$534,492	US\$1,808,918	US\$1,092,000	US\$2,900,918
Jacynthe Côté <sup>3</sup>	US\$813,125	–	US\$686,116	US\$1,499,241	US\$1,287,000	US\$2,786,241
	–	C\$2,200,049	–	C\$2,200,049	–	C\$2,200,049
Andrew Harding <sup>4</sup>	US\$421,373	US\$559,259	US\$401,653	US\$1,382,285	US\$386,131	US\$1,768,416
Harry Kenyon-Slaney <sup>5</sup>	£266,933	£258,475	£113,997	£639,405	£174,843	£814,248
Keith Johnson	£245,000	£1,029,954	£178,322	£1,453,276	–	£1,453,276
Doug Ritchie <sup>6</sup>	A\$734,333	A\$873,286	A\$540,161	A\$2,147,780	A\$606,900	A\$2,754,680
Grant Thorne	A\$920,000	A\$243,722	A\$662,890	A\$1,826,612	A\$1,012,000	A\$2,838,612
Debra Valentine	US\$570,000	US\$712,799	US\$467,541	US\$1,750,340	US\$627,000	US\$2,337,340

1. Includes superannuation, pension, health care, expatriate payments, car allowances or cars, other perquisite payments and any special one time bonus payments as detailed in Table 1a.

2. The LTIP value is the expected value of the LTIP award granted in 2009.

3. Total pay received for time as both CEO Rio Tinto Alcan - primary metal and CEO Rio Tinto Alcan. C\$ amount includes the one time special bonus payments as detailed in Table 1a.

4. Total pay received in US\$ for time as both CEO KUC and CEO Copper.

5. Total pay received in £ for time as both CEO RT&T and CEO Diamonds & Minerals.

6. Total pay received in A\$ for time as both managing director strategy within Rio Tinto Australia and CEO Energy.

7. STIP payment made in 2010 in respect of 2009 performance.

#### Short Term Incentive Plan

##### Performance evaluation process for individual executives

Rio Tinto conducts an annual performance evaluation process for all of its senior executives. In the case of members of the Executive committee, the chief executive conducts the review. In the case of the chief executive, the chairman of the Committee conducts the review in conjunction with the chairman of the board.

The key objectives of the performance evaluation process are to:

- Improve organisational effectiveness by creating alignment between the executives' individual objectives and Rio Tinto's business strategy.
- Provide a consistent, transparent and balanced approach to measure, recognise and reward executive performance.

Annual individual objectives are finalised at the beginning of the calendar year. Performance evaluations are completed during early January of the following year.

Individual objectives and awards in respect of 2009 for the executives are set out below. As outlined above, there is a rigorous annual evaluation process undertaken during which performance against stated objectives is assessed. Personal performance for Messrs

Albanese, Elliott, Bague, Chiaro, Kenyon-Slaney and Jacynthe Côté was adversely affected due to fatalities in the Group.

##### Annual Bonus (STIP) Performance Assessment for 2009

###### **Tom Albanese**

Based on individual objectives related to the strengthening of the balance sheet, achieving significant cost reductions brought on by the economic downturn and the reorganisation of the product groups and Executive committee, the Committee assessed personal performance, including Group safety, as 92.5 per cent of target. The overall STIP award is 108 per cent of target which is 65 per cent of salary.

###### **Guy Elliott**

Based on individual objectives related to the strengthening of the balance sheet, leadership of the CFO function, and divestments, the Committee assessed personal performance, including Group safety, as 117 per cent of target. The overall STIP award is 136 per cent of target which is 82 per cent of salary.

###### **Sam Walsh**

Based on individual objectives related to the proposed iron ore production joint venture, leadership of Rio Tinto China/Asia and Rio Tinto India and West Africa, effective implementation of the Planning and Rio Tinto Iron Ore operations centre, and the business

sustainability and joint venture management, the Committee assessed personal performance, including product group safety, as 123 per cent of target. The overall STIP award is 148 per cent of target which is 89 per cent of salary.

###### **Dick Evans**

Based on individual objectives related to the transition of duties to new leadership and the delivery of integration activities and financial synergies, the Committee assessed personal performance, including product group safety, as 92 per cent of target. The overall STIP award is 108 per cent of target which is 65 per cent of salary.

###### **Hugo Bague**

Based on individual objectives related to talent retention and engagement, organisational and workforce management, development of a 'business driven' communities practice, and improvement on the focus and intensity of internal communications, the Committee assessed personal performance, including Group safety, as 117 per cent of target. The overall STIP award is 136 per cent of target which is 79 per cent of salary.

###### **Preston Chiaro**

Based on individual objectives related to management of asset divestments, progression of the climate and energy strategy and cash flow initiatives, the Committee assessed personal performance, including

product group safety, as 83 per cent of target. The overall STIP award is 90 per cent of target which is 54 per cent of salary.

#### Bret Clayton

Based on individual objectives related to the progress of development projects and identification of new opportunities and the successful management of the slowdown of major projects in Diamonds group and its impact on the business units, the Committee assessed personal performance, including product group safety, as 105 per cent of target. The overall STIP award is 127 per cent of target which is 76 per cent of salary.

#### Jacynthe Côté

Based on individual objectives related to the delivery of integration goals, cash initiatives, and management of business sustainability and key stakeholders, the Committee assessed personal performance, including product group safety, as 117 per cent of target. The overall STIP award is 139 per cent of target which is 83 per cent of salary.

#### Andrew Harding

Based on individual objectives related to the successful transition of business unit managing director duties and the objectives of his previous role as president KUC, the Committee assessed personal performance, including business unit safety, as 134 per cent of target. The overall STIP award is 174 per cent of target which is 95 per cent of salary.

#### Harry Kenyon-Slaney

Based on individual objectives related to the successful transition of business unit managing director duties and the objectives of his previous role as managing director RITT, the Committee assessed personal performance, including

business unit safety, as 94 per cent of target. The overall STIP award is 88 per cent of target which is 43 per cent of salary.

#### Doug Ritchie

Based on individual objectives related to the successful transition of his managing director strategy duties and the objectives of his previous role as managing director strategy, the Committee assessed personal performance, including Group safety, as 119 per cent of target. The overall STIP award is 141 per cent of target which is 74 per cent of salary.

#### Grant Thorne

Based on individual objectives related to the major project execution, progression of key technology initiatives and leadership of T&I Group, the Committee assessed personal performance, including T&I safety, as 103 per cent of target. The overall STIP award is 120 per cent of target which is 72 per cent of salary.

#### Debra Valentine

Based on individual objectives related to the leadership of the legal, external relations, security and compliance functions,

delivery on key corporate projects and cost management, the Committee assessed personal performance, including Group safety, as 119 per cent of target. The overall STIP award is 139 per cent of target which is 82 per cent of salary.

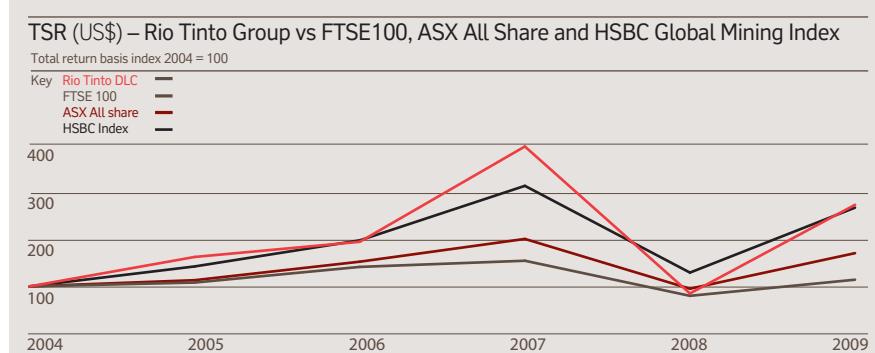
### Long term incentive programmes

#### Performance of Rio Tinto

The Companies' share price showed strong improvement in 2009 as a result of Rio Tinto's cost containment measures, completion of divestments and the strengthening of the balance sheet.

The graph illustrates the performance of the Company against the FTSE 100, the ASX All Ordinaries Index, and the HSBC Global Mining Index. These indexes have been chosen as they represent major markets and the mining sector in which the Group competes for investors.

The effect of this performance on shareholder wealth, as measured by TSR delivered during the relevant calendar year, is detailed in the table below.



### Rio Tinto shareholder return 2005-2009

Year	Dividends paid during the year	Share price – Rio Tinto plc pence		Share price – Rio Tinto Limited A\$		Total shareholder return (TSR) %		
		US cents per share	1 Jan	31 Dec	1 Jan	31 Dec	plc	Ltd
2009	68.0	1,231	3,390	29.97	74.89	182.2	156.7	172.5
2008	152.0	4,392	1,231	105.65	29.97	(71.5)	(71.1)	(71.5)
2007	116.0	2,245	4,392	58.60	105.65	99.5	82.9	92.7
2006	191.5	2,193	2,245	54.42	58.60	6.2	9.2	7.5
2005	83.5	1,266	2,193	30.86	54.42	77.4	80.2	78.5

### LTIP Award Results

Rio Tinto Group and product group performance during 2009, and over the performance periods of the long term incentive plans which ended on 31 December 2009, affected executives' remuneration as follows:

#### MCCP

Plan Period	Plan period that ended 31 December 2009
Comparator Companies	Alcoa, Anglo American, Barrick Gold, BHP Billiton, Cameco, Freeport-McMoRan, Gmexico 'B', Newmont Mining, Peabody Energy, Teck Cominco, Vale do Rio Dolce, Xstrata
TSR Ranking	6th (44.8 per cent TSR)
% of Shares Vested	39.60 per cent of initial award (26.4 per cent of maximum) for executive directors and participants who were PGCEOs at the time of the grant and 57.1 per cent for all other plan participants based on TSR results. The Committee believes that this is consistent with the Company's underlying performance over the four year vesting period. The vesting matrix for the 2006 award which vested in 2010 was adjusted in 2007 by the Committee to reflect industry consolidation.

## Remuneration report continued

### SOP

Plan Period	Plan period that ended 31 December 2009
HSBC Mining Index TSR	10.20 per cent
Rio Tinto TSR	-6.20 per cent
% of shares vested	0 per cent vested based on TSR results as reviewed and approved by the Committee and were cancelled

Despite a strong share price recovery in 2009, the share price for each performance period included baseline prices from periods of very strong commodity markets that existed prior to the 2008-9 downturn therefore share options granted in 2007 did not vest and were cancelled.

### MSP

Plan Period	Plan period that ended 31 December 2009
% of shares vested	100.00 per cent

Executive directors and PGCEOs are not eligible for awards under this plan. From 2010, MSP awards granted to Group executives will be subject to performance criteria, other than in exceptional circumstances, for example the recruitment of key talent.

### Bonus and LTIP vested in respect of 2009

Executive	Bonus			SOP (Performance Options)		MCCP (Performance Shares)		MSP (Service Awards)	
	% of maximum STIP awarded	% of maximum STIP forfeited	% of target STIP awarded	% vested	% forfeited	% vested	% forfeited	% vested	% forfeited
Tom Albanese	54.00	46.00	108	–	100	39.6	60.4	N/A	N/A
Guy Elliott	68.00	32.00	136	–	100	39.6	60.4	N/A	N/A
Dick Evans	54.00	46.00	108	N/A	N/A	N/A	N/A	N/A	N/A
Sam Walsh	74.00	26.00	148	–	100	39.6	60.4	N/A	N/A
Hugo Bague	79.00	21.00	136	–	100	N/A	N/A	100	N/A
Preston Chiaro	45.00	55.00	90	–	100	39.6	60.4	N/A	N/A
Bret Clayton	64.00	36.00	127	–	100	57.1	42.9	N/A	N/A
Jacynthe Côté	69.00	31.00	139	N/A	N/A	N/A	N/A	N/A	N/A
Andrew Harding	91.00	9.00	174	–	100	57.1	42.9	100	–
Keith Johnson	35.00	65.00	122	–	100	39.6	60.4	N/A	N/A
Harry Kenyon-Slaney	44.00	56.00	88	–	100	57.1	42.9	100	–
Doug Ritchie	70.50	29.50	141	–	100	57.1	42.9	100	–
Grant Thorne	60.00	40.00	120	–	100	57.1	42.9	100	–
Debra Valentine	68.00	32.00	139	N/A	N/A	N/A	N/A	N/A	N/A

### Long term incentives granted in 2009

#### SOP

Options over either Rio Tinto plc or Rio Tinto Limited shares, as appropriate, were granted to each executive under the SOP on 17 March 2009. The performance condition for these awards is as outlined in the policy section above.

#### MCCP

A conditional award of performance shares in either Rio Tinto plc or Rio Tinto Limited shares was made to each executive under the MCCP on 17 March 2009. The performance condition for these awards is as outlined in the policy section above.

#### MSP

The objective of service based awards, when they are used for employees, is to enhance retention. Each year, for senior management below the Executive committee level, the Committee will determine the make-up of the long term incentive grant by employee level. Given market and industry conditions in 2009, the Committee decided to use service-based awards for a portion of

each employee's award below the level of executive director and PGCEO.

The awards are service-based with no performance conditions and vest subject to continuous employment, on 1 January 2012. Executive directors and PGCEOs are not eligible for service-based awards other than in relation to bonus deferrals (as occurred in 2009 for the 2008 bonus).

#### Other payments during 2009

This section provides information on any one-time payments made during the year which are not a core element of the remuneration package.

- Retention of key talent** – In 2007, at the time of the pre-conditional offer from BHP Billiton, Rio Tinto introduced a retention programme for key executives below the level of executive director and PGCEO. Retention payments under this programme were made in December 2008 and July 2009. Hugo Bague, Andrew Harding, Harry Kenyon-Slaney and Doug Ritchie received payments under this programme as detailed in Table 1. The retention

programme was put in place prior to Messrs Harding, Kenyon-Slaney and Ritchie becoming PGCEOs. Doug Ritchie received an additional award of A\$835,000 in recognition of his particular contribution to the business as managing director, strategy. Of this, A\$275,550 was paid in cash and A\$559,450 as MSP shares as detailed in Table 1a.

- Integration bonuses** – As disclosed in the 2008 remuneration report, Dick Evans was eligible for a Rio Tinto Alcan integration bonus of up to 426 per cent of salary (US\$6,397,500) at target and 640 per cent of salary (US\$9,596,250) at maximum. The Committee determined that this bonus was justified in order to lock in the essential skills and knowledge of Dick Evans and to incentivise him to deliver synergies and accelerate the integration of Rio Tinto Alcan into the Group. The Committee has reviewed performance against the objectives set for this bonus and determined that Dick Evans should receive 71 per cent of the target reward or 301 per cent of salary (US\$4,515,036). This reflects the

exceptional synergy savings generated over the past two years, the strong progress in developing and appointing a successor and the organisational and cultural integration of Rio Tinto Alcan into the wider Group.

- Alcan Inc long term cash plan –** Consistent with its normal granting schedule, in September 2007 the human resources committee of the board of the former Alcan Inc approved the final long term incentive award made prior to Alcan Inc being acquired by Rio Tinto. To encourage retention of Alcan Inc employees, the last award did not vest at the change of control in October 2007 and was made in the form of a long term cash award that vested on 15 December 2009 subject to participants remaining in employment. Jacynthe Côté was granted an award under the 2007 Alcan long term cash plan in September 2007 and received payment of the award when it vested in December 2009 as reported in Table 1a. Dick Evans was not eligible for a payment in December 2009. There are no further payments to be made under the 2007 Alcan long term cash plan.
- One-off long term incentive grant –** Upon promotion to the role of PGCEO Rio Tinto Alcan, and based on the terms of her legacy Alcan Inc. contract, Jacynthe Côté was granted a one-time conditional award of shares equal to 25 per cent of her current annual base salary to incentivise her to deliver synergy savings and to promote the effective integration of Rio Tinto Alcan from an organisational and cultural perspective. The award is subject to performance conditions which provide for 50 per cent of the award to vest on 1 February 2010 and 50 per cent on 1 February 2011 if the performance conditions are met. Effective from October 2007, Jacynthe Côté was also granted a one-off service based, special retention grant as part of her legacy Alcan Inc. arrangements on assuming the role of president and CEO Primary Metals, Rio Tinto Alcan. Forty per cent of the award vested on 25 January 2009 and 60 per cent vests on 25 October 2010. The payment made under this award is detailed in Table 1a.
- Termination –** As disclosed in the 2008 remuneration report, Keith Johnson's position was deemed redundant and he left the Group on 31 July 2009 after many valued years of service. Consistent with policy, Keith Johnson received a redundancy payment equal to 12 months' base salary plus car allowance.

This payment was in addition to the 12 months' notice period provided for in his contract. In addition, Keith Johnson will be reimbursed for taxation and finance planning advice not to exceed £10,000 for 2009 and 2010. The payments are detailed in Table 1a. The payments detailed above are in line with his contract and local policy. Given Keith Johnson's many years of service and performance the Committee considers these payments appropriate.

## Other remuneration disclosures

### Rio Tinto rights issue

In July 2009 the Group undertook a capital raising as discussed in the Directors' report on page 91. As permitted under the rules of the Rio Tinto share plans, adjustments were made to ensure that the value of options and awards held by participants was not significantly impacted by the rights issue. These adjustments are shown in Tables 4a, 4b and 5. The adjustments reflected the plan rules and governing laws and involved the award of additional shares or options and the adjustment of the exercise price of outstanding options.

### Shareholding policy for executives

The Company recognises the importance of aligning directors' and executives' interests with those of shareholders and they are therefore expected to build up a shareholding. The Committee determined that executive directors should aim to reach a holding equivalent in value to two times their base salary over three years and PGCEOs should aim to achieve this over five years. From 2010, all members of the Executive committee will be subject to the same shareholding policy as the executive directors.

### Share dealing policy

Key management personnel and employee insiders are bound by the "Rules for dealing in Rio Tinto securities" ("Rules") which are available on the Rio Tinto website. Directors and executives are required to certify that they do not hold any price sensitive information when seeking clearance to deal in Rio Tinto securities. Executives participate in long term incentive plans which involve the award of Rio Tinto securities at a future date. The board has a policy contained in the Rules prohibiting an executive from limiting his or her exposure to risk in relation to the securities. The grants of shares and options under the incentive plans are conditional upon

compliance with the Rules. All employees subject to the Rules receive regular training and information.

### Executives' external and other appointments

Executives may be invited to become non executive directors of other companies. It is Rio Tinto's policy that such appointments can broaden their experience and knowledge, to the benefit of the Group. This policy limits each executive's external directorships to one FTSE 100 company or equivalent. Consequently, where there is no likelihood that such a directorship will give rise to a conflict of interest, the boards will normally give their consent to the appointment. The executive is permitted to retain the fees earned.

In the course of 2009 the following executives received fees from external appointments: Guy Elliott received US\$124,000 (2008: US\$89,000) and Sam Walsh A\$120,000.00 (2008: A\$10,000).

### Company secretary remuneration

The executive remuneration policy applies to the company secretary of each of Rio Tinto plc and Rio Tinto Limited. They participate in the same performance-based remuneration arrangements as the executives. The individual performance-measures for the company secretaries' STIP comprise Group and individual objectives. Their personal measures reflect the key responsibilities of the company secretarial role and include ensuring compliance with regulatory requirements, oversight of good corporate governance practice and the provision of corporate secretarial services.

## Executive service contracts

All executives have service contracts that can be terminated by the Company giving 12 months' notice in writing, or immediately by paying base salary only in lieu of any unexpired notice period with the following exceptions: for Debra Valentine, the Company must provide six months' notice in writing and for Jacynthe Côté where the 12 months' notice includes salary and target bonus opportunity in line with typical market practice in Canada and her legacy Alcan Inc. contract.

If termination is a result of a redundancy, then the terms of the relevant policy would apply in the same way it would apply to other local employees. In the case of involuntary termination, Jacynthe Côté would receive 24 months' salary and bonus inclusive of notice as per her entitlement

## Remuneration report continued

in her legacy Alcan Inc. contract.

In the case of dismissal for cause, employment may be terminated by the Company without notice and without payment of any salary or compensation in lieu of notice. The annual bonus and outstanding awards under the long term incentive programme are forfeited.

The rules of the STIP and the long term incentive plans cover any entitlements participants may have on termination. If termination is due to any reason besides cause or resignation, then participants are eligible to receive a pro-rata STIP paid based on the

portion of the performance period worked. Options or performance shares will vest at the normal vesting date subject to performance against the performance condition. Options or performance shares held for less than 12 months at the date of termination are reduced pro-rata. MSP awards vest pro-rata upon termination. No awards vest if a participant resigns or is terminated for cause.

Contractual entitlements to severance are not triggered by a change of control. All of the Company's share plans contain provisions relating to a change of control.

Outstanding awards and options would normally vest and become exercisable on a change of control on a pro-rata basis, subject to the satisfaction of any performance conditions at that time.

From 1 November 2009, Grant Thorne stood down from the Executive committee and became a special adviser to undertake a knowledge transfer prior to his intended retirement on 1 November 2011. A new contract was entered into with Grant Thorne that continues his current employment conditions until his retirement on 1 November 2011.

Name	Position(s) held	Date of appointment	Notice period/Contract end date	2010 Base salary
<b>Executive directors</b>				
Tom Albanese	Chief executive	1-May-07	12 months	£907,500
Guy Elliott	Chief financial officer	19-Jun-02	12 months	£675,500
Dick Evans <sup>1</sup>	Special adviser ED & CEO Rio Tinto Alcan	1-Feb-09 25-Oct-07	31-Dec-09	N/A
Sam Walsh	ED & CEO Iron Ore and Australia CEO Iron Ore	5-Jun-09 1-Nov-04	12 months	A\$1,475,000

### Other members of executive committee

Hugo Bague	Group executive People & Organisation Support	1-Aug-07	12 months	£360,000
Preston Chiaro	Group executive Technology & Innovation CEO Energy & Minerals	1-Nov-09 15-Nov-07	12 months	US\$725,000
Bret Clayton	Group executive Business Support & Operations CEO Copper & Diamonds	1-Nov-09 15-Nov-07	12 months	US\$700,000
Jacynthe Côté	CEO Rio Tinto Alcan CEO Primary Metal RTA	1-Feb-09 25-Oct-07	12 months	US\$825,000
Andrew Harding	CEO Copper CEO KUC	1-Nov-09 1-Nov-07	12 months	US\$650,000
Keith Johnson				N/A
Harry Kenyon-Slaney	CEO Diamonds & Minerals MD RTI&T	1-Nov-09 1-Mar-07	12 months	£360,000
Doug Ritchie	CEO Energy MD Strategy	1-Nov-09 19-Nov-07	12 months	A\$850,000
Grant Thorne	Special adviser Group executive Technology & Innovation	1-Nov-09 1-Jun-07	31-Oct-11	A\$920,000
Debra Valentine	Group executive Legal & External Affairs	15-Jan-08	6 months	US\$570,000

1. Dick Evans was not entitled to receive any termination payment at the cessation of his contract on 31 December 2009.

## Chairman and non executive directors' remuneration

### Remuneration policy

#### Chairman

The Remuneration committee determines the terms of service, including remuneration, of the chairman.

It is Rio Tinto's policy that the chairman should be remunerated on a competitive basis and at a level which reflects his contribution to the Group, as assessed by the board. The chairman is not present at any discussion regarding his own

remuneration and he does not participate in the Group's incentive plans or pension arrangements. The chairman receives a fixed fee and does not receive additional payment for committee membership or overseas travel.

#### Non executive directors

The Chairman's committee comprising the chairman, the chief executive and the chief financial officer, annually reviews the level of non executive directors' fees, including fees for committee work and overseas travel. Fees paid to non executive directors reflect their respective duties and responsibilities and the time required to be spent by them so as to make a meaningful and effective contribution to the affairs of Rio Tinto. Non

executive directors receive a fixed annual fee comprising a base fee, committee membership or committee chairmanship fees, as applicable, and fees for attending meetings which involve medium or long distance air travel. Rio Tinto does not pay retirement benefits or allowances to non executive directors, nor do any of them participate in any of the Group's incentive plans.

The Chairman's committee reviewed the non executive directors' fees during 2009 to take account of market and related developments and made no increase to annual base fees or committee fees. The fees are detailed in the table on page 115.

## Remuneration components

The table below sets out the annual fees payable to the chairman and the non executive directors in £/A\$, as appropriate.

## Remuneration paid during 2009

Details of each element of remuneration paid to the chairman and non executive directors during 2009 is set out in Table 1b non executive directors' remuneration. No post employment, long term or termination payments were paid and no share based payments made. The total payments made to the chairman and non executive directors come within the maximum aggregate annual amount of £3 million set out in the Group's constitutional documents and which was approved by shareholders at the 2009 annual general meetings.

## Shareholding policy

In 2006, the board recommended that non executive directors be encouraged to build up a shareholding within three years of their appointment equal in value to one year of the base fee. To help facilitate this, the Group put in place a non executive directors' share purchase plan through which non executive directors could elect to invest a proportion of their fees net of tax on a regular basis to acquire shares on the open market. Details of non executive directors' share interests in the Group are set out in Table 3 on page 119.

## Letters of appointment

Non executive directors have formal letters of appointment setting out their duties and responsibilities. These letters are available for inspection at Rio Tinto plc's registered office, and at the annual general meeting. Each non executive director is appointed by the boards subject to their subsequent election and periodic re-election by shareholders as detailed on page 97.

Ann Godbehere and Robert Brown were appointed with effect from 9 February 2010 and 1 April 2010 respectively and will stand

for election at the 2010 annual general meetings. There are no provisions for compensation payable on termination of any non executive director's appointment.

Jim Leng was appointed as a non executive director and chairman designate on 14 January 2009. His letter of appointment provided for an annual fee upon his appointment as chairman of £650,000. In the interim period, his fee as a non executive director and chairman designate was set at 50 per cent of this amount. Jim Leng resigned from the board on 9 February 2009. No termination payments were payable and the amounts disclosed in Table 1b on page 118 reflect amounts paid for Jim Leng's services during this period.

Paul Skinner retired as chairman on 20 April 2009 and was succeeded by Jan du Plessis. Mr Skinner remained as an adviser to the board on his existing terms and conditions until 14 July 2009. The amounts shown Table 1b on page 118 reflect amounts paid to Paul Skinner until that date.

Jan du Plessis' letter of appointment stipulates his duties as chairman of the Group. His appointment may be terminated without liability on the part of Rio Tinto in accordance with the constitutional documents dealing with retirement by rotation, disqualification from office or other vacation from office. Otherwise his appointment may be terminated by giving 12 months' notice. The chairman receives a base fee and no additional committee, attendance or travel fees. He is provided with a car and driver for business purposes, private medical insurance and participates in the Rio Tinto Medical Expenses Plan which Group employees are eligible to join. He is also covered under the Group's accident policy. These are disclosed as benefits in Table 1 on page 118.

## Auditable information

Under Schedule 8 of the Large and Medium sized Companies and Groups Accounts and

Reports) Regulations 2008, the information included in respect of the non executive directors and the directors' short term employee benefits and termination benefits in Tables 1a and 1b, and the information included in respect of the directors accrued benefits, transfer values and defined contribution pension in Table 2, Tables 4a and 4b and Table 5 are all auditable.

The Australian Securities and Investments Commission issued an order dated 27 January 2006 (and amended on 22 December 2006) under which the information included in the Remuneration report to comply with paragraph 25 of Australian Accounting Standard AASB 124 "Related Party Disclosures" (relating to "key management personnel" compensation) is also auditable. This information comprises Tables 1, (executive and non executive directors set out in Table 1a and 1b respectively), 3, 4 and 5 and the disclosures provided under the headings executive remuneration and chairman and non executive director remuneration.

## Annual general meetings

Shareholders will be asked to vote on this Remuneration report at the Companies' 2010 annual general meetings.

By order of the board

Ben Mathews  
Secretary  
Remuneration committee  
5 March 2010

## Director fees

Non executive director base fee

As at 31 Dec 2009

As at 31 Dec 2008

£70,000/A\$160,000	£70,000/A\$160,000
£700,000	£693,000
£35,000	£35,000

Chairman's fee

Senior independent director

## Committee fees

Audit committee chairman

£30,000

£30,000

Audit committee member

£15,000/A\$37,500

£15,000/A\$37,500

Remuneration committee chairman

£20,000

£20,000

Remuneration committee member

£10,000/A\$25,000

£10,000/A\$25,000

Nominations committee member

£7,500

£7,500

Committee on social and environmental accountability chairman

£20,000

£20,000

Committee on social and environmental accountability member

£7,500/A\$18,750

£7,500/A\$18,750

## Overseas meeting allowances

Long distance (flights over 10 hours per journey)

£4,000/A\$10,000

£4,000/A\$10,000

Medium distance (flights of 5-10 hours per journey)

£2,000/A\$5,000

£2,000/A\$5,000

## Remuneration report continued

**Table 1a – Executives' remuneration**

Stated in US\$'000 <sup>1</sup>	Year	Short term benefits				Total short term benefits <sup>5</sup>	Other long term benefits	Long term benefits		
		Base salary	Cash bonus <sup>2</sup>	Other cash based benefits <sup>3</sup>	Non monetary benefits <sup>4</sup>			Deferred shares <sup>7</sup>	Value of share based awards <sup>6</sup>	CCA <sup>8</sup>
<b>Executive directors</b>										
Tom Albanese	2009	1,421	947	8	323	2,699	–	186	–	3,915
	2008	1,664	–	10	329	2,003	–	169	–	(2,837)
Guy Elliott	2009	1,057	888	24	168	2,137	–	122	–	2,862
	2008	1,239	–	28	166	1,433	–	111	–	(2,518)
Dick Evans	2009	1,500	5,491	–	422	7,413	–	505	–	4,013
	2008	1,500	1,350	–	413	3,263	–	139	–	48
Sam Walsh	2009	1,167	1,170	71	20	2,428	–	184	–	2,697
	2008	1,245	–	77	37	1,359	–	163	–	(2,434)
<b>Other key management personnel</b>										
Hugo Bague	2009	564	752	139	210	1,665	–	36	59	344
	2008	663	462	107	216	1,448	–	32	–	8
Preston Chiaro	2009	725	390	83	492	1,690	–	125	–	2,265
	2008	714	–	21	693	1,428	–	110	–	(2,092)
Bret Clayton	2009	700	534	–	444	1,678	–	34	–	1,486
	2008	680	–	–	651	1,331	–	30	–	(698)
Jacynthe Côté	2009	813	2,226	–	27	3,066	–	60	97	556
Andrew Harding	2009	421	596	–	298	1,315	–	26	47	415
Keith Johnson	2009	383	287	78	19	767	–	–	–	2,340
	2008	774	317	24	30	1,145	–	–	–	(1,655)
Harry Kenyon-Slaney	2009	418	362	77	61	918	–	37	41	455
Doug Ritchie	2009	581	986	23	2	1,592	–	31	57	756
Grant Thorne	2009	728	593	4	1	1,326	–	60	74	1,232
	2008	773	178	4	1	956	–	52	–	(763)
Debra Valentine	2009	570	468	–	543	1,581	–	50	67	203
	2008	548	146	–	721	1,415	–	43	–	18

**Notes to Table 1a**

- The total remuneration is reported in US dollars. The amounts can be converted into sterling at the rate of US\$1 = £0.6389, into Australian dollars at the rate of US\$1 = A\$1.2637 or alternatively into Canadian dollars at the rate of US\$1 = C\$1.13740, each being the average exchange rate for 2009. The annual cash bonus is payable under the STIP and this may be converted at the 2009 year end exchange rate of US\$1 = £0.6222 to ascertain the sterling equivalent, US\$1 = A\$1.1179 to calculate the Australian dollar value or alternatively, US\$1=C\$1.0546 to calculate the Canadian dollar value. The 2009 figures reported in this table are less than the 2008 figures due to exchange rate variation.
- 'Cash bonus' includes STIP and other special one-off bonuses as described in the Remuneration report on page 110 to 113. It includes a retention payment for Andrew Harding, Hugo Bague, Doug Ritchie and Harry Kenyon-Slaney. For Jacynthe Côté, it also includes the 2007 Alcan LTI payout and the COC award payment. For Doug Ritchie, it also includes a one-off recognition award cash payment.
- 'Other cash based benefits' include cash in lieu of a car and fuel and cash in lieu of holiday. For Hugo Bague and Harry Kenyon-Slaney, it also includes a cash supplement equal to 20 per cent of the amount by which their 'Contributory Salary' exceeds the 'Earning Cap' as defined in the Rio Tinto Pension Fund. Cash in lieu of company share dividend payments is included for Hugo Bague.
- 'Non monetary benefits' for executives include healthcare, the provision of a car, flexible perquisites and secondment costs comprising housing, education, professional advice, tax equalisation and relocation payments made to and on behalf of executives living outside their home country. For Harry Kenyon-Slaney and Andrew Harding, it includes a 2008 tax payable that was paid by the Company in 2009. For Tom Albanese and Guy Elliott, it includes the cost of spouse travel and the value of company provided transport. Rio Tinto provides accident cover for employee members of the Rio Tinto Pension Fund. Some of the executive directors and key management personnel are members of the Rio Tinto Pension Fund; the total premium paid in 2009 was US\$7,827.
- 'Total short term benefits' represents the short term benefits total required by the UK Companies Act 2006 and total remuneration under the Australian Corporations Act 2001 and applicable accounting standards.
- The value of share based awards has been determined in accordance with the recognition and measurement requirements of IFRS2 "Share-based Payment". The fair value of awards granted under the Share Option Plan (SOP), the Management Share Plan (MSP), the Bonus Deferral Plan (BDP) and the Share Savings Plan (SSP) have been calculated at their dates of grant using an independent lattice-based option valuation model provided by external consultants, Lane Clark and Peacock LLP. Some of these awards will be settled in cash, rather than the transfer of shares, and so the fair value of these cash settled awards has been calculated based on Rio Tinto's share price at 31 December 2009. The fair value of awards granted under the Mining Companies Comparative Plan (the MCCP) has been calculated using a Monte Carlo valuation model based on the market price of shares and their relative TSR performance at 31 December 2009. Over 2009, the increase in Rio Tinto's share price, has led to a significant increase in the value attached to the MCCP under the IFRS2 accounting standard. Further details of the valuation methods and assumptions used for these awards are included in note 49 (Share Based Payments) in the 2009 financial statements. The fair value of other share based awards is measured at the purchase cost of the shares from the market. The non executive directors do not participate in the long term incentive share schemes.
- 'Deferred shares' represents the deferral of the 2008 bonus under STIP into Rio Tinto shares.
- 'CCA (Company Contributed Awards)' represents the shares provided to employees below the executive directors and PGCEO level under the 2008 bonus deferral programme to provide and enhance retention.

**Table 1a – Executives' remuneration continued**

Stated in US\$'000 <sup>1</sup>	Year	Long term benefits Value of share based awards <sup>6</sup>			Post employment benefits <sup>10</sup>			Termination benefits	Total remuneration	Currency <sup>11</sup> of actual payment
		MSP	SOP	Others <sup>9</sup>	Pension and superannuation	Other post employment benefits				
<b>Executive directors</b>										
Tom Albanese	2009	–	1,179	4	1,056	–	–	–	9,039	£
	2008	–	1,327	5	1,443	–	–	–	2,110	£
Guy Elliott	2009	–	691	5	389	–	–	–	6,206	£
	2008	–	840	9	534	–	–	–	409	£
Dick Evans	2009	–	1,838	–	342	–	–	–	14,111	US\$/C\$
	2008	–	621	–	338	–	–	–	4,409	US\$
Sam Walsh	2009	–	636	–	313	–	–	–	6,258	A\$
	2008	–	718	4	327	–	–	–	137	A\$
<b>Other key management personnel</b>										
Hugo Bague	2009	341	39	2	41	–	–	–	2,527	£
	2008	835	44	3	46	–	–	–	2,416	£
Preston Chiaro	2009	–	550	1	218	–	–	–	4,849	US\$
	2008	–	717	2	177	8	–	–	350	US\$
Bret Clayton	2009	–	494	1	129	1	–	–	3,823	US\$
	2008	–	484	1	79	2	–	–	1,229	US\$
Jacynthe Côté	2009	990	75	–	364	3	–	–	5,211	US\$/C\$
Andrew Harding	2009	144	36	3	67	–	–	–	2,053	US\$
Keith Johnson	2009	–	689	2	158	–	1,357	5,313	£	
	2008	–	551	8	384	–	–	433	£	
Harry Kenyon-Slaney	2009	114	44	1	88	–	–	–	1,698	£
Doug Ritchie	2009	247	69	3	164	–	–	–	2,919	A\$
Grant Thorne	2009	280	101	3	188	–	–	–	3,264	A\$
	2008	125	136	3	195	–	–	704	A\$	
Debra Valentine	2009	427	29	1	163	8	–	–	2,529	US\$
	2008	281	–	–	123	8	–	–	1,888	US\$

9. 'Others' include the Share Savings Plan and Share Ownership Plan as described in the section on other share awards on page 109.

10. The costs shown for defined benefit pension plans and post retirement medical benefits are the service costs attributable to the individual, calculated in accordance with IAS19. The cost for defined contribution plans is the amount for Dick Evans, contributed in the year by the Company. American PGCEOs enjoy a Company matching of personal contribution for shares under the 401K arrangements up to a maximum of US\$14,700. The Company matched personal contributions of US\$14,700 for Preston Chiaro, Bret Clayton and Debra Valentine.

11. For Jacynthe Côté and Dick Evans, base salary is paid in US dollars. All other short term benefits received are paid in Canadian dollars.

## Remuneration report continued

**Table 1b – Non executive directors' remuneration**

Stated in US\$'000 <sup>1</sup>	Year	Short term benefits			Total remuneration <sup>4</sup>	Currency of actual payment
		Fees	Other cash based benefits <sup>2</sup>	Non monetary benefits <sup>3</sup>		
<b>Chairman</b>						
Jan du Plessis	2009	808	–	37	845	£
	2008	53	–	–	53	£
<b>Non executive directors</b>						
Sir David Clementi	2009	172	9	–	181	£
	2008	196	7	2	205	£
Vivienne Cox	2009	133	9	–	142	£
	2008	158	7	21	186	£
Sir Rod Eddington	2009	143	29	–	172	A\$
	2008	155	24	11	190	A\$
Michael Fitzpatrick	2009	162	29	–	191	A\$
	2008	175	24	2	201	A\$
Yves Fortier	2009	133	22	–	155	£
	2008	158	26	37	221	£
Richard Goodmanson	2009	157	13	6	176	£
	2008	186	26	15	227	£
Andrew Gould	2009	200	–	–	200	£
	2008	231	11	–	242	£
Lord Kerr	2009	168	9	–	177	£
	2008	200	11	54	265	£
Jim Leng	2009	37	–	13	50	£
David Mayhew	2009	197	–	–	197	£
	2008	158	7	26	191	£
Paul Skinner	2009	584	14	82	680	£
	2008	1,310	31	197	1,538	£
Paul Tellier	2009	149	22	–	171	£
	2008	177	22	41	240	£

**Notes to Table 1b**

- The total remuneration is reported in US dollars. The amounts can be converted into sterling at the rate of US\$1 = £0.6389 or alternatively into Australian dollars at the rate of US\$1 = A\$1.2637, each being the average exchange rate for 2009. The 2009 figures reported in this table are less than the 2008 figures due to exchange rate variation.
- The 'Other cash based benefits' for non executive directors comprise overseas meeting allowances. The values of car and fuel allowances are included for Paul Skinner.
- 'Non monetary benefits' include for Jim Leng the cost of accompanied travel in 2009. For Richard Goodmanson, it includes the value of professional advice received. For Paul Skinner and Jan du Plessis, it includes the value of company provided transport and medical insurance premiums. The value of a retirement gift is also included for Paul Skinner. Rio Tinto plc provides accident cover for non executive directors; the total premium paid in 2009 was US\$6,418.
- Represents short term benefits total required under the UK Companies Act 2006 and total remuneration under Australian Corporations Act 2001 and applicable accounting standards.

**Table 2 – Directors' pension entitlements (as at 31 December 2009)**

**Defined benefit pensions**

	Years of service completed	Accrued benefits				Transfer values			
		At 31 Dec 2008 £'000 pa pension	At 31 Dec 2009 £'000 pa pension	Change in accrued benefits during the year ended 31 Dec 2009 £'000 pa pension	Change in accrued benefit net of inflation <sup>1</sup> £'000 pa pension	At 31 Dec 2008 £'000	At 31 Dec 2009 £'000	Change, net of personal contributions £'000	Transfer value of change in accrued benefit net of inflation <sup>1</sup> £'000
	Age								
<b>UK Directors</b>									
Tom Albanese <sup>2, 3, 4</sup>	52	28	286	336	50	43	2,836	4,060	1,224
Guy Elliott <sup>3</sup>	54	29	434	456	22	12	6,728	7,706	978
		A\$'000 lump sum	A\$'000 lump sum	A\$'000 lump sum	A\$'000 lump sum	A\$'000	A\$'000	A\$'000	A\$'000
<b>Australian Director</b>									
Sam Walsh	60	18	4,904	5,203	299	237	4,904	5,203	218
									237

**Notes to Table 2**

- Price inflation is calculated as the increase in the relevant retail or consumer price index over the year to 31 December 2009, except for Australia where a September to September change is used.
- Tom Albanese became a director of Rio Tinto plc and Rio Tinto Limited with effect from 7 March 2006. He accrued pension benefits in the US plans for service up to 30 June 2006, and is accruing benefits under the UK fund for subsequent service.
- The transfer value of benefits in the UK plans is calculated in a manner consistent with "Retirement Benefit Schemes – Transfer Values (GN11)" published by the Institute of Actuaries and the Faculty of Actuaries.
- The transfer value of benefits in the US plans is represented by the Accumulated Benefit Obligation calculated on the accounting assumptions used for the Group's post-retirement benefits disclosures.

**Table 2 – Directors' pension entitlements (as at 31 December 2009) continued**  
**Defined contribution pensions**

	Age	Years of service completed	Company Contributions	
			Year to 31 Dec 2008 US\$'000	Year to 31 Dec 2009 US\$'000
<b>UK Director</b>				
Dick Evans <sup>5</sup>	62	2	338	342
<b>Australian Director</b>				
Sam Walsh	60	18	54	59

Notes to Table 2

5. Dick Evans became a director of Rio Tinto plc and Rio Tinto Limited with effect from 25 October 2007 and has a UK unfunded defined contribution benefit. He also participated in the Alcan Employee Savings Plan. He ceased to be an executive director on 20 April 2009 and retired on 31 December 2009.

**Table 3 – Directors' and executives' beneficial interests in Rio Tinto shares**

	Rio Tinto plc			Rio Tinto Limited			Movements		
	1 Jan 2009 <sup>1</sup>	31 Dec 2009 <sup>2</sup>	18 Feb 2010 <sup>2</sup>	1 Jan 2009 <sup>1</sup>	31 Dec 2009 <sup>2</sup>	18 Feb 2010 <sup>2</sup>	Exercise of options <sup>3</sup>	Compensation <sup>4</sup>	Other <sup>5</sup>
<b>Directors</b>									
Tom Albanese <sup>6,7</sup>	57,176	129,438	129,438	–	–	–	–	32,433	39,829
Sir David Clementi	454	1,024	1,024	–	–	–	–	–	570
Vivienne Cox	826	2,912	2,912	–	–	–	–	–	2,086
Jan du Plessis	–	30,000	30,000	–	–	–	–	–	30,000
Sir Rod Eddington	–	–	–	–	–	–	–	–	–
Guy Elliott <sup>7</sup>	60,771	95,099	95,113	–	–	–	1,431	193	32,718
Dick Evans	–	40,000	N/A	–	–	–	–	–	40,000
Michael Fitzpatrick	–	–	–	2,100	6,252	6,252	–	–	4,152
Yves Fortier	–	2,697	2,697	–	–	–	–	–	2,697
Richard Goodmanson	2,307	4,990	4,990	–	–	–	–	–	2,683
Andrew Gould <sup>7</sup>	1,077	1,642	1,642	–	–	–	–	–	565
Lord Kerr	3,000	12,000	12,000	–	–	–	–	–	9,000
Jim Leng	–	–	N/A	–	–	–	–	–	–
David Mayhew	2,500	3,812	3,812	–	–	–	–	–	1,312
Paul Skinner	5,795	9,920	N/A	–	–	–	–	–	4,125
Paul Tellier	–	10,396	10,396	–	–	–	–	–	10,396
Sam Walsh	–	–	–	43,033	66,950	66,950	601	–	23,316
<b>Executives</b>									
Hugo Bague <sup>7</sup>	5,950	16,296	16,296	–	–	–	–	7,195	3,151
Preston Chiaro <sup>6</sup>	64,849	79,776	79,810	–	–	–	207,507	–	(192,546)
Bret Clayton <sup>6</sup>	8,502	18,927	22,078	–	–	–	197	7,441	5,938
Jacynthe Côté	–	–	–	–	–	–	–	–	–
Andrew Harding	–	–	–	5,184	5,184	5,184	–	–	–
Harry Kenyon-Slaney	15,802	15,818	15,832	–	–	–	–	6,633	(6,603)
Keith Johnson	25,330	25,346	N/A	–	–	–	–	16	–
Doug Ritchie	–	–	–	6,825	6,825	7,280	455	–	–
Grant Thorne	–	–	–	7,213	25,016	N/A	22,560	8,883	(13,640)
Debra Valentine	–	–	–	–	–	–	–	–	–

Notes to Table 3

- Or date of appointment, if later.
- Or date of retirement, or resignation or at date no longer a KMP, if earlier.
- Shares obtained through the exercise of options under the Rio Tinto Share Savings Plan or the Rio Tinto Share Option Plan. The number of shares retained may differ from the number of options exercised.
- Shares obtained through the Rio Tinto Share Ownership Plan and / or vesting of awards under the Mining Companies Comparative Plan or Management Share Plan.
- Share movements due to sale or purchase of shares, shares received under the Dividend Reinvestment Plan, shares purchased / sold through the Rio Tinto America Savings Plan or non executive directors share purchase plan.
- The shareholdings of Tom Albanese, Preston Chiaro and Bret Clayton include Rio Tinto plc ADRs held through the Rio Tinto America Savings Plan.
- The balances at 31 December 2008 for the following individuals were understated in the 2008 Remuneration report: Tom Albanese by 97 Rio Tinto plc shares; Hugo Bague by 50 Rio Tinto plc shares; Guy Elliott by 52 Rio Tinto plc shares and Andrew Gould by 77 Rio Tinto plc shares.

## Remuneration report continued

**Table 4a – Executives with awards under long term incentive plans 2009**

	Conditional award granted	Market price at award	1 Jan 2009 <sup>1</sup>	Awarded	Rights Issue adjustment or Top Up (Jul-09)	Lapsed/ cancelled	Vested	31 Dec 2009 <sup>2</sup>	Performance period concludes	Date of vesting	Market price at vesting	Monetary value of vested award US\$'000
<b>Rio Tinto plc Bonus Deferral Plan</b>												
Tom Albanese <sup>9</sup>	17-Mar-09	£19.82	–	23,361	4,917	–	–	28,278	30-Dec-11			
Hugo Bague <sup>10</sup>	17-Mar-09	£19.82	–	1,917	403	–	–	2,320	30-Dec-10			
	17-Mar-09	£19.82	–	1,917	404	–	–	2,321	30-Dec-11			
	17-Mar-09	£19.82	–	2,248	473	–	–	2,721	30-Dec-10			
	17-Mar-09	£19.82	–	2,249	473	–	–	2,722	30-Dec-11			
Preston Chiaro <sup>9</sup>	17-Mar-09	£19.82	–	15,764	3,318	–	–	19,082	30-Dec-11			
Bret Clayton <sup>9</sup>	17-Mar-09	£19.82	–	4,320	909	–	–	5,229	30-Dec-11			
Jacynthe Côté <sup>10</sup> (Disclosure from 1/2/09)	17-Mar-09	£19.82	–	3,183	670	–	–	3,853	30-Dec-10			
	17-Mar-09	£19.82	–	3,183	670	–	–	3,853	30-Dec-11			
	17-Mar-09	£19.82	–	3,708	780	–	–	4,488	30-Dec-10			
	17-Mar-09	£19.82	–	3,709	781	–	–	4,490	30-Dec-11			
Guy Elliott <sup>9</sup>	17-Mar-09	£19.82	–	15,402	3,242	–	–	18,644	30-Dec-11			
Dick Evans <sup>9</sup> (Disclosure to 20/4/09)	17-Mar-09	£19.82	–	19,925	–	–	–	19,925	30-Dec-11			
Harry Kenyon-Slaney <sup>10</sup> (Disclosure from 1/11/09)	17-Mar-09	£19.82	2,396	–	–	–	–	2,396	30-Dec-10			
	17-Mar-09	£19.82	2,396	–	–	–	–	2,396	30-Dec-11			
	17-Mar-09	£19.82	1,888	–	–	–	–	1,888	30-Dec-10			
	17-Mar-09	£19.82	1,888	–	–	–	–	1,888	30-Dec-11			
Debra Valentine <sup>10</sup>	17-Mar-09	£19.82	–	2,630	553	–	–	3,183	30-Dec-10			
	17-Mar-09	£19.82	–	2,630	554	–	–	3,184	30-Dec-11			
	17-Mar-09	£19.82	–	2,562	539	–	–	3,101	30-Dec-10			
	17-Mar-09	£19.82	–	2,563	539	–	–	3,102	30-Dec-11			
<b>Rio Tinto Limited Bonus Deferral Plan</b>												
Andrew Harding <sup>10</sup> (Disclosure from 1/11/09)	17-Mar-09	A\$52.01	1,112	–	–	–	–	1,112	30-Dec-10			
	17-Mar-09	A\$52.01	1,113	–	–	–	–	1,113	30-Dec-11			
	9-Jul-09	A\$47.60	234	–	–	–	–	234	30-Dec-10			
	9-Jul-09	A\$47.60	234	–	–	–	–	234	30-Dec-11			
	17-Mar-09	A\$52.01	1,486	–	–	–	–	1,486	30-Dec-10			
	17-Mar-09	A\$52.01	1,486	–	–	–	–	1,486	30-Dec-11			
	9-Jul-09	A\$47.60	312	–	–	–	–	312	30-Dec-10			
	9-Jul-09	A\$47.60	313	–	–	–	–	313	30-Dec-11			
Doug Ritchie <sup>10</sup> (Disclosure from 1/11/09)	17-Mar-09	A\$52.01	1,368	–	–	–	–	1,368	30-Dec-10			
	17-Mar-09	A\$52.01	1,368	–	–	–	–	1,368	30-Dec-11			
	9-Jul-09	A\$47.60	287	–	–	–	–	287	30-Dec-10			
	9-Jul-09	A\$47.60	288	–	–	–	–	288	30-Dec-11			
	17-Mar-09	A\$52.01	1,800	–	–	–	–	1,800	30-Dec-10			
	17-Mar-09	A\$52.01	1,801	–	–	–	–	1,801	30-Dec-11			
	9-Jul-09	A\$47.60	379	–	–	–	–	379	30-Dec-10			
	9-Jul-09	A\$47.60	379	–	–	–	–	379	30-Dec-11			
Grant Thorne <sup>10</sup> (Disclosure to 31/10/09)	17-Mar-09	A\$52.01	–	2,591	–	–	–	2,591	30-Dec-10			
	17-Mar-09	A\$52.01	–	2,592	–	–	–	2,592	30-Dec-11			
	9-Jul-09	A\$47.60	–	–	545	–	–	545	30-Dec-10			
	9-Jul-09	A\$47.60	–	–	546	–	–	546	30-Dec-11			
	17-Mar-09	A\$52.01	–	2,320	–	–	–	2,320	30-Dec-10			
	17-Mar-09	A\$52.01	–	2,320	–	–	–	2,320	30-Dec-11			
	9-Jul-09	A\$47.60	–	–	488	–	–	488	30-Dec-10			
	9-Jul-09	A\$47.60	–	–	488	–	–	488	30-Dec-11			
Sam Walsh <sup>9</sup>	17-Mar-09	A\$52.01	–	19,022	–	–	–	19,022	30-Dec-11			
	9-Jul-09	A\$47.60	–	–	4,004	–	–	4,004	30-Dec-11			

**Table 4a – Executives with awards under long term incentive plans 2009 continued**

	Conditional award granted	Market price at award	1 Jan 2009 <sup>1</sup>	Awarded	Rights Issue adjustment or Top Up (Jul-09)	Lapsed/ cancelled	Vested	31 Dec 2009 <sup>2</sup>	Performance period concludes	Date of vesting	Market price at vesting	Monetary value of vested award US\$'000
<b>Rio Tinto plc Mining Companies Comparative Plan</b>												
Tom Albanese	7-Mar-06	£26.30	45,007	–	9,473	–	–	54,480	31-Dec-09			
	13-Mar-07	£26.81	44,124	–	9,288	–	–	53,412	31-Dec-10			
	10-Mar-08	£52.58	49,040	–	10,322	–	–	59,362	31-Dec-11			
	17-Mar-09	£19.82	–	39,669	8,350	–	–	48,019	31-Dec-12			
Hugo Bague	13-Mar-07	£26.81	6,035	–	1,270	–	–	7,305	31-Dec-10			
	10-Mar-08	£52.58	11,672	–	2,456	–	–	14,128	31-Dec-11			
Preston Chiaro	7-Mar-06	£26.30	34,182	–	7,195	–	–	41,377	31-Dec-09			
	13-Mar-07	£26.81	25,679	–	5,405	–	–	31,084	31-Dec-10			
	10-Mar-08	£52.58	19,569	–	4,119	–	–	23,688	31-Dec-11			
	17-Mar-09	£19.82	–	17,269	3,635	–	–	20,904	31-Dec-12			
Bret Clayton	7-Mar-06	£26.30	10,767	–	2,266	–	–	13,033	31-Dec-09			
	13-Mar-07	£26.81	22,566	–	4,750	–	–	27,316	31-Dec-10			
	10-Mar-08	£52.58	18,894	–	3,977	–	–	22,871	31-Dec-11			
	17-Mar-09	£19.82	–	16,673	3,509	–	–	20,182	31-Dec-12			
Jacynthe Côté (Disclosure from 1/2/09)	10-Mar-08	£52.58	18,422	–	3,877	–	–	22,299	31-Dec-11			
	17-Mar-09	£19.82	–	19,651	4,136	–	–	23,787	31-Dec-12			
Guy Elliott	7-Mar-06	£26.30	40,670	–	8,561	–	–	49,231	31-Dec-09			
	13-Mar-07	£26.81	30,837	–	6,491	–	–	37,328	31-Dec-10			
	10-Mar-08	£52.58	25,552	–	5,378	–	–	30,930	31-Dec-11			
	17-Mar-09	£19.82	–	29,528	6,215	–	–	35,743	31-Dec-12			
Dick Evans (Disclosure to 20/4/09)	10-Mar-08	£52.58	40,489	–	–	–	–	40,489	31-Dec-11			
	17-Mar-09	£19.82	–	35,729	–	–	–	35,729	31-Dec-12			
Keith Johnson (Disclosure to 1/2/09)	7-Mar-06	£26.30	26,508	–	–	–	–	26,508	31-Dec-09			
	13-Mar-07	£26.81	19,805	–	–	–	–	19,805	31-Dec-10			
	10-Mar-08	£52.58	15,887	–	–	–	–	15,887	31-Dec-11			
Harry Kenyon-Slaney (Disclosure from 1/11/09)	7-Mar-06	£26.30	6,028	–	–	–	–	6,028	31-Dec-09			
	13-Mar-07	£26.81	8,514	–	–	–	–	8,514	31-Dec-10			
	10-Mar-08	£52.58	7,210	–	–	–	–	7,210	31-Dec-11			
Debra Valentine	10-Mar-08	£52.58	11,539	–	2,428	–	–	13,967	31-Dec-11			
<b>Rio Tinto Limited Mining Companies Comparative Plan</b>												
Andrew Harding (Disclosure from 1/11/09)	7-Mar-06	A\$69.60	5,253	–	–	–	–	5,253	31-Dec-09			
	9-Jul-09	A\$47.60	1,105	–	–	–	–	1,105	31-Dec-09			
	13-Mar-07	A\$74.50	3,777	–	–	–	–	3,777	31-Dec-10			
	9-Jul-09	A\$47.60	795	–	–	–	–	795	31-Dec-10			
	10-Mar-08	A\$126.48	6,485	–	–	–	–	6,485	31-Dec-11			
	9-Jul-09	A\$47.60	1,365	–	–	–	–	1,365	31-Dec-11			
Doug Ritchie (Disclosure from 1/11/09)	7-Mar-06	A\$69.60	7,308	–	–	–	–	7,308	31-Dec-09			
	9-Jul-09	A\$47.60	1,538	–	–	–	–	1,538	31-Dec-09			
	13-Mar-07	A\$74.50	10,200	–	–	–	–	10,200	31-Dec-10			
	9-Jul-09	A\$47.60	2,147	–	–	–	–	2,147	31-Dec-10			
	10-Mar-08	A\$126.48	8,691	–	–	–	–	8,691	31-Dec-11			
	9-Jul-09	A\$47.60	1,829	–	–	–	–	1,829	31-Dec-11			
Grant Thorne (Disclosure to 31/10/09)	7-Mar-06	A\$69.60	14,568	–	–	–	–	14,568	31-Dec-09			
	9-Jul-09	A\$47.60	–	–	3,066	–	–	3,066	31-Dec-09			
	13-Mar-07	A\$74.50	13,037	–	–	–	–	13,037	31-Dec-10			
	9-Jul-09	A\$47.60	–	–	2,744	–	–	2,744	31-Dec-10			
	10-Mar-08	A\$126.48	16,658	–	–	–	–	16,658	31-Dec-11			
Sam Walsh	9-Jul-09	A\$47.60	–	–	3,506	–	–	3,506	31-Dec-11			
	7-Mar-06	A\$69.60	33,655	–	–	–	–	33,655	31-Dec-09			
	9-Jul-09	A\$47.60	–	–	7,084	–	–	7,084	31-Dec-09			
	13-Mar-07	A\$74.50	25,103	–	–	–	–	25,103	31-Dec-10			
	9-Jul-09	A\$47.60	–	–	5,284	–	–	5,284	31-Dec-10			
	10-Mar-08	A\$126.48	21,366	–	–	–	–	21,366	31-Dec-11			
	9-Jul-09	A\$47.60	–	–	4,497	–	–	4,497	31-Dec-11			
	17-Mar-09	A\$52.01	–	26,670	–	–	–	26,670	31-Dec-12			
	9-Jul-09	A\$47.60	–	–	5,614	–	–	5,614	31-Dec-12			

## Remuneration report continued

**Table 4a – Executives with awards under long term incentive plans 2009 continued**

	Conditional award granted	Market price at award	1 Jan 2009 <sup>1</sup>	Awarded	Rights issue adjustment or Top Up (Jul-09)	Lapsed/ cancelled	Vested	31 Dec 2009 <sup>2</sup>	Performance period concludes	Date of vesting	Market price at vesting	Monetary value of vested award US\$'000
<b>Rio Tinto plc Management Share Plan</b>												
Hugo Bague	9-Sep-07	£35.94	10,000	–	2,105	–	12,105	–	31-Jul-09	1-Aug-09	£26.10	495
	10-Mar-08	£52.58	1,509	–	317	–	–	1,826	31-Dec-10			
	17-Mar-09	£19.82	–	13,853	2,916	–	–	16,769	31-Dec-11			
Jacynthe Côté	10-Mar-08	£52.58	6,028	–	1,268	–	–	7,296	25-Oct-10			
(Disclosure from 1/2/09)	17-Mar-09	£19.82	–	4,513	949	–	–	5,462	1-Feb-10			
	17-Mar-09	£19.82	–	4,513	950	–	–	5,463	1-Feb-11			
Harry Kenyon-Slaney	13-Mar-07	£26.81	3,026	–	–	–	–	3,026	31-Dec-09			
(Disclosure from 1/11/09)	10-Mar-08	£52.58	932	–	–	–	–	932	31-Dec-10			
	17-Mar-09	£19.82	7,403	–	–	–	–	7,403	31-Dec-11			
Debra Valentine	10-Mar-08	£52.58	1,504	–	316	–	–	1,820	31-Dec-10			
	10-Mar-08	£52.58	5,000	–	1,052	–	–	6,052	15-Jan-11			
	10-Mar-08	£52.58	5,000	–	1,053	–	–	6,053	15-Jan-12			
	17-Mar-09	£19.82	–	15,785	3,322	–	–	19,107	31-Dec-11			
<b>Rio Tinto Limited Management Share Plan</b>												
Andrew Harding	13-Mar-07	A\$74.50	1,250	–	–	–	–	1,250	31-Dec-09			
(Disclosure from 1/11/09)	9-Jul-09	A\$47.60	263	–	–	–	–	263	31-Dec-09			
	10-Mar-08	A\$126.48	837	–	–	–	–	837	31-Dec-10			
	9-Jul-09	A\$47.60	176	–	–	–	–	176	31-Dec-10			
	17-Mar-09	A\$52.01	8,490	–	–	–	–	8,490	31-Dec-11			
	9-Jul-09	A\$47.60	1,787	–	–	–	–	1,787	31-Dec-11			
Doug Ritchie	13-Mar-07	A\$74.50	2,750	–	–	–	–	2,750	31-Dec-09			
(Disclosure from 1/11/09)	9-Jul-09	A\$47.60	578	–	–	–	–	578	31-Dec-09			
	10-Mar-08	A\$126.48	1,252	–	–	–	–	1,252	31-Dec-10			
	9-Jul-09	A\$47.60	263	–	–	–	–	263	31-Dec-10			
	17-Mar-09	A\$52.01	8,572	–	–	–	–	8,572	31-Dec-11			
	9-Jul-09	A\$47.60	1,804	–	–	–	–	1,804	31-Dec-11			
	14-Sep-09	A\$58.05	9,879	–	–	–	–	9,879	31-Dec-11			
Grant Thorne	13-Mar-07	A\$74.50	2,750	–	–	–	–	2,750	31-Dec-09			
(Disclosure to 31/10/09)	9-Jul-09	A\$47.60	–	–	578	–	–	578	31-Dec-09			
	10-Mar-08	A\$126.48	2,056	–	–	–	–	2,056	31-Dec-10			
	9-Jul-09	A\$47.60	–	–	432	–	–	432	31-Dec-10			
	17-Mar-09	A\$52.01	–	14,293	–	–	–	14,293	31-Dec-11			
	9-Jul-09	A\$47.60	–	–	3,008	–	–	3,008	31-Dec-11			

**Notes to Tables 4a and 4b**

1. Or at date of appointment, if later. Balance as at 1 January 2009 relates to awards granted for service prior to being designated a KMP for remuneration report disclosure purposes.
2. Or at date of resignation, or at date no longer a KMP, if earlier.
3. Awards denominated in pounds sterling were for Rio Tinto plc ordinary shares of 10p each and awards denominated in Australian dollars were for Rio Tinto Limited shares.
4. The weighted fair value per share of conditional awards granted in 2009 was as follows: Bonus Deferral Plan was £17.32 (adjusted for rights issue) for Rio Tinto plc and A\$41.75 (adjusted for rights issue) for Rio Tinto Limited; Mining Companies Comparative Plan was £13.56 (adjusted for rights issue) for Rio Tinto plc and A\$32.74 (adjusted for rights issue) for Rio Tinto Limited; Management Share Plan was £17.32 (March 2009 grant as adjusted for rights issue) and £26.17 (September 2009 grant) for Rio Tinto plc and A\$41.77 (March 2009 grant as adjusted for rights issue) and A\$59.15 (September 2009 grant) for Rio Tinto Limited.
5. Conditional awards are awarded at no cost to the recipient and no amount remains unpaid on any shares granted.
6. Where an election was made prior to 18 February 2010 the transaction value is shown based on share prices, being the respective closing prices for Rio Tinto plc and Rio Tinto Limited shares. Otherwise the value of vested awards has been based on share prices of £34.41 and A\$72.10 respectively being the closing prices for Rio Tinto plc and Rio Tinto Limited shares on 18 February 2010, the latest practicable date prior to the publication of this report.
7. The amount in US dollars has been converted from sterling at the rate of £1 = US\$1.5652 and Australian dollars at the rate of A\$1 = US\$0.7913, being the average exchange rate for 2009 used elsewhere in the *Annual report*.
8. For information on the rights issue please see "Other remuneration disclosures" in the Remuneration report.
9. 100 per cent of the 2008 bonus under STIP was deferred into Rio Tinto shares.
10. 50 per cent of the 2008 bonus under STIP was deferred into Rio Tinto shares which vests equally in 2010 and 2011. In addition, a Company Contribution Award was made which vests equally in 2010 and 2011.

**Table 4b – Executives with awards under long term incentive plans 2010**

	Conditional award granted	Market price at award	1 Jan 2010 <sup>1</sup>	Lapsed/cancelled	Dividend shares entitlement	Vested	18 Feb 2010 <sup>2</sup>	Date of vesting	Market price at vesting	Monetary value of vested award US\$'000
<b>Rio Tinto plc Bonus Deferral Plan</b>										
Tom Albanese <sup>9</sup>	17-Mar-09	£19.82	28,278	-	-	-	28,278			
Hugo Bague <sup>10</sup>	17-Mar-09	£19.82	2,320	-	-	-	2,320			
	17-Mar-09	£19.82	2,321	-	-	-	2,321			
	17-Mar-09	£19.82	2,721	-	-	-	2,721			
	17-Mar-09	£19.82	2,722	-	-	-	2,722			
Preston Chiaro <sup>9</sup>	17-Mar-09	£19.82	19,082	-	-	-	19,082			
Bret Clayton <sup>9</sup>	17-Mar-09	£19.82	5,229	-	-	-	5,229			
Jacynthe Côté <sup>10</sup>	17-Mar-09	£19.82	3,853	-	-	-	3,853			
	17-Mar-09	£19.82	3,853	-	-	-	3,853			
	17-Mar-09	£19.82	4,488	-	-	-	4,488			
	17-Mar-09	£19.82	4,490	-	-	-	4,490			
Guy Elliott <sup>9</sup>	17-Mar-09	£19.82	18,644	-	-	-	18,644			
Harry Kenyon-Slaney <sup>10</sup>	17-Mar-09	£19.82	2,396	-	-	-	2,396			
	17-Mar-09	£19.82	2,396	-	-	-	2,396			
	17-Mar-09	£19.82	1,888	-	-	-	1,888			
	17-Mar-09	£19.82	1,888	-	-	-	1,888			
Debra Valentine <sup>10</sup>	17-Mar-09	£19.82	3,183	-	-	-	3,183			
	17-Mar-09	£19.82	3,184	-	-	-	3,184			
	17-Mar-09	£19.82	3,101	-	-	-	3,101			
	17-Mar-09	£19.82	3,102	-	-	-	3,102			
<b>Rio Tinto Limited Bonus Deferral Plan</b>										
Andrew Harding <sup>10</sup>	17-Mar-09	A\$52.01	1,112	-	-	-	1,112			
	17-Mar-09	A\$52.01	1,113	-	-	-	1,113			
	9-Jul-09	A\$47.60	234	-	-	-	234			
	9-Jul-09	A\$47.60	234	-	-	-	234			
	17-Mar-09	A\$52.01	1,486	-	-	-	1,486			
	17-Mar-09	A\$52.01	1,486	-	-	-	1,486			
	9-Jul-09	A\$47.60	312	-	-	-	312			
	9-Jul-09	A\$47.60	313	-	-	-	313			
Doug Ritchie <sup>10</sup>	17-Mar-09	A\$52.01	1,368	-	-	-	1,368			
	17-Mar-09	A\$52.01	1,368	-	-	-	1,368			
	9-Jul-09	A\$47.60	287	-	-	-	287			
	9-Jul-09	A\$47.60	288	-	-	-	288			
	17-Mar-09	A\$52.01	1,800	-	-	-	1,800			
	17-Mar-09	A\$52.01	1,801	-	-	-	1,801			
	9-Jul-09	A\$47.60	379	-	-	-	379			
	9-Jul-09	A\$47.60	379	-	-	-	379			
Sam Walsh <sup>9</sup>	17-Mar-09	A\$52.01	19,022	-	-	-	19,022			
	9-Jul-09	A\$47.60	4,004	-	-	-	4,004			

## Remuneration report continued

**Table 4b – Executives with awards under long term incentive plans 2010 continued**

	Conditional award granted	Market price at award	1 Jan 2010 <sup>1</sup>	Lapsed/ cancelled	Dividend shares entitlement	Vested	18 Feb 2010 <sup>2</sup>	Date of vesting	Market price at vesting	Monetary value of vested award US\$'000
<b>Rio Tinto plc Mining Companies Comparative Plan</b>										
Tom Albanese	7-Mar-06 13-Mar-07 10-Mar-08 17-Mar-09	£26.30 £26.81 £52.58 £19.82	54,480 53,412 59,362 48,019	32,906 – – –	– – – –	21,574 – – –	– 53,412 59,362 48,019	18-Feb-10	£34.41	1,162
Hugo Bague	13-Mar-07 10-Mar-08	£26.81 £52.58	7,305 14,128	– –	– –	– –	7,305 14,128			
Preston Chiaro	7-Mar-06 13-Mar-07 10-Mar-08 17-Mar-09	£26.30 £26.81 £52.58 £19.82	41,377 31,084 23,688 20,904	24,992 – – –	– – – –	16,385 – – –	– 31,084 23,688 20,904	18-Feb-10	£34.41	882
Bret Clayton	7-Mar-06 13-Mar-07 10-Mar-08 17-Mar-09	£26.30 £26.81 £52.58 £19.82	13,033 27,316 22,871 20,182	5,592 – – –	– – – –	7,441 – – –	– 27,316 22,871 20,182	15-Feb-10	£32.75	381
Jacynthe Côté	10-Mar-08 17-Mar-09	£52.58 £19.82	22,299 23,787	– –	– –	– –	22,299 23,787			
Guy Elliott	7-Mar-06 13-Mar-07 10-Mar-08 17-Mar-09	£26.30 £26.81 £52.58 £19.82	49,231 37,328 30,930 35,743	29,736 – – –	– – – –	19,495 – – –	– 37,328 30,930 35,743	18-Feb-10	£34.41	1,050
Harry Kenyon-Slaney	7-Mar-06 13-Mar-07 10-Mar-08	£26.30 £26.81 £52.58	6,028 8,514 7,210	2,587 – –	– – –	3,441 – –	– 8,514 7,210	18-Feb-10	£34.41	185
Debra Valentine	10-Mar-08	£52.58	13,967	–	–	–	13,967			
<b>Rio Tinto Limited Mining Companies Comparative Plan</b>										
Andrew Harding	7-Mar-06 9-Jul-09 13-Mar-07 9-Jul-09 10-Mar-08 9-Jul-09	A\$69.60 A\$47.60 A\$74.50 A\$47.60 A\$126.48 A\$47.60	5,253 1,105 3,777 795 6,485 1,365	2,254 475 – – – –	– – – – – –	2,999 630 – – – –	– – 3,777 795 6,485 1,365	18-Feb-10 18-Feb-10	A\$72.10 A\$72.10	171 36
Doug Ritchie	7-Mar-06 9-Jul-09 13-Mar-07 9-Jul-09 10-Mar-08 9-Jul-09	A\$69.60 A\$47.60 A\$74.50 A\$47.60 A\$126.48 A\$47.60	7,308 1,538 10,200 2,147 8,691 1,829	3,136 660 – – – –	– – – – – –	4,172 878 – – – –	– – 10,200 2,147 8,691 1,829	18-Feb-10 18-Feb-10	A\$72.10 A\$72.10	238 50
Sam Walsh	7-Mar-06 9-Jul-09 13-Mar-07 9-Jul-09 10-Mar-08 9-Jul-09 17-Mar-09 9-Jul-09	A\$69.60 A\$47.60 A\$74.50 A\$47.60 A\$126.48 A\$47.60 A\$52.01 A\$47.60	33,655 7,084 25,103 5,284 21,366 4,497 26,670 5,614	20,328 4,279 – – – – – –	– – – – – – – –	13,327 2,805 – – – – – –	– – 25,103 5,284 21,366 4,497 26,670 5,614	18-Feb-10 18-Feb-10	A\$72.10 A\$72.10	720 160

**Table 4b – Executives with awards under long term incentive plans 2010**

	Conditional award granted	Market price at award	1 Jan 2010 <sup>1</sup>	Lapsed/ cancelled	Dividend shares entitlement	Vested	18 Feb 2010 <sup>2</sup>	Date of vesting	Market price at vesting	Monetary value of vested award US\$'000
<b>Rio Tinto plc Management Share Plan</b>										
Hugo Bague	10-Mar-08	£52.58	1,826	–	–	–	1,826			
	17-Mar-09	£19.82	16,769	–	–	–	16,769			
Jacynthe Côté	10-Mar-08	£52.58	7,296	–	–	–	7,296			
	17-Mar-09	£19.82	5,462	–	–	5,462	–	18-Feb-10	£34.41	294
	17-Mar-09	£19.82	5,463	–	–	–	5,463			
Harry Kenyon-Slaney	13-Mar-07	£26.81	3,026	–	136	3,162	–	18-Feb-10	£34.41	170
	10-Mar-08	£52.58	932	–	–	–	932			
	17-Mar-09	£19.82	7,403	–	–	–	7,403			
Debra Valentine	10-Mar-08	£52.58	1,820	–	–	–	1,820			
	10-Mar-08	£52.58	6,052	–	–	–	6,052			
	10-Mar-08	£52.58	6,053	–	–	–	6,053			
	17-Mar-09	£19.82	19,107	–	–	–	19,107			
<b>Rio Tinto Limited Management Share Plan</b>										
Andrew Harding	13-Mar-07	A\$74.50	1,250	–	70	1,320	–	18-Feb-10	A\$72.10	75
	9-Jul-09	A\$47.60	263	–	–	263	–	18-Feb-10	A\$72.10	15
	10-Mar-08	A\$126.48	837	–	–	–	837			
	9-Jul-09	A\$47.60	176	–	–	–	176			
	17-Mar-09	A\$52.01	8,490	–	–	–	8,490			
	9-Jul-09	A\$47.60	1,787	–	–	–	1,787			
Doug Ritchie	13-Mar-07	A\$74.50	2,750	–	154	2,904	–	18-Feb-10	A\$72.10	166
	9-Jul-09	A\$47.60	578	–	–	578	–	18-Feb-10	A\$72.10	33
	10-Mar-08	A\$126.48	1,252	–	–	–	1,252			
	9-Jul-09	A\$47.60	263	–	–	–	263			
	17-Mar-09	A\$52.01	8,572	–	–	–	8,572			
	9-Jul-09	A\$47.60	1,804	–	–	–	1,804			
	14-Sep-09	A\$58.05	9,879	–	–	–	9,879			

## Remuneration report continued

Table 5 – Executives holding options to acquire Rio Tinto plc and Rio Tinto Limited shares

	Date of grant	1 Jan 2009 <sup>1</sup>	Granted	Vested during 2009	Exercised	Lapsed/ cancelled	Rights issue adjustment (Jul-09)
<b>Rio Tinto plc Share Savings Plan</b>							
Tom Albanese	6-Oct-06	791	–	–	–	–	166
Hugo Bague	17-Oct-08	238	–	–	–	–	50
	20-Oct-09	–	84	–	–	–	–
Preston Chiaro	6-Oct-06	298	–	298	298	–	–
	17-Oct-08	304	–	–	–	–	63
Bret Clayton	5-Oct-07	163	–	–	–	–	34
Guy Elliott	7-Oct-03	1,431	–	1,431	1,431	–	–
	17-Oct-08	520	–	–	–	–	109
Keith Johnson (Disclosure to 1/2/09)	6-Oct-06	456	–	–	–	–	–
Harry Kenyon-Slaney (Disclosure from 1/11/09)	5-Oct-07	280	–	–	–	–	–
	20-Oct-09	434	–	–	–	–	–
Debra Valentine	17-Oct-08	304	–	–	–	–	63
<b>Rio Tinto plc Share Option Plan</b>							
Tom Albanese	6-Mar-01	102,718	–	–	–	–	21,622
	13-Mar-02	125,336	–	–	–	–	26,383
	7-Mar-03	139,165	–	–	–	–	29,294
	22-Apr-04	84,020	–	84,020	–	–	17,686
	9-Mar-05	83,926	–	–	–	–	17,666
	7-Mar-06	67,511	–	67,511	–	–	14,211
	13-Mar-07	66,186	–	–	–	–	13,931
	10-Mar-08	73,561	–	–	–	–	15,484
	17-Mar-09	–	59,504	–	–	–	12,525
Hugo Bague	9-Sep-07	8,835	–	–	–	–	1,858
	17-Mar-09	–	12,982	–	–	–	2,732
Preston Chiaro	7-Mar-03	37,160	–	–	–	–	7,822
	22-Apr-04	70,490	–	70,490	–	–	14,838
	9-Mar-05	63,527	–	–	–	–	13,372
	7-Mar-06	51,274	–	51,274	–	–	10,793
	13-Mar-07	38,519	–	–	–	–	8,108
	10-Mar-08	29,354	–	–	–	–	6,179
	17-Mar-09	–	25,903	–	–	–	5,452
Bret Clayton	22-Apr-04	13,315	–	13,315	–	–	2,802
	9-Mar-05	11,539	–	–	–	–	2,428
	7-Mar-06	10,767	–	10,767	–	–	2,266
	13-Mar-07	33,850	–	–	–	–	7,125
	10-Mar-08	28,342	–	–	–	–	5,965
	17-Mar-09	–	25,010	–	–	–	5,264
Jacynthe Côté (Disclosure from 1/2/09)	17-Mar-09	–	29,476	–	–	–	6,204
Guy Elliott	13-Mar-02	61,703	–	–	–	–	12,988
	7-Mar-03	97,387	–	–	–	–	20,499
	22-Apr-04	73,700	–	73,700	–	–	15,513
	9-Mar-05	72,972	–	–	–	–	15,360
	7-Mar-06	58,100	–	58,100	–	–	12,230
	13-Mar-07	44,052	–	–	–	–	9,272
	10-Mar-08	36,503	–	–	–	–	7,683
	17-Mar-09	–	44,292	–	–	–	9,323
Dick Evans (Disclosure to 20/4/09)	10-Mar-08	60,733	–	–	–	–	–
	17-Mar-09	–	53,594	–	–	–	–
Keith Johnson (Disclosure to 1/2/09)	22-Apr-04	43,500	–	–	–	–	–
	9-Mar-05	47,937	–	–	–	–	–
	7-Mar-06	37,869	–	–	–	–	–
	13-Mar-07	28,294	–	–	–	–	–
	10-Mar-08	22,696	–	–	–	–	–
Harry Kenyon-Slaney (Disclosure from 1/11/09)	13-Mar-07	9,103	–	–	–	–	–
	17-Mar-09	6,938	–	–	–	–	–
Debra Valentine	17-Mar-09	–	11,201	–	–	–	2,357

	Vested and exercisable on 31 Dec 2009 <sup>2</sup>	31 Dec 2009 <sup>2</sup>	Pre rights issue option price	Post rights issue option price	Value of options exercised during 2009 <sup>7</sup>	Market price on date of exercise	Date from which first exercisable	Expiry date
<b>Rio Tinto plc Share Savings Plan</b>								
Tom Albanese	-	957	£20.68	£17.084	-	-	1-Jan-12	1-Jul-12
Hugo Bague	-	288	£32.17	£26.576	-	-	1-Jan-12	1-Jul-12
	-	84	N/A	£21.480	-	-	1-Jan-13	1-Jul-13
Preston Chiaro	-	-	£20.88	N/A	(£1,054.92)	£17.34	1-Jan-09	7-Jan-09
	-	367	£20.50	£16.935	-	-	1-Jan-11	17-Jan-11
Bret Clayton	-	197	£35.57	£29.385	-	-	1-Jan-10	6-Jan-10
Guy Elliott	-	-	£11.07	N/A	£11,118.87	£18.84	1-Jan-09	1-Jul-09
	-	629	£32.17	£26.576	-	-	1-Jan-14	1-Jul-14
Keith Johnson (Disclosure to 1/2/09)	-	456	£20.68	N/A	-	-	1-Aug-09	1-Feb-10
Harry Kenyon-Slaney (Disclosure from 1/11/09)	-	280	N/A	£23.850	-	-	1-Jan-13	1-Jul-13
	-	434	N/A	£21.480	-	-	1-Jan-15	1-Jul-15
Debra Valentine	-	367	£20.50	£16.935	-	-	1-Jan-11	18-Jan-11
<b>Rio Tinto plc Share Option Plan</b>								
Tom Albanese	124,340	124,340	£12.656	£10.455	-	-	6-Mar-05	6-Mar-11
	151,719	151,719	£14.586	£12.050	-	-	13-Mar-05	13-Mar-12
	168,459	168,459	£12.630	£10.434	-	-	7-Mar-06	7-Mar-13
	101,706	101,706	£13.290	£10.979	-	-	22-Apr-09	22-Apr-14
	101,592	101,592	£18.262	£15.086	-	-	9-Mar-08	9-Mar-15
	81,722	81,722	£27.112	£22.397	-	-	7-Mar-09	7-Mar-16
	-	80,117	£27.012	£22.315	-	-	13-Mar-10	13-Mar-17
	-	89,045	£57.232	£47.280	-	-	10-Mar-11	10-Mar-18
	-	72,029	£20.010	£16.530	-	-	17-Mar-12	17-Mar-19
Hugo Bague	-	10,693	£34.506	£28.506	-	-	9-Sep-10	9-Sep-17
	-	15,714	£20.010	£16.530	-	-	17-Mar-12	17-Mar-19
Preston Chiaro	44,982	44,982	£12.630	£10.434	-	-	7-Mar-06	7-Mar-13
	85,328	85,328	£13.290	£10.979	-	-	22-Apr-09	22-Apr-14
	76,899	76,899	£18.262	£15.086	-	-	9-Mar-08	9-Mar-15
	62,067	62,067	£27.112	£22.397	-	-	7-Mar-09	7-Mar-16
	-	46,627	£27.012	£22.315	-	-	13-Mar-10	13-Mar-17
	-	35,533	£57.232	£47.280	-	-	10-Mar-11	10-Mar-18
	-	31,355	£20.010	£16.530	-	-	17-Mar-12	17-Mar-19
Bret Clayton	16,117	16,117	£13.290	£10.979	-	-	22-Apr-09	22-Apr-14
	13,967	13,967	£18.262	£15.086	-	-	9-Mar-08	9-Mar-15
	13,033	13,033	£27.112	£22.397	-	-	7-Mar-09	7-Mar-16
	-	40,975	£27.012	£22.315	-	-	13-Mar-10	13-Mar-17
	-	34,307	£57.232	£47.280	-	-	10-Mar-11	10-Mar-18
	-	30,274	£20.010	£16.530	-	-	17-Mar-12	17-Mar-19
Jacynthe Côté (Disclosure from 1/2/09)	-	35,680	£20.010	£16.530	-	-	17-Mar-12	17-Mar-19
Guy Elliott	74,691	74,691	£14.586	£12.050	-	-	13-Mar-05	13-Mar-12
	117,886	117,886	£12.630	£10.434	-	-	7-Mar-06	7-Mar-13
	89,213	89,213	£13.290	£10.979	-	-	22-Apr-09	22-Apr-14
	88,332	88,332	£18.262	£15.086	-	-	9-Mar-08	9-Mar-15
	70,330	70,330	£27.112	£22.397	-	-	7-Mar-09	7-Mar-16
	-	53,324	£27.012	£22.315	-	-	13-Mar-10	13-Mar-17
	-	44,186	£57.232	£47.280	-	-	10-Mar-11	10-Mar-18
	-	53,615	£20.010	£16.530	-	-	17-Mar-12	17-Mar-19
Dick Evans (Disclosure to 20/4/09)	-	60,733	£57.232	N/A	-	-	10-Mar-11	10-Mar-18
	-	53,594	£20.010	N/A	-	-	17-Mar-12	17-Mar-19
Keith Johnson (Disclosure to 1/2/09)	-	43,500	£13.290	N/A	-	-	22-Apr-09	31-Jul-10
	47,937	47,937	£18.262	N/A	-	-	9-Mar-08	31-Jul-10
	-	37,869	£27.112	N/A	-	-	7-Mar-09	31-Jul-10
	-	28,294	£27.012	N/A	-	-	13-Mar-10	13-Mar-11
	-	22,696	£57.232	N/A	-	-	10-Mar-11	10-Mar-12
Harry Kenyon-Slaney (Disclosure from 1/11/09)	-	9,103	N/A	£22.315	-	-	13-Mar-10	13-Mar-17
	-	6,938	N/A	£16.530	-	-	17-Mar-12	17-Mar-19
Debra Valentine	-	13,558	£20.010	£16.530	-	-	17-Mar-12	17-Mar-19

## Remuneration report continued

Table 5 – Executives holding options to acquire Rio Tinto plc and Rio Tinto Limited shares continued

	Date of grant	1 Jan 2009 <sup>1</sup>	Granted	Vested during 2009	Exercised	Lapsed/ cancelled	Rights issue adjustment (Jul-09)
<b>Rio Tinto Limited Share Savings Plan</b>							
Andrew Harding (Disclosure from 1/11/09)	6-Oct-06	455	–	–	–	–	N/A
	20-Oct-09	723	–	–	–	–	N/A
<b>Rio Tinto Limited Share Option Plan</b>							
Andrew Harding (Disclosure from 1/11/09)	13-Mar-02	2,894	–	–	–	–	N/A
	7-Mar-03	9,383	–	–	–	–	N/A
	22-Apr-04	1,526	–	–	–	–	N/A
	9-Mar-05	2,275	–	–	–	–	N/A
	7-Mar-06	5,253	–	–	–	–	N/A
	13-Mar-07	3,777	–	–	–	–	N/A
	17-Mar-09	6,268	–	–	–	–	N/A
Doug Ritchie (Disclosure from 1/11/09)	7-Mar-06	7,308	–	–	–	–	N/A
	13-Mar-07	10,200	–	–	–	–	N/A
	17-Mar-09	8,230	–	–	–	–	N/A
Grant Thorne (Disclosure to 31/10/09)	13-Mar-02	939	–	–	939	–	N/A
	7-Mar-03	11,159	–	–	11,159	–	N/A
	22-Apr-04	10,462	–	10,462	10,462	–	N/A
	9-Mar-05	10,665	–	–	–	–	N/A
	7-Mar-06	14,568	–	14,568	–	–	N/A
	13-Mar-07	13,037	–	–	–	–	N/A
	17-Mar-09	–	13,724	–	–	–	N/A
Sam Walsh	22-Apr-04	54,400	–	54,400	–	–	N/A
	9-Mar-05	58,823	–	–	–	–	N/A
	7-Mar-06	48,079	–	48,079	–	–	N/A
	13-Mar-07	35,861	–	–	–	–	N/A
	10-Mar-08	30,523	–	–	–	–	N/A
	17-Mar-09	–	40,005	–	–	–	N/A

## Notes to Table 5

1. Or at date of appointment, if later. Balance as at 1 January 2009 relates to awards granted for service prior to being designated a KMP for Remuneration report disclosure purposes.
2. Or at date of resignation, or at date no longer a KMP, if earlier.
3. All options granted over ordinary shares. Rio Tinto plc – ordinary shares of 10p each stated in sterling; Rio Tinto Limited shares – stated in Australian dollars. Each option is granted over one share.
4. The closing price of Rio Tinto plc ordinary shares at 31 December 2009 was £33.90 (2008: £14.90) and the closing price of Rio Tinto Limited shares at 31 December 2009 was A\$74.89 (2008: A\$133.50). The adjusted high and low prices during 2009 of Rio Tinto plc and Rio Tinto Limited shares were £34.20 and £11.40 and A\$74.89 and A\$29.38 respectively.
5. The option prices represents the exercise price payable on the options. No amounts are unpaid on any shares allocated on the exercise of options.
6. The weighted fair value per option granted in 2009 was as follows: Rio Tinto plc Share Savings Plan two year contract £7.96; three year contract £9.70; four year contract £9.30 and five year contract £9.28; Rio Tinto Limited Share Savings Plan three year contract A\$21.09 and five year contract A\$20.63. Rio Tinto plc Share Option Plan £5.47 (March 2009 grant as adjusted for the rights issue) and £8.29 (September 2009 grant); Rio Tinto Limited Share Option Plan A\$13.36 (March 2009 grant as adjusted for the rights issue).
7. The value of options exercised during 2009 is calculated by multiplying the number of options exercised by the difference between the market price and the option price on date of exercise.
8. No options lapsed for failure to satisfy a performance condition.
9. For information on the rights issue please see "Other remuneration disclosures" on page 113.

	Vested and exercisable on 31 Dec 2009 <sup>2</sup>	31 Dec 2009 <sup>2</sup>	Pre rights issue option price	Post rights issue option price	Value of options exercised during 2009 <sup>7</sup>	Market price on date of exercise	Date from which first exercisable	Expiry date
<b>Rio Tinto Limited Share Savings Plan</b>								
Andrew Harding (Disclosure from 1/11/09)	-	455	A\$56.80	A\$40.691	-	-	1-Jan-10	1-Jul-10
	-	723	N/A	A\$48.730	-	-	1-Jan-15	1-Jul-15
Doug Ritchie (Disclosure from 1/11/09)	-	455	A\$56.80	A\$40.691	-	-	1-Jan-10	1-Jul-10
	-	422	N/A	A\$48.73	-	-	1-Jan-15	1-Jul-15
Grant Thorne (Disclosure to 31/10/09)	-	567	N/A	A\$63.161	-	-	1-Jan-13	1-Jul-13
Sam Walsh	-	-	A\$40.92	N/A	A\$3,804.33	A\$47.25	1-Jan-09	1-Jul-09
	-	505	A\$82.19	A\$66.081	-	-	1-Jan-14	1-Jul-14
	-	125	N/A	A\$48.73	-	-	1-Jan-15	1-Jul-15
<b>Rio Tinto Limited Share Option Plan</b>								
Andrew Harding (Disclosure from 1/11/09)	2,894	2,894	N/A	A\$23.762	-	-	13-Mar-05	13-Mar-12
	9,383	9,383	N/A	A\$17.227	-	-	7-Mar-06	7-Mar-13
	1,526	1,526	N/A	A\$18.297	-	-	22-Apr-09	22-Apr-14
	2,275	2,275	N/A	A\$30.933	-	-	9-Mar-08	9-Mar-15
	5,253	5,253	N/A	A\$54.951	-	-	7-Mar-09	7-Mar-16
	-	3,777	N/A	A\$58.479	-	-	13-Mar-10	13-Mar-17
	-	6,268	N/A	A\$33.451	-	-	17-Mar-12	17-Mar-19
Doug Ritchie (Disclosure from 1/11/09)	7,308	7,308	N/A	A\$54.951	-	-	7-Mar-09	7-Mar-16
	-	10,200	N/A	A\$58.479	-	-	13-Mar-10	13-Mar-17
	-	8,230	N/A	A\$33.451	-	-	17-Mar-12	17-Mar-19
Grant Thorne (Disclosure to 31/10/09)	-	-	A\$39.8708	A\$23.762	A\$33,304.45	A\$59.23	13-Mar-05	13-Mar-12
	-	-	A\$33.3360	A\$17.227	A\$468,711.48	A\$59.23	7-Mar-06	7-Mar-13
	-	-	A\$34.4060	A\$18.297	A\$428,241.05	A\$59.23	22-Apr-09	22-Apr-14
	10,665	10,665	A\$47.0420	A\$30.933	-	-	9-Mar-08	9-Mar-15
	14,568	14,568	A\$71.0600	A\$54.951	-	-	7-Mar-09	7-Mar-16
	-	13,037	A\$74.5880	A\$58.479	-	-	13-Mar-10	13-Mar-17
	-	13,724	A\$49.5600	A\$33.451	-	-	17-Mar-12	17-Mar-19
Sam Walsh	54,400	54,400	A\$34.4060	A\$18.297	-	-	22-Apr-09	22-Apr-14
	58,823	58,823	A\$47.0420	A\$30.933	-	-	9-Mar-08	9-Mar-15
	48,079	48,079	A\$71.0600	A\$54.951	-	-	7-Mar-09	7-Mar-16
	-	35,861	A\$74.5880	A\$58.479	-	-	13-Mar-10	13-Mar-17
	-	30,523	A\$134.1760	A\$118.067	-	-	10-Mar-11	10-Mar-18
	-	40,005	A\$49.5600	A\$33.451	-	-	17-Mar-12	17-Mar-19

# 2009 Financial statements

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# Group income statement

Years ended 31 December

	Note	2009 US\$m	2008 US\$m
Gross sales revenue (including share of equity accounted units) <sup>(a)</sup>		44,036	58,065
<b>Continuing operations</b>			
<b>Consolidated sales revenue</b>		41,825	54,264
Net operating costs (excluding items shown separately)	3	(33,818)	(37,641)
Impairment charges	5	(1,573)	(8,015)
Profits on disposal of interests in businesses	41	692	2,231
Exploration and evaluation costs	12	(514)	(1,134)
Profits on disposal of interests in undeveloped projects <sup>(b)</sup>	12	894	489
<b>Operating profit</b>		7,506	10,194
Share of profit after tax of equity accounted units	6	786	1,039
<b>Profit before finance items and taxation</b>		8,292	11,233
<b>Finance items</b>			
Net exchange gains/(losses) on external debt and intragroup balances	24	365	(176)
Net gains/(losses) on derivatives not qualifying for hedge accounting		261	(173)
Interest receivable and similar income	7	120	204
Interest payable and similar charges	7	(929)	(1,618)
Amortisation of discount		(249)	(292)
		(432)	(2,055)
<b>Profit before taxation</b>		7,860	9,178
<b>Taxation</b>	8	(2,076)	(3,742)
<b>Profit from continuing operations</b>		5,784	5,436
<b>Discontinued operations</b>			
Loss after tax from discontinued operations	19	(449)	(827)
Profit for the year		5,335	4,609
- attributable to outside equity shareholders		463	933
- attributable to equity shareholders of Rio Tinto (Net earnings)		4,872	3,676
<b>Basic earnings/(loss) per share<sup>(c)</sup> (2008 restated)</b>			
Profit from continuing operations	9	301.7c	286.8c
Loss from discontinued operations	9	(25.5c)	(52.7c)
Profit for the year	9	276.2c	234.1c
<b>Diluted earnings/(loss) per share<sup>(c)</sup> (2008 restated)</b>			
Profit from continuing operations	9	300.7c	285.5c
Loss from discontinued operations	9	(25.4c)	(52.4c)
Profit for the year	9	275.3c	233.1c

(a) Gross sales revenue includes the sales revenue of equity accounted units of US\$3,197 million (2008: US\$3,801 million) in addition to Consolidated sales revenue (after adjusting for intra-subsidiary/equity accounted units sales). Consolidated revenue includes subsidiary sales to equity accounted units which are not included in gross sales revenue.

(b) Profits arising on the disposal of interests in undeveloped projects are stated net of charges of nil (2008: US\$156 million), related to such projects.

(c) The rights issues were at a discount to the then market price. Accordingly, earnings per share for all periods up to the date on which the shares were issued have been adjusted for the bonus element of the issues. The 2008 comparatives have been restated accordingly. See note 46 for other information relating to the rights issues.

The notes on pages 137 to 212 are an integral part of these consolidated financial statements.

# Group statement of comprehensive income

Years ended 31 December

	2009			2008		
	Attributable to shareholders of Rio Tinto US\$m	Outside interests US\$m	Total US\$m	Attributable to shareholders of Rio Tinto US\$m	Outside interests US\$m	Total US\$m
<b>Profit after tax for the year</b>	<b>4,872</b>	<b>463</b>	<b>5,335</b>	3,676	933	4,609
<b>Other comprehensive income</b>						
Currency translation adjustment	3,732	429	4,161	(4,383)	(411)	(4,794)
Currency translation on companies disposed of transferred to the income statement	(13)	–	(13)	(2)	–	(2)
Cash flow hedge fair value (losses)/gains:						
– Cash flow hedge fair value (losses)/gains	(206)	(107)	(313)	28	6	34
– Cash flow hedge losses transferred to the income statement	16	34	50	245	107	352
– Cash flow hedge gains on companies disposed of transferred to the income statement	(4)	(1)	(5)	–	–	–
Gains/(losses) on revaluation of available for sale securities	357	1	358	(173)	(1)	(174)
Gains on revaluation of available for sale securities transferred to the income statement	(3)	–	(3)	(1)	–	(1)
Actuarial (losses)/gains on post retirement benefit plans (note 30)	(847)	3	(844)	(1,294)	(20)	(1,314)
Share of other comprehensive income/(expense) of equity accounted units	368	–	368	(283)	–	(283)
Tax relating to components of other comprehensive income (note 8)	297	24	321	280	(36)	244
<b>Other comprehensive income/(expense) for the year, net of tax</b>	<b>3,697</b>	<b>383</b>	<b>4,080</b>	<b>(5,583)</b>	<b>(355)</b>	<b>(5,938)</b>
<b>Total comprehensive income/(expense) for the year</b>	<b>8,569</b>	<b>846</b>	<b>9,415</b>	<b>(1,907)</b>	<b>578</b>	<b>(1,329)</b>

The notes on pages 137 to 212 are an integral part of these consolidated financial statements.

# Group cash flow statement

Years ended 31 December

	Note	2009 US\$m	2008 US\$m
<b>Cash flow from consolidated operations <sup>(a)</sup></b>		<b>13,224</b>	<b>19,195</b>
Dividends from equity accounted units		610	1,473
<b>Cash flows from operations</b>		<b>13,834</b>	<b>20,668</b>
Net interest paid		(1,136)	(1,538)
Dividends paid to outside shareholders of subsidiaries		(410)	(348)
Tax paid		(3,076)	(3,899)
<b>Net cash generated from operating activities</b>		<b>9,212</b>	<b>14,883</b>
<b>Cash flow from investing activities</b>			
Cash inflow from disposals/acquisitions of subsidiaries, joint ventures & associates	41	2,028	2,563
Purchase of property, plant and equipment and intangible assets		(5,388)	(8,574)
Sales of financial assets		253	171
Purchases of financial assets		(44)	(288)
Other funding of equity accounted units		(265)	(334)
Other investing cash flows		59	281
<b>Cash used in investing activities</b>		<b>(3,357)</b>	<b>(6,181)</b>
<b>Cash flow before financing activities</b>		<b>5,855</b>	<b>8,702</b>
<b>Cash flow from financing activities</b>			
Equity dividends paid to Rio Tinto shareholders		(876)	(1,933)
Proceeds from issue of ordinary shares in Rio Tinto		14,877	23
Proceeds from additional borrowings		5,775	4,697
Repayment of borrowings		(22,195)	(12,667)
Finance lease repayments		(25)	(10)
Receipt from close out of interest rate swaps		–	710
Other financing cash flows		(19)	72
<b>Cash used in financing activities</b>		<b>(2,463)</b>	<b>(9,108)</b>
Effects of exchange rates on cash and cash equivalents		(284)	(101)
<b>Net increase/(decrease) in cash and cash equivalents</b>		<b>3,108</b>	<b>(507)</b>
Opening cash and cash equivalents less overdrafts		1,034	1,541
Closing cash and cash equivalents less overdrafts	21	<b>4,142</b>	<b>1,034</b>
<b>(a) Cash flow from consolidated operations</b>			
Profit from continuing operations		5,784	5,436
Adjustments for:			
Taxation	8	2,076	3,742
Finance items		432	2,055
Share of profit after tax of equity accounted units	6	(786)	(1,039)
Profit on disposal of interests in businesses	41	(692)	(2,231)
Impairment charges	5	1,573	8,015
Depreciation and amortisation		3,427	3,475
Provisions (including exchange losses/(gains) on provisions)	27	930	265
Utilisation of provisions	27	(363)	(464)
Utilisation of provision for post retirement benefits	27	(470)	(448)
Change in inventories		653	(1,178)
Change in trade and other receivables		908	658
Change in trade and other payables		(570)	951
Other items		322	(42)
		<b>13,224</b>	<b>19,195</b>

The notes on pages 137 to 212 are an integral part of these consolidated financial statements.

# Group statement of financial position

At 31 December

	Note	2009 US\$m	2008 US\$m
<b>Non current assets</b>			
Goodwill	11	14,268	14,296
Intangible assets	12	5,730	6,285
Property, plant and equipment	13	45,803	41,753
Investments in equity accounted units	14	6,735	5,053
Loans to equity accounted units		170	264
Inventories	16	284	166
Trade and other receivables	17	1,375	1,111
Deferred tax assets	18	2,231	1,367
Tax recoverable		85	220
Other financial assets	20	841	666
		77,522	71,181
<b>Current assets</b>			
Inventories	16	4,889	5,607
Trade and other receivables	17	4,447	5,401
Loans to equity accounted units		168	251
Tax recoverable		501	406
Other financial assets	20	694	264
Cash and cash equivalents	21	4,233	1,181
		14,932	13,110
Assets of disposal groups held for sale	19	4,782	5,325
<b>Total assets</b>		97,236	89,616
<b>Current liabilities</b>			
Bank overdrafts repayable on demand	21	(91)	(147)
Borrowings	22	(756)	(9,887)
Trade and other payables	25	(5,759)	(7,197)
Other financial liabilities	26	(412)	(480)
Tax payable		(1,329)	(1,442)
Provisions	27	(1,182)	(826)
		(9,529)	(19,979)
<b>Non current liabilities</b>			
Borrowings	22	(22,155)	(29,724)
Trade and other payables	25	(591)	(452)
Other financial liabilities	26	(601)	(268)
Tax payable		(299)	(450)
Deferred tax liabilities	18	(4,304)	(4,054)
Provision for post retirement benefits	27	(4,993)	(3,601)
Other provisions	27	(7,519)	(6,506)
		(40,462)	(45,055)
Liabilities of disposal groups held for sale	19	(1,320)	(2,121)
<b>Total liabilities</b>		(51,311)	(67,155)
<b>Net assets</b>		45,925	22,461
<b>Capital and reserves</b>			
Share capital – Rio Tinto plc	28	246	160
– Rio Tinto Limited (excluding Rio Tinto plc interest)	29	4,924	961
Share premium account <sup>(a)</sup>		4,174	4,705
Other reserves	30	14,010	(2,322)
Retained earnings	30	20,477	17,134
<b>Equity attributable to Rio Tinto shareholders</b>	30	43,831	20,638
Attributable to outside equity shareholders <sup>(a)</sup>		2,094	1,823
<b>Total equity</b>		45,925	22,461

(a) Refer to statement of changes in equity.

The notes on pages 137 to 212 are an integral part of these consolidated financial statements.

The financial statements on pages 131 to 224 were approved by the directors of Rio Tinto plc and Rio Tinto Limited on 5 March 2010 and signed on their behalf by

Jan du Plessis Chairman

Tom Albanese Chief executive

Guy Elliott Chief financial officer

# Group statement of changes in equity

Years ended

**31 December 2009**

	Attributable to shareholders of Rio Tinto						
	Share capital (notes 28 and 29) US\$m	Share premium <sup>(a)</sup> US\$m	Retained earnings (note 30) US\$m	Other reserves (note 30) US\$m	Total US\$m	Outside interests US\$m	Total equity US\$m
<b>Opening balance</b>	1,121	4,705	17,134	(2,322)	20,638	1,823	22,461
Total comprehensive income for the year <sup>(b)</sup>	–	–	4,168	4,401	8,569	846	9,415
Currency translation arising from Rio Tinto Limited's share capital <sup>(c)</sup>	710	–	–	–	710	–	710
Dividends	–	–	(876)	–	(876)	(410)	(1,286)
Own shares purchased from Rio Tinto shareholders to satisfy share options	–	–	(17)	(35)	(52)	–	(52)
Ordinary shares issued	3,339	(531)	3	11,936	14,747	–	14,747
Shares issued to outside interests	–	–	–	–	–	53	53
Subsidiaries now equity accounted	–	–	–	–	–	(218)	(218)
Employee share options and other IFRS 2 charges taken to the income statement	–	–	65	30	95	–	95
<b>Closing balance</b>	<b>5,170</b>	<b>4,174</b>	<b>20,477</b>	<b>14,010</b>	<b>43,831</b>	<b>2,094</b>	<b>45,925</b>

(a) Charges to share premium in 2009 include underwriting fees and other fees for the Rio Tinto plc rights issue, together with the mark-to-market losses from inception to receipt of proceeds on forward contracts taken out by Rio Tinto plc to provide confidence in the absolute dollar proceeds of the rights issue.

(b) Refer to Statement of comprehensive income.

(c) Refer to note 1 (d).

**31 December 2008**

	Attributable to shareholders of Rio Tinto						
	Share capital (notes 28 and 29) US\$m	Share premium US\$m	Retained earnings (note 30) US\$m	Other reserves (note 30) US\$m	Total US\$m	Outside interests US\$m	Total equity US\$m
<b>Opening balance</b>	1,391	1,932	19,033	2,416	24,772	1,521	26,293
Total comprehensive income/(expense) for the year <sup>(b)</sup>	–	–	2,742	(4,649)	(1,907)	578	(1,329)
Currency translation arising from Rio Tinto Limited's share capital <sup>(c)</sup>	(258)	–	–	–	(258)	–	(258)
Dividends	–	–	(1,933)	–	(1,933)	(348)	(2,281)
Own shares purchased from Rio Tinto shareholders to satisfy share options	–	–	–	(128)	(128)	–	(128)
Ordinary shares issued	–	6	25	–	31	–	31
Own shares purchased and cancelled	(12)	2,767	(2,767)	12	–	–	–
Shares issued to outside interests	–	–	–	–	–	72	72
Employee share options taken to the income statement	–	–	34	27	61	–	61
<b>Closing balance</b>	<b>1,121</b>	<b>4,705</b>	<b>17,134</b>	<b>(2,322)</b>	<b>20,638</b>	<b>1,823</b>	<b>22,461</b>

The notes on pages 137 to 212 are an integral part of these consolidated financial statements.

## Reconciliation with Australian IFRS

The Group's financial statements have been prepared in accordance with IFRS as adopted by the European Union ('EU IFRS'), which differs in certain respects from the version of IFRS that is applicable in Australia ('Australian IFRS').

Prior to 1 January 2004, the Group's financial statements were prepared in accordance with UK GAAP. Under EU IFRS, goodwill on acquisitions prior to 1998, which was eliminated directly against equity in the Group's UK GAAP financial statements, has not been reinstated. This was permitted under the rules governing the transition to EU IFRS set out in IFRS 1. The equivalent Australian Standard, AASB 1, does not provide for the netting of goodwill against equity. As a consequence, shareholders' funds under Australian IFRS include the residue of such goodwill, which amounted to US\$597 million at 31 December 2009 (2008: US\$752 million).

Save for the exception described above, the Group's financial statements drawn up in accordance with EU IFRS are consistent with the requirements of Australian IFRS.

## Outline of dual listed companies structure and basis of financial statements

### **The Rio Tinto Group**

These are the financial statements of the Rio Tinto Group (the 'Group'), formed through the merger of economic interests ('merger') of Rio Tinto plc and Rio Tinto Limited, and presented by both Rio Tinto plc and Rio Tinto Limited as their consolidated accounts in accordance with both United Kingdom and Australian legislation and regulations.

### **Merger terms**

On 21 December 1995, Rio Tinto plc and Rio Tinto Limited, which are listed respectively on Stock Exchanges in the United Kingdom and Australia, entered into a dual listed companies ('DLC') merger. This was effected by contractual arrangements between the companies and amendments to Rio Tinto plc's Memorandum and Articles of Association and Rio Tinto Limited's constitution. As a result, Rio Tinto plc and Rio Tinto Limited and their respective groups operate together as a single economic enterprise, with neither assuming a dominant role. In particular, the arrangements:

- confer upon the shareholders of Rio Tinto plc and Rio Tinto Limited a common economic interest in both groups;
- provide for common boards of directors and a unified management structure;
- provide for equalised dividends and capital distributions; and
- provide for the shareholders of Rio Tinto plc and Rio Tinto Limited to take key decisions, including the election of directors, through an electoral procedure in which the public shareholders of the two companies effectively vote on a joint basis.

The merger involved no change in the legal ownership of any assets of Rio Tinto plc or Rio Tinto Limited, nor any change in the ownership of any existing shares or securities of Rio Tinto plc or Rio Tinto Limited, nor the issue of any shares, securities or payment by way of consideration, save for the issue by each company of one special voting share to a trustee company which provides the joint electoral procedure for public shareholders. During 2002, each of the parent companies issued a DLC Dividend Share to facilitate the efficient management of funds within the DLC structure.

### **Accounting standards**

The financial statements have been drawn up in accordance with International Financial Reporting Standards as adopted by the European Union ('EU IFRS'). The merger of economic interests of Rio Tinto plc and Rio Tinto Limited was accounted for as a merger under UK GAAP. As permitted under the rules governing the transition to EU IFRS, which are set out in IFRS 1, the Group did not restate business combinations that occurred before the transition date of 1 January 2004. As a result, the DLC merger of economic interests described above continues to be accounted for as a merger under EU IFRS.

The main consequence of adopting merger rather than acquisition accounting is that the statement of financial position of the merged Group includes the assets and liabilities of Rio Tinto plc and Rio Tinto Limited at their carrying values prior to the merger, subject to adjustments to achieve uniformity of accounting policies, rather than at their fair values at the date of the merger. For accounting purposes Rio Tinto plc and Rio Tinto Limited are viewed as a single public parent company (with their respective public shareholders being the shareholders in that single company). As a result the amounts attributable to both Rio Tinto plc and Rio Tinto Limited public shareholders are included in the amounts attributed to equity shareholders on the statement of financial position, income statement and statement of comprehensive income.

### **Australian Corporations Act**

The financial statements are drawn up in accordance with an order, under section 340 of the Australian Corporations Act 2001, issued by the Australian Securities and Investments Commission ('ASIC') on 27 January 2006 (as amended on 22 December 2006). The main provisions of the order are that the financial statements are:

- to be made out in accordance with IFRS as adopted by the European Union ('EU IFRS'); and
- to include a reconciliation from EU IFRS to the Australian equivalents of IFRS (see above).

For further details of the ASIC Class Order relief see page 222.

# Notes to the 2009 financial statements

## 1 Principal accounting policies

### Corporate information

The financial statements of the Group were authorised for issue in accordance with a directors' resolution on 5 March 2010. Rio Tinto plc and Rio Tinto Limited are listed and incorporated respectively on Stock Exchanges in the United Kingdom and Australia. Rio Tinto plc's registered office is at 2 Eastbourne Terrace, London W2 6LG, United Kingdom. Rio Tinto Limited's registered office is at 120 Collins Street, Melbourne, Australia, 3000.

Rio Tinto's business is finding, mining and processing mineral resources. Major products are aluminium, copper, diamonds, coal, uranium, gold, industrial minerals (borax, titanium dioxide, salt, talc), and iron ore. Activities span the world but are strongly represented in Australia and North America with significant businesses in South America, Asia, Europe and Africa.

### Basis of preparation

The basis of preparation and accounting policies used in preparing the financial statements for the year ended 31 December 2009 are set out below.

The financial statements for the year ended 31 December 2009 have been prepared in accordance with International Financial Reporting Standards both as adopted by the EU ('EU IFRS') and as issued by the International Accounting Standards Board ('IFRS'), interpretations issued from time to time by the International Financial Reporting Interpretations Committee ('IFRIC') adopted by the European Union that are mandatory for year ended 31 December 2009, the Companies Act 2006 applicable to companies reporting under IFRS and in accordance with applicable United Kingdom law, applicable Australian law as amended by the Australian Securities and Investments Commission Order dated 27 January 2006 (as amended on 22 December 2006) and Article 4 of the European Union IAS regulation.

The EU IFRS financial information has been drawn up on the basis of accounting policies consistent with those applied in the financial statements for the year to 31 December 2008, except for the following:

- IFRS 8 Operating segments
- IFRS 7 Financial instruments – Disclosures (amendment)
- IAS 1 Presentation of financial statements (revised)
- IFRS 2 (amendment), Share based payment – Vesting conditions and cancellations
- Amendment to IAS 32 Financial instruments: Presentation and IAS 1 Presentation of financial statements Puttable financial instruments and obligations arising on liquidation
- Amendment to IAS 39 – Eligible hedged items
- Amendment to IAS 39 and IFRS 7 – Reclassification of financial assets
- Amendment to IFRIC 9 and IAS 39 on embedded derivatives
- Improvements to IFRS 2008 – to the extent mandatory in 2009. This standard collates many minor changes to IFRS. The amendments most relevant to the Group relate to the classification of derivatives which are not hedges by maturity rather than as short term and the imputation of interest on government grants.
- IFRIC 12 Service concession arrangements
- IFRIC 13 Customer loyalty programmes
- IFRIC 15 Agreements for construction of real estate
- IFRIC 16 Hedges of a net investment in a foreign operation
- IFRIC 18 Transfers of assets from customers

The effect of adopting the above standards and interpretations is not material to Group earnings or to shareholders' funds in the current or prior year. Therefore, prior year information has not been restated. IFRS 7, IFRS 8 and IAS 1 (revised) relate to disclosure only, prior year information has been reclassified to conform with the current presentation. The reclassifications do not affect prior year statements of financial position.

In addition, the Group has early adopted Amendment to IAS 32 Classification of rights issues. The amendment permits rights issues to existing shareholders which allow those shareholders to receive a fixed number of shares at a fixed price in a currency other than the entity's functional currency, to be classed as equity transactions provided the offer is pro rata to all shareholders. Prior to the amendment, such an offer was treated as giving rise to a derivative liability. As a consequence, the US\$827 million gain in the income statement which arose at the half year under the previous accounting rules has been removed with a corresponding credit to equity.

The Group has not applied the following pronouncements: those which are expected to be most relevant to the Group are IFRS 3 and IAS 27 (revised).

- IAS 1 (amendment), Presentation of financial statements – mandatory for year 2010
- IAS 27 (revised) Consolidated and separate financial statements – mandatory for year 2010. The standard requires the effects of all increases or decreases in the ownership of subsidiaries to be recorded in equity if there is no change in control. They will therefore no longer result in goodwill or gains and losses. The standard also specifies the accounting when control is lost. Any remaining interest in the company is re-measured to fair value and a gain or loss is recognised in profit or loss.
- IAS 38 (amendment), Intangible Assets – mandatory for year 2010

## Notes to the financial statements continued

### 1 Principal accounting policies continued

- IFRS 3 (amendment) Business combinations – mandatory for business combinations after 1 January 2010. Under the revised standard, all payments to purchase a business are to be recorded at fair value at the acquisition date with contingent payments classified as debt subsequently re-measured through the income statement. All acquisition related costs should be expensed. When a business is acquired in which the Group previously held a non-controlling stake, or the Group increases its stake in a business which it does not control, the existing stake is re-measured to fair value at the date of acquisition. Any difference between fair value and carrying value is taken to the income statement.
- IFRS 5 (amendment), Non-current assets held for sale and discontinued operations – mandatory for year 2010
- Eligible Hedged Items (an amendment to IAS 39 Financial Instruments: Recognition and Measurement) – mandatory for year 2010
- IFRIC 17 Non cash distributions to owners – mandatory for year 2010

Standards and interpretations not yet endorsed by the European Union

- IFRS 2 Share based payment – Group cash settled share based payment transactions – mandatory for year 2010
- Improvements to IFRS 2009 – mandatory for year 2010. This standard collates further minor changes to IFRS
- Amendment to IFRIC 14, IAS 19 – Prepayments of a minimum funding requirement – mandatory for year 2011
- Amendment to IAS 24 Related party disclosures – mandatory for year 2011
- IFRIC 19 Extinguishing financial liabilities with equity instruments – mandatory for year 2011
- IFRS 9, Financial instruments – mandatory for year 2013

The Group is evaluating the impact of the above pronouncements. The above changes are not expected to be material to the Group's earnings or to shareholders' funds.

#### Judgements in applying accounting policies and key sources of estimation uncertainty

Many of the amounts included in the financial statements involve the use of judgement and/or estimation. These judgements and estimates are based on management's best knowledge of the relevant facts and circumstances, having regard to previous experience, but actual results may differ from the amounts included in the financial statements. Information about such judgements and estimation is contained in the accounting policies and/or the Notes to the financial statements, and the key areas are summarised below.

Areas of judgement that have the most significant effect on the amounts recognised in the financial statements are:

- Merger accounting for the 1995 merger of the economic interests of Rio Tinto plc and Rio Tinto Limited into the dual listed companies ('DLC') structure (page 136).
- Review of asset carrying values and impairment charges and reversals note 1(e) and (i), note 5 and note 11
- Estimation of asset lives, note 1 (e and i)
- Determination of ore reserve estimates – note 1(j)
- Close down, restoration and clean up obligations – note 1(k)
- Deferral of stripping costs – note 1(h)
- Recognition of deferred tax on mineral rights recognised in acquisitions – note 1(m)
- Capitalisation of exploration and evaluation costs – note 1(f)
- Identification of functional currencies – note 1(d)
- The definition of Underlying earnings – note 2
- Acquisitions – note 1(b)

Key sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are:

- Review of asset carrying values and impairment charges and reversals note 1(e) and (i), note 5 and note 11
- Estimation of close down and restoration costs and the timing of expenditure – note 1(k) and note 27
- Estimation of environmental clean up costs and the timing of expenditure – note 1(k) and note 27
- Estimation of liabilities for post retirement costs – note 50
- Recoverability of potential deferred tax assets – note 1 (m) and note 18 (d)
- Contingencies – note 35

These areas of judgement and estimation are discussed further on page 149.

#### (a) Accounting convention

The financial information included in the financial statements for the year ended 31 December 2009, and for the related comparative period, has been prepared under the historical cost convention, as modified by the revaluation of certain derivative contracts, financial assets and post retirement assets and liabilities. The Group's policy in respect of these items is set out in the notes below.

#### (b) Basis of consolidation

The financial statements consist of the consolidation of the accounts of Rio Tinto plc and Rio Tinto Limited (together 'the Companies') and their respective subsidiaries (together 'the Group').

All intragroup balances, transactions, income and expenses and profits or losses, including unrealised profits arising from intragroup transactions, have been eliminated on consolidation. Unrealised losses are eliminated in the same way as unrealised gains except that they are only eliminated to the extent that there is no evidence of impairment.

**Subsidiaries:** Subsidiaries are entities over which the Companies have the power to govern the financial and operating policies in order to obtain benefits from their activities. Control is presumed to exist where the Companies own more than one half of the voting rights (which does not always equate to percentage ownership) unless it can be demonstrated that ownership does not constitute control. Control does not exist where other parties hold veto rights over significant operating and financial decisions. In assessing control, potential voting rights that are currently exercisable or convertible are taken into account. The consolidated financial statements include all the assets, liabilities, revenues, expenses and cash flows of the Companies and their subsidiaries after eliminating intragroup transactions as noted above.

For partly owned subsidiaries, the allocation of net assets and net earnings to outside shareholders is shown in the line 'Amounts attributable to outside equity shareholders' on the face of the Group statement of financial position and Group income statement.

**Associates:** An associate is an entity, that is neither a subsidiary nor a joint venture, over whose operating and financial policies the Group exercises significant influence. Significant influence is presumed to exist where the Group has between 20 per cent and 50 per cent of the voting rights, but can also arise where the Group holds less than 20 per cent if it has the power to be actively involved and influential in policy decisions affecting the entity. The Group's share of the net assets, post tax results and reserves of associates are included in the financial statements using the equity accounting method. This involves recording the investment initially at cost to the Group, which therefore includes any goodwill on acquisition, and then, in subsequent periods, adjusting the carrying amount of the investment to reflect the Group's share of the associate's results less any impairment of goodwill and any other changes to the associate's net assets such as dividends. Unrealised gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates.

**Joint ventures:** A joint venture is a contractual arrangement whereby two or more parties undertake an economic activity that is subject to joint control. Joint control is the contractually agreed sharing of control such that significant operating and financial decisions require the unanimous consent of the parties sharing control. In some situations, joint control exists even though the Group has an ownership interest of more than 50 per cent because of the veto rights held by joint venture partners. The Group has two types of joint ventures:

**Jointly controlled entities (JCEs):** A JCE is a joint venture that involves the establishment of a corporation, partnership or other entity in which each venturer has a long term interest. JCEs are accounted for using the equity accounting method. In addition, for both associates and jointly controlled entities, the carrying value will include any long term debt interests that in substance form part of the Group's net investment.

**Jointly controlled assets (JCAs):** A JCA is a joint venture in which the venturers have joint control over the assets contributed to or acquired for the purposes of the joint venture. JCAs do not involve the establishment of a corporation, partnership or other entity. This includes situations where the participants derive benefit from the joint activity through a share of the production, rather than by receiving a share of the results of trading. The Group's proportionate interest in the assets, liabilities, revenues, expenses and cash flows of JCAs are incorporated into the Group's financial statements under the appropriate headings.

The Group uses the term 'Equity accounted units' to refer to associates and jointly controlled entities collectively.

Where necessary, adjustments are made to the results of subsidiaries, joint ventures and associates to bring their accounting policies into line with those used by the Group.

#### Acquisitions

On the acquisition of a subsidiary, the purchase method of accounting is used whereby the purchase consideration is allocated to the identifiable assets, liabilities and contingent liabilities (identifiable net assets) of the subsidiary on the basis of fair value at the date of acquisition. Provisional fair values allocated at a reporting date are finalised within twelve months of the acquisition date.

When part or all of the amount of purchase consideration is contingent on future events, the cost of the acquisition initially recorded includes a reasonable estimate of the fair value of the contingent amounts expected to be payable in the future. The cost of the acquisition is adjusted when revised estimates are made, with corresponding adjustments made to goodwill until the ultimate outcome is known.

The results of businesses acquired during the year are brought into the consolidated financial statements from the date on which control, joint control or significant influence commences and taken out of the financial statements from the date on which control, joint control or significant influence ceases.

#### Disposals

Individual non current assets or 'disposal groups' (ie groups of assets and liabilities) to be disposed of, by sale or otherwise in a single transaction, are classified as 'held for sale' if the following criteria are met:

- the carrying amount will be recovered principally through a sale transaction rather than through continuing use, and
- the disposal group is available for immediate sale in its present condition subject only to terms that are usual and customary for such sales, and
- the sale is highly probable.

Disposal groups held for sale are carried at the lower of their carrying amount and fair value less costs to sell and are presented separately on the face of the statement of financial position with the related assets and liabilities being presented as a single asset and a single liability respectively. Comparative statement of financial position information is not restated. Disposal groups acquired with a view to resale are held at fair value determined at the acquisition date and no profits or losses are recognised between acquisition date and disposal date.

## Notes to the financial statements continued

### 1 Principal accounting policies continued

#### Disposals continued

For a disposal group held for sale that continues to be carried at its carrying amount, the profit on disposal, calculated as net sales proceeds less the carrying amount, is recognised in the income statement in the period during which control passes to the buyer. Where the fair value less costs to sell of a disposal group is lower than the carrying amount at the time of classification as held for sale, the resulting charge is recognised in the income statement in that period. On classification as held for sale, the assets are no longer depreciated. When the fair value less costs to sell of a disposal group falls below the carrying amount during the period in which it is classified as held for sale, the charge is included in the income statement at that time.

If the disposal group or groups represent a separate major line of business or geographical area of operations, or are part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations, or are subsidiaries acquired exclusively with a view to resale, they are classified as discontinued operations. The net results attributable to such discontinued operations are shown separately and comparative figures in the income and cash flow statements are restated.

The Group accounts for transactions with outside equity shareholders using the 'parent company' model. Under this model, acquisitions of an outside equity shareholders' interest will generally give rise to additional goodwill and a disposal will give rise to a profit or loss in the income statement.

#### **(c) Sales revenue**

Sales revenue comprises sales to third parties at invoiced amounts, with most sales being priced ex works, free on board (f.o.b.) or cost, insurance and freight (c.i.f.). Amounts billed to customers in respect of shipping and handling are classed as sales revenue where the Group is responsible for carriage, insurance and freight. All shipping and handling costs incurred by the Group are recognised as operating costs. If the Group is acting solely as an agent, amounts billed to customers are offset against the relevant costs. Revenue from services is recognised as services are rendered and accepted by the customer.

Sales revenue excludes any applicable sales taxes. Mining royalties are presented as an operating cost or, where they are in substance a profit based tax, within taxes. Gross sales revenue disclosed as part of the income statement includes the Group's share of the sales revenue of equity accounted units. To avoid duplication, this excludes sales by jointly controlled entities to third parties of products purchased from the Group and sales by jointly controlled entities of products to the Group for onward sale to third parties. It also excludes charges by jointly controlled entities to the Group. Co-product revenues are included in sales revenue.

A large proportion of Group production is sold under medium to long term contracts, but sales revenue is only recognised on individual sales when persuasive evidence exists that all of the following criteria are met:

- the significant risks and rewards of ownership of the product have been transferred to the buyer;
- neither continuing managerial involvement to the degree usually associated with ownership, nor effective control over the goods sold, has been retained;
- the amount of revenue can be measured reliably;
- it is probable that the economic benefits associated with the sale will flow to the Group; and
- the costs incurred or to be incurred in respect of the sale can be measured reliably.

These conditions are generally satisfied when title passes to the customer. In most instances sales revenue is recognised when the product is delivered to the destination specified by the customer, which is typically the vessel on which it will be shipped, the destination port or the customer's premises.

Sales revenue is commonly subject to adjustment based on an inspection of the product by the customer. In such cases, sales revenue is initially recognised on a provisional basis using the Group's best estimate of contained metal, and adjusted subsequently.

Certain products are 'provisionally priced', ie the selling price is subject to final adjustment at the end of a period normally ranging, from 30 to 180 days after delivery to the customer, based on the market price at the relevant quotation point stipulated in the contract.

As is customary in the industry, revenue on provisionally priced sales is recognised based on estimates of the fair value of the consideration receivable based on forward market prices. At each reporting date provisionally priced metal is marked to market based on the forward selling price for the quotational period stipulated in the contract. For this purpose, the selling price can be measured reliably for those products, such as copper, for which there exists an active and freely traded commodity market such as the London Metals Exchange and the value of product sold by the Group is directly linked to the form in which it is traded on that market.

The marking to market of provisionally priced sales contracts is recorded as an adjustment to sales revenue. Information on provisionally priced sales contracts is included in note 33.

Certain other of the Group's products, such as iron ore, are sold under long term contracts at a benchmark price which is agreed annually. Where the benchmark price has not been finally agreed at the end of an accounting period, revenue is estimated based on the best available information, having reference to the terms of the contractual agreement and, where appropriate, to sales with other customers.

#### (d) Currency translation

The functional currency for each entity in the Group, and for jointly controlled entities and associates, is the currency of the primary economic environment in which it operates. For many entities, this is the currency of the country in which they operate. Transactions denominated in other currencies are converted to the functional currency at the exchange rate ruling at the date of the transaction unless hedge accounting applies, in which case the contract rate is used. Generally, this applies when derivatives or embedded derivatives are designated as cashflow hedges of the Group's sales. The Group's accounting policies for derivative financial instruments and hedge accounting are explained in more detail in note (p) (iii) below. Monetary assets and liabilities denominated in foreign currencies are retranslated at year end exchange rates.

The US dollar is the currency in which the Group's Financial statements are presented, as it most reliably reflects the global business performance of the Group as a whole.

On consolidation, income statement items are translated from the functional currency into US dollars at average rates of exchange. Statement of financial position items are translated into US dollars at year end exchange rates. Exchange differences on the translation of the net assets of entities with functional currencies other than the US dollar, and any offsetting exchange differences on net debt hedging those net assets, are recognised directly in the foreign currency translation reserve via the statement of comprehensive income (net of translation adjustments relating to Rio Tinto Limited's share capital).

Exchange gains and losses which arise on balances between Group entities are taken to the foreign currency translation reserve where the intragroup balance is, in substance, part of the Group's net investment in the entity.

The balance of the foreign currency translation reserve relating to an operation that is disposed of is transferred to the income statement at the time of the disposal.

The Group finances its operations primarily in US dollars but part of the Group's US dollar debt is located in subsidiaries having functional currencies other than the US dollar. Except as noted above, exchange gains and losses relating to such US dollar debt are charged or credited to the Group's income statement in the year in which they arise. This means that the impact of financing in US dollars on the Group's income statement is dependent on the functional currency of the particular subsidiary where the debt is located.

Exchange differences arising on closure provisions are capitalised at operating mines. Except as noted above, or in note (p) below relating to derivative contracts, all other exchange differences are charged or credited to the income statement in the year in which they arise.

#### (e) Goodwill and intangible assets (excluding exploration and evaluation expenditure)

Goodwill represents the difference between the cost of acquisition and the fair value of the identifiable assets, liabilities and contingent liabilities acquired. Goodwill is initially determined based on provisional fair values. Fair values are finalised within 12 months of the acquisition date. Goodwill on acquisition of subsidiaries is separately disclosed and goodwill on acquisitions of associates and JCEs is included within investments in equity accounted units. For non wholly owned subsidiaries, interests attributable to outside equity shareholders are initially recorded based on the proportion of the fair values of the identifiable assets and liabilities and contingent liabilities recognised at acquisition attributable to outside equity shareholders. Where the Group's interest in the net fair value of the acquired company's identifiable assets, liabilities and contingent liabilities exceeds costs, the values assigned are reassessed. Any excess after that reassessment is recognised immediately in the income statement.

In 1997 and previous years, goodwill was eliminated against reserves in the year of acquisition as a matter of accounting policy, as was then permitted under UK GAAP. Such goodwill was not reinstated under subsequent UK accounting standards or on transition to IFRS.

Goodwill is not amortised; rather it is tested annually for impairment. Goodwill is allocated to the cash generating unit or group of cash generating units expected to benefit from the related business combination for the purposes of impairment testing which is carried out in accordance with accounting policy note 1(i). Goodwill impairments cannot be reversed. Investments in equity accounted units are tested for impairment as a single asset. Goodwill included in the Group's investment in equity accounted units is not tested on an annual basis therefore but only as part of the Group's overall testing for impairment when a trigger for impairment has been identified.

Intangible assets acquired as part of an acquisition of a business are capitalised separately from goodwill if the asset is separable or arises from contractual or legal rights, and the fair value can be measured reliably on initial recognition.

Purchased intangible assets are initially recorded at cost and finite life intangible assets are amortised over their useful economic lives on a straight line or units of production basis, as appropriate. Intangible assets having indefinite lives and intangible assets that are not yet ready for use are not amortised and are reviewed annually for impairment in accordance with accounting policy note 1(i).

Intangible assets are considered to have indefinite lives when, based on an analysis of all of the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate cash flows for the Group. The factors considered in making this determination include the existence of contractual rights for unlimited terms; or evidence that renewal of the contractual rights without significant incremental cost can be expected for indefinite periods into the future in view of the Group's future investment intentions. The life cycles of the products and processes that depend on the asset are also considered.

Where amortisation is calculated on a straight line basis, the following useful lives have been determined for classes of intangible assets:

##### *Trademark, patented and non patented technology*

Trademarks: 14 to 20 years

Patented and non patented technology: 10 to 20 years

## Notes to the financial statements continued

### 1 Principal accounting policies continued

#### *Other intangible assets*

Internally generated intangible assets and computer software: 2 to 5 years

Other intangible assets: 2 to 20 years

#### *Contract based intangible assets*

Power contracts: 2 to 39 years

Other purchase and customer contracts: 5 to 15 years

#### **(f) Exploration and evaluation**

Exploration and evaluation expenditure comprises costs that are directly attributable to:

- researching and analysing existing exploration data;
- conducting geological studies, exploratory drilling and sampling;
- examining and testing extraction and treatment methods; and/or
- compiling pre-feasibility and feasibility studies.

Exploration expenditure relates to the initial search for deposits with economic potential. Evaluation expenditure arises from a detailed assessment of deposits or other projects that have been identified as having economic potential.

Expenditure on exploration activity is not capitalised.

Capitalisation of evaluation expenditure commences when there is a high degree of confidence in the project's viability and hence it is probable that future economic benefits will flow to the Group.

The carrying values of capitalised evaluation amounts are reviewed twice per annum by management and the results of these reviews are reported to the Audit committee. In the case of undeveloped projects, there may be only inferred resources to form a basis for the impairment review. The review is based on a status report regarding the Group's intentions for development of the undeveloped project. In some cases, the undeveloped projects are regarded as successors to ore bodies, smelters or refineries currently in production. Where this is the case, it is intended that these will be developed and go into production when the current source of ore is exhausted or to replace the reduced output, which results where existing smelters and/or refineries are closed. It is often the case that technological and other improvements will allow successor smelters and/or refineries to more than replace the capacity of their predecessors.

Subsequent recovery of the resulting carrying value depends on successful development or sale of the undeveloped project. If a project does not prove viable, all irrecoverable costs associated with the project net of any related impairment provisions are written off.

#### **(g) Property, plant and equipment**

Property, plant and equipment are stated at cost, less accumulated depreciation and accumulated impairment losses. The cost of property, plant and equipment comprises its purchase price, any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and the estimated close down and restoration costs associated with the asset. Once a mining project has been established as commercially viable, expenditure other than that on land, buildings, plant and equipment is capitalised under 'Mining properties and leases' together with any amount transferred from 'Exploration and evaluation'.

In open pit mining operations, it is necessary to remove overburden and other waste materials to access ore from which minerals can be extracted economically. The process of mining overburden and waste materials is referred to as stripping. During the development of a mine (or pit), before production commences, stripping costs are capitalised as part of the investment in construction of the mine.

Costs associated with commissioning new assets, in the period before they are capable of operating in the manner intended by management, are capitalised. Development costs incurred after the commencement of production are capitalised to the extent they are expected to give rise to a future economic benefit. Interest on borrowings related to construction or development projects is capitalised until the point when substantially all the activities that are necessary to make the asset ready for its intended use are complete.

#### **(h) Deferred stripping**

As noted above, stripping costs incurred in the development of a mine (or pit) before production commences are capitalised as part of the cost of constructing the mine (or pit) and subsequently amortised over the life of the mine (or pit) on a units of production basis.

Where a mine operates several open pits that are regarded as separate operations for the purpose of mine planning, stripping costs are accounted for separately by reference to the ore from each separate pit. If, however, the pits are highly integrated for the purpose of mine planning, the second and subsequent pits are regarded as extensions of the first pit in accounting for stripping costs. In such cases, the initial stripping (ie overburden and other waste removal) of the second and subsequent pits is considered to be production phase stripping relating to the combined operation.

The Group's determination of whether multiple pit mines are considered separate or integrated operations depends on each mine's specific circumstances. The following factors would point towards the stripping costs for the individual pits being accounted for separately:

- If mining of the second and subsequent pits is conducted consecutively with that of the first pit, rather than concurrently.
- If separate investment decisions are made to develop each pit, rather than a single investment decision being made at the outset.
- If the pits are operated as separate units in terms of mine planning and the sequencing of overburden and ore mining, rather than as an integrated unit.

- If expenditures for additional infrastructure to support the second and subsequent pits are relatively large.
- If the pits extract ore from separate and distinct ore bodies, rather than from a single ore body.

This additional factor would point to an integrated operation in accounting for stripping costs:

- If the designs of the second and subsequent pits are significantly influenced by opportunities to optimise output from the several pits combined, including the co-treatment or blending of the output from the pits.

The relative importance of each of the above factors is considered in each case to determine whether, on balance, the stripping costs should be attributed to the individual pit or to the combined output from the several pits. As this analysis requires judgment another company could make the determination that a mine is separate or integrated differently than the Group, even if the fact pattern appears to be similar. To the extent the determination is different, the resulting accounting would also be different.

The Group defers stripping costs incurred subsequently, during the production stage of its operations, for those operations where this is the most appropriate basis for matching the costs against the related economic benefits and the effect is material. This is generally the case where there are fluctuations in stripping costs over the life of the mine (or pit). The amount of stripping costs deferred is based on the ratio ('Ratio') obtained by dividing the tonnage of waste mined either by the quantity of ore mined or by the quantity of minerals contained in the ore. Stripping costs incurred in the period are deferred to the extent that the current period Ratio exceeds the life of mine (or pit) Ratio. Such deferred costs are then charged against reported profits to the extent that, in subsequent periods, the current period Ratio falls short of the life of mine (or pit) Ratio. The life of mine (or pit) Ratio is based on proved and probable reserves of the mine (or pit).

The life of mine (or pit) waste-to-ore ratio is a function of the pit design(s) and therefore changes to that design will generally result in changes to the Ratio. Changes in other technical or economic parameters that impact on reserves will also have an impact on the life of mine (or pit) Ratio even if they do not affect the pit design(s). Changes to the life of mine (or pit) Ratio are accounted for prospectively.

In the production stage of some mines (or pits), further development of the mine (or pit) requires a phase of unusually high overburden removal activity that is similar in nature to pre-production mine development. The costs of such unusually high overburden removal activity are deferred and charged against reported profits in subsequent periods on a units of production basis. This accounting treatment is consistent with that for stripping costs incurred during the development phase of a mine (or pit), before production commences.

If the Group were to expense production stage stripping costs as incurred, there would be greater volatility in the year to year results from operations and excess stripping costs would be expensed at an earlier stage of a mine's operation.

Deferred stripping costs are included in 'Mining properties and leases' within property, plant and equipment or in investments in equity accounted units, as appropriate. These form part of the total investment in the relevant cash generating unit, which is reviewed for impairment if events or changes in circumstances indicate that the carrying value may not be recoverable. Amortisation of deferred stripping costs is included in net operating costs or in the Group's share of the results of its equity accounted units, as appropriate.

#### **(i) Depreciation and impairment**

##### Depreciation of non current assets

Property, plant and equipment is depreciated over its useful life, or over the remaining life of the mine if shorter. Depreciation commences when an asset is available for use. The major categories of property, plant and equipment are depreciated on a units of production and/or straight-line basis as follows:

##### *Units of production basis*

For mining properties and leases and certain mining equipment, the economic benefits from the asset are consumed in a pattern which is linked to the production level. Except as noted below, such assets are depreciated on a units of production basis.

##### *Straight line basis*

Assets within operations for which production is not expected to fluctuate significantly from one year to another or which have a physical life shorter than the related mine are depreciated on a straight line basis as follows:

##### *Land and Buildings*

Land Not depreciated

Buildings 5 to 50 years

##### *Plant and equipment*

Other plant and equipment 3 to 35 years

Power assets 25 to 100 years

Capital work in progress Not depreciated

Residual values and useful lives are reviewed, and adjusted if appropriate, at each statement of financial position date. Changes to the estimated residual values or useful lives are accounted for prospectively. In applying the units of production method, depreciation is normally calculated using the quantity of material extracted from the mine in the period as a percentage of the total quantity of material to be extracted in current and future periods based on proved and probable reserves and, for some mines, other mineral resources. Such non reserve material may be included in depreciation calculations in limited circumstances and where there is a high degree of confidence in its economic extraction. Development costs that relate to a discrete section of an ore body and which only provide benefit over the life of those reserves, are depreciated over the estimated life of that discrete section. Development costs incurred which benefit the entire ore body are depreciated over the estimated life of the ore body.

## Notes to the financial statements continued

### 1 Principal accounting policies continued

#### (i) Depreciation and impairment continued

##### Impairment of non current assets

Property, plant and equipment and intangible assets with finite lives are reviewed for impairment if there is any indication that the carrying amount may not be recoverable. Impairment is normally assessed at the level of cash-generating units which, in accordance with IAS 36 'Impairment of Assets', are identified as the smallest identifiable group of assets that generates cash inflows, which are largely independent of the cash inflows from other assets.

In addition, an impairment loss is recognised for any excess of carrying amount over the fair value less costs to sell of a non current asset or disposal group held for sale.

Goodwill and indefinite-life intangible assets are reviewed for impairment annually or at any time during the year if an indicator of impairment is considered to exist. Goodwill acquired through business combinations is allocated to groups of cash-generating units that are expected to benefit from the related business combination. The groups of cash-generating units represent the lowest level within the Group at which goodwill is monitored for internal management purposes and these groups are not larger than the reporting segments determined in accordance with IFRS 8 'Operating segments'.

When an impairment review is undertaken, recoverable amount is assessed by reference to the higher of value in use (being the net present value of expected future cash flows of the relevant cash generating unit) and fair value less costs to sell ('fair value'). The best evidence of fair value is the value obtained from an active market or binding sale agreement. Where neither exists, fair value is based on the best information available to reflect the amount the Group could receive for the cash generating unit in an arm's length transaction. This is often estimated using discounted cash flow techniques.

Where recoverable amount is assessed using discounted cash flow techniques, the resulting estimates are based on detailed mine and/or production plans. For value in use, recent cost levels are considered, together with expected changes in costs that are compatible with the current condition of the business and which meet the requirements of IAS 36.

The cash flow forecasts are based on best estimates of expected future revenues and costs, including the future cash costs of production, capital expenditure, close down, restoration and environmental clean up. These may include net cash flows expected to be realised from extraction, processing and sale of mineral resources that do not currently qualify for inclusion in proved or probable ore reserves. Such non reserve material is included where there is a high degree of confidence in its economic extraction. This expectation is usually based on preliminary drilling and sampling of areas of mineralisation that are contiguous with existing reserves. Typically, the additional evaluation to achieve reserve status for such material has not yet been done because this would involve incurring costs earlier than is required for the efficient planning and operation of the mine.

Where the recoverable amount of a cash generating unit is dependent on the life of its associated ore body, expected future cash flows reflect long term mine plans, which are based on detailed research, analysis and iterative modelling to optimise the level of return from investment, output and sequence of extraction. The mine plan takes account of all relevant characteristics of the ore body, including waste to ore ratios, ore grades, haul distances, chemical and metallurgical properties of the ore impacting on process recoveries and capacities of processing equipment that can be used. The mine plan is therefore the basis for forecasting production output in each future year and for forecasting production costs.

The Group's cash flow forecasts are based on estimates of future commodity prices, which assume market prices will revert to the Group's assessment of the long term average price, generally over a period of three to five years. These long term commodity prices, for most commodities, are derived from an analysis of the marginal costs of the producers of these commodities. These assessments often differ from current price levels and are updated periodically. For the long run, the Group does not believe that forward prices quoted in the metals markets provide a good indication of future price levels since forward prices tend to be strongly influenced by spot price levels.

In some cases, prices applying to some part of the future sales volumes of a cash generating unit are predetermined by existing sales contracts. The effects of such contracts are taken into account in forecasting future cash flows.

The discount rates applied to the future cash flow forecasts represent an estimate of the rate the market would apply having regard to the time value of money and the risks specific to the asset for which the future cash flow estimates have not been adjusted. The Group's weighted average cost of capital is used as a starting point for determining the discount rates, with appropriate adjustments for the risk profile of the countries in which the individual cash generating units operate.

For operations with a functional currency other than the US dollar, the impairment review is undertaken in the relevant functional currency. The great majority of the Group's sales are based on prices denominated in US dollars. To the extent that the currencies of countries in which the Group produces commodities strengthen against the US dollar without commodity price offset, cash flows and, therefore, net present values are reduced.

When calculating value in use, IAS 36 requires that calculations should be based on exchange rates current at the time of the assessment.

Non financial assets other than goodwill that have suffered an impairment are tested for possible reversal of the impairment whenever events or changes in circumstances indicate that the impairment may have reversed.

**(j) Determination of ore reserve estimates**

The Group estimates its ore reserves and mineral resources based on information compiled by Competent Persons as defined in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves of December 2004 (the JORC code). Reserves, and for certain mines, other mineral resources, determined in this way are used in the calculation of depreciation, amortisation and impairment charges, the assessment of life of mine stripping ratios and for forecasting the timing of the payment of close down and restoration costs and clean up costs.

In assessing the life of a mine for accounting purposes, mineral resources are only taken into account where there is a high degree of confidence of economic extraction.

There are numerous uncertainties inherent in estimating ore reserves, and assumptions that are valid at the time of estimation may change significantly when new information becomes available. Changes in the forecast prices of commodities, exchange rates, production costs or recovery rates may change the economic status of reserves and may, ultimately, result in the reserves being restated.

**(k) Provisions for close down and restoration and for environmental clean up costs**

Close down and restoration costs include the dismantling and demolition of infrastructure and the removal of residual materials and remediation of disturbed areas. Estimated close down and restoration costs are provided for in the accounting period when the obligation arising from the related disturbance occurs, whether this occurs during the mine development or during the production phase, based on the net present value of estimated future costs. Provisions for close down and restoration costs do not include any additional obligations which are expected to arise from future disturbance. The costs are estimated on the basis of a closure plan. The cost estimates are updated annually during the life of the operation to reflect known developments, eg revisions to cost estimates and to the estimated lives of operations, and are subject to formal review at regular intervals.

Close down and restoration costs are a normal consequence of mining, and the majority of close down and restoration expenditure is incurred at the end of the life of the mine. Although the ultimate cost to be incurred is uncertain, the Group's businesses estimate their respective costs based on feasibility and engineering studies using current restoration standards and techniques.

The amortisation or 'unwinding' of the discount applied in establishing the net present value of provisions is charged to the income statement in each accounting period. The amortisation of the discount is shown as a financing cost, rather than as an operating cost.

The initial closure provision together with other movements in the provisions for close down and restoration costs, including those resulting from new disturbance, updated cost estimates, changes to the estimated lives of operations and revisions to discount rates are capitalised within property, plant and equipment. These costs are then depreciated over the lives of the assets to which they relate.

Where rehabilitation is conducted systematically over the life of the operation, rather than at the time of closure, provision is made for the estimated outstanding continuous rehabilitation work at each statement of financial position date and the cost is charged to the income statement.

Provision is made for the estimated present value of the costs of environmental clean up obligations outstanding at the statement of financial position date. These costs are charged to the income statement. Movements in the environmental clean up provisions are presented as an operating cost, except for the unwind of the discount which is shown as a financing cost. Remediation procedures may commence soon after the time the disturbance, remediation process and estimated remediation costs become known, but can continue for many years depending on the nature of the disturbance and the remediation techniques.

As noted above, the ultimate cost of environmental remediation is uncertain and cost estimates can vary in response to many factors including changes to the relevant legal requirements, the emergence of new restoration techniques or experience at other mine sites. The expected timing of expenditure can also change, for example in response to changes in ore reserves or production rates. As a result there could be significant adjustments to the provision for close down and restoration and environmental clean up, which would affect future financial results.

**(l) Inventories**

Inventories are valued at the lower of cost and net realisable value, primarily on a weighted average cost basis. Average costs are calculated by reference to the cost levels experienced in the current month together with those in opening inventory. Cost for raw materials and stores is purchase price and for partly processed and saleable products is generally the cost of production. For this purpose the costs of production include:

- labour costs, materials and contractor expenses which are directly attributable to the extraction and processing of ore;
- the depreciation of mining properties and leases and of property, plant and equipment used in the extraction and processing of ore; and
- production overheads.

Stockpiles represent ore that has been extracted and is available for further processing. If there is significant uncertainty as to when the stockpiled ore will be processed it is expensed as incurred. Where the future processing of this ore can be predicted with confidence, eg because it exceeds the mine's cut off grade, it is valued at the lower of cost and net realisable value. If the ore will not be processed within the 12 months after the statement of financial position date it is included within non current assets. Work in progress inventory includes ore stockpiles and other partly processed material. Quantities are assessed primarily through surveys and assays.

**(m) Taxation**

Current tax is the tax expected to be payable on the taxable income for the year calculated using rates that have been enacted or substantively enacted by the statement of financial position date. It includes adjustments for tax expected to be payable or recoverable in respect of previous periods.

## Notes to the financial statements continued

### 1 Principal accounting policies continued

Temporary differences are the difference between the carrying value of an asset or liability and its tax base. Full provision is made for deferred taxation on all temporary differences existing at the statement of financial position date with certain limited exceptions. The main exceptions to this principle are as follows:

- tax payable on the future remittance of the past earnings of subsidiaries, associates and jointly controlled entities is provided for except where the Group is able to control the remittance of profits and it is probable that there will be no remittance in the foreseeable future;
- deferred tax is not provided on the initial recognition of an asset or liability in a transaction that does not affect accounting profit or taxable profit and is not a business combination, such as on the recognition of a provision for close down and restoration costs and the related asset or on the recognition of new finance leases. Furthermore, with the exception of the unwind of discount, deferred tax is not recognised on subsequent changes in the carrying value of such assets and liabilities, for example where the related assets are depreciated or finance leases are repaid; and
- deferred tax assets are recognised only to the extent that it is probable that they will be recovered. Probable is defined as 'more likely than not'. Recoverability is assessed having regard to the reasons why the deferred tax asset has arisen and projected future taxable profits for the relevant entity (or group of entities).

Deferred tax is provided in respect of fair value adjustments on acquisitions. These adjustments may relate to assets such as mining rights that, in general, are not eligible for income tax allowances. In such cases, the provision for deferred tax is based on the difference between the carrying value of the asset and its nil income tax base. The existence of a tax base for capital gains tax purposes is not taken into account in determining the deferred tax provision relating to such mineral rights because it is expected that the carrying amount will be recovered primarily through use and not from the disposal of mineral rights. Also, the Group is only entitled to a deduction for capital gains tax purposes if the mineral rights are sold or formally relinquished.

Current and deferred tax relating to items recognised directly in equity are recognised in equity and not in the income statement.

#### (n) Post employment benefits

For defined benefit post employment plans, the difference between the fair value of the plan assets (if any) and the present value of the plan liabilities is recognised as an asset or liability on the statement of financial position. Any asset recognised is restricted, if appropriate, to the present value of any amounts the Group expects to recover by way of refunds from the plan or reductions in future contributions. Actuarial gains and losses arising in the year are taken to the statement of comprehensive income. For this purpose, actuarial gains and losses comprise both the effects of changes in actuarial assumptions and experience adjustments arising because of differences between the previous actuarial assumptions and what has actually occurred.

Other movements in the net surplus or deficit are recognised in the income statement, including the current service cost, any past service cost and the effect of any curtailment or settlements. The interest cost less the expected return on assets is also charged to the income statement. The amount charged to the income statement in respect of these plans is included within operating costs or in the Group's share of the results of equity accounted units as appropriate.

The most significant assumptions used in accounting for pension plans are the long term rate of return on plan assets, the discount rate and the mortality assumptions. The long term rate of return on plan assets is used to calculate interest income on pension assets, which is credited to the Group's income statement. The discount rate is used to determine the net present value of future liabilities. The discount rate used is the yield on high quality corporate bonds with maturity and terms that match those of the post employment obligations as closely as possible. Where there is no developed corporate bond market in a country, the rate on government bonds is used. Each year, the unwinding of the discount on those liabilities is charged to the Group's income statement as the interest cost. The mortality assumption is used to project the future stream of benefit payments, which is then discounted to arrive at a net present value of liabilities.

The values attributed to plan liabilities are assessed in accordance with the advice of independent qualified actuaries.

The Group's contributions to defined contribution pension plans are charged to the income statement in the period to which the contributions relate.

#### (o) Cash and cash equivalents

For the purposes of the statement of financial position, cash and cash equivalents comprise cash on hand, deposits held on call with banks and short term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to insignificant risk of changes in value. For the purposes of the cash flow statement, cash and cash equivalents are net of bank overdrafts that are repayable on demand which are shown as current liabilities on the statement of financial position.

#### (p) Financial instruments

##### (i) Financial assets

The Group classifies its financial assets in the following categories: at fair value through profit or loss, loans and receivables, available-for-sale and held to maturity investments. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of financial assets at initial recognition.

###### (a) Financial assets at fair value through profit or loss

Derivatives are included in this category unless they are designated as hedges. Assets in this category are classified based on their maturity. Generally, the Group does not acquire financial assets for the purpose of selling in the short term.

Financial assets carried at fair value through profit or loss are initially recognised at fair value and transaction costs are expensed in the income statement.

*(b) Loans and receivables*

Loans and receivables are non derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are classified as current assets or non current assets based on their maturity date. Loans and receivables comprise 'trade and other receivables', 'other financial assets' and 'cash and cash equivalents' in the statement of financial position. Loans and receivables are carried at amortised cost less any impairment.

*(c) Available-for-sale financial assets*

Available-for-sale financial assets are non derivatives that are either designated as available for sale or not classified in any of the other categories. They are included in non current assets unless the Group intends to dispose of the investment within 12 months of the statement of financial position date.

Changes in the fair value of available-for-sale financial assets denominated in a currency other than the functional currency of the holder other than equity investments, are analysed between translation differences and other changes in the carrying amount of the security. The translation differences are recognised in profit or loss. Any impairment charges are also recognised in profit or loss, while other changes in fair value are recognised in equity.

When financial assets classified as available-for-sale are sold, the accumulated fair value adjustments recognised in equity are included in the income statement within 'net operating costs'.

Dividends on available-for-sale equity instruments are also recognised in the income statement within 'interest receivable and similar income' when the Group's right to receive payments is established.

Financial assets not carried at fair value through profit and loss are initially recognised on the trade date at fair value plus transaction costs.

Financial assets are derecognised when the investments mature or are sold, and substantially all the risks and rewards of ownership have been transferred.

**(ii) Financial liabilities**

Borrowings and other financial liabilities are recognised initially at fair value, net of transaction costs incurred and are subsequently stated at amortised cost. Any difference between the amounts originally received (net of transaction costs) and the redemption value is recognised in the income statement over the period to maturity using the effective interest method.

Borrowings and other financial liabilities are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the statement of financial position date.

**(iii) Derivative financial instruments and hedge accounting**

The Group's policy with regard to 'Financial risk management' is set out in note 33. When the Group enters into derivative contracts these transactions are designed to reduce exposures related to assets and liabilities, firm commitments or anticipated transactions.

Commodity based contracts that meet the definition of a derivative in IAS 39 but are entered into in accordance with the Group's expected purchase or sales requirements are recognised in earnings as described in note 1(c) Sales revenue above.

All other derivatives are initially recognised at their fair value on the date the derivative contract is entered into and are subsequently re-measured subject to IAS 39 at their fair value at each statement of financial position date. The method of recognising the resulting gain or loss depends on whether or not the derivative is designated as a hedging instrument and, if so, the nature of the item being hedged. The Group designates certain derivatives as either hedges of the fair value of recognised assets or liabilities or of firm commitments (fair value hedges) or hedges of highly probable forecast transactions (cash flow hedges).

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge. The documentation includes identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged and how the entity will assess the hedging instrument's effectiveness in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Hedges that are expected to be highly effective in achieving offsetting changes in fair value or cash flows are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

*Fair value hedges:* Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the income statement, together with any changes in the fair value of the hedged asset or liability or firm commitment that is attributable to the hedged risk. Where derivatives are held with different counterparties to the underlying asset or liability or firm commitment, the fair values of the derivative assets and liabilities are shown separately in the statement of financial position as there is no legal right of offset. The gain or loss relating to the effective portion of interest rate swaps hedging fixed rate borrowings is recognised in the income statement within 'interest payable and similar charges'.

## Notes to the financial statements continued

### 1 Principal accounting policies continued

**Cash flow hedges:** The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in equity. The gain or loss relating to the ineffective portion is recognised immediately in the income statement within 'net operating costs'. Amounts accumulated in equity are recycled in the income statement in the period when the hedged item affects profit or loss, for example when the forecast sale that is being hedged takes place. The realised gain or loss relating to the effective portion of forward foreign exchange or commodity contracts hedging sales is recognised in the income statement within 'sales revenue'. When the forecast transaction that is being hedged results in the recognition of a non financial asset the gains and losses previously deferred in equity are transferred from equity and adjust the cost of the asset. The gains and losses are recognised subsequently in the income statement within 'net operating costs' when the non financial asset is amortised.

When a cash flow hedging instrument expires or is sold, or when a cash flow hedge no longer meets the criteria for hedge accounting, although the forecasted transaction is still expected to occur, any cumulative gain or loss relating to the instrument which is held in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the income statement.

When a fair value interest rate hedging instrument expires or is sold, or when a fair value interest rate hedge no longer meets the criteria for hedge accounting, the fair value adjustments which have been made to the hedged item are amortised through the income statement over its remaining life.

#### (iii) Derivative financial instruments and hedge accounting continued

**Derivatives that do not qualify for hedge accounting:** Any derivative contracts that do not qualify for hedge accounting, are marked to market at the statement of financial position date. In respect of currency swaps, the gain or loss on the swap and offsetting gain or loss on the financial asset or liability against which the swap forms an economic hedge are shown in separate lines in the income statement within the lines 'net gains/(losses) on derivatives not qualifying for hedge accounting' and 'net exchange gains/(losses) on external debt and intragroup balances'. In respect of other derivatives, the mark to market may give rise to charges or credits to the income statement in periods before the transaction against which the derivative is held as an economic hedge is recognised. These charges or credits would be recognised in the line 'net gains/(losses) on derivatives not qualifying for hedge accounting'.

**Embedded derivatives:** Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to their host contracts. In some cases, the embedded derivatives may be designated as hedges and will be accounted for as described above.

#### (iv) Fair value

Fair value is the amount at which a financial instrument could be exchanged in an arm's length transaction between informed and willing parties. Where relevant market prices are available, these have been used to determine fair values. In other cases, fair values have been calculated using quotations from independent financial institutions, or by using valuation techniques consistent with general market practice applicable to the instrument.

- (a) The fair values of cash, short term borrowings and loans to joint ventures and associates approximate to their carrying values, as a result of their short maturity or because they carry floating rates of interest.
- (b) The fair values of medium and long term borrowings is calculated as the present value of the estimated future cash flows using an appropriate market based yield curve. The carrying value of the borrowings is amortised cost.
- (c) Derivative financial assets and liabilities are carried at fair value based on published price quotations for the period for which a liquid active market exists. Beyond this period, the Group's own assumptions are used.

The fair values of the various derivative instruments used for hedging purposes are disclosed in note 34. Movements on the hedging reserve are disclosed within note 30.

#### (v) Impairment of financial assets

##### *Available-for-sale financial assets*

The group assesses at each statement of financial position date whether there is objective evidence that a financial asset or a group of financial assets is impaired. In the case of equity securities classified as available for sale, an evaluation is made as to whether a decline in fair value is 'significant' or 'prolonged' based on an analysis of indicators such as significant adverse changes in the technological, market, economic or legal environment in which the company invested in operates.

If an available-for-sale financial asset is impaired, an amount comprising the difference between its cost (net of any principal payment and amortisation) and its current fair value, less any impairment loss previously recognised in the income statement is transferred from equity to the income statement. Reversals in respect of equity instruments classified as available-for-sale are not recognised in the income statement. Reversals of impairment losses on debt instruments are reversed through the income statement, if the increase in fair value of the instrument can be objectively related to an event occurring after the impairment loss was recognised.

#### (vi) De-recognition of financial assets and liabilities

##### *Financial assets*

A financial asset is derecognised when its contractual rights to the cash flows that comprise the financial asset expire or substantially all the risks and rewards of the asset are transferred.

*Financial liabilities*

A financial liability is derecognised when the obligation under the liability is discharged, cancelled or expired. Gains and losses on derecognition are recognised within finance income and finance costs respectively.

Where an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a de-recognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognised in the income statement.

**(vii) Trade receivables**

Trade receivables are recognised initially at fair value and are subsequently measured at amortised cost reduced by any provision for impairment. A provision for impairment of trade receivables is established when there is objective evidence that the Group will not be able to collect all amounts due. Indicators of impairment would include financial difficulties of the debtor, likelihood of the debtor's insolvency, default in payment or a significant deterioration in credit worthiness. Any impairment is recognised in the income statement within 'net operating costs'. When a trade receivable is uncollectable, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against 'net operating costs' in the income statement.

**(viii) Trade payables**

Trade payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

**(q) Share based payments**

The fair value of cash settled share plans is recognised as a liability over the vesting period of the awards. Movements in that liability between accounting dates are recognised as an expense. The grant date fair value of the awards is determined from the market value of the shares at the date of award and adjusted for any market based vesting conditions attached to the award eg relative Total Shareholder Return ('TSR') performance. Fair values are subsequently re-measured at each accounting date to reflect the market value of shares at the measurement date and, where relevant, the number of awards expected to vest based on the current and anticipated TSR performance. If any awards are ultimately settled in shares, the liability is transferred directly to equity as part of the consideration for the equity instruments issued.

The Group's equity-settled share plans are settled either by the issue of shares by the relevant parent company, by the purchase of shares on market or by the use of shares previously acquired as part of a share buyback. The fair value of the share plans recognised as an expense over the expected vesting period with a corresponding entry to retained earnings for Rio Tinto plc plans and to other reserves for Rio Tinto Limited plans. If the cost of shares acquired to satisfy the plans exceeds the expense charged, the excess is taken to the appropriate reserve. The fair value of the share plans is determined at the date of grant, taking into account any market based vesting conditions attached to the award (eg TSR). The Group uses fair values provided by independent actuaries calculated using a lattice based option valuation model.

Non market based vesting conditions (eg earnings per share targets) are taken into account in estimating the number of awards likely to vest.

The estimate of the number of awards likely to vest is reviewed at each statement of financial position date up to the vesting date, at which point the estimate is adjusted to reflect the actual awards issued. No adjustment is made after the vesting date even if the awards are forfeited or not exercised.

Further information about the treatment of individual share based payment plans is provided in note 49.

**(r) Contingencies**

Contingent liabilities are not recognised in the financial statements but are disclosed by way of note unless their occurrence is remote.

Contingent assets are not recognised in the financial statement but they are disclosed by way of note if they are deemed probable.

**(s) Share capital**

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Where any group company purchases the Group's equity share capital (treasury shares), the consideration paid, including any directly attributable incremental costs (net of income taxes) is deducted from equity attributable to Rio Tinto's equity shareholders. Where such shares are subsequently reissued, any consideration received, net of any directly attributable incremental transaction costs and the related income tax effects, is included in equity attributable to Rio Tinto's equity shareholders.

**Critical accounting policies and estimates****(i) Dual listed company reporting**

As explained in detail in the 'Outline of Dual Listed Companies' Structure and basis of financial statements' section on page 136, the consolidated financial statements of the Rio Tinto Group deal with the results, assets and liabilities of both of the dual listed companies, Rio Tinto plc and Rio Tinto Limited, and their subsidiaries. In other words, Rio Tinto plc and Rio Tinto Limited are viewed as a single parent company with their respective shareholders being the shareholders in that single company.

The *2009 Annual report* satisfies the obligations of Rio Tinto Limited to prepare consolidated accounts under Australian company law, as amended by an order issued by the Australian Securities and Investments Commission on 27 January 2006 (as amended on 22 December 2006). The 2009 Financial statements disclose the effect of the adjustments to consolidated EU IFRS profit, consolidated total comprehensive income and consolidated shareholders' funds for the Group that would be required under the version of IFRS that is applicable in Australia ('Australian IFRS').

The US dollar is the presentation currency used in these financial statements, as it most reliably reflects the Group's global business performance.

## Notes to the financial statements continued

### 1 Principal accounting policies continued

#### (ii) Asset carrying values

Events or changes in circumstances can give rise to significant impairment charges or reversals of impairment provisions in a particular year. When such events or changes in circumstances impact on a particular asset or cash generating unit, its carrying value is assessed by reference to its recoverable amount, being the higher of fair value less costs to sell and value in use (being the net present value of expected future cash flows of the relevant cash generating unit). This is often estimated using discounted cash flow techniques.

Where the recoverable amounts of Group cash generating units are assessed by analyses of discounted cash flows, the resulting valuations are particularly sensitive to changes in long term commodity prices; exchange rates; operating costs; and discount rates.

The great majority of the Group's sales are based on prices denominated in US dollars. To the extent that the currencies of countries in which the Group produces commodities strengthen against the US dollar without commodity price offset; cash flows and, therefore, net present values are reduced. Management considers that over the long term, there is a tendency for movements in commodity prices to compensate to some extent for movements in the value of the US dollar (and vice versa). However, such compensating changes are not synchronised and do not fully offset each other.

Reviews of carrying values relate to cash generating units which, in accordance with IAS 36 'Impairment of Assets', are identified as the smallest identifiable group of assets that generates cash inflows, which are largely independent of the cash inflows from other assets. In some cases, the business units within the product groups consist of several operations with independent cash generating streams, which therefore constitute separate cash generating units.

Goodwill acquired through business combinations has been allocated to groups of cash generating units that are being managed as a combined business. These groups of cash generating units represent the lowest level within the Group at which goodwill is monitored for internal management purposes and these groups are not larger than the Group's reporting segments, which are its product groups.

The cash flow forecasts are based on best estimates of expected future revenues and costs. These may include net cash flows expected to be realised from extraction, processing and sale of mineralised material that does not currently qualify for inclusion in proven or probable ore reserves. Such non reserve material is included where there is a high degree of confidence in its economic extraction. This expectation is usually based on preliminary drilling and sampling of areas of mineralisation that are contiguous with existing reserves. Typically, the additional evaluation to achieve reserve status for such material has not yet been done because this would involve incurring costs earlier than is required for the efficient planning and operation of the mine.

Where the recoverable amount of a cash generating unit is dependent on the life of its associated ore body, expected future cash flows reflect long term mine plans, which are based on detailed research, analysis and iterative modelling to optimise the level of return from investment, output and sequence of extraction. The mine plan takes account of all relevant characteristics of the ore body, including waste to ore ratios, ore grades, haul distances, chemical and metallurgical properties of the ore impacting on process recoveries and capacities of processing equipment that can be used. The mine plan is therefore the basis for forecasting production output in each future year and for forecasting production costs.

Rio Tinto's cash flow forecasts are based on assessments of expected long term commodity prices, which for most commodities are derived from an analysis of the marginal costs of the producers of the relevant commodities. These assessments often differ from current price levels and are updated regularly.

In some cases, prices applying to some part of the future sales volumes of a cash generating unit are predetermined by existing sales contracts. The effects of such contracts are taken into account in forecasting future cash flows.

As denoted above, cost levels incorporated in the cash flow forecasts are based on the current long term mine plan or long term production plan for the cash generating unit. For value in use calculations used in impairment reviews, recent cost levels are considered, together with expected changes in costs that are compatible with the current condition of the business. Because future cash flows are estimates for the asset in its current condition, value in use does not reflect future cash flows associated with improving or enhancing an asset's performance.

The useful lives of the major assets of a cash generating unit are often dependent on the life of the ore body to which they relate. Where this is the case, the lives of mining properties, and their associated refineries, concentrators and other long lived processing equipment generally relate to the expected life of the ore body. The life of the ore body, in turn, is estimated on the basis of the long term mine plan. Where the major assets of a cash generating unit are not dependent on the life of a related ore body, management applies judgement in estimating the remaining service potential of long lived assets. In the case of smelters, factors affecting the remaining service potential include smelter technology and electricity contracts when the power is not sourced from the company's own electricity generating capacity.

Forecast cash flows are discounted to present values using Rio Tinto's weighted average cost of capital with appropriate adjustment for the risks associated with the relevant cash flows, to the extent that such risks are not reflected in the forecast cash flows. For final feasibility studies and ore reserve estimation, internal hurdle rates are used which are generally higher than the weighted average cost of capital.

Value in use and ore reserve estimates are based on the exchange rates current at the time of the evaluation. In final feasibility studies and estimates of fair value, a forecast of the long term exchange rate is made having regard to spot exchange rates, historical data and external forecasts.

Forecast cash flows for ore reserve estimation for JORC purposes and for impairment testing are generally based on Rio Tinto's long term price forecasts. For Aluminium, the prices used fall within the range of analyst's long term consensus forecasts current around the date of the evaluation.

All goodwill and intangible assets that are not yet ready for use or have an indefinite life are tested annually for impairment regardless of whether there has been any change in events or circumstances.

**(iii) Asset lives**

Intangible assets are considered to have indefinite lives when, based on an analysis of all of the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate cash flows for the Group. The factors considered in making this determination include the existence of contractual rights for unlimited terms; or evidence that renewal of the contractual rights without significant incremental cost can be expected for indefinite periods into the future in view of the Group's future investment intentions.

There are numerous uncertainties inherent in estimating ore reserves and assumptions that are valid at the time of estimation may change significantly when new information becomes available.

Changes in the forecast prices of commodities, exchange rates, production costs or recovery rates may change the economic status of reserves and may, ultimately, result in the reserves being restated. Such changes in reserves could impact on depreciation and amortisation rates, asset carrying values, deferred stripping calculations and provisions for close down, restoration and environmental clean up costs.

**(iv) Ore reserve estimates**

Rio Tinto estimates its ore reserves and mineral resources based on information compiled by Competent Persons as defined in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves of December 2004 (the JORC code). The amounts presented under EU and Australian IFRS are based on the reserves, and in some cases mineral resources, determined under the JORC code.

There are numerous uncertainties inherent in estimating ore reserves and assumptions that are valid at the time of estimation may change significantly when new information becomes available.

Changes in the forecast prices of commodities, exchange rates, production costs or recovery rates may change the economic status of reserves and may, ultimately, result in the reserves being restated. Such changes in reserves could impact on depreciation and amortisation rates, asset carrying values, deferred stripping calculations and provisions for close down, restoration and environmental clean up costs.

**(v) Close down, restoration and clean up obligations**

Provision is made for environmental remediation costs when the related environmental disturbance occurs, based on the net present value of estimated future costs.

Close down and restoration costs are a normal consequence of mining, and the majority of close down and restoration expenditure is incurred at the end of the life of the mine. The costs are estimated on the basis of a closure plan. The cost estimates are calculated annually during the life of the operation to reflect known developments, eg updated cost estimates and revisions to the estimated lives of operations, and are subject to formal review at regular intervals. Although the ultimate cost to be incurred is uncertain, the Group's businesses estimate their respective costs based on feasibility and engineering studies using current restoration standards and techniques. The initial closure provisions together with changes, other than those arising from the unwind of the discount applied in establishing the net present value of the provision, are capitalised within property, plant and equipment and depreciated over the lives of the assets to which they relate.

Clean up costs result from environmental damage that was not a necessary consequence of mining, including remediation, compensation and penalties. These costs are charged to the income statement. Provisions are recognised at the time the damage, remediation process and estimated remediation costs become known. Remediation procedures may commence soon after this point in time but may continue for many years depending on the nature of the disturbance and the remediation techniques.

As noted above, the ultimate cost of environmental disturbance is uncertain and cost estimates can vary in response to many factors including changes to the relevant legal requirements, the emergence of new restoration techniques or experience at other mine sites.

The expected timing of expenditure can also change, for example in response to changes in ore reserves or production rates or economic conditions. As a result there could be significant adjustments to the provision for close down and restoration and environmental clean up, which would affect future financial results.

**(vi) Overburden removal costs**

In open pit mining operations, it is necessary to remove overburden and other barren waste materials to access ore from which minerals can economically be extracted. The process of mining overburden and waste materials is referred to as stripping. During the development of a mine, before production commences, it is generally accepted that stripping costs are capitalised as part of the investment in construction of the mine.

Where a mine operates several open pits that are regarded as separate operations for the purpose of mine planning, stripping costs are accounted for separately by reference to the ore from each separate pit. If, however, the pits are highly integrated for the purpose of mine planning, the second and subsequent pits are regarded as extensions of the first pit in accounting for stripping costs. In such cases, the initial stripping of the second and subsequent pits is considered to be production phase stripping relating to the combined operation.

Stripping of waste materials continues during the production stage of the mine or pit. Some mining companies expense these production stage stripping costs as incurred, while others defer such stripping costs. In operations that experience material fluctuations in the ratio of waste materials to ore or contained minerals on a year to year basis over the life of the mine or pit, deferral of stripping costs reduces the volatility of the cost of stripping expensed in individual reporting periods. Those mining companies that expense stripping costs as incurred will therefore report greater volatility in the results of their operations from period to period.

## Notes to the financial statements continued

### 1 Principal accounting policies continued

Rio Tinto defers production stage stripping costs for those operations where this is the most appropriate basis for matching costs with the related economic benefits and the effect is material. Stripping costs incurred in the period are deferred to the extent that the current period ratio exceeds the life of mine or pit ratio. Such deferred costs are then charged against reported profits to the extent that, in subsequent periods, the ratio falls short of the life of mine or pit ratio. The life of mine or pit ratio is based on the proven and probable reserves of the mine or pit and is obtained by dividing the tonnage of waste mined either by the quantity of ore mined or by the quantity of minerals contained in the ore. In some operations, the quantity of ore is a more practical basis for matching costs with the related economic benefits where there are important co-products or where the grade of the ore is relatively stable from year to year.

The life of mine or pit waste-to-ore ratio is a function of an individual mine's pit design and therefore changes to that design will generally result in changes to the ratio. Changes in other technical or economic parameters that impact on reserves will also have an impact on the life of mine or pit ratio even if they do not affect the pit design. Changes to the life of mine or pit ratio are accounted for prospectively.

In the production stage of some operations, further development of the mine requires a phase of unusually high overburden removal activity that is similar in nature to preproduction mine development. The costs of such unusually high overburden removal activity are deferred and charged against reported profits in subsequent periods on a units-of-production basis. This accounting treatment is consistent with that for stripping costs incurred during the development phase of a mine or pit, before production commences.

Deferred stripping costs are included in property, plant and equipment or in investment in equity accounted units, as appropriate.

These form part of the total investment in the relevant cash generating unit, which is reviewed for impairment if events or changes in circumstances indicate that the carrying value may not be recoverable. Amortisation of deferred stripping costs is included in operating costs or in the Group's share of the results of its jointly controlled entities and associates as appropriate.

During 2009, production stage stripping costs incurred by subsidiaries and equity accounted operations were US\$174 million higher than the amounts charged against pre tax profit (2008: production stage costs exceeded the amounts charged against pre tax profit by US\$175 million). In addition, US\$59 million of deferred stripping has been written off in 2009 as part of the Diamonds businesses impairment.

The net book value carried forward in property, plant and equipment and in investments in jointly controlled entities and associates at 31 December 2009 was US\$1,171 million (2008: US\$1,026 million).

Information about the stripping ratios of the business units, including equity accounted units that account for the majority of the deferred stripping balance at 31 December 2009, along with the year in which deferred stripping is expected to be fully amortised, is set out in the following table:

	Actual stripping ratio for the year		Life of mine stripping ratio	
	2009	2008	2009	2008
Kennecott Utah Copper (2020) <sup>(a)</sup>	2.13	1.98	1.21	1.24
Grasberg Joint Venture (2015) <sup>(a)</sup>	3.42	3.27	3.00	2.87
Diavik (2012) <sup>(b)</sup>	1.17	1.23	1.02	1.20
Escondida (2043) <sup>(c)</sup>	0.11	0.12	0.14	0.10

- Notes
- (a) Stripping ratios shown are waste to ore.
  - (b) Diavik's stripping ratio is disclosed as bench cubic metre per carat. The 2009 deferred stripping ratio is based on a dual pit commercial production (A154 and A418) with the A154 open pit scheduled to end commercial production in the first quarter of 2010 and the A418 open pit scheduled to end commercial production in the third quarter of 2012.
  - (c) Escondida's stripping ratio is based on waste tonnes to pounds of copper mined.

Rio Tinto Borax capitalised stripping costs as part of a distinct period of new development during the production stage of the mine. Capitalisation stopped in 2004. The capitalised costs will be fully amortised in 2034.

#### (vii) Deferred tax on fair value adjustments

On transition to EU IFRS with effect from 1 January 2004, deferred tax was provided in respect of fair value adjustments on acquisitions in previous years. No other adjustments were made to the assets and liabilities recognised in such prior year acquisitions and, accordingly, shareholders' funds were reduced by US\$720 million on transition to EU IFRS primarily as a result of deferred tax on fair value adjustments to mining rights. In general, these mining rights are not eligible for income tax allowances. In such cases, the provision for deferred tax was based on the difference between their carrying value and their nil income tax base. The existence of a tax base for capital gains tax purposes was not taken into account in determining the deferred tax provision relating to such mineral rights because it is expected that the carrying amount will be recovered primarily through use and not from the disposal of the mineral rights. Also, the Group is only entitled to a deduction for capital gains tax purposes if the mineral rights are sold or formally relinquished.

For acquisitions after 1 January 2004 provision for such deferred tax on acquisition results in a corresponding increase in the amounts attributed to acquired assets and/or goodwill under EU IFRS.

#### (viii) Exploration

Under the Group's accounting policy, exploration and evaluation expenditure is not capitalised until the point is reached at which there is a high degree of confidence in the project's viability and it is considered probable that future economic benefits will flow to the Group.

The carrying values of exploration and evaluation assets are reviewed twice per annum by management and the results of these reviews are reported to the Audit committee. In the case of undeveloped projects, there may be only inferred resources to form a basis for the impairment review. The review is based on a status report regarding the Group's intentions for development of the undeveloped project. In some cases, the undeveloped projects are regarded as successors to ore bodies, smelters or refineries currently in production and may therefore benefit from existing infrastructure and equipment.

**(ix) Functional currency**

The determination of functional currency affects the carrying value of non current assets included in the statement of financial position and, as a consequence, the amortisation of those assets included in the income statement. It also impacts exchange gains and losses included in the income statement.

The functional currency for each entity in the Group, and for jointly controlled entities and associates, is the currency of the primary economic environment in which it operates. For many of Rio Tinto's entities, this is the currency of the country in which each operates. Transactions denominated in currencies other than the functional currency are converted to the functional currency at the exchange rate ruling at the date of the transaction unless hedge accounting applies. Monetary assets and liabilities denominated in foreign currencies are retranslated at year end exchange rates.

The US dollar is the currency in which the Group's financial statements are presented, as it most reliably reflects the global business performance of the Group as a whole.

On consolidation, income statement items are translated into US dollars at average rates of exchange. Statement of financial position items are translated into US dollars at year end exchange rates. Exchange differences on the translation of the net assets of entities with functional currencies other than the US dollar, and any offsetting exchange differences on net debt hedging those net assets, are recognised directly in the foreign currency translation reserve. Exchange gains and losses which arise on balances between Group entities are taken to the foreign currency translation reserve where the intragroup balance is, in substance, part of the Group's net investment in the entity.

The balance of the foreign currency translation reserve relating to an operation that is disposed of is transferred to the income statement at the time of the disposal.

The Group finances its operations primarily in US dollars but part of the Group's US dollar debt is located in subsidiaries having functional currencies other than the US dollar. Except as noted above, exchange gains and losses relating to such US dollar debt are charged or credited to the Group's income statement in the year in which they arise. This means that the impact of financing in US dollars on the Group's income statement is dependent on the functional currency of the particular subsidiary where the debt is located.

With the above exceptions, and except for derivative contracts which qualify as cash flow hedges, exchange differences are charged or credited to the income statement in the year in which they arise.

**(x) Underlying earnings**

The Group presents 'Underlying earnings' as an additional measure to provide greater understanding of the underlying business performance of its operations. The adjustments made to net earnings to arrive at Underlying earnings are explained in note 2.

**(xi) Post retirement benefits**

The difference between the fair value of the plan assets (if any) of post retirement plans and the present value of the plan obligations is recognised as an asset or liability on the statement of financial position. The Group has adopted the option under IAS 19 to record actuarial gains and losses directly in the Group's statement of comprehensive income.

The most significant assumptions used in accounting for post retirement plans are the long term rate of return on plan assets, the discount rate, the expected rate of long term inflation and the mortality assumptions.

The long term rate of return on plan assets is used to calculate interest income on pension assets, which is credited to the Group's income statement. The mortality assumption is used to project the length of time for which future pension payments will be made and the inflation assumption is used in projecting future increases in those payments. The discount rate is used to determine the net present value of those future payments and each year the unwinding of the discount on those liabilities is charged to the Group's income statement.

Valuations are carried out using the projected unit method. The expected rate of return on pension plan assets is determined as management's best estimate of the long term return on the major asset classes, ie equity, debt, property and other, weighted by the actual allocation of assets among the categories at the measurement date. The expected rate of return is calculated using geometric averaging.

The sources used to determine management's best estimate of long term returns are numerous and include country specific bond yields, which may be derived from the market using local bond indices or by analysis of the local bond market, and country specific inflation and investment market expectations derived from market data and analysts' or governments' expectations as applicable.

In particular, the Group estimates long term expected returns on equity based on the economic outlook, analysts' views and those of other market commentators. This is the most subjective of the assumptions used and it is reviewed regularly to ensure that it remains consistent with best practice.

The discount rate used in determining the service cost and interest cost charged to income is the market yield at the start of the year on high quality corporate bonds. For countries where there is no deep market in such bonds the yield on government bonds is used.

## Notes to the financial statements continued

### 1 Principal accounting policies continued

#### (xi) Post retirement benefits continued

For determining the present value of obligations shown on the statement of financial position, market yields at the statement of financial position date are used.

Details of the key assumptions are set out in note 50.

#### (xii) Deferred tax potentially recoverable on Group tax losses

The Group has carried forward losses; mainly in the UK, French and Canadian tax groups; that have the potential to reduce tax charges in future years. Deferred tax assets have been recognised on these tax losses to the extent their recovery is probable, having regard to the projected future taxable profits of the relevant tax groups.

The 'possible tax assets' on these losses totalled US\$1,882 million at 31 December 2009 (2008: US\$1,000 million).

Of these, US\$1,286 million have been recognised as deferred tax assets (2008: US\$899 million), leaving US\$596 million (2008: US\$101 million) unrecognised, as recovery is not considered probable. This amount excludes unrecognised capital losses which can only be recovered against future capital gains.

Within the UK tax group, US\$303 million in tax losses have been recognised as deferred tax assets (2008: US\$246 million), with no amounts unrecognised. Within the French tax group, US\$419 million in tax losses have been recognised as deferred tax assets (2008: US\$309 million) with US\$503 million unrecognised. Within the Canadian tax group, US\$393 million in tax losses have been recognised as deferred tax assets (2008: US\$172 million), with no amounts unrecognised.

#### (xiii) Contingencies

Disclosure is made of material contingent liabilities unless the possibility of any loss arising is considered remote. Contingencies are disclosed in note 35.

#### (xiv) Acquisition accounting

On the acquisition of a subsidiary, the purchase method of accounting is used whereby the purchase consideration is allocated to the identifiable assets, liabilities and contingent liabilities (identifiable net assets) on the basis of fair value at the date of acquisition.

## 2 Reconciliation of net earnings to Underlying earnings

Exclusions from Underlying earnings

	Pre-tax <sup>(i)</sup> 2009 US\$m	Taxation 2009 US\$m	Outside interests 2009 US\$m	Discontinued operations <sup>(i)</sup> 2009 US\$m	Net amount 2009 US\$m	Net amount 2008 US\$m
Profits less losses on disposal of interests in businesses <sup>(a)</sup>	692	(193)	–	–	499	1,470
Impairment charges <sup>(b)</sup>	(1,573)	445	25	–	(1,103)	(7,579)
Loss after tax from discontinued operations <sup>(b)</sup>	–	–	–	(449)	(449)	(827)
Exchange differences and gains/(losses) on derivatives:						
– Exchange gains/(losses) on US dollar net debt and intragroup balances <sup>(c)</sup>	368	(438)	14	–	(56)	960
– (Losses)/gains on currency and interest rate derivatives not qualifying for hedge accounting <sup>(d) (e)</sup>	(21)	12	18	–	9	(22)
– Gains/(losses) on commodity derivatives not qualifying for hedge accounting <sup>(f)</sup>	181	(106)	–	–	75	(95)
Chinalco break fee	(195)	13	–	–	(182)	–
Restructuring costs from global headcount reduction <sup>(g)</sup>	(321)	90	–	–	(231)	(57)
Other exclusions <sup>(h)</sup>	(56)	86	(18)	–	12	(477)
Total excluded from Underlying earnings	(925)	(91)	39	(449)	(1,426)	(6,627)
Net earnings	7,860	(2,076)	(463)	(449)	4,872	3,676
Underlying earnings	8,785	(1,985)	(502)	–	6,298	10,303

'Underlying earnings' is an alternative measure of earnings, which is reported by Rio Tinto to provide greater understanding of the underlying business performance of its operations. Underlying earnings and Net earnings both represent amounts attributable to Rio Tinto shareholders. Items (a) to (h) below are excluded from Net earnings in arriving at Underlying earnings.

- (a) Profits arising on the disposal of interests in businesses in 2009 relate principally to sales of the Corumba iron ore mine in Brazil, the Jacobs Ranch coal mine, the sale of 52 per cent of Rio Tinto's interest in Cloud Peak Energy Resources LLC (CPER) and are partially offset by a loss from the sale of Alcan Composites.  
Profits arising on the disposal of interests in businesses in 2008 relate principally to the sales of the Cortez gold mine and the Greens Creek mine.  
Profits arising on the disposal of interests in undeveloped projects which in 2009 includes gains on disposal of undeveloped potash assets in Argentina and Canada amounting to US\$797 million, net of tax, are not excluded from Underlying earnings. The 2008 profits relate principally to the disposal of the undeveloped Kintyre uranium project in Western Australia.
- (b) Charges relating to impairment of goodwill and other non-current assets other than undeveloped projects but including discontinued operations.  
The impairment charges of US\$1,103 million for the year ended 31 December 2009 related mainly to Alcan Engineered Products: US\$500 million, the Group's aluminium businesses: US\$212 million, the Group's diamond businesses: US\$348 million, and US\$43 million in other impairments. All impairments have been measured based upon an assessment of fair value.  
An impairment of US\$318 million (31 December 2008: US\$960 million) relating to the Alcan Packaging business has been recognised during the year ended 31 December 2009, and is included in 'Loss after tax from discontinued operations'. This impairment is based on an estimate of fair value less costs to sell, which is based on the Group's best estimate of expected proceeds to be realised on sale of Alcan Packaging, less an estimate of remaining costs to sell. 'Loss after tax from discontinued operations' of US\$449 million (31 December 2008: US\$827 million) also includes a US\$131 million tax charge (31 December 2008: US\$133 million tax benefit) relating to an increase in the Group's estimate of the tax to be paid on sale of the Alcan Packaging business.  
The weak economic environment continued to put downward pressure on the sales prices for these divestment businesses and resulted in the impairment of the Alcan Packaging businesses and Alcan Engineered Products businesses. The impairment charge related to the Group's aluminium businesses related mainly to the planned closure of certain smelters and was caused by a decrease in short term price assumptions at the date of the impairment review.  
The impairment to the Group's diamond business was caused by weak demand for luxury items and increased input costs.
- (c) The impairment charge of US\$7,579 million for the year ended 31 December 2008 related mainly to the Group's aluminium businesses: US\$6,127 million, and Alcan Engineered Products: US\$980 million. This includes amounts relating to equity accounted units of US\$15 million.
- (d) Exchange gains and losses on US dollar debt and intragroup balances.  
The 2009 tax on exchange gains and losses on external debt and intragroup balances includes tax charges on gains on US dollar denominated debt. However, a significant proportion of the pre-tax losses on intragroup balances are not subject to tax.
- (e) The 2008 tax on exchange gains and losses on external debt and intragroup balances included a benefit of US\$254 million through recovery of tax relating to prior years. It also included a tax relief for losses on US dollar denominated debt. The gains on intragroup balances were largely not subject to tax.
- (f) Valuation changes on currency and interest rate derivatives which are ineligible for hedge accounting, other than those embedded in commercial contracts.
- (g) The currency revaluation of embedded US dollar derivatives contained in contracts held by entities whose functional currency is not the US dollar.
- (h) Valuation changes on commodity derivatives, including those embedded in commercial contracts, that are ineligible for hedge accounting, but for which there will be an offsetting change in future Group earnings.
- (i) During 2009, the Group incurred further restructuring costs relating to the cost savings measures announced in December 2008.
- (j) Other credits and charges that, individually, or in aggregate if of a similar type, are of a nature or size to require exclusion in order to provide additional insight into underlying business performance.  
During 2008, the Group incurred advisory and other costs related to the rejection by the Board of the pre-conditional takeover proposal from BHP Billiton, which was withdrawn in November 2008. These costs totalled US\$270 million (net of tax) in 2008 and have been excluded from Underlying earnings. Other charges excluded from Underlying earnings in 2008 and 2009 comprise of costs relating to acquisitions, disposals and similar corporate projects.
- (k) Exclusions from Underlying earnings relating to equity accounted units and discontinued operations are stated after tax.

## Notes to the financial statements continued

**3 Net operating costs**

	Note	2009 US\$m	2008 US\$m
Raw materials and consumables		11,501	16,248
Amortisation of intangible assets	12	387	429
Depreciation of property, plant & equipment	13	3,040	3,046
Employment costs	4	6,198	6,603
Repairs and maintenance		1,771	1,960
Shipping costs		1,828	2,495
Other freight costs		756	815
Decrease/(increase) in finished goods and work in progress		517	(163)
Royalties		1,539	1,946
Amounts charged by jointly controlled entities <sup>(a)</sup>		2,420	2,473
Net foreign exchange losses/(gains)		123	(379)
Other external costs		3,127	2,230
Provisions (including exchange losses/(gains) on provisions)	27	930	265
Research and development		193	307
Costs included above qualifying for capitalisation		(136)	(259)
Other operating income		(376)	(375)
<b>Net operating costs (excluding items shown separately)</b>		<b>33,818</b>	<b>37,641</b>

(a) Amounts charged by jointly controlled entities mainly relate to toll processing but also include purchases from jointly controlled entities of bauxite and aluminium which are then processed by the product group or sold to third parties. Generally, purchases are in proportion to the Group's share of the jointly controlled entity but in 2009, US\$491 million (2008: nil) related to purchases of the other venturer's share of production.

Information on auditors' remuneration is included in note 43.

**4 Employment costs**

	Note	2009 US\$m	2008 US\$m
Employment costs			
- Wages and salaries		6,130	6,414
- Social security costs		101	113
- Net post retirement cost <sup>(a)</sup>	50	524	502
- Share option charge/(credit) <sup>(b)</sup>	49	177	(22)
		<b>6,932</b>	<b>7,007</b>
Less: charged within provisions		(734)	(404)
<b>Total employment costs</b>	<b>3</b>	<b>6,198</b>	<b>6,603</b>

(a) Post retirement costs include the aggregate service and interest cost of providing post retirement benefits under defined benefit plans, net of the related expected return on plan assets. Additional detail of the amount charged to the income statement in respect of post retirement plans, and the treatment of actuarial gains and losses, is shown in note 50.

(b) Further details of the Group's share options and other share based payment plans are given in note 49.

## 5 Impairment charges

	Pre-tax 2009 US\$m	Taxation 2009 US\$m	Outside interests 2009 US\$m	Net amount 2009 US\$m	Net amount 2008 US\$m
Aluminium <sup>(b)</sup>	(304)	67	25	(212)	(6,127)
Alcan Engineered Products <sup>(c)</sup>	(687)	187	–	(500)	(980)
Diamonds <sup>(e)</sup>	(525)	177	–	(348)	(107)
HIs melt® <sup>(f)</sup>	–	–	–	–	(182)
Other	(57)	14	–	(43)	(168)
<b>Total<sup>(a)</sup></b>	<b>(1,573)</b>	<b>445</b>	<b>25</b>	<b>(1,103)</b>	<b>(7,564)</b>

- (a) The majority of the 2009 pre-tax impairment charge relates to property, plant and equipment (US\$1,290 million) and intangible assets (US\$179 million), with the remainder relating to investments in equity accounted units. The majority of the 2008 impairment charge related to goodwill (US\$6,621 million), property, plant and equipment (US\$1,222 million) and intangible assets (US\$129 million), with the remainder relating to investments in equity accounted units.
- (b) The 2009 impairment charge related mainly to the planned closure of certain smelters, and was caused by a decrease in short term price assumptions at the date of the impairment review. The recoverable amount was based on fair value less costs to sell, and was assessed in line with the policy in note 1(i).
- The 2008 impairment charge related mainly to the writedown of goodwill resulting from the annual impairment review, due to the deferral of growth projects following significant weakening in economic and market circumstances, and increases in input costs.
- (c) Alcan Engineered Products is part of the Alcan group that was acquired in October 2007, and forms part of Other Operations. It manufactures engineered or fabricated aluminium products. On 1 December 2009, Rio Tinto announced that it had completed the sale of Alcan Composites for US\$349 million. The Group's intention is to sell the remaining businesses relating to Alcan Engineered Products. As such, the recoverable amount has been based on fair value less costs to sell, which represents the Group's best estimate of the expected proceeds to be realised from the sale of the remaining Alcan Engineered Products businesses, less an estimate of remaining costs to sell. The estimated proceeds are assessed in line with the policy in note 1(i).
- The weak economic environment continued to put downward pressure on the sales prices for these divestment businesses and resulted in the impairment of the property, plant and equipment relating to the Alcan Engineered Products businesses.
- (d) The specific details of the impairment review relating to Alcan Packaging are set out in note 19.
- (e) The impairment to the Group's Diamonds business during 2009 was caused by weak demand for luxury items and higher input costs. Impairment of property, plant and equipment was assessed by reference to the fair value less costs to sell of the cash generating units (CGUs). The determination of fair value less costs to sell was based on the policy in note 1(i). This estimate was derived from discounting projections of cash flows, using valuation assumptions that a buyer might be expected to apply.
- (f) In 2008, full provision was made against the carrying value of the HIs melt® operation, which is within the Iron ore product group. Operations at the Kwinana plant have been suspended and the Group's future role in developing this technology is under review, leading to doubt about the recoverability of the amount invested.
- (g) Total impairment charges in 2008, excluded from Underlying earnings, includes US\$15 million relating to equity accounted units, which is not included in the table above.

## 6 Share of profit after tax of equity accounted units

	2009 US\$m	2008 US\$m
Sales revenue <sup>(a)</sup>	3,020	3,801
Operating costs	(1,717)	(2,158)
Profit before finance items and taxation	1,303	1,643
Exchange gains on net debt	4	37
Gains/(losses) on currency and interest rate derivatives not qualifying for hedge accounting	9	(19)
Net interest payable	(55)	(45)
Amortisation of discount	(7)	(17)
Share of profit after tax of equity accounted units	23	36
Profit before taxation	1,277	1,635
Taxation	(491)	(596)
<b>Profit for the year (Rio Tinto share)</b>	<b>786</b>	<b>1,039</b>

(a) The sales revenue of equity accounted units excludes charges by jointly controlled entities to Group subsidiaries.

## 7 Interest receivable and payable

	Note	2009 US\$m	2008 US\$m
Interest receivable and similar income from:			
– Equity accounted units		36	43
– Other investments <sup>(a)</sup>		66	107
		102	150
Other interest receivable		18	54
<b>Total interest receivable and similar income</b>		<b>120</b>	<b>204</b>
Interest payable and similar charges <sup>(b)</sup>		(1,127)	(1,821)
Amounts capitalised	13	198	203
<b>Total interest payable and similar charges</b>		<b>(929)</b>	<b>(1,618)</b>

- (a) Interest income from other investments comprises US\$45 million (2008: US\$72 million) of interest income from bank deposits and US\$21 million (2008: US\$35 million) from other financial assets.
- (b) Interest payable and similar charges relates to interest on bank loans and other borrowings. This includes a fair value loss on the interest rate swaps designated as hedges of US\$59 million and an offsetting fair value gain on bank borrowings attributable to interest rate risk of US\$59 million (2008: fair value gain on the interest rate swaps of US\$669 million and a US\$655 million fair value loss on bank borrowings attributable to interest rate risk).

## Notes to the financial statements continued

### 8 Tax on profit

	Note	2009 US\$m	2008 US\$m
<b>UK taxation</b>			
Corporation tax at 28%			
– Current		1	–
– Deferred		–	(46)
		1	(46)
<b>Australian taxation</b>			
Corporation tax at 30%			
– Current		1,829	3,005
– Deferred		391	(812)
		2,220	2,193
<b>Other countries taxation</b>			
– Current		763	1,711
– Deferred		(908)	(116)
		(145)	1,595
<b>Total taxation charge</b>			
– Current		2,593	4,716
– Deferred	18	(517)	(974)
		2,076	3,742

	2009 US\$m	2008 US\$m
<b>Prima facie tax reconciliation</b>		
Profit before taxation	7,860	9,178
Deduct: share of profit after tax of equity accounted units	(786)	(1,039)
Parent companies' and subsidiaries' profit before tax	7,074	8,139
Prima facie tax payable at UK rate of 28%	1,981	2,279
Higher rate of taxation on Australian earnings at 30%	136	226
Impact of items excluded in arriving at Underlying earnings <sup>(a)</sup>	347	919
Adjustments to deferred tax liabilities following changes in tax rates	(22)	(25)
Other tax rates applicable outside the UK and Australia	113	206
Resource depletion and other depreciation allowances	(132)	(129)
Research, development and other investment allowances	(55)	(72)
Utilisation of previously unrecognised deferred tax assets	(36)	(160)
Unrecognised current year operating losses	105	163
Foreign exchange differences	(167)	197
Withholding taxes	73	95
Non-taxable gains on asset disposals <sup>(b)</sup>	(208)	–
Other items	(59)	43
<b>Total taxation charge <sup>(c)</sup></b>	<b>2,076</b>	<b>3,742</b>

(a) An analysis of the impact on the tax reconciliation of items excluded in arriving at Underlying earnings is given below:

	2009 US\$m	2008 US\$m
Impairment charges	(5)	1,806
Disposal of interests in businesses	–	136
Exchange losses/(gains) on intragroup balances	332	(723)
Exchange gains on external debt	–	(332)
Exchange losses/(gains) on derivatives and others	25	(19)
Other exclusions	(5)	51
	347	919

(b) The non-taxable gains on asset disposals relate to undeveloped potash assets in Argentina.

(c) This tax reconciliation relates to the parent companies, subsidiaries and proportionally consolidated units. The Group's share of profit of equity accounted units is net of tax charges of US\$491 million (2008: US\$596 million).

(d) The tax credit/(charge) relating to components of other comprehensive income is as follows:

	2009			2008		
	Attributable to shareholders of Rio Tinto US\$m	Outside interests US\$m	Total US\$m	Attributable to shareholders of Rio Tinto US\$m	Outside interests US\$m	Total US\$m
Tax on exchange adjustments	–	–	–	99	–	99
Cash flow hedge fair value losses/(gains):						
– Cash flow hedge fair value losses/(gains)	62	35	97	(11)	(8)	(19)
– Cash flow hedge losses transferred to the income statement	(10)	(10)	(20)	(77)	(35)	(112)
Gains/(losses) on available for sale securities	(1)	–	(1)	10	–	10
Gains on revaluation of available for sale securities transferred to the income statement	1	–	1	–	–	–
Actuarial losses on post retirement benefit plans	233	(1)	232	457	7	464
Deferred tax on share options	50	–	50	(179)	–	(179)
	335	24	359	299	(36)	263
Share of tax on other comprehensive income/(expense) of equity accounted units	(38)	–	(38)	(19)	–	(19)
<b>Tax relating to components of other comprehensive income/(expense) for the year <sup>(a)</sup></b>	<b>297</b>	<b>24</b>	<b>321</b>	<b>280</b>	<b>(36)</b>	<b>244</b>

(a) This includes US\$319 million (2008: US\$205 million) of deferred tax and US\$2 million (2008: US\$39 million) of current tax. See note 18.

## 9 Earnings/(loss) per ordinary share

	2009 Earnings US\$m	2009 Weighted average number of shares (millions)	2009 Per share amount <sup>(a)</sup> (cents)	2008 Earnings US\$m	2008 Weighted average number of shares (millions)	2008 Per share amount <sup>(a)</sup> (cents)
Basic earnings per share attributable to ordinary shareholders of Rio Tinto – continuing operations	5,321	1,763.6	301.7	4,503	1,570.1	286.8
Basic loss per share attributable to ordinary shareholders of Rio Tinto – discontinued operations	(449)	1,763.6	(25.5)	(827)	1,570.1	(52.7)
Total basic earnings per share – profit for the year <sup>(b)</sup>	4,872	1,763.6	276.2	3,676	1,570.1	234.1
Diluted earnings per share attributable to ordinary shareholders of Rio Tinto – continuing operations	5,321	1,769.6	300.7	4,503	1,577.3	285.5
Diluted loss per share attributable to ordinary shareholders of Rio Tinto – discontinued operations	(449)	1,769.6	(25.4)	(827)	1,577.3	(52.4)
Total diluted earnings per share – profit for the year <sup>(c)</sup>	4,872	1,769.6	275.3	3,676	1,577.3	233.1
Underlying earnings per share attributable to ordinary shareholders <sup>(d)</sup>						
– Basic <sup>(b)</sup>	6,298	1,763.6	357.1	10,303	1,570.1	656.2
– Diluted <sup>(c)</sup>	6,298	1,769.6	355.9	10,303	1,577.3	653.2

(a) The rights issues were at a discount to the then market price. Accordingly, earnings per share for all periods up to the date on which the shares were issued have been adjusted for the bonus element of the issues. The bonus factor for Rio Tinto plc was 1.2105 and for Rio Tinto Limited was 1.2679. The 2008 comparatives have been restated accordingly. Other information relating to the rights issues is shown in note 46.

(b) The weighted average number of shares is calculated as the average number of Rio Tinto plc shares outstanding not held as treasury shares of 1,366.1 million (2008 restated: 1,207.8 million) plus the average number of Rio Tinto Limited shares outstanding not held by Rio Tinto plc of 397.5 million (2008 restated: 362.3 million).

(c) For the purposes of calculating diluted earnings per share, the effect of dilutive securities of 6.0 million shares in 2009 (2008: 5.8 million shares) is added to the weighted average number of shares described in (b) above. This effect is calculated under the treasury stock method. The Group's only potential dilutive ordinary shares are share options for which terms and conditions are described in note 49.

(d) Underlying earnings per share is calculated from Underlying earnings, detailed information on which is given in note 2.

## Notes to the financial statements continued

**10 Dividends**

	2009 US\$m	2008 US\$m
Rio Tinto plc previous year Final dividend paid	670	838
Rio Tinto plc Interim dividend paid	–	679
Rio Tinto Limited previous year Final dividend paid	206	228
Rio Tinto Limited Interim dividend paid	–	188
<b>Dividends paid during the year</b>	<b>876</b>	<b>1,933</b>
 <b>Dividends per share: paid during the year (restated)</b>	55.6c	124.3c
<b>Dividends per share: proposed in the announcement of the results for the year (2008 restated)</b>	45.0c	55.6c
	Restated number of shares 2009 (millions)	Restated number of shares 2008 (millions)
Rio Tinto plc previous year Final	1,208.4	1,207.8
Rio Tinto plc Interim	–	1,208.2
Rio Tinto Limited previous year Final – fully franked at 30%	362.3	362.3
Rio Tinto Limited Interim – fully franked at 30%	–	362.3

The dividends paid in 2009 are based on the following US cents per share amounts: 2008 final (restated) – 55.6 cents, 2009 interim – nil (2008 dividends paid: 2007 final (restated) – 68.7 cents, 2008 interim (restated) – 55.6 cents). The 2008 and 2007 dividends per share have been restated using a number of shares which reflects the discounted price of the 2009 July rights issues ('the bonus factor'). Refer to note 46 for further details.

The number of shares on which the Rio Tinto Limited dividends are based excludes those shares held by Rio Tinto plc, in order that the dividends shown represent those paid to public shareholders. The number of shares on which Rio Tinto plc dividends are based excludes those held as treasury shares.

In addition, the directors of Rio Tinto announced a final dividend of 45.0 cents per share on 11 February 2010. This is expected to result in payments of US\$882 million (Rio Tinto plc: US\$686 million, Rio Tinto Limited US\$196 million). The dividends will be paid on 1 April 2010 to Rio Tinto plc shareholders on the register at the close of business on 26 February 2010 and to Rio Tinto Limited shareholders on the register at the close of business on 2 March 2010.

The proposed Rio Tinto Limited dividends will be franked out of existing franking credits or out of franking credits arising from the payment of income tax during 2010.

The approximate amount of the Rio Tinto Limited consolidated tax group's retained profits and reserves that could be distributed as dividends and franked out of credits, that arose from net payments of income tax in respect of periods up to 31 December 2009 (after deducting franking credits expected to be utilised on the 2009 final dividend declared), is US\$13,035 million.

**11 Goodwill**

	2009 US\$m	2008 US\$m
<b>Net book value</b>		
At 1 January	14,296	21,105
Adjustment on currency translation	156	(196)
Additions	–	8
Disposals	(184)	–
Impairment charges	–	(6,621)
At 31 December	14,268	14,296
– cost	20,854	21,123
– accumulated impairment	(6,586)	(6,827)
 At 1 January		
– cost	21,123	21,366
– accumulated impairment	(6,827)	(261)

## Impairment tests for goodwill

At 31 December 2009, goodwill has been allocated as follows:

	2009 US\$m	2008 US\$m
<b>Net book value</b>		
Aluminium	13,691	13,563
Australian Iron Ore	446	345
Other	131	388
	<b>14,268</b>	<b>14,296</b>

### Aluminium

The majority of the Group's goodwill has been allocated to cash generating units within the Aluminium group of cash generating units ('Aluminium'), which includes both Alcan and the aluminium businesses previously owned by Rio Tinto, which are now managed as a single business. A large component of Aluminium's carrying value relates to the former Alcan businesses purchased in 2007.

Aluminium's annual impairment review resulted in no impairment charge for 2009 (2008: US\$6,127 million after taxation). The recoverable amount has been assessed by reference to fair value less costs to sell, using discounted cash flows, in line with the policy in note 1(i).

In arriving at fair value less costs to sell, a post-tax discount rate of 6.8 per cent has been applied to the post-tax cash flows expressed in real terms. Fair value less costs to sell was determined by estimating cash flows for a period of 12 years. The cash flow projections are based on long term production plans. These cash flows are then aggregated with a 'terminal value'. The terminal value represents the value of cash flows beyond the twelfth year, incorporating an annual real term growth rate of one and a half percent, with a corresponding increase in capital expenditure to support the real term growth rate. Aluminium benefits from a global marketplace with substantial barriers to entry and there are a limited number of competitors who are able to access effectively the key resources necessary to make aluminium. In addition, continued global industrialisation is expected to support demand for aluminium. The operating cost levels included in the fair value assessment are calculated based on Aluminium's long term production plans. Price assumptions for inputs into the aluminium smelting process are based on analysis of market fundamentals and are made consistent with related output price assumptions. Approximately, 80 per cent of Aluminium's production is located in the first half of the industry cost curve. Aluminium's intention is to maintain and, where possible, improve its relative position on the industry cash cost curve.

The key assumptions to which the calculation of fair value less costs to sell for Aluminium is most sensitive are the long term aluminium price; the Canadian dollar and Australian dollar exchange rates against the US dollar; operating costs; and discount rates. Cash flows for the periods included in the projections were translated into the functional currency using the Group's estimate of future exchange rates. Future selling prices and operating costs have been estimated in line with the policy in note 1(i). Management believes that, currently, there are no reasonably possible changes in any of the key assumptions, that would lead to the recoverable amount being below the carrying amount, except for the long term aluminium price.

The long term aluminium price used in the terminal year of the fair value calculations include a component to reflect the impact of carbon pricing. The Group's price without this carbon element is within the range of market consensus of US\$2,014 to US\$2,578 per tonne, with an average of US\$2,347 per tonne, in real terms. The carbon element within the long term price used in the fair value calculations is based on a price per tonne of carbon dioxide ('CO<sub>2</sub>') emissions. This price is also comparable to the range published by market commentators, of between US\$10 and US\$35 per tonne of carbon dioxide emissions in real terms. The relationship between the price per tonne of carbon dioxide emissions and the price per tonne of aluminium is dependent on how many tonnes of carbon dioxide are used per tonne of aluminium produced by marginal cost smelters. Industry data show that emissions for all producers range from about two tonnes to in excess of 15 tonnes of CO<sub>2</sub> per tonne of aluminium produced, depending on the primary energy source used to generate the consumed electric power. The weighted industry average for all producers is approximately 8-10 tonnes of CO<sub>2</sub> per tonne of aluminium. The assumptions used in the Group's long term aluminium price used in the terminal year imply a carbon emission intensity for the marginal producers above the weighted industry average but below the top end of the industry range.

Based on the assessment of fair value less costs to sell, the recoverable amount exceeds the carrying value by approximately 21 per cent. The calculation is highly sensitive to changes in the long term aluminium price, and an eight per cent decrease in the long term aluminium price, in isolation, would lead to the fair value less costs to sell of Aluminium being equal to its carrying amount. However, management believe that a decrease in the long term aluminium price would have an associated beneficial impact on input costs which would, to a certain extent, offset the impact of the change in the long term aluminium price. In addition, the assumed relationship between the long term aluminium price and the Australian and Canadian currencies provides further natural protection in the long term (see also note 33 – Financial risk management).

### Australian Iron Ore

The recoverable amount of the goodwill relating to Australian Iron Ore has been assessed by reference to fair value less costs to sell. Valuations are based on cash flow projections that incorporate best estimates of selling prices, ore grades, production rates, future sustaining capital expenditure and production costs over the life of each mine. In line with normal practice in the mining industry, the cash flow projections are based on long term mine plans covering the expected life of each operation. Therefore, the projections generally cover periods well in excess of five years.

Assumptions about selling prices, operating costs, exchange rates, and discount rates are particularly important in these valuations.

## Notes to the financial statements continued

### 11 Goodwill continued

Future selling prices and operating costs have been estimated in line with the policy in note 1(i). Long term average selling prices are forecast taking account of estimates of the costs of producers of each commodity. Forecasts of operating costs are based on detailed mine plans which take account of all relevant characteristics of the ore body.

Goodwill relating to Australian Iron Ore has been reviewed applying a discount rate of 6.8 per cent to the post-tax cash flows expressed in real terms. If assessed based on pre-tax cash flows expressed in real terms, the equivalent pre-tax discount rate would be around 9.5 per cent.

There are no reasonably possible changes in key assumptions, which would cause the goodwill allocated to Australian Iron Ore to be impaired.

#### Other

The recoverability of the remaining goodwill, which is included within Other in the table above, has been assessed by reference to fair value, using assumptions consistent with those described above. The recoverable amounts were determined to be in excess of carrying value, and there are no reasonably possible changes in key assumptions that would cause the remaining goodwill to be impaired by a significant amount.

### 12 Intangible assets

Year ended 31 December 2009	Exploration and evaluation <sup>(a)</sup> US\$m	Trademarks, patented and non patented technology US\$m	Contract based intangible assets <sup>(b)</sup> US\$m	Other intangible assets US\$m	Total US\$m
Net book value					
At 1 January 2009	133	444	5,208	500	6,285
Adjustment on currency translation	10	6	2	71	89
Expenditure during the year	2	–	–	53	55
Amortisation for the year	–	(25)	(188)	(174)	(387)
Impairment charges	–	(23)	(156)	–	(179)
Subsidiaries now equity accounted	–	–	–	(2)	(2)
Subsidiaries no longer consolidated	–	(113)	(54)	–	(167)
Disposals, transfers and other movements	–	–	(10)	46	36
At 31 December 2009	145	289	4,802	494	5,730
– cost	145	398	5,445	1,062	7,050
– accumulated amortisation	–	(109)	(643)	(568)	(1,320)

Year ended 31 December 2008	Exploration and evaluation <sup>(a)</sup> US\$m	Trademarks, patented and non patented technology US\$m	Contract based intangible assets <sup>(b)</sup> US\$m	Other intangible assets US\$m	Total US\$m
Net book value					
At 1 January 2008	152	568	5,500	584	6,804
Adjustment on currency translation	(10)	(9)	(6)	(69)	(94)
Expenditure during the year	–	–	–	105	105
Amortisation for the year	–	(44)	(230)	(155)	(429)
Impairment charges	–	(57)	(69)	(3)	(129)
Disposals, transfers and other movements	(9)	(14)	13	38	28
At 31 December 2008	133	444	5,208	500	6,285
– cost	133	565	5,532	829	7,059
– accumulated amortisation	–	(121)	(324)	(329)	(774)
At 1 January 2008	152	576	5,529	820	7,077
– cost	–	(8)	(29)	(236)	(273)

(a) Exploration and evaluation: useful life not determined until transferred to property, plant & equipment.

(b) The Group benefits from certain intangible assets acquired with Alcan including power supply contracts, customer contracts and water rights. The water rights are expected to contribute to the efficiency and cost effectiveness of operations for the foreseeable future: accordingly, these rights are considered to have indefinite lives and are not subject to amortisation. These water rights constitute the majority of the amounts in the column of the above table entitled 'Contract based intangible assets'.

Intangible assets with indefinite lives were provisionally valued at acquisition based on the advice of expert valuation consultants and, subsequently this valuation was finalised in 2008. The carrying values are reviewed for impairment annually or at any time an indicator of impairment is considered to exist. They are reviewed for impairment as part of the cash generating units to which they relate. The water rights have been allocated to cash generating units within Aluminium.

In 2009, the recoverable amount of these cash generating units was determined based on fair value less costs to sell, using a methodology and assumptions consistent with those described in note 1(i) and note 11. No impairment of these indefinite-lived intangible assets was recognised during 2009, as the fair value less costs to sell of the related cash generating units was in excess of their carrying amounts.

In 2008, the recoverable amount of these cash generating units was determined based on value in use, using a methodology and assumptions consistent with those described in note 1(i). No impairment of these indefinite-lived intangible assets was recognised during 2008, as the value in use of the related cash generating units was in excess of their carrying amounts.

(c) There are no intangible assets either pledged as security or held under restriction of title.

### Exploration and evaluation expenditure

The charge for the year and the net amount of intangible assets capitalised during the year are as follows:

	2009 US\$m	2008 US\$m
Net proceeds/(expenditure) in the year (net of proceeds of US\$932 million (2008: US\$673 million) on disposal of undeveloped projects)	486	(440)
Changes in accruals (including impairment of undeveloped projects of nil (2008: US\$156 million) and non cash proceeds on disposal of undeveloped projects)	(104)	(205)
Amount capitalised during the year	(2)	–
Net credit/(charge) for the year	380	(645)
<b>Reconciliation to income statement</b>		
Exploration and evaluation costs	(514)	(1,134)
Profit on disposal of interests in undeveloped projects	894	489
Net credit/(charge) for the year	380	(645)

## 13 Property, plant and equipment

Year ended 31 December 2009	Mining properties and leases <sup>(a)</sup> US\$m	Land and buildings <sup>(b)</sup> US\$m	Plant and equipment US\$m	Capital works in progress US\$m	Total US\$m
Net book value					
At 1 January 2009	6,118	5,706	22,112	7,817	41,753
Adjustment on currency translation	1,130	349	2,890	1,257	5,626
Capitalisation of additional closure costs (note 27)	268	–	–	–	268
Interest capitalised <sup>(c)</sup> (note 7)	8	–	9	181	198
Additions	242	115	1,346	3,108	4,811
Depreciation for the year <sup>(a)</sup>	(412)	(364)	(2,264)	–	(3,040)
Impairment charges, net of reversals	(170)	(308)	(473)	(321)	(1,272)
Disposals	4	(16)	(49)	(21)	(82)
Subsidiaries now equity accounted	(250)	(156)	(476)	(349)	(1,231)
Subsidiaries no longer consolidated	(319)	(184)	(503)	(6)	(1,012)
Transfers and other movements <sup>(d)</sup>	119	816	3,003	(4,154)	(216)
At 31 December 2009	6,738	5,958	25,595	7,512	45,803
– cost	11,028	8,973	41,990	8,154	70,145
– accumulated depreciation	(4,290)	(3,015)	(16,395)	(642)	(24,342)
Fixed assets held under finance leases <sup>(e)</sup>	–	21	67	–	88
Other fixed assets pledged as security <sup>(f)</sup>	6	15	1,703	27	1,751

Refer to notes on page 164.

## Notes to the financial statements continued

## 13 Property plant and equipment continued

Year ended 31 December 2008	Mining properties and leases <sup>(a)</sup> US\$m	Land and buildings <sup>(b)</sup> US\$m	Plant and equipment US\$m	Capital works in progress US\$m	Total US\$m
Net book value					
At 1 January 2008	7,131	5,384	23,955	5,498	41,968
Adjustment on currency translation	(1,075)	(374)	(2,787)	(1,050)	(5,286)
Capitalisation of additional closure costs (note 27)	380	–	–	13	393
Interest capitalised <sup>(c)</sup> (note 7)	13	–	–	190	203
Additions	234	296	1,861	6,581	8,972
Depreciation for the year <sup>(a)</sup>	(517)	(336)	(2,178)	(15)	(3,046)
Impairment charges, net of reversals	(99)	(219)	(792)	(112)	(1,222)
Disposals	–	(16)	(64)	(15)	(95)
Subsidiaries no longer consolidated	(48)	(4)	(56)	(6)	(114)
Transfers and other movements <sup>(d)</sup>	99	975	2,173	(3,267)	(20)
At 31 December 2008	6,118	5,706	22,112	7,817	41,753
– cost	9,496	7,894	35,140	8,091	60,621
– accumulated depreciation	(3,378)	(2,188)	(13,028)	(274)	(18,868)
At 1 January 2008					
– cost	10,911	7,347	36,265	5,858	60,381
– accumulated depreciation	(3,780)	(1,963)	(12,310)	(360)	(18,413)
Fixed assets held under finance leases <sup>(e)</sup>	–	21	19	–	40
Other fixed assets pledged as security <sup>(f)</sup>	20	–	1,400	7	1,427

- (a) Mining properties include deferred stripping costs of US\$900 million (2008: US\$820 million). Amortisation of deferred stripping costs of US\$3 million (2008: US\$35 million) is included within 'Depreciation for the year'. There was also US\$59 million (2008: nil) impairment of deferred stripping costs charged to the income statement.
- (b) At 31 December 2009, the net balance sheet amount for land and buildings includes freehold US\$5,834 million (2008: US\$5,557 million); long leasehold US\$83 million (2008: US\$76 million); and short leasehold US\$41 million (2008: US\$73 million).
- (c) Interest is capitalised at a rate based on the Group's cost of borrowing or at the rate on project specific debt, where applicable. The Group's average borrowing rate used for capitalisation of interest is 4.2 per cent (2008: 3.9 per cent).
- (d) 'Transfers and other movements' includes reclassifications between categories.
- (e) The finance leases under which these assets are held are disclosed in note 23.
- (f) Excludes assets held under finance leases. Fixed assets pledged as security represent amounts pledged as collateral against US\$224 million (2008: US\$234 million) of loans, which are included in note 22.

## 14 Investments in equity accounted units

	2009 US\$m	2008 US\$m
Summary balance sheet (Rio Tinto share)		
Rio Tinto's share of assets		
Non current assets		
Current assets	9,707	7,733
Current assets	2,329	1,921
	12,036	9,654
Rio Tinto's share of liabilities		
Current liabilities	(1,089)	(1,551)
Non current liabilities	(4,212)	(3,050)
	(5,301)	(4,601)
Rio Tinto's share of net assets <sup>(a)</sup>	6,735	5,053

(a) Further details of investments in jointly controlled entities and associates are set out in notes 38 and 39.

At 31 December 2009, the quoted value of the Group's share in associates having shares listed on recognised stock exchanges was US\$1,230 million (2008: US\$149 million).

Investments in equity accounted units at 31 December 2009 include goodwill of US\$1,782 million (2008: US\$1,582 million).

## 15 Net debt of equity accounted units (excluding amounts due to Rio Tinto)

	Group interest 2009 %	Rio Tinto share of net debt 2009 US\$m	Group interest 2008 %	Rio Tinto share of net debt 2008 US\$m
<b>Jointly controlled entities</b>				
Minera Escondida Limitada	30.0	226	30.0	427
Sohar Aluminium Company LLC	20.0	343	20.0	336
Queensland Alumina Limited (QAL)	80.0	18	80.0	(13)
Halco Mining Inc.	45.0	37	45.0	28
Alcan Ningxia Aluminium Company Limited	–	–	50.0	45
Richards Bay Minerals <sup>(d)</sup>	37.0	199	–	–
<b>Associates</b>				
Tisand (Pty) Limited <sup>(d)</sup>	–	–	50.0	50
Ivanhoe Mines Ltd	19.7	(58)	9.9	(10)
Port Waratah Coal Services	27.6	225	27.6	184
Mineração Rio do Norte SA	12.0	36	12.0	29
Cloud Peak Energy Resources LLC	48.3	170	–	–
Other equity accounted units	–	(99)	–	(83)
		<b>1,097</b>		<b>993</b>

- (a) In accordance with IAS 28 and IAS 31, the Group includes its net investment in equity accounted units in its consolidated statement of financial position. This investment is net of the Group's share of the net debt of such units, which is set out above. Further details of investments in jointly controlled entities and associates are set out in notes 38 and 39.
- (b) Some of the debt of equity accounted units is subject to financial and general covenants.
- (c) None of the debt shown above is with recourse to Rio Tinto at 31 December 2009 (2008: US\$292 million).
- (d) On 9 December, an agreement was signed with a Broad-Based Black Economic Empowerment (BBBEE) Consortium transferring 26 per cent of the Group's interest in Richards Bay Minerals ('RBM') to a group comprising local communities, investors and RBM employees. At the same time, the Group's interest in RBM was restructured such that the 2009 net debt balance relates to the restructured holding in RBM which includes Tisand (Pty) Limited. The 2008 balance relates only to Tisand (Pty) Limited.

## 16 Inventories

	2009 US\$m	2008 US\$m
Raw materials and purchased components	1,120	1,100
Consumable stores	1,278	1,108
Work in progress	1,410	1,800
Finished goods and goods for resale	1,365	1,765
	<b>5,173</b>	<b>5,773</b>
Comprising:		
Expected to be used within one year	4,889	5,607
Expected to be used after more than one year	284	166
	<b>5,173</b>	<b>5,773</b>

Inventory write downs amounting to US\$99 million (2008: US\$280 million) were recognised during the year.

## Notes to the financial statements continued

**17 Trade and other receivables**

	Non current 2009 US\$m	Current 2009 US\$m	Non current 2008 US\$m	Current 2008 US\$m
Trade receivables	14	3,442	–	3,792
Provision for doubtful debts	–	(62)	–	(71)
Trade receivables – net	14	3,380	–	3,721
Amounts due from equity accounted units	320	197	–	253
Other receivables	247	641	166	962
Pension surpluses (note 50)	15	2	137	23
Prepayment of tolling charges to jointly controlled entities <sup>(a)</sup>	424	–	435	–
Other prepayments	355	227	373	442
	<b>1,375</b>	<b>4,447</b>	<b>1,111</b>	<b>5,401</b>

(a) Rio Tinto Aluminium has made certain prepayments to jointly controlled entities for toll processing of bauxite and alumina. These prepayments will be charged to Group operating costs as processing takes place.

There is no material element of trade and other receivables that is interest bearing.

Due to their short term maturities, the fair value of trade and other receivables approximates their carrying value.

At 31 December 2009, trade and other receivables of US\$62 million (2008: US\$71 million) were impaired. The majority of these receivables were more than 90 days overdue.

At 31 December 2009, trade and other receivables of US\$454 million (2008: US\$427 million) were past due but not impaired. The ageing of these receivables is as follows:

	2009 US\$m	2008 US\$m
less than 30 days overdue	262	242
between 30 and 60 days overdue	93	101
between 60 and 90 days overdue	18	40
more than 90 days overdue	81	44
	<b>454</b>	<b>427</b>

These relate to a number of customers for whom there is no recent history of default or other indicators of impairment.

With respect to trade and other receivables that are neither impaired nor past due, there are no indications as of the reporting date that the debtors will not meet their payment obligations.

The provision for doubtful trade receivables decreased by US\$9 million in 2009 (2008: US\$1 million), of which US\$12 million was from net reversals of provisions credited within other external costs and US\$3 million other movements mainly from currency translation.

## 18 Deferred taxation

	2009 US\$m	2008 US\$m
At 1 January	2,687	4,327
Adjustment on currency translation	297	(287)
Credited to the income statement	(517)	(974)
Credited to Statement of comprehensive income <sup>(a)</sup>	(319)	(205)
Subsidiaries no longer consolidated	(82)	–
Subsidiaries now equity accounted	(14)	–
Transfer from asset held for sale	(190)	–
Other movements <sup>(b)</sup>	211	(174)
<b>At 31 December</b>	<b>2,073</b>	<b>2,687</b>
Comprising:		
– deferred tax liabilities <sup>(c)</sup>	4,304	4,054
– deferred tax assets <sup>(c)</sup>	(2,231)	(1,367)

Deferred tax balances for which there is a right of offset within the same jurisdiction are presented net on the face of the balance sheet as permitted by IAS 12. The closing deferred tax liabilities and assets, prior to this offsetting of balances, are shown below.

	UK tax US\$m	Australian tax US\$m	Other countries' tax US\$m	Total 2009 US\$m	Total 2008 US\$m
<b>Deferred tax liabilities arising from:</b>					
Accelerated capital allowances	94	1,750	4,138	5,982	6,468
Post retirement benefits	–	–	–	–	29
Unremitted earnings	–	–	616	616	340
Unrealised exchange losses	–	47	37	84	493
Other temporary differences	1	347	246	594	161
	95	2,144	5,037	7,276	7,491
<b>Deferred tax assets arising from:</b>					
Capital allowances	–	(48)	(15)	(63)	(202)
Provisions	(71)	(737)	(1,100)	(1,908)	(1,468)
Post retirement benefits	(167)	(30)	(1,359)	(1,556)	(1,129)
Tax losses	(303)	(132)	(851)	(1,286)	(899)
Unrealised exchange losses	–	(149)	–	(149)	(1,076)
Other temporary differences	(11)	(95)	(135)	(241)	(30)
	(552)	(1,191)	(3,460)	(5,203)	(4,804)
<b>(Credited)/charged to the income statement</b>					
(Decelerated)/accelerated capital allowances	(11)	177	(554)	(388)	(132)
Provisions	(32)	(231)	35	(228)	203
Post retirement benefits	11	8	(13)	6	100
Tax losses	15	(119)	(344)	(448)	20
Tax on unremitted earnings	–	4	(22)	(18)	22
Unrealised exchange losses	–	577	41	618	(1,039)
Other temporary differences	17	(25)	(51)	(59)	(148)
	–	391	(908)	(517)	(974)

- (a) The amounts credited directly to the Statement of comprehensive income relate to tax relief on share options, provisions for tax on exchange differences on intragroup loans qualifying for reporting as part of the net investment in subsidiaries, on cash flow hedges and on actuarial gains and losses on pension schemes and post retirement healthcare plans.
- (b) 'Other movements' include deferred tax relating to tax payable recognised by subsidiary holding companies on the profits of the equity accounted units to which it relates, as well as the movements in the estimated tax accrual relating to the divestment of the Alcan Packaging businesses.
- (c) The deferred tax liability of US\$4,304 million (2008: US\$4,054 million) includes US\$4,091 million (2008: US\$3,866 million) due in more than one year. The deferred tax asset of US\$2,231 million (2008: US\$1,367 million) includes US\$2,109 million (2008: US\$594 million) receivable in more than one year.
- (d) US\$1,426 million (2008: US\$1,311 million) of potential deferred tax assets have not been recognised as assets in these accounts. There is a time limit for the recovery of US\$20 million of these potential assets (2008: US\$32 million), US\$620 million (2008: US\$1,067 million) of the potential assets relates to realised or unrealised capital losses, recovery of which depends on the existence of capital gains in future years. US\$503 million (2008: US\$543 million) of the potential assets relates to trading losses in France, which were acquired as part of the Alcan acquisition.
- (e) Deferred tax is not recognised on the unremitted earnings of subsidiaries and jointly controlled entities where the Group is able to control the timing of the remittance and it is probable that there will be no remittance in the foreseeable future. If these earnings were remitted, tax of US\$888 million (2008: US\$1,130 million) would be payable. The reduction from prior year is due to the introduction of an exemption from taxation for foreign dividends in the UK in 2009.
- (f) There is a limited time period for the recovery of US\$401 million (2008: US\$187 million) of tax losses which have been recognised as deferred tax assets in the financial statements.

## Notes to the financial statements continued

### 19 Assets held for sale

At 31 December 2009 and 2008, assets and liabilities held for sale mainly comprise Alcan's Packaging group ('Packaging'). In the announcement of Rio Tinto's offer for Alcan on 12 July 2007, it was stated that Rio Tinto and Alcan had agreed to divest Packaging. As Packaging was acquired with a view to resale, its results are excluded from the Group's profit from continuing operations.

An impairment of US\$318 million (31 December 2008: US\$960 million) relating to the Packaging business has been recognised during the year ended 31 December 2009, and is included in 'Loss after tax from discontinued operations'. 'Loss after tax from discontinued operations' of US\$449 million (31 December 2008: US\$827 million) also includes a US\$131 million tax charge (31 December 2008: US\$133 million tax benefit) relating to an increase in the Group's estimate of the tax to be paid on sale of the Packaging business.

Packaging's fair value less costs to sell represents the Group's best estimate of the expected proceeds to be realised from the sale of Packaging, less an estimate of remaining costs to sell. This estimate is based on proceeds from the sale of the global pharmaceuticals, global tobacco, food Europe and food Asia divisions to Amcor, which was completed on 1 February 2010; proceeds from the sale of the Food Americas division to Bemis, which was announced on 6 July 2009; and an estimate of fair value less costs to sell for Packaging's remaining businesses, assessed in line with the policy in note 1(i).

Packaging's impairment reduced the 'Assets held for sale' line of the Group's statement of financial position.

### 20 Other financial assets

	Non current 2009 US\$m	Current 2009 US\$m	Non current 2008 US\$m	Current 2008 US\$m
Currency and commodity contracts: designated as hedges	–	8	38	60
Derivatives and embedded derivatives not related to net debt: not designated as hedges <sup>(a)</sup>	65	226	–	87
Equity shares and quoted funds	439	219	150	111
Other investments, including loans	337	168	478	2
Other liquid resources (non cash equivalent)	–	73	–	4
	<b>841</b>	<b>694</b>	<b>666</b>	<b>264</b>

(a) Derivatives and embedded derivatives not designated as hedges include amounts of US\$65 million (2008: US\$21 million) which mature beyond one year.

Detailed information relating to other financial assets is given in note 34.

### 21 Cash and cash equivalents

	2009 US\$m	2008 US\$m
Cash at bank and in hand	831	629
Short term bank deposits	3,402	552
	4,233	1,181
Bank overdrafts repayable on demand (unsecured)	(91)	(147)
<b>Balance per Group cash flow statement</b>	<b>4,142</b>	<b>1,034</b>

Cash and cash equivalents include US\$16 million (2008: US\$97 million) for which there are restrictions on remittances.

## 22 Borrowings

	Notes	Non current 2009 US\$m	Current 2009 US\$m	Non current 2008 US\$m	Current 2008 US\$m
Borrowings at 31 December					
<b>Syndicated bank loans <sup>(a)</sup></b>		<b>8,480</b>	<b>–</b>	<b>19,050</b>	<b>8,846</b>
<b>Other bank loans</b>		<b>–</b>	<b>–</b>	<b>–</b>	<b>582</b>
<b>Commercial paper</b>		<b>–</b>	<b>–</b>	<b>–</b>	<b>90</b>
<b>Other loans</b>					
Finance leases	23	104	19	61	28
Rio Tinto Finance (USA) Limited Bonds 7.125% 2013		100	–	100	–
Rio Tinto Finance (USA) Limited Bonds 5.875% 2013 <sup>(c)</sup>		2,622	–	2,664	–
Rio Tinto Finance (USA) Limited Bonds 6.5% 2018 <sup>(c)</sup>		1,878	–	1,953	–
Rio Tinto Finance (USA) Limited Bonds 7.125% 2028 <sup>(c)</sup>		871	–	912	–
Rio Tinto Finance (USA) Limited Bonds 8.900% 2014		1,967	–	–	–
Rio Tinto Finance (USA) Limited Bonds 9.250% 2019		1,449	–	–	–
Colowyo Coal Company L.P. Bonds 9.56% 2011		23	–	23	9
Colowyo Coal Company L.P. Bonds 10.19% 2016		69	5	100	–
Alcan Inc. Debentures 6.45% due 2011		406	–	410	–
Alcan Inc. Global Notes 4.875% due 2012		494	–	497	–
Alcan Inc. Global Notes 4.50% due 2013		486	–	481	–
Alcan Inc. Global Notes 5.20% due 2014		495	–	493	–
Alcan Inc. Global Notes 5.00% due 2015		485	–	496	–
Alcan Inc. Debentures 7.25% due 2028		109	–	109	–
Alcan Inc. Debentures 7.25% due 2031		437	–	439	–
Alcan Inc. Global Notes 6.125% due 2033		737	–	737	–
Alcan Inc. Global Notes 5.75% due 2035		281	–	281	–
European Medium Term Notes <sup>(b)</sup>		–	322	295	–
Other secured loans		325	63	310	10
Other unsecured loans		337	347	313	322
<b>Total borrowings</b>		<b>22,155</b>	<b>756</b>	<b>29,724</b>	<b>9,887</b>

(a) In support of its acquisition of Alcan Inc. in 2007, the Group arranged for US\$40 billion in term loans and revolving credit facilities, which were fully underwritten and subsequently syndicated (the 'Syndicated bank loans'). The Syndicated bank loans were divided into four facilities, as follows:

	Facility A	Facility B	Facility C	Facility D
<b>Facility amount (US\$ billions)</b>	15	10	5	10
Type	Term Loan	Revolving	Revolving	Term Loan
Due	October 2009	October 2010	October 2012	December 2012
Repayment	Bullet	Bullet	Bullet	Bullet
<b>Outstanding balance (US\$ billions)</b>	<b>Total</b>			
At 31 December 2009	8.5	–	–	–
At 31 December 2008	28.0	8.9	9.1	–
<b>Undrawn facilities (US\$ billions)</b>				
At 31 December 2009	–	2.1	5.0	–
At 31 December 2008	–	0.9	5.0	–

The amounts outstanding under these facilities are shown net of the unamortised costs of obtaining the facilities. In addition to the syndicated bank loan facilities shown above, there are US\$2.3 billion of unused committed bilateral banking facilities of which US\$1.0 billion matures December 2011 and US\$1.3 billion matures December 2012.

Facilities A and B were subject to mandatory prepayment and cancellation to the extent of the net proceeds from disposals of assets and from the raising of funds through equity or capital markets, subject to specific thresholds and conditions. All of Facilities A and B have been repaid from the proceeds of the rights issues and disposal proceeds in 2009. The mandatory prepayments also reduced the available limit on Facility B to US\$2.1 billion at 31 December 2009. Refer to note 48 for partial repayment of Facility D and cancellation of Facility B subsequent to year end.

The main financial covenant to which the Group is subject is the covenant contained in the Alcan facilities which requires it to maintain a ratio of net borrowings to EBITDA of no greater than 4.5 times. A compliance certificate must be produced for this ratio on a semi annual basis. In addition, the Facility Agreement contains restrictions on the Group, including that it be required to observe certain customary covenants including but not limited to (i) maintenance of authorisations; (ii) compliance with laws; (iii) change of business; (iv) negative pledge (subject to certain carve outs); (v) environmental laws and licences; and (vi) subsidiaries incurring financial indebtedness. At 31 December 2009, the Group is in compliance with the covenants contained in the Alcan facilities.

- (b) Rio Tinto has a US\$10 billion (2008: US\$10 billion) European Medium Term Note (EMTN) programme for the issuance of debt, of which approximately US\$0.3 billion was outstanding at 31 December 2009 (2008: US\$0.3 billion). The Group's EMTNs are swapped to US dollars. The fair value of currency swap liabilities at 31 December 2009 was US\$68 million (2008: US\$99 million). These are included in 'other financial liabilities' in the statement of financial position. Details of the major currency swaps are shown in note 34-B (d).
- (c) As at 31 December 2009, US\$5 billion of the fixed rate borrowings shown were swapped to floating rates (2008: none). The fair value of interest rate swap liabilities at 31 December 2009 was US\$97 million (2008: nil). These are included in 'other financial liabilities' in the statement of financial position. Details of the major interest rate swaps are shown in note 34-B (d). In December 2008, the Group unwound interest rate swaps with a principal of US\$5.9 billion to take advantage of market conditions. US\$5.0 billion of this amount was designated as a fair value hedge. As a consequence, the fair value adjustments which had been made to the hedged debt are being amortised to the income statement over the remaining life of the debt. At 31 December 2009, the carrying value of the debt was US\$506 million (2008: US\$565 million) higher than the principal as a result of the unamortised fair value adjustment.
- (d) The Group's borrowings of US\$22.9 billion (2008: US\$39.6 billion) include some US\$4.6 billion (2008: US\$4.6 billion) which relates to borrowings of subsidiaries that are without recourse to the Group, some of which are subject to various financial and general covenants with which the respective borrowers were in compliance as at 31 December 2009.

## Notes to the financial statements continued

**23 Capitalised finance leases**

	2009 US\$m	2008 US\$m
<b>Present value of minimum lease payments</b>		
Total minimum lease payments	131	97
Effect of discounting	(8)	(8)
	<b>123</b>	<b>89</b>
<b>Payments under capitalised finance leases</b>		
Due within one year	19	28
Between 1 and 3 years	40	11
Between 3 and 5 years	29	10
More than 5 years	35	40
	<b>123</b>	<b>89</b>

**24 Consolidated net debt**

	2009 US\$m	2008 US\$m
<b>Analysis of changes in consolidated net debt</b>		
At 1 January	(38,672)	(45,191)
Adjustment on currency translation	(2,265)	1,296
Exchange gains/(losses) taken to the income statement <sup>(a)</sup>	2,222	(1,701)
Gains on derivatives related to net debt	20	105
Cash movements excluding exchange movements	19,909	6,864
Other movements	(75)	(45)
<b>At 31 December</b>	<b>(18,861)</b>	<b>(38,672)</b>
<b>Reconciliation to statement of financial position categories</b>		
Borrowings (note 22)	(22,911)	(39,611)
Bank overdrafts repayable on demand (note 21)	(91)	(147)
Cash and cash equivalents (note 21)	4,233	1,181
Other liquid resources (note 20)	73	4
Derivatives related to net debt (note 34)	(165)	(99)
	<b>(18,861)</b>	<b>(38,672)</b>

	2009 US\$m	2008 US\$m
<b>Exchange gains/(losses) on US dollar net debt and intragroup balances excluded from Underlying earnings</b>		
Exchange gains/(losses) on US dollar net debt	2,211	(1,675)
Exchange (losses)/gains on intragroup balances	(1,912)	1,523
Exchange gains/(losses) on loans from equity accounted units	36	(36)
Exchange gain on settlement of dividend	30	12
<b>Credited/charged to income statement</b>	<b>365</b>	<b>(176)</b>

(a) Exchange gains/(losses) taken to the income statement include amounts taken to Underlying earnings.

Further information relating to the currency and interest rate exposures arising from net debt and related derivatives is given in note 34-B (d) – Financial instruments.

## 25 Trade and other payables

	Non current 2009 US\$m	Current 2009 US\$m	Non current 2008 US\$m	Current 2008 US\$m
Trade creditors	–	1,959	–	2,875
Amounts owed to equity accounted units	197	205	11	269
Other creditors <sup>(a)</sup>	128	512	243	641
Employee entitlements	–	856	–	770
Royalties and mining taxes	–	325	–	471
Accruals and deferred income	125	1,865	79	2,130
Government grants deferred	141	37	119	41
	591	5,759	452	7,197

(a) 'Other creditors' include deferred consideration of US\$119 million (2008: US\$318 million) relating to certain assets acquired. The deferred consideration is included at its net present value. The amortisation of the discount applied in establishing the net present value is treated as a finance cost. All other accounts payable and accruals are non interest bearing.

Due to their short term maturities, the fair value of trade and other payables approximates their carrying value.

## 26 Other financial liabilities

	Non current 2009 US\$m	Current 2009 US\$m	Non current 2008 US\$m	Current 2008 US\$m
Forward commodity contracts: designated as hedges	371	128	173	84
Derivatives related to net debt	97	68	95	4
Other derivatives and embedded derivatives: not designated as hedges	133	167	–	355
Other financial liabilities	–	49	–	37
	601	412	268	480

Detailed information relating to other financial liabilities is given in note 34.

## Notes to the financial statements continued

**27 Provisions (not including taxation)**

	Pensions and post retirement healthcare <sup>(a)</sup> US\$m	Other employee entitlements <sup>(b)</sup> US\$m	Close down and restoration/ environmental <sup>(c),(d),(e)</sup> US\$m	Other <sup>(f)</sup> US\$m	Total 2009 US\$m	Total 2008 US\$m
At 1 January	3,713	523	6,011	686	10,933	11,101
Adjustment on currency translation	123	103	638	49	913	(959)
Amounts capitalised	–	–	268	–	268	393
Subsidiaries no longer consolidated	–	(1)	(94)	(12)	(107)	(42)
Subsidiaries now equity accounted	(16)	–	(260)	(1)	(277)	–
Charged/(credited) to profit:						
– new provisions	–	23	1	38	62	53
– increases to existing provisions	326	356	57	30	769	629
– unused amounts reversed	–	(23)	(26)	(33)	(82)	(144)
– exchange losses/(gains) on provisions	–	5	169	7	181	(273)
Amortisation of discount	–	1	244	10	255	297
Utilised in the year	(470)	(155)	(123)	(85)	(833)	(912)
Actuarial losses recognised in equity	693	–	–	–	693	809
Transfer from assets held for sale	774	–	–	–	774	–
Transfers and other movements	7	(37)	31	144	145	(19)
<b>At 31 December</b>	<b>5,150</b>	<b>795</b>	<b>6,916</b>	<b>833</b>	<b>13,694</b>	<b>10,933</b>
<b>Balance sheet analysis:</b>						
Current	157	465	211	349	1,182	826
Non current	4,993	330	6,705	484	12,512	10,107
<b>Total</b>	<b>5,150</b>	<b>795</b>	<b>6,916</b>	<b>833</b>	<b>13,694</b>	<b>10,933</b>

- (a) The main assumptions used to determine the provision for pensions and post retirement healthcare, and other information, including the expected level of future funding payments in respect of those arrangements, are given in note 50.
- (b) The provision for other employee entitlements includes a provision for long service leave of US\$205 million (2008:US\$142 million), based on the relevant entitlements in certain Group operations. It also includes the provisions relating to the Group's cash-settled share based payment plans of US\$111 million (2008: US\$43 million), which are described in note 49. Furthermore, this includes US\$229 million (2008: US\$118 million) of provision for redundancy and severance payments.
- (c) The Group's policy on close down and restoration costs is described in note 1(k). Close down and restoration costs are a normal consequence of mining, and the majority of close down and restoration expenditure is incurred at the end of the relevant operation. Remaining lives of mines and infrastructure range from one to over 50 years with an average, weighted by closure provision, of around 23 years (2008: 18 years). Although the ultimate cost to be incurred is uncertain, the Group's businesses estimate their respective costs based on feasibility and engineering studies using current restoration standards and techniques. Provisions of US\$6,916 million (2008: US\$6,011 million) for close down and restoration costs and environmental clean up obligations, include estimates of the effect of future inflation and have been adjusted to reflect risk. These estimates have been discounted to their present value at an average rate of approximately four per cent per annum, being an estimate of the long term, risk free, pre-tax cost of borrowing. Excluding the effects of future inflation, and before discounting, this provision is equivalent to some US\$10.1 billion (2008: US\$8.2 billion).
- (d) Some US\$505 million (2008: US\$495 million) of environmental clean up expenditure is expected to take place within the next five years. The remainder includes amounts for the operation and maintenance of remediation facilities in later years. The provision for environmental clean up expenditure includes the issue described in (e) below.
- (e) In 1995, Kennecott Utah Copper ('KUC') agreed with the US Environmental Protection Agency ('EPA') and the State of Utah to complete certain source control projects and perform specific environmental studies regarding contamination of ground water in the vicinity of the Bingham Canyon mine. A remedial investigation and feasibility study on the South Zone ground water contamination, completed in March 1998, identified a range of alternative measures to address this issue. Additional studies were conducted to refine the workable alternatives. A remedial design document was completed in 2002. A joint proposal and related agreements with the State of Utah Natural Resource Damage Trustee, the State of Utah and the Jordan Valley Water Conservancy District were approved in 2004. KUC entered into a formal agreement with the EPA in 2007 on the remedial action. In September 2008, the EPA withdrew its proposal to list the Kennecott South Zone Site on the Superfund National Priorities List. This action recognises that soil clean up work is complete and that groundwater cleanup is adequately initiated and financial assurance is in place to assure completion of the work.
- (f) Other provisions deal with a variety of issues and include US\$101 million (2008: US\$103 million) relating to the Rio Tinto Alcan Foundation commitment in Canada made at the time of the Alcan acquisition. This involves payments of C\$200 million over a five year period.

## 28 Share capital – Rio Tinto plc

	2009 Number (million)	2008 Number (million)	2009 US\$m	2008 US\$m
<b>Issued and fully paid up share capital</b>				
At 1 January	1,004.10	1,071.80	160	172
Ordinary shares issued <sup>(a), (c)</sup>	524.90	0.18	86	–
Own shares purchased and cancelled <sup>(b)</sup>	–	(67.88)	–	(12)
At 31 December	1,529.00	1,004.10	246	160
– Special Voting Share of 10p <sup>(d)</sup>	1 only	1 only		
– DLC Dividend Share of 10p <sup>(d)</sup>	1 only	1 only		
– shares repurchased and held in treasury <sup>(b)</sup>	5.03	5.91		
– shares held by public	1,523.97	998.19		
<b>Shares held by public</b>				
At 1 January	998.19	997.25		
Ordinary shares issued <sup>(a)</sup>	524.90	0.18		
Shares reissued from treasury <sup>(b)</sup>	0.88	0.76		
At 31 December	1,523.97	998.19		
<b>Unissued share capital</b>				
Ordinary shares of 10p each	171.00	417.13	27	63
Equalisation Share of 10p <sup>(d)</sup>	1 only	1 only	–	–
<b>Total authorised share capital</b>	<b>1,700.00</b>	<b>1,421.23</b>	<b>273</b>	<b>223</b>

- (a) 524,460,478 Ordinary shares were issued in July 2009 as a result of the Rio Tinto plc rights issue. Further details on the rights issues are provided in note 46. 440,018 Ordinary shares were issued, and 874,925 Ordinary shares reissued from treasury during the year resulting from the exercise of options under Rio Tinto plc employee share based payment plans with exercise prices between £7.98p and £29.38p per share (2008: 183,714 shares issued, and 763,919 shares reissued from treasury with exercise prices between £8.09p and £35.57p per share).
- (b) The authority for the Company to buy back its Ordinary shares was renewed at the 2008 annual general meeting. No shares were bought back and held in treasury during 2009 and 2008. During 2008, as part of the Group's internal capital management programme, Rio Tinto undertook a series of transactions, whereby 67,880,000 shares held by Rio Tinto plc in treasury were sold to Rio Tinto Limited at market value, before being immediately repurchased by Rio Tinto plc for a nominal amount, pursuant to the share purchase approval granted by Rio Tinto plc shareholders at the 2008 Rio Tinto plc annual general meeting. The shares were then cancelled upon their repurchase by Rio Tinto plc.
- (c) The aggregate gross consideration received for new shares issued arising from the rights issue during 2009 was US\$12.0 billion (2008: nil). The difference between the nominal value and issue price of the shares issued was credited to merger reserve and expenses associated with the rights issue were charged against the share premium account. The aggregate consideration received for treasury shares reissued was US\$3 million (2008: US\$25 million) and US\$32 million (2008: US\$6 million) for new shares issued resulting from the exercise of options under Rio Tinto plc employee share based payment plans.
- (d) The 'Special Voting Share' was issued to facilitate the joint voting by shareholders of Rio Tinto plc and Rio Tinto Limited on Joint Decisions, following the DLC merger. Directors have the ability to issue an Equalisation Share if that is required under the terms of the DLC Merger Sharing Agreement. The 'DLC Dividend Share' was issued to facilitate the efficient management of funds within the DLC structure.

During 2009, US\$17 million of shares were purchased by the Employee Share Ownership Trust on behalf of Rio Tinto plc to satisfy future share options and awards as they vest.

Information relating to share options and other share based incentive schemes is given in note 49 on share based payments.

## 29 Share capital – Rio Tinto Limited

	2009 Number (million)	2008 Number (million)	2009 US\$m	2008 US\$m
<b>Issued and fully paid up share capital</b>				
At 1 January	285.75	285.75	961	1,219
Adjustment on currency translation	–	–	710	(258)
Ordinary shares issued <sup>(a)</sup>	150.01	–	3,253	–
At 31 December	435.76	285.75	4,924	961
– Share capital held by Rio Tinto plc	171.07	171.07		
– Special Voting Share of 10p <sup>(b)</sup>	1 only	1 only		
– DLC Dividend Share of 10p <sup>(b)</sup>	1 only	1 only		
<b>Total share capital <sup>(b)</sup></b>	<b>606.83</b>	<b>456.82</b>		

- (a) 150,015,297 Ordinary shares were issued during 2009 as a result of the Rio Tinto Limited rights issue. The aggregate gross consideration received for new shares issued during 2009 was US\$3.2 billion. Further details on the rights issue are provided in note 46.

- (b) The 'Special Voting Share' was issued to facilitate the joint voting by shareholders of Rio Tinto Limited and Rio Tinto plc on Joint Decisions following the DLC merger. Directors have the ability to issue an Equalisation Share if that is required under the terms of the DLC Merger Sharing Agreement. The 'DLC Dividend Share' was issued to facilitate the efficient management of funds within the DLC structure.

The authority for the Company to buy back shares was renewed at the 2008 annual general meeting. No shares were bought back during 2009 and 2008.

Share options exercised during the year to 31 December 2009 under various Rio Tinto Limited employee share option schemes were satisfied by the on-market purchase of Rio Tinto Limited shares by a third party on the Group's behalf.

Information relating to share options and other share based incentive schemes is given in note 49 on share based payments.

## Notes to the financial statements continued

**30 Other reserves and retained earnings**

	2009 US\$m	2008 US\$m
<b>Capital redemption reserve <sup>(a)</sup></b>		
At 1 January	12	–
Own shares purchased and cancelled	–	12
At 31 December	12	12
<b>Hedging reserves <sup>(b)</sup></b>		
At 1 January	14	(174)
Parent and subsidiaries' net cash flow hedge fair value (losses)/gains	(206)	28
Equity accounted units' cash flow hedge fair value (losses)/gains	(7)	3
Parent and subsidiaries' net cash flow hedge losses transferred to the income statement	16	245
Equity accounted units' cash flow hedge losses transferred to the income statement	7	–
Cash flow hedge gains reclassified on disposal	(4)	–
Tax on the above	52	(88)
At 31 December	(128)	14
<b>Available for sale revaluation reserves <sup>(c)</sup></b>		
At 1 January	(107)	57
Gains/(losses) on available for sale securities	357	(173)
Gains on available for sale securities transferred to the income statement	(3)	(1)
Tax on the above	–	10
At 31 December	247	(107)
<b>Other reserves <sup>(d)</sup></b>		
At 1 January	(169)	19
Own shares purchased from Rio Tinto Limited shareholders to satisfy share options	(35)	(128)
Employee share options: value of services	30	27
Merger reserve arising from Rio Tinto plc's rights issue <sup>(d)</sup>	11,936	–
Deferred tax on share options	14	(87)
At 31 December	11,776	(169)
<b>Foreign currency translation reserve <sup>(e)</sup></b>		
At 1 January	(2,072)	2,514
Parent and subsidiaries currency translation adjustments	3,745	(4,168)
Equity accounted units currency translation adjustments	456	(300)
Exchange losses	(13)	(215)
Currency translation reclassified on disposal	(13)	(2)
Tax on exchange adjustments	–	99
At 31 December	2,103	(2,072)
<b>Total other reserves per statement of financial position</b>	<b>14,010</b>	<b>(2,322)</b>

	2009 US\$m	2008 US\$m
<b>Retained earnings <sup>(i)</sup></b>		
At 1 January	17,134	19,033
Parent and subsidiaries' profit for the year	4,497	3,879
Equity accounted units' retained profit/(loss) for the year	375	(203)
Actuarial losses <sup>(g)</sup>	(973)	(1,299)
<b>Tax relating to components of other comprehensive income</b>	<b>269</b>	<b>365</b>
Total comprehensive income for the year	4,168	2,742
Dividends paid	(876)	(1,933)
Own shares purchased and cancelled	–	(2,767)
Own shares purchased from Rio Tinto plc shareholders to satisfy share options	(17)	–
Ordinary shares held in treasury, reissued to satisfy share options	3	25
<b>Employee share options and other IFRS 2 charges taken to the income statement <sup>(h)</sup></b>	<b>65</b>	<b>34</b>
<b>At 31 December</b>	<b>20,477</b>	<b>17,134</b>

(a) The capital redemption reserve was set up to comply with section 170 of the Companies Act 1985, when shares of a company are redeemed or purchased wholly out of the company's profits. The amount at 31 December 2009 reflects the amount by which the Company's issued share capital is diminished in accordance with section 733 of the Companies Act 2006.

(b) The hedging reserve records gains or losses on cash flow hedges that are recognised initially in equity, as described in note 1(p.iii).

(c) The available for sale revaluation reserves record fair value gains or losses relating to available for sale securities, as described in note 1(p.i).

(d) Other reserves record the cumulative amount recognised under IFRS 2 in respect of options granted but not exercised to acquire shares in Rio Tinto Limited, less, where applicable, the cost of shares purchased to satisfy share options exercised. The cumulative amount recognised under IFRS 2 in respect of options granted but not exercised to acquire shares in Rio Tinto plc is recorded in retained earnings.

Other reserves includes US\$11,936 million which represents the difference between the nominal value and issue price of the shares issued arising from Rio Tinto plc's rights issue. No share premium was recorded in the Rio Tinto plc financial statements through the operation of the merger relief provisions of the Companies Act 1985.

(e) Exchange differences arising on the translation of the Group's net investment in foreign controlled companies are taken to the foreign currency translation reserve, as described in note 1(d). The cumulative differences relating to an investment are transferred to the income statement when the investment is disposed of.

(f) Retained profit and movements in reserves of subsidiaries include those arising from the Group's share of proportionally consolidated units.

(g) This includes actuarial losses relating to equity accounted units of US\$126 million (2008: US\$5 million).

(h) Includes IFRS 2 charges arising from a Broad Based Black Economic Empowerment (BEE) transaction. The discount to fair value arising from this transaction is treated as a share based payment in accordance with IFRIC 8 Scope of IFRS 2 (Share based Payments) and AC 503 Accounting for BEE Transactions.

## Notes to the financial statements continued

## 31 Operating segments

	2009 US\$m	2008 US\$m
<b>Sales revenue <sup>(a)</sup></b>		
Iron Ore	12,598	16,527
Aluminium	12,038	18,297
Copper	6,206	5,748
Energy	6,709	8,018
Diamonds & Minerals	2,618	3,820
Other Operations	4,743	7,378
<b>Reportable segments total</b>	<b>44,912</b>	59,788
Inter-segment transactions	(876)	(1,723)
<b>Gross sales revenue</b>	<b>44,036</b>	58,065
Share of equity accounted units and adjustments for intra-subsidiary/equity accounted units' sales	(2,211)	(3,801)
<b>Consolidated sales revenue per income statement</b>	<b>41,825</b>	54,264
<b>Underlying earnings <sup>(b)</sup></b>		
Iron Ore	4,126	6,017
Aluminium	(578)	1,271
Copper	1,866	1,597
Energy	1,420	2,581
Diamonds & Minerals	800	474
Other Operations	(188)	(133)
<b>Reportable segments total</b>	<b>7,446</b>	11,807
Inter-segment transactions	(28)	25
Other items	(547)	(366)
Exploration and evaluation not attributed to product groups	5	(133)
Net interest	(578)	(1,030)
<b>Underlying earnings</b>	<b>6,298</b>	10,303
Items excluded from Underlying earnings (note 2)	(1,426)	(6,627)
<b>Net earnings per income statement</b>	<b>4,872</b>	3,676
<b>Depreciation and amortisation <sup>(c)</sup></b>		
Iron Ore	763	705
Aluminium	1,551	1,543
Copper	541	442
Energy	395	415
Diamonds & Minerals	290	361
Other Operations	216	332
<b>Reportable segments total</b>	<b>3,756</b>	3,798
Other items	111	91
Less: depreciation and amortisation of equity accounted units	(440)	(414)
<b>Depreciation and amortisation per note 3</b>	<b>3,427</b>	3,475
<b>Tax charge <sup>(d)</sup></b>		
Iron Ore	1,868	2,869
Aluminium	(565)	875
Copper	582	261
Energy	646	1,016
Diamonds & Minerals	37	287
Other Operations	(55)	(68)
<b>Reportable segments total</b>	<b>2,513</b>	5,240
Other items	(270)	(99)
Exploration and evaluation not attributed to product groups	(30)	(31)
Net interest	(228)	(380)
	1,985	4,730
Tax charge excluded from Underlying earnings (note 2)	91	(988)
<b>Tax charge per income statement</b>	<b>2,076</b>	3,742

Refer to notes on page 178.

	2009 US\$m	2008 US\$m
<b>Additions to non current assets (other than financial instruments and deferred tax assets)</b>		
Iron Ore	2,034	3,494
Aluminium	1,487	2,206
Copper	828	836
Energy	718	1,206
Diamonds & Minerals	478	1,379
Other Operations	227	470
<b>Reportable segments total</b>	<b>5,772</b>	<b>9,591</b>
Other items	81	179
Reconciling items <sup>(e)</sup>	(497)	(1,282)
<b>Purchase of property, plant &amp; equipment and intangible assets per Financial information by business unit</b>	<b>5,356</b>	<b>8,488</b>
Proceeds of disposal of property, plant and equity and intangible assets	32	90
Funding of equity accounted units for major capital expenditure	–	(4)
<b>Purchase of property, plant &amp; equipment and intangible assets per statement of cash flow</b>	<b>5,388</b>	<b>8,574</b>

	At 31 December 2009 US\$m	At 31 December 2008 US\$m
<b>Operating assets <sup>(f)</sup></b>		
Iron Ore	11,263	7,632
Aluminium	35,992	34,735
Copper	5,028	4,223
Energy	2,538	2,665
Diamonds & Minerals	4,612	4,287
Other Operations	1,756	3,375
<b>Reportable segments total</b>	<b>61,189</b>	<b>56,917</b>
Net assets held for sale	3,462	3,204
Other items	(1,959)	(811)
<b>Total assets</b>	<b>62,692</b>	<b>59,310</b>
<b>Reconciling items:</b>		
Liabilities of disposal groups held for sale	1,320	2,121
Trade and other payables	6,350	7,649
Tax payable	1,628	1,892
Deferred tax liabilities	4,304	4,054
Other financial liabilities (excluding derivatives related to net debt)	848	649
Provisions	13,694	10,933
Cash and cash equivalents	4,233	1,181
Other liquid resources	73	4
Outside interests	2,094	1,823
<b>Total assets</b>	<b>34,544</b>	<b>30,306</b>
	<b>97,236</b>	<b>89,616</b>

Refer to notes on pages 178 and 179.

Rio Tinto's management structure is based on the principal product groups shown above together with the global functions that support the business. The chief executive of each product group reports to the Chief executive of Rio Tinto. The Chief executive of Rio Tinto monitors the performance of each product group based on a number of measures including capital expenditure and operating cash flows, with Underlying earnings being the key financial performance indicator. Interest costs and net debt are managed on a group basis.

Generally, business units are allocated to product groups based on their primary product. The Energy product group includes both coal and uranium businesses. The Diamonds & Minerals product group includes businesses with products such as borates, talc and titanium dioxide feedstock together with diamonds operations. The Copper group includes certain gold operations in addition to copper. The Aluminium group excludes Alcan Engineered Products which is included in 'Other Operations' and Alcan Packaging which is included in 'Assets held for sale'.

The segments differ from those reported under IAS 14 in 2008 because of changes in the Group's organisational structure. The Diamonds & Minerals product group has been reinstated alongside the Iron Ore, Copper, Aluminium and Energy product groups. Alcan Engineered Products was reclassified from 'Aluminium' to 'Other Operations' during the year. Information for 2008 has been reclassified accordingly.

## Notes to the financial statements continued

### 31 Operating segments continued

The Financial information by business unit provided on page 219 of these financial statements provide additional voluntary disclosure which the Group considers is useful to the users of the financial statements.

#### (a) Gross sales revenue

Product group gross sales revenue includes 100 per cent of subsidiaries' sales revenue and the Group's share of the sales revenue of equity accounted units. The Rio Tinto's share of the sales revenue of equity accounted units are deducted and intra-subsidiary equity accounted unit sales are adjusted in arriving at consolidated sales revenue as shown on the income statement.

Inter-segment transactions relate to sales between Aluminium and Alcan Engineered Products which is included in Other Operations.

#### (b) Underlying earnings

As discussed in note 2, 'Underlying earnings' is an alternative measure of earnings which provides a greater understanding of the underlying business performance of the Group's operations. The measure of Underlying earnings is used by the Chief executive of Rio Tinto to assess the performance of the product groups.

Product group earnings include earnings of subsidiaries stated before finance items but after the amortisation of discount. Earnings attributable to equity accounted units include interest charges and amortisation of discount except that, from 2009 onwards, RBM earnings are before charging interest on third party debt.

Rio Tinto's share of the Underlying earnings of equity accounted units amounts to US\$864 million in 2009 (2008: US\$1,047 million). This amount is attributable as follows: US\$750 million profit to the Copper group and US\$114 million profit to other product groups, (2008: US\$852 million profit is attributable to the Copper product group and US\$195 million profit to other product groups). These amounts are included in Underlying earnings of the relevant product groups. These amounts include the Underlying earnings of the Group's tolling entities which process bauxite and alumina. These entities recharge the majority of their costs and would generally have minimal earnings.

The Diamonds & Minerals Underlying earnings in 2009 includes a US\$797 million profit after tax in relation to the divestment of undeveloped potash assets in Argentina and Canada. In 2008, the Energy group Underlying earnings includes a US\$483 million profit after tax in relation to the divestment of the undeveloped Kintyre uranium project in Western Australia.

#### (c) Depreciation and amortisation

Product group totals of depreciation include 100 per cent of subsidiaries' depreciation and amortisation and include Rio Tinto's share of the depreciation and amortisation of equity accounted units. The Rio Tinto's share of the depreciation and amortisation charge of equity accounted units is deducted to arrive at depreciation and amortisation excluding equity accounted units as shown in note 3. These figures exclude impairment charges, which are excluded from Underlying earnings.

#### (d) Tax charge

This relates to the tax charges on the product group's Underlying earnings. The reconciling item is the tax on amounts that are excluded in arriving at Underlying earnings. Within product groups, tax of subsidiaries is stated before tax on finance items but after tax on the amortisation of the discount related to provisions. The tax charge excludes tax on the earnings of equity accounted units of US\$491 million (2008: US\$596 million) of which US\$498 million (2008: US\$515 million) related to the Copper product group.

#### (e) Additions to non current assets (other than financial instruments and deferred tax assets)

This represents the total cost incurred during the year to acquire non current assets (other than financial instruments and deferred tax assets), measured on an accruals basis in accordance with IFRS 8.

The reconciling items to arrive at capital expenditure shown in the Financial information by business unit are shown below:

	Year ended 31 December 2009 US\$m	Year ended 31 December 2008 US\$m
Capitalised interest costs	(198)	(203)
Capitalised closure costs and other provisions	(268)	(393)
Movement in payables for capital expenditure	595	(503)
Goodwill cash additions	–	(8)
Additions to investments in equity accounted units	(412)	(29)
Increase in non current inventories	(109)	(10)
Increase in non current prepayments	–	(50)
Finance leases taken out	(73)	–
Proceeds of disposal of property, plant and equipment and intangible assets	(32)	(90)
Funding of equity accounted units for major capital expenditure	–	4
<b>Total</b>	<b>(497)</b>	<b>(1,282)</b>

## (f) Operating assets

Product group totals of operating assets comprise net assets excluding post retirement assets and liabilities, net of tax, and are before deducting net debt. Operating assets are less outside shareholders' interests, which are calculated by reference to the net assets of the relevant companies (i.e. net of such companies' debt). For equity accounted units, Rio Tinto's net investment excluding post retirement assets and liabilities (net of tax), is shown. Other items relate to assets held by entities not considered as reportable segments.

In 2009, Rio Tinto's investment in equity accounted units of US\$6,735 million is attributable as follows: US\$3,489 million to the Aluminium product group, US\$2,777 million to the Copper product group and US\$469 million to other product groups (31 December 2008: US\$5,053 million of which US\$3,294 million is attributable to the Aluminium product group, US\$1,597 million is attributable to the Copper product group, and US\$162 million to other product groups).

## 32 Operating segments – additional information

### Gross sales revenue by destination<sup>(a)</sup>

	2009 %	2008 %	2009 US\$m	2008 US\$m
China	24.3	18.8	10,691	10,934
North America <sup>(b)</sup>	23.1	22.4	10,190	12,984
Other Europe (excluding United Kingdom)	14.4	20.7	6,337	12,015
Japan	13.5	15.2	5,921	8,825
Other Asia	13.2	11.1	5,822	6,453
Australia	3.1	3.0	1,373	1,737
United Kingdom	2.6	3.6	1,161	2,112
Other	5.8	5.2	2,541	3,005
<b>Gross sales revenue</b>	<b>100.0</b>	<b>100.0</b>	<b>44,036</b>	<b>58,065</b>
Share of equity accounted units sales and intra-subsidiary/equity accounted units sales			(2,211)	(3,801)
<b>Consolidated sales revenue</b>			<b>41,825</b>	<b>54,264</b>

(a) Sales by geographical destination are based on the ultimate country of destination of the product if known. If the eventual destination of the product sold through traders is not known, then revenue is allocated to the location of the product at the time when the risks and rewards of ownership are passed. Rio Tinto is domiciled in both the United Kingdom and Australia.

(b) The United States of America and Canada have been combined to form the 'North America' geographical segment, having regard to the similarity of economic and political conditions in these countries.

### Gross sales revenue by product

Gross sales revenues of the Group are derived from the following products sold to external customers:

	2009 US\$m	2008 US\$m
Iron Ore	12,096	15,975
Aluminium	11,126	16,542
Coal	5,683	7,011
Copper	4,775	4,495
Industrial Minerals	2,677	3,388
Gold	972	379
Diamonds	450	840
Other	6,257	9,435
<b>Gross sales revenue</b>	<b>44,036</b>	<b>58,065</b>
Share of equity accounted units sales and intra-subsidiary/equity accounted units sales	(2,211)	(3,801)
<b>Consolidated sales revenue</b>	<b>41,825</b>	<b>54,264</b>

## Notes to the financial statements continued

### 32 Operating segments – additional information continued

#### Non-current assets other than financial instruments and deferred tax assets

The total of non-current assets other than financial instruments, deferred tax assets, post-employment benefit assets and assets held for sale by location is shown below. This is allocated based on the location of the business units holding the assets.

	2009 US\$m	2008 US\$m
<b>Non-current assets other than financial instruments and deferred tax assets <sup>(a)</sup></b>		
Australia	31,543	24,080
United Kingdom	928	1034
North America <sup>(b)</sup>	29,486	32,197
France	2,298	2,507
Europe (excluding France)	2,041	2,813
South America	2,419	1,882
Africa	1,665	1,731
Indonesia	587	555
Other countries	1,212	961
	<b>72,179</b>	<b>67,760</b>
<b>Non-current assets excluded from analysis above:</b>		
Deferred tax assets	2,231	1,367
Tax recoverable	85	220
Derivative assets	841	666
Loans to equity accounted units <sup>(c)</sup>	1,593	862
Accounts receivable	593	306
<b>Total non-current assets per statement of financial position</b>	<b>77,522</b>	<b>71,181</b>

(a) Includes investments in equity accounted units totalling US\$5,312 million (2008: US\$4,455 million) which represents the Group's share of net assets excluding quasi equity loans shown separately within 'Loans to equity accounted units' above.

(b) The United States of America and Canada have been combined to form the 'North America' geographical segment, having regard to the similarity of economic and political conditions in these countries.

(c) Loans to equity accounted units comprise quasi equity loans of US\$1,423 million (2008: US\$598 million) included in 'Investments in equity accounted units' on the face of the statement of financial position and non-quasi equity loans of US\$170 million (2008: US\$264 million) shown separately.

### 33 Financial risk management

The Group's policies with regard to financial risk management are clearly defined and consistently applied. They are a fundamental part of the Group's long term strategy covering areas such as foreign exchange risk, interest rate risk, commodity price risk, credit risk, liquidity risk and capital management.

Generally, the Group only sells commodities it has produced but also enters into third party direct transactions and physical swaps on Alumina to balance the regional positions and to balance the loading on production facilities. In the long term, natural hedges operate in a number of ways to help protect and stabilise earnings and cash flow.

The Group has a diverse portfolio of commodities and markets, which have varying responses to the economic cycle. The relationship between commodity prices and the currencies of most of the countries in which the Group operates provides further natural protection in the long term. Production of minerals is an important contributor to the Gross Domestic Products of Australia and Canada, countries in which the Group has a large presence. As a consequence, the Australian and Canadian currencies have historically tended to strengthen when commodity prices are high. In addition, the Group's policy of borrowing primarily at floating US dollar interest rates helps to counteract the effect of economic and commodity price cycles. These natural hedges significantly reduce the necessity for using derivatives or other forms of synthetic hedging. Such hedging is therefore undertaken to a strictly limited degree, as described below.

Treasury operates as a service to the business of the Rio Tinto Group and not as a profit centre. Strict limits on the size and type of transaction permitted are laid down by the Rio Tinto board and are subject to rigorous internal controls. Senior management is advised of corporate debt and currency, commodity and interest rate derivatives through a monthly reporting framework.

Rio Tinto does not acquire or issue derivative financial instruments for trading or speculative purposes; nor does it believe that it has material exposure to such trading or speculative holdings through its investments in joint ventures and associates. Derivatives are used to separate funding and cash management decisions from currency exposure and interest rate management. The Group uses interest rate and cross currency interest rate swaps in conjunction with longer term funds raised in the capital markets to achieve a predominantly floating rate obligation which is consistent with the Group's interest and exchange rate policies, ie. primarily US dollar LIBOR. However, the group reserves the right to realise swap positions to take advantage of favourable market conditions and to manage counterparty credit risk. No material exposure is considered to exist by virtue of the possible non performance of the counterparties to financial instruments held by the Group.

Derivative contracts are carried at fair value based on published quotations for the period for which a liquid active market exists. Beyond this period, Rio Tinto's own assumptions are used.

### (i) Foreign exchange risk

Rio Tinto's shareholders' equity, earnings and cash flows are influenced by a wide variety of currencies due to the geographic diversity of the Group's sales and the countries in which it operates. The US dollar, however, is the currency in which the great majority of the Group's sales are denominated. Operating costs are influenced by the currencies of those countries where the Group's mines and processing plants are located and also by those currencies in which the costs of imported equipment and services are determined. The Australian and Canadian dollars and the Euro are the most important currencies (apart from the US dollar) influencing costs. In any particular year, currency fluctuations may have a significant impact on Rio Tinto's financial results. A strengthening of the US dollar against the currencies in which the Group's costs are partly determined has a positive effect on Rio Tinto's Underlying earnings.

Given the dominant role of the US currency in the Group's affairs, the US dollar is the currency in which financial results are presented both internally and externally. It is also the most appropriate currency for borrowing and holding surplus cash, although a portion of surplus cash may also be held in other currencies, most notably Australian dollars, Canadian dollars and the Euro. This cash is held in order to meet short term operational and capital commitments and, for the Australian dollar, dividend payments. The Group finances its operations primarily in US dollars, either directly or using cross currency interest rate swaps. A substantial part of the Group's US dollar debt is located in subsidiaries having a US dollar functional currency.

However, certain US dollar debt and other financial assets and liabilities including intragroup balances are not held in the functional currency of the relevant subsidiary. This results in an accounting exposure to exchange gains and losses as the financial assets and liabilities are translated into the functional currency of the subsidiary that accounts for those assets and liabilities. These exchange gains and losses are recorded in the Group's income statement except to the extent that they can be taken to equity under the Group's accounting policy which is explained in note 1(d). Gains and losses on US dollar net debt and on intragroup balances are excluded from Underlying earnings. Other exchange gains and losses are included in Underlying earnings.

As noted above, Rio Tinto hedges interest rate and currency risk on most of its foreign currency borrowings by entering into cross currency interest rate swaps, and/or interest rate swaps when required. These have the economic effect of converting fixed rate foreign currency borrowings to floating rate US dollar borrowings. See section B (d) of note 34 – Financial instruments for the details of currency and interest rate contracts relating to borrowings.

After taking into account relevant swap instruments, almost all of the Group's net debt is either denominated in US dollars or in the functional currency of the entity holding the debt. The table below summarises the net debt by currency.

Net (debt)/funds by currency	2009 US\$m	2008 US\$m
United States dollar	(18,466)	(38,111)
Australian dollar	(232)	(351)
South African rand	60	52
UK sterling	(35)	(34)
Euro	(140)	(77)
Canadian dollar	(137)	(122)
Other	89	(29)
<b>Total</b>	<b>(18,861)</b>	<b>(38,672)</b>

### Currency hedging

Under normal market conditions, the Group does not generally believe that active currency hedging of transactions would provide long term benefits to shareholders. The Group reviews on a regular basis its exposure and reserves the right to enter into hedges to maintain financial stability. Currency protection measures may be deemed appropriate in specific commercial circumstances and are subject to strict limits laid down by the Rio Tinto board, typically hedging of capital expenditures and other significant financial items such as tax and dividends. There is a legacy of currency forward contracts used to hedge operating cash flow exposures which was acquired with the North companies. Refer to section B ((a) to (d)) of note 34 - Financial instruments for the currency forward and option contracts used to manage the currency risk exposures of the Group at 31 December 2009.

### Foreign exchange sensitivity: Risks associated with exposure to financial instruments

The sensitivities below give the estimated effect of a ten per cent strengthening in the full year closing US dollar exchange rate on the value of financial instruments. The impact is expressed in terms of the effect on net earnings, Underlying earnings and equity, assuming that each exchange rate moves in isolation. The sensitivities are based on financial assets and liabilities held at 31 December 2009, where balances are not denominated in the functional currency of the subsidiary and exclude financial assets and liabilities held by equity accounted units (see note b below). They also exclude exchange movements on local currency deferred tax balances and provisions. These balances will not remain constant throughout 2010, and therefore these numbers should be used with care.

## Notes to the financial statements continued

**33 Financial risk management continued****At 31 December 2009**

Gains/(losses) associated with 10% strengthening of the US dollar

Currency Exposure	Closing exchange rate US cents	Effect on net earnings US\$m	Of which amount impacting Underlying earnings US\$m	Impact directly on equity US\$m
Australian dollar <sup>(a)</sup>	89	178	66	(1)
Canadian dollar	95	5	61	–
South African rand	14	13	2	(42)
Euro	144	252	13	–
New Zealand dollar	73	2	–	–

At 31 December 2008

Gains/(losses) associated with 10% strengthening of the US dollar

Currency Exposure	Closing exchange rate US cents	Effect on net earnings US\$m	Of which amount impacting Underlying earnings US\$m	Impact directly on equity US\$m
Australian dollar <sup>(a)</sup>	69	(27)	63	3
Canadian dollar	82	53	99	–
South African rand	11	13	19	–
Euro	141	239	18	–
New Zealand dollar	58	21	2	–

(a) The sensitivities show the net sensitivity of US\$ exposures in A\$ functional currency companies, for example, and A\$ exposures in US\$ functional currency companies.

(b) The sensitivities presented are on financial assets and liabilities of subsidiaries and proportionally consolidated entities, and do not include non-financial instruments such as provisions or post retirement benefits, or sensitivities arising from financial assets and liabilities within equity accounted units. The impact of reflecting these items primarily impacts the Canadian dollar sensitivity, with a US\$69 million reduction in net earnings (2008: US\$9 million reduction), a US\$67 million reduction in Underlying earnings (2008: US\$21 million reduction), and a US\$114 million increase recorded directly in equity (2008: US\$56 million increase).

(c) Rio Tinto Alcan Inc., which has a US functional currency for accounting purposes, has a significant amount of US dollar denominated external and intragroup debt held in Canada and is taxed on a Canadian currency basis. The above sensitivities as at 31 December 2009 for a 10 per cent strengthening of the US dollar do not include any tax benefit related to this debt because the capital losses generated would not be recognised. If the US dollar weakened below 97 Canadian cents then tax charges would begin to be recognised at 15 per cent.

Similarly at 31 December 2008, the above sensitivities for a 10 per cent strengthening of the US dollar did not include any tax benefit related to this debt because the capital losses generated would not have been recognised. If the US dollar had weakened below 97 Canadian cents then tax charges would have begun to be recognised at 15 per cent.

**(ii) Interest rate risk**

Interest rate risk refers to the risk that the value of a financial instrument or cash flows associated with the instruments will fluctuate due to changes in market interest rates. Rio Tinto's interest rate management policy is generally to borrow and invest at floating interest rates. This approach is based on historical correlation between interest rates and commodity prices. In some circumstances, an element of fixed rate funding may be considered appropriate. As noted above, Rio Tinto hedges interest rate and currency risk on most of its foreign currency borrowings by entering into cross currency interest rate swaps in order to convert fixed rate foreign currency borrowings to floating rate US dollar borrowings. The market value of these interest rate and cross currency interest rate swaps moves in alignment with the market and at times can act as alternative sources of funding. The Group reviews the positions on a regular basis and may act to either monetise in-the-money value or achieve lower costs of funding. See section B (d) of note 34 – Financial instruments for the details of currency and interest rate contracts relating to borrowings. At the end of 2009, US\$8.3 billion (2008: US\$10.6 billion) of the Group's debt was at fixed rates after taking into account interest rate swaps and finance leases, making the fixed to floating debt ratio 36 per cent fixed to 64 per cent floating.

A monthly Treasury report is provided to senior management which summarises corporate debt exposed to currency risks and, where applicable, the offsetting derivatives. See section B (d) of note 34 – Financial instruments for the details of currency and interest rate contracts relating to borrowings. See note 22 – Borrowings for the details of debt outstanding at 31 December 2009.

Based on the Group's net debt and other floating rate financial instruments outstanding as at 31 December 2009, the effect on net earnings of a half percentage point increase in US dollar LIBOR interest rates, with all other variables held constant, would be a reduction of US\$37 million (2008: US\$100 million). These balances will not remain constant throughout 2010, however, and therefore these numbers should be used with care.

### (iii) Commodity price risk

The Group's normal policy is to sell its products at prevailing market prices. Exceptions to this rule are subject to strict limits laid down by the Rio Tinto board and to rigid internal controls. Rio Tinto's exposure to commodity prices is diversified by virtue of its broad commodity base and the Group does not generally believe commodity price hedging would provide long term benefit to shareholders. The Group may hedge certain commitments with some of its customers or suppliers. Details of commodity derivatives held at 31 December 2009 are set out in note 34 – B a) to c) Financial instruments.

Metals such as copper and aluminium are generally sold under contract, often long term, at prices determined by reference to prevailing market prices on terminal markets, such as the London Metal Exchange (LME) and COMEX in New York, usually at the time of delivery. Prices fluctuate widely in response to changing levels of supply and demand but, in the long run, prices are related to the marginal cost of supply. Gold is also priced in an active market in which prices respond to daily changes in quantities offered and sought. Newly mined gold is only one source of supply; investment and disinvestment can be important elements of supply and demand. Contract prices for many other natural resource products including iron ore and coal are generally agreed annually or for longer periods with customers, although volume commitments vary by product.

Certain products, predominantly copper concentrate, are 'provisionally priced', ie the selling price is subject to final adjustment at the end of a period normally ranging from 30 to 180 days after delivery to the customer, based on the market price at the relevant quotation point stipulated in the contract. Revenue on provisionally priced sales is recognised based on estimates of fair value of the consideration receivable based on forward market prices. At each reporting date, provisionally priced metal is marked to market based on the forward selling price for the period stipulated in the contract. For this purpose, the selling price can be measured reliably for those products, such as copper for which there exists an active and freely traded commodity market such as the London Metal Exchange and the value of product sold by the Group is directly linked to the form in which it is traded on that market.

The marking to market of provisionally priced sales contracts is recorded as an adjustment to sales revenue.

At the end of 2009, the Group had 267 million pounds of copper sales (2008: 183 million pounds) that were provisionally priced at US 335 cents per pound (2008: US 133 cents per pound). The final price of these sales will be determined during the first half of 2010. A ten per cent change in the price of copper realised on the provisionally priced sales would increase or reduce net earnings by US\$55 million (2008: \$15 million).

Approximately 27 per cent of Rio Tinto's 2009 Underlying earnings from operating businesses came from products whose prices were terminal market related and the remainder came from products priced by direct negotiation.

### Commodity price sensitivity: Risks associated with derivatives

The table below summarises the impact of changes in the market price on the following commodity derivatives including those aluminium forward and option contracts embedded in electricity purchase contracts outstanding at 31 December 2009, but excluding the impact of commodity and embedded derivatives held by equity accounted units (see note a). The impact is expressed in terms of the resulting change in the Group's net earnings for the year or, where applicable, the change in equity. The sensitivities are based on the assumption that the market price increases by ten per cent with all other variables held constant. The Group's 'own use contracts' are excluded from the sensitivity analysis below as they are outside the scope of IAS 39. Such contracts to buy or sell non financial items can be net settled but were entered into and continue to be held for the purpose of the receipt or delivery of the non financial item in accordance with the business unit's expected purchase, sale or usage requirements.

These sensitivities should be used with care. The relationship between currencies and commodity prices is a complex one; changes in exchange rates can influence commodity prices and vice versa.

#### At 31 December 2009

Gains/(losses) associated with 10% increase from year end price

Products	Effect on net earnings US\$m	Effect directly on equity attributable to Rio Tinto US\$m
Copper	(1)	(18)
Aluminium	(19)	(24)
Oil	3	–
<b>Total</b>	<b>(17)</b>	<b>(42)</b>

#### At 31 December 2008

Gains/(losses) associated with 10% increase from year end price

Products	Effect on net earnings US\$m	Effect directly on equity attributable to Rio Tinto US\$m
Copper	–	(13)
Coal	–	(8)
Aluminium	21	(16)
<b>Total</b>	<b>21</b>	<b>(37)</b>

(a) The sensitivities presented do not include those arising from balances within equity accounted units. The impact of reflecting equity accounted units primarily relates to the aluminium sensitivity, with a US\$55 million reduction in net earnings (2008: US\$83 million reduction).

## Notes to the financial statements continued

### 33 Financial risk management continued

#### (iv) Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily from customer receivables) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

#### Credit risks related to receivables

Customer credit risk is managed by each business unit subject to Rio Tinto's established policy, procedures and controls relating to customer credit risk management. Credit limits are established for all customers based on internal or external rating criteria. Where customers are rated by an independent credit rating agency, these ratings are used to set credit limits. In circumstances where no independent credit rating exists, the credit quality of the customer is assessed based on an extensive credit rating scorecard. Outstanding customer receivables are regularly monitored and any credit concerns highlighted to senior management. High risk shipments to major customers are generally covered by letters of credit or other forms of credit insurance.

At 31 December 2009, the Group had approximately 70 customers (2008: 86 customers) that owed the Group more than US\$5 million each and these balances accounted for approximately 52 per cent (2008: 75 per cent) of all receivables owing. There were 17 customers (2008: 21 customers) with balances greater than US\$20 million accounting for just over 30 per cent (2008: 49 per cent) of total amounts receivable.

The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets mentioned on page 191. The Group does not hold collateral as security for any trade receivables.

#### Credit risk related to financial instruments and cash deposits

Credit risk from balances with banks and financial institutions is managed by Group Treasury in accordance with a board approved policy. Investments of surplus funds are made only with approved counterparties and within credit limits assigned to each counterparty. Counterparty credit limits are reviewed by the Rio Tinto board on an annual basis, and may be updated throughout the year subject to approval of the Rio Tinto Finance committee. The limits are set to minimise the concentration of risks and therefore mitigate the potential for financial loss through counterparty failure.

No material exposure is considered to exist by virtue of the possible non performance of the counterparties to financial instruments.

#### (v) Liquidity and Capital risk management

The Group's total capital is defined as Rio Tinto's shareholders' funds plus funds attributable to outside equity shareholders plus net debt, and amounted to US\$65 billion at 31 December 2009 (2008: US\$61 billion).

The Group's over-riding objectives when managing capital are to safeguard the business as a going concern; to maximise returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure in order to provide a high degree of financial flexibility at the lowest cost of capital.

The unified credit status of the Group is maintained through cross guarantees whereby contractual obligations of Rio Tinto plc and Rio Tinto Limited are automatically guaranteed by the other. Following the successful US\$15.2 billion rights issues in July 2009, Moody's and Standard & Poor's ('S&P') improved the Groups credit rating. S&P upgraded the long term rating to BBB+ from BBB and its short term credit ratings to A-2 from A-3, the outlook improved from negative to stable. Moody's affirmed the long term rating of Baa1 and short term corporate credit rating of P-2 also with a stable outlook.

In 2007, Rio Tinto acquired Alcan which was financed using a US\$40 billion syndicated bank facility. As at 31 December 2009, there was US\$8.5 billion drawn on this facility compared to US\$28 billion at 31 December 2008. The facility had two term facilities (Facilities A and D) of which Facility A was fully repaid in 2009 and US\$8.5 billion remained on Facility D at 31 December 2009. Revolving Facility B had an initial capacity of US\$10 billion. As at 31 December 2009, only US\$ 2.1 billion of the facility remained available to draw upon. The maturity date for Facility B is October 2010. Revolving Facility C is for an amount of up to US\$5 billion, all of which is undrawn. The maturity date for Facility C is October 2012. The maturity date for Facility D is December 2012. Advances under each Facility generally bear interest at rates per annum equal to the margin for that Facility plus LIBOR and any mandatory costs. Refer to note 48 – Events after the statement of financial position date for the partial repayment of Facility D and cancellation of Facility B post year end.

The Group's back-up facilities consist of revolving tranches of the syndicated bank facility and a series of standby bi-lateral bank facilities. These standby bi-lateral bank facilities contain no financial covenants and are not affected to any material extent by a change in the Group's credit rating. The syndicated bank facility contains a financial covenant requiring the maintenance of a ratio of no greater than 4.5 times of net borrowings to EBITDA. At 31 December 2009, the Group has available committed financing of US\$5.0 billion under Alcan Facility C, US\$2.1 billion under Facility B and US\$2.3 billion unused committed bilateral banking facilities. Refer to note 22 – Borrowings for further details. Refer to note 48 – Events after the statement of financial position date for the partial repayment of Facility D and cancellation of Facility B post year end.

The Group's net debt as a percentage of total capital was 29 per cent at 31 December 2009 (2008: 63 per cent).

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period from the statement of financial position date to the contractual maturity date. As the amounts disclosed in the table are the contractual undiscounted cash flows, these balances will not necessarily agree with the amounts disclosed in the statement of financial position.

	Trade and other payables US\$m	Borrowings before swaps US\$m	Expected future interest payments <sup>(a)</sup> US\$m	Derivatives related to net debt US\$m	Other financial liabilities US\$m	Total financial liabilities US\$m
<b>At 31 December 2009</b>						
<b>Financial liabilities</b>						
Within 1 year, or on demand	(4,416)	(878)	(942)	(52)	(365)	(6,653)
Between 1 and 2 years	–	(463)	(884)	–	(203)	(1,550)
Between 2 and 3 years	–	(9,087)	(910)	2	(204)	(10,199)
Between 3 and 4 years	–	(3,269)	(840)	–	(177)	(4,286)
Between 4 and 5 years	–	(2,767)	(591)	–	(58)	(3,416)
After 5 years	–	(6,725)	(3,857)	(162)	(54)	(10,798)
	(4,416)	(23,189)	(8,024)	(212)	(1,061)	(36,902)
<b>At 31 December 2008</b>						
<b>Financial liabilities</b>						
Within 1 year, or on demand	(5,478)	(10,079)	(1,375)	–	(414)	(17,346)
Between 1 and 2 years	–	(9,485)	(1,139)	(85)	(129)	(10,838)
Between 2 and 3 years	–	(417)	(914)	–	(130)	(1,461)
Between 3 and 4 years	–	(10,525)	(744)	–	(113)	(11,382)
Between 4 and 5 years	–	(3,112)	(486)	–	(106)	(3,704)
After 5 years	–	(5,760)	(3,366)	–	(123)	(9,249)
	(5,478)	(39,378)	(8,024)	(85)	(1,015)	(53,980)

(a) Interest payments have been projected using interest rates applicable at 31 December, including the impact of interest rate swap agreements, where appropriate. Much of the debt is subject to variable interest rates. Future interest payments are therefore subject to change in line with market rates.

## 34 Financial instruments

Except where stated, the information given below relates to the financial instruments of the parent companies and their subsidiaries and proportionally consolidated units, and excludes those of equity accounted units. The information is grouped in the following sections:

A – Financial assets and liabilities by categories

B – Derivative financial instruments

C – Fair values

## Notes to the financial statements continued

### 34 Financial instruments continued

#### (A) Financial assets and liabilities by categories

At 31 December 2009	Total US\$m	Loans and receivables US\$m	Available for sale securities US\$m	Held at fair value US\$m	Other financial assets and liabilities US\$m
<b>Financial Assets</b>					
Cash and cash equivalents (note 21)	4,233	4,233	–	–	–
Trade and other receivables (note 17) <sup>(a)</sup>	4,739	4,739	–	–	–
Equity shares and quoted funds (note 20)	658	–	658	–	–
Other investments, including loans (note 20)	505	270	77	158	–
Other liquid resources (note 20)	73	–	–	–	73
Currency and commodity contracts: not designated as hedges (note 20)	8	–	–	8	–
Derivatives and embedded derivatives not related to net debt: not designated as hedges (note 20)	291	–	–	291	–
Loans to equity accounted units including quasi equity loans	1,761	1,761	–	–	–
Total financial assets	12,268	11,003	735	457	73
<b>Financial liabilities</b>					
Trade and other payables (note 25) <sup>(b)</sup>	(4,416)	–	–	–	(4,416)
Short term borrowings and bank overdrafts (notes 21 and 22)	(847)	–	–	–	(847)
Medium and long term borrowings (note 22)	(22,155)	–	–	–	(22,155)
Deferred consideration (note 25) <sup>(a)</sup>	(119)	–	–	–	(119)
Forward commodity contracts: designated as hedges (note 26)	(499)	–	–	(499)	–
Derivatives related to net debt (note 26)	(165)	–	–	(165)	–
Other derivatives and embedded derivatives not designated as hedges (note 26)	(300)	–	–	(300)	–
Other financial liabilities (note 26)	(49)	–	–	–	(49)
Total financial liabilities	(28,550)	–	–	(964)	(27,586)

At 31 December 2008	Total US\$m	Loans and receivables US\$m	Available for sale securities US\$m	Held at fair value US\$m	Other financial assets and liabilities US\$m
<b>Financial Assets</b>					
Cash and cash equivalents (note 21)	1,181	1,181	–	–	–
Trade and other receivables (note 17) <sup>(a)</sup>	5,054	5,054	–	–	–
Equity shares and quoted funds (note 20)	261	–	261	–	–
Other investments, including loans (note 20)	480	480	–	–	–
Other liquid resources (note 20)	4	–	–	–	4
Currency and commodity contracts: designated as hedges (note 20)	98	–	–	–	98
Derivatives and embedded derivatives not related to net debt: not designated as hedges (note 20)	87	–	–	87	–
Loans to equity accounted units including quasi equity loans	1,113	1,113	–	–	–
Total financial assets	8,278	7,828	261	87	102
<b>Financial liabilities</b>					
Trade and other payables (note 25) <sup>(b)</sup>	(5,478)	–	–	–	(5,478)
Short term borrowings and bank overdrafts (notes 21 and 22)	(10,034)	–	–	–	(10,034)
Medium and long term borrowings (note 22)	(29,724)	–	–	–	(29,724)
Deferred consideration (note 25) <sup>(a)</sup>	(318)	–	–	–	(318)
Forward commodity contracts: designated as hedges (note 26)	(257)	–	–	–	(257)
Derivatives related to net debt (note 26)	(99)	–	–	(99)	–
Other derivatives and embedded derivatives not designated as hedges (note 26)	(355)	–	–	(355)	–
Other financial liabilities (note 26)	(37)	–	–	–	(37)
Total financial liabilities	(46,302)	–	–	(454)	(45,848)

(a) This excludes pension surpluses, prepayment of tolling charges to jointly controlled entities and other prepayments and accrued income.

(b) Trade and other payables includes trade creditors, amounts owed to equity accounted units, other creditors excluding deferred consideration shown separately and accruals.

**(B) Derivative financial instruments**

The Group's derivatives, including embedded derivatives, as at 31 December 2009, are summarised below:

**(a) Forward contracts relating to operating transactions: designated as hedges****Assets (note 20)**

	Total fair value 2009 US\$m	Total fair value 2008 US\$m
Buy Australian dollar; sell US dollar		
Less than 1 year	8	7
Between 1 and 5 years	-	2
Total	8	9
Other currency forward contracts	-	12
<b>Total currency forward contracts</b>	<b>8</b>	<b>21</b>

The above currency forward contracts were acquired with companies purchased in 2000 and were entered into by those companies in order to reduce their exposure to the US dollar through forecast sales.

## Aluminium price exposures embedded in electricity purchase contracts

Less than 1 year	-	6
Between 1 and 5 years	-	36
Total	-	42

## Coal forward contracts

Less than 1 year	-	35
Between 1 and 5 years	-	-
Total	-	35

**Total commodity forward contracts**

<b>Total assets related to forward contracts designated as hedges</b>	<b>8</b>	<b>98</b>
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Coal commodity contracts have been entered into in order to reduce exposure to movements in the coal price.

**Liabilities (note 26)**

	Total fair value 2009 US\$m	Total fair value 2008 US\$m
Copper forward contracts		
Less than 1 year	(118)	(34)
Between 1 and 5 years	(317)	(146)
Total	(435)	(180)

## Coal (API #2) forward contracts

Less than 1 year	(4)	(18)
Between 1 and 5 years	-	(4)
Total	(4)	(22)

## Coal (GC NewC) forward contracts

Less than 1 year	-	(31)
Total	-	(31)

## Aluminium forward contracts embedded in electricity purchase contracts

Between 1 and 5 years	(4)	-
<b>Total liabilities related to forward contracts designated as hedges</b>	<b>(443)</b>	<b>(233)</b>

The above copper forward contracts were entered into as a condition of the refinancing of Palabora in 2005, and reduce the Group's exposure to movements in the copper price. Coal forward contracts have been entered into in order to reduce exposure to movements in the coal price.

Aluminium price exposures are embedded within certain aluminium smelter electricity purchase contracts. These contracts reduce the Group's exposure to movements in the aluminium price.

## Notes to the financial statements continued

**34 Financial instruments continued****b) Options relating to operating transactions: designated as hedges****Liabilities (note 26)**

	Total fair value 2009 US\$m	Total fair value 2008 US\$m
Aluminium options embedded in electricity purchase contracts		
Less than 1 year	(6)	(1)
Between 1 and 5 years	(50)	(23)
Total	(56)	(24)

Embedded options exist within an electricity purchase contract for a smelter. These derivatives reduce the Group's exposure to movements in the aluminium price. A number of put and call options were combined to form synthetic forward contracts that were designated as hedges of variable priced aluminium sales.

Reconciliation to statement of financial position categories for derivatives designated as hedges	2009 US\$m	2008 US\$m
- non-current assets (note 20)	–	38
- current assets (note 20)	8	60
- current liabilities (note 26)	(128)	(84)
- non-current liabilities (note 26)	(371)	(173)
<b>Total derivatives designated as hedges, detailed above</b>	<b>(491)</b>	<b>(159)</b>

The hedged forecast transactions denominated in foreign currencies and the hedged commodity purchase or sales contracts are expected to occur in line with the maturity dates of the derivatives hedging these particular exposures. Gains and losses recognised in equity for these cash flow hedges will be recycled into the income statement in the period during which the hedged transaction affects the income statement. Where the hedged transaction relates to capital expenditures, the gain or loss on the derivative will be recognised in the income statement within 'depreciation' as the fixed asset is amortised.

Gains and losses recognised in the hedging reserve in equity, net of tax and outside interests, for the year to 31 December 2009, comprised cash flow hedge fair value losses of US\$151 million including equity accounted units (2008: gains of US\$20 million) and net cash flow hedge losses reclassified from equity and included in the income statement for the period amounted to US\$13 million (2008: US\$168 million).

The ineffective portion arising from cash flow hedges recognised in the income statement was US\$2 million (2008: US\$6 million).

**c) Forward and option contracts relating to operating transactions: not designated as hedges**

**Assets**

	Total fair value 2009 US\$m	Total fair value 2008 US\$m
Forward contracts		
Buy New Zealand dollar; sell US dollar		
Less than 1 year	35	15
Between 1 and 5 years	-	15
Total	35	30

The above currency forward contracts relating to the New Zealand dollar were taken out to manage exposures impacting on operating costs.

	Total fair value 2009 US\$m	Total fair value 2008 US\$m
Aluminium forward contracts		
Less than 1 year	153	-
Between 1 and 5 years	63	-
Total	216	-

The above aluminium forward contracts were taken out to manage exposure to movements in the aluminium price.

**Option contracts**

	Total fair value 2009 US\$m	Total fair value 2008 US\$m
Aluminium options embedded in electricity purchase contracts		
Less than 1 year	-	1
Between 1 and 5 years	-	26
More than 5 years	-	18
Total	-	45

The above aluminium options embedded in electricity purchase contracts reduce exposure to movements in the aluminium price.

**Others:**

Less than 1 year		
Other embedded derivatives	-	6
Other commodity contracts	12	2
Other currency forward contracts and swaps	26	4
Between 1 and 5 years		
Other commodity contracts	2	-
Total	40	12
<b>Total assets relating to derivatives not designated as hedges (note 20)</b>	<b>291</b>	<b>87</b>

**Liabilities**

	Total fair value 2009 US\$m	Total fair value 2008 US\$m
<b>Forward contracts</b>		
Aluminium forward contracts		
Less than 1 year	(44)	(158)
Between 1 and 5 years	(3)	(7)
Total	(47)	(165)

The above aluminium forward contracts were taken out to manage exposure to movements in the aluminium price. These contracts are not designated as hedges as they are predominantly offset by other aluminium forward contracts.

## Notes to the financial statements continued

**34 Financial instruments continued****Option contracts**

	Total fair value 2009 US\$m	Total fair value 2008 US\$m
Aluminium options embedded in electricity purchase contracts		
Less than 1 year	(29)	(10)
Between 1 and 5 years	(103)	(79)
More than 5 years	(14)	(73)
Total	(146)	(162)

The above aluminium options embedded in electricity purchase contracts reduce exposure to movements in the aluminium price.

**Others:**

Less than 1 year		
Other currency derivative contracts	–	(3)
Other embedded derivatives	(87)	(20)
Other commodity contracts	(7)	(5)
Between 1 and 5 years		
Other embedded derivatives	(11)	–
Other derivatives	(2)	–
Total	(107)	(28)
<b>Total liabilities relating to derivatives not designated as hedges (note 26)</b>	<b>(300)</b>	<b>(355)</b>

Reconciliation to statement of financial position categories for derivatives not designated as hedges	2009 US\$m	2008 US\$m
– non-current assets (note 20)	65	–
– current assets (note 20)	226	87
– current liabilities (note 26)	(167)	–
– non-current liabilities (note 26)	(133)	(355)
<b>Total derivatives not designated as hedges, detailed above</b>	<b>(9)</b>	<b>(268)</b>

**(d) Currency and interest contracts relating to borrowings**

Liabilities	Total fair value 2009 US\$m	Total fair value 2008 US\$m
<b>Buy US dollar: sell GBP</b>		
Less than 1 year	(68)	(95)
Other currency swaps	–	(4)
Total currency swaps	(68)	(99)
Interest contracts relating to borrowings		
Between 1 and 5 years	(8)	–
More than 5 years	(89)	–
Total interest rate swaps	(97)	–
<b>Total derivatives related to net debt</b>	<b>(165)</b>	<b>(99)</b>
Designated as fair value hedges		
	(165)	(99)

Reconciliation to statement of financial position categories for currency and interest derivatives	2009 US\$m	2008 US\$m
– current liabilities (note 26)	(68)	(4)
– non-current liabilities (note 26)	(97)	(95)
<b>Total currency and interest rate contracts, detailed above</b>	<b>(165)</b>	<b>(99)</b>

The currency contracts are used to swap non US dollar denominated external debt to US dollar floating. The interest rate contracts are used to convert certain fixed rate obligations to a floating rate.

The ineffective portion arising from fair value hedges recognised in the income statement was nil (2008: US\$91 million). The 2008 amount relates to interest rate swaps unwound during the year with a principal of US\$5.9 billion which were de-designated as hedges ahead of the unwind.

### (C) Fair values

The carrying values and the fair values of Rio Tinto's financial instruments, other than trade and other receivables and payables, at 31 December are shown in the following table. The fair values of the Group's cash, short term borrowings and loans to jointly controlled entities and associates approximate their carrying values, as a result of their short maturity or because they carry floating rates of interest.

	31 December 2009		31 December 2008	
	Carrying value US\$m	Fair Value US\$m	Carrying value US\$m	Fair value US\$m
<b>Primary financial instruments held or issued to finance the Group's operations</b>				
Equity shares and quoted funds (note 20)	658	658	261	261
Other investments, including loans (note 20)	505	505	480	480
Cash and cash equivalents (note 21)	4,233	4,233	1,181	1,181
Other liquid resources (note 20)	73	73	4	4
Short term borrowings and bank overdrafts (notes 21 and 22)	(847)	(847)	(10,034)	(10,059)
Medium and long term borrowings (note 22)	(22,155)	(23,318)	(29,724)	(29,752)
Loans to equity accounted units including quasi equity	1,761	1,761	1,113	1,113
Deferred consideration (note 25)	(119)	(119)	(318)	(318)
Other financial liabilities (note 26)	(49)	(49)	(37)	(37)
	(15,940)	(17,103)	(37,074)	(37,127)
<b>Derivatives:</b>				
Forward contracts: designated as hedges (Section B (a) of note 34)	(435)	(435)	(135)	(135)
Option contracts: designated as hedges (Section B (b) of note 34)	(56)	(56)	(24)	(24)
Forward contracts and option contracts not designated as hedges (Section B (c) of note 34)	(9)	(9)	(268)	(268)
Currency swaps hedging borrowings (Section B (d) of note 34)	(68)	(68)	(99)	(99)
Interest rate swap agreements (Section B (d) of note 34)	(97)	(97)	—	—
	(16,605)	(17,768)	(37,600)	(37,653)

### Valuation hierarchy

The table below shows the financial instruments carried at fair value by valuation method at 31 December 2009.

	Total	Level 1 <sup>(a)</sup>	Level 2 <sup>(b)</sup>	Level 3 <sup>(c)</sup>	Not held at fair value
<b>Assets</b>					
Equity shares and quoted funds (note 20)	658	644	14	—	—
Other investments, including loans (note 20)	505	129	—	106	270
Cash and cash equivalents (note 21)	4,233	—	—	—	4,233
Other liquid resources (note 20)	73	—	—	—	73
Loans to equity accounted units including quasi equity	1,761	—	—	—	1,761
<b>Liabilities</b>					
Short term borrowings and bank overdrafts (notes 21 and 22)	(847)	—	—	—	(847)
Medium and long term borrowings (note 22)	(22,155)	—	—	—	(22,155)
Deferred consideration (note 25)	(119)	—	—	—	(119)
Other financial liabilities (note 26)	(49)	—	—	—	(49)
	(15,940)	773	14	106	(16,833)
<b>Derivatives</b>					
Forward contracts: designated as hedges (Section B (a) of note 34)	(435)	—	(430)	(5)	—
Option contracts: designated as hedges (Section B (b) of note 34)	(56)	—	—	(56)	—
Forward contracts and option contracts not designated as hedges (Section B (c) of note 34)	(9)	—	132	(141)	—
Currency swaps hedging borrowings (Section B (d) of note 34)	(68)	—	(68)	—	—
Interest rate swap agreements (Section B (d) of note 34)	(97)	—	(97)	—	—
	(16,605)	773	(449)	(96)	(16,833)

(a) Valuation is based on unadjusted quoted prices in active markets for identical financial instruments. This category includes listed equity shares and other quoted funds.

(b) Valuation is based on inputs that are observable for the financial instruments which includes quoted prices for similar instruments or identical instruments in markets which are not considered to be active or either directly or indirectly based on observable market data.

(c) Valuation is based on inputs for the asset or liability that are not based on observable market data (unobservable inputs).

## Notes to the financial statements continued

### 34 Financial instruments continued

#### Level 3 Financial assets and Financial liabilities

The table below shows the summary of changes in the fair value of the Group's level 3 financial assets and financial liabilities for the year ended 31 December 2009.

	Level 3 financial assets and financial liabilities
<b>Opening balance</b>	(50)
Currency translation adjustments	(1)
Realised gains to income statement	24
Unrealised losses to income statement	(35)
Unrealised losses to comprehensive income	(66)
Additions	38
Disposals	(6)
<b>Closing balance</b>	(96)
<b>Total losses for the year included in the income statement for assets and liabilities held at year end</b>	(31)

### 35 Contingent liabilities and commitments

	2009 US\$m	2008 US\$m
<b>Capital commitments (including those related to joint ventures and associates)</b>		
Within 1 year	2,439	3,568
Between 1 and 3 years	1,050	487
Between 3 and 5 years	308	228
After 5 years	78	71
	<b>3,875</b>	<b>4,354</b>

(a) Included in the above table is other commitments of US\$117 million (2008: US\$18 million). Capital commitments incurred by the Group relating to joint ventures and associates amount to US\$261 million (2008: US\$376 million). Capital commitments incurred jointly with other venturers (Rio Tinto share) relating to joint ventures amount to US\$539 million (2008: US\$713 million).

#### Operating leases

The aggregate amount of minimum lease payments under non cancellable operating leases are as follows:

	2009 US\$m	2008 US\$m
<b>Within 1 year</b>		
Between 1 and 3 years	484	336
Between 3 and 5 years	628	565
After 5 years	287	345
	<b>451</b>	<b>315</b>
	<b>1,850</b>	<b>1,561</b>

#### Unconditional purchase obligations

The aggregate amount of future payment commitments for the next 5 years under unconditional purchase obligations outstanding at 31 December was:

	2009 US\$m	2008 US\$m
<b>Within 1 year</b>		
Between 1 and 2 years	1,339	1,245
Between 2 and 3 years	1,054	870
Between 3 and 4 years	1,113	773
Between 4 and 5 years	1,006	648
After 5 years	891	505
	<b>7,404</b>	<b>6,304</b>
	<b>12,807</b>	<b>10,345</b>

Unconditional purchase obligations relate to commitments to make payments in the future for fixed or minimum quantities of goods or services at fixed or minimum prices. The future payment commitments set out above have not been discounted and mainly relate to commitments under 'take or pay' power and freight contracts. They exclude unconditional purchase obligations of jointly controlled entities apart from those relating to the Group's tolling arrangements.

	2009 US\$m	2008 US\$m
<b>Contingent liabilities (excluding those relating to joint ventures and associates)</b>		
Indemnities and other performance guarantees	316	329
<b>Contingent liabilities relating to joint ventures and associates<sup>(a)</sup></b>		
Share of contingent liabilities of joint ventures and associates	–	5
Incurred in relation to interests in joint ventures	233	187
Incurred in relation to other venturers' contingent liabilities	73	67

- (a) Amounts disclosed include those arising as a result of the Group's investments in both jointly controlled assets and jointly controlled entities.  
(b) There are a number of legal claims currently outstanding against the Group. No material loss to the Group is expected to result from these claims.

### 36 Average number of employees

	Subsidiaries and proportionally consolidated units		Equity accounted units (Rio Tinto share) <sup>(a)</sup>		Group Total	
	2009	2008	2009	2008	2009	2008
<b>The principal locations of employment were:</b>						
Australia and New Zealand	17,537	17,875	2,355	2,471	19,892	20,346
North America	21,787	23,167	580	370	22,367	23,537
Africa	6,539	6,329	1,673	1,980	8,212	8,309
Europe	16,965	16,909	274	520	17,239	17,429
South America	2,039	2,909	1,148	1,116	3,187	4,025
Indonesia	2,165	2,206	–	–	2,165	2,206
Other countries	844	942	356	605	1,200	1,547
Discontinued operations	27,732	28,386	–	–	27,732	28,386
	<b>95,608</b>	<b>98,723</b>	<b>6,386</b>	<b>7,062</b>	<b>101,994</b>	<b>105,785</b>

- (a) Employee numbers, which represent the average for the year, include 100 per cent of employees of subsidiary companies. Employee numbers for proportionally consolidated and equity accounted units are proportional to the Group's interest. Average employee numbers include a part year effect for companies acquired or disposed of during the year.

Part time employees are included on a full time equivalent basis. Temporary employees are included in employee numbers.

People employed by contractors are not included.

## Notes to the financial statements continued

**37 Principal subsidiaries**

At 31 December 2009

Company and country of incorporation/operation	Principal activities	Class of shares held	Proportion of class held (%)	Group interest (%)
<b>Australia</b>				
Argyle Diamond Mines	Mining and processing of diamonds	(a)	100	100
Coal & Allied Industries Limited	Coal mining	Ordinary	75.71	75.71
Dampier Salt Limited	Salt production	Ordinary	68.40	68.40
Energy Resources of Australia Limited	Uranium mining	Class A	68.39	68.39
Hamersley Iron Pty Limited	Iron ore mining	Ordinary	100	100
Queensland Coal Pty Limited <sup>(b)</sup>	Coal mining	Ordinary	100	100
Rio Tinto Aluminium (Holdings) Limited	Bauxite mining; alumina production; primary aluminium smelting	Ordinary	100	100
<b>Canada</b>				
Iron Ore Company of Canada Inc.	Iron ore mining; iron ore pellets	Series A, E & F	58.72	58.72
QIT-Fer et Titane Inc.	Titanium dioxide feedstock; high purity iron and steel	Common shares	100	100
		Class B preference shares	100	100
Rio Tinto Alcan Inc.	Bauxite mining; alumina refining; production of specialty alumina; and recycling; engineered products; flexible and specialty packaging	Common shares	100	100
<b>France</b>				
Talc de Luzenac France SA	Mining, refining and marketing of talc	Ordinary 15.25	100	100
<b>Indonesia</b>				
P.T. Kelian Equatorial Mining	Gold mining (now in close down phase)	Ordinary US\$1	90	90
<b>Madagascar</b>				
QIT Madagascar Minerals SA	Ilmenite mining	Common shares	80	80
<b>Namibia</b>				
Rössing Uranium Limited <sup>(c)</sup>	Uranium mining	B N\$1 C N10c	71.16 70.59 }	68.58
<b>Papua New Guinea</b>				
Bougainville Copper Limited <sup>(d)</sup>	Copper and gold mining	Ordinary 1 Kina	53.58	53.58
<b>South Africa</b>				
Palabora Mining Company Limited	Copper mining, smelting and refining	R1	72.03	57.67
<b>United States of America</b>				
Kennecott Holdings Corporation (including Kennecott Utah Copper, Kennecott Land and Kennecott Exploration)	Copper and gold mining, smelting and refining, land development and exploration activities	Common US\$0.01	100	100
U.S. Borax Inc.	Mining, refining and marketing of borates	Common US\$0.10	100	100

(a) This entity is unincorporated.

(b) Queensland Coal Pty Limited is the main legal entity that owns the shares shown in note 40 of Hail Creek, Blair Athol and Kestrel.

(c) The Group's shareholding in Rössing Uranium Limited carries 35.54 per cent of the total voting rights. Rössing is consolidated by virtue of board control.

(d) The results of Bougainville Copper Limited are not consolidated. See note 47.

(e) The Group comprises a large number of companies and it is not practical to include all of them in this list. The list therefore only includes those companies that have a more significant impact on the profit or assets of the Group.

(f) The Group's principal subsidiaries are held by intermediate holding companies and not directly by Rio Tinto plc or Rio Tinto Limited.

(g) Companies operate mainly in the countries in which they are incorporated.

## 38 Principal jointly controlled entities

At 31 December 2009

Company and country of incorporation/operation	Principal activities	Number of shares held	Class of shares held	Proportion of class held (%)	Group interest (%)
<b>Australia</b>					
Boyne Smelters Limited <sup>(a)</sup>	Aluminium smelting	153,679,560	Ordinary	59.4	59.4
Leichhardt Coal Pty Limited <sup>(b)</sup>	Coal mining	20,115,000	Ordinary	44.7	44.7
Queensland Alumina Limited <sup>(a)</sup>	Alumina production	1,769,600	Ordinary	80	80
<b>Chile</b>					
Minera Escondida Limitada <sup>(c)</sup>	Copper mining and refining			30	30
<b>New Zealand</b>					
New Zealand Aluminium Smelters Limited <sup>(a)</sup>	Aluminium smelting	24,998,400	Ordinary	79.4	79.4
<b>Norway</b>					
Sor-Norge Aluminium A.S.	Aluminium smelting	500,000	Ordinary	50	50
<b>Oman</b>					
Sohar Aluminium Company LLC	Aluminium smelting / power generation	37,500	OMR1	20	20
<b>South Africa</b>					
Richards Bay Titanium (Pty) Ltd <sup>(d)</sup>	Ilmenite, rutile and zircon mining	- - 150,960 - 140,046	Preferred Ordinary A Ordinary B Ordinary A Preference B Preference	- - } 51 - } 51 }	37.7 38.5
Richards Bay Mining (Pty) Ltd <sup>(d)</sup>	Ilmenite, rutile and zircon mining	- - 36,260 - 31,335	Preferred Ordinary A Ordinary B Ordinary A Preference B Preference	- - } 49 - } 49 }	36.3 37.0
<b>United Kingdom</b>					
Anglesey Aluminium Metal Limited <sup>(a)</sup>	Aluminium smelting	13,387,500	Ordinary £1	51	51
<b>United States of America</b>					
Halco (Mining) Inc. <sup>(e)</sup>		4,500	Common	45	45
Pechiney Reynolds Quebec Inc. <sup>(f)</sup>		100 1	Common Preferred	50 } 100 }	50.3
Hydrogen Energy California LLC <sup>(g)</sup>	Alternative energy				50.0

The Group has joint control of the above operations which, except as disclosed in note (d) below, are independent legal entities. It therefore includes them in its accounts using the equity accounting method.

The Group comprises a large number of operations and it is not practical to include all of them in this list. The list therefore only includes those jointly controlled entities that have a more significant impact on the profit or operating assets of the Group.

The Group's principal jointly controlled entities are held by intermediate holding companies and not directly by Rio Tinto plc or Rio Tinto Limited.

With the exception of (e) and (f) above, all jointly controlled entities operate mainly in the countries in which they are incorporated.

- (a) While the Group holds more than a 50 per cent interest in these entities, other participants have veto rights over operating, financing and strategic decision making. Accordingly, the Group does not have the ability to unilaterally control, and therefore does not consolidate these entities.
- (b) Leichhardt has a 31.4 per cent interest in the Blair Athol joint venture. As a result, the Group has a further beneficial interest of 14 per cent in addition to its direct interest of 57.2 per cent, which is owned via a subsidiary of Rio Tinto Limited. The Blair Athol joint venture is disclosed as a jointly controlled asset in note 40.
- (c) The year end of Minera Escondida Limitada is 30 June. However, the amounts included in the consolidated financial statements of Rio Tinto are based on accounts of Minera Escondida Limitada that are coterminous with those of the Group.
- (d) On 9 December, an agreement was signed with a Broad-Based Black Economic Empowerment (BBBEE) Consortium transferring 26 per cent of the Group's interest in Richards Bay Minerals (RBM) to a group comprising local communities, investors and RBM employees. At the same time an agreement was signed with the joint venture partner BHP Billiton, to restructure the joint venture while maintaining the Group's remaining interest in RBM. This transaction has reduced the Group's interest from 50 per cent to 37 per cent allocated between two entities.
- (e) Halco has a 51 per cent indirect interest in Compagnie des Bauxites de Guinée, a bauxite mine, the core assets of which are located in Guinea.
- (f) Pechiney Reynolds Quebec has a 50.1 per cent interest in the Aluminerie de Becancour aluminium smelter, which is located in Canada.
- (g) This entity has been incorporated but its capital has not been divided into shares.

## Notes to the financial statements continued

### 39 Principal associates

At 31 December 2009

Company and country of incorporation/operation	Principal activities	Number of shares held	Class of shares held	Proportion of class held (%)	Group interest (%)
<b>Brazil</b>					
Mineração Rio do Norte SA <sup>(a)</sup>	Bauxite mining	25,000,000 47,000,000	Ordinary Preferred	12.5 11.8 }	12
<b>Cameroon</b>					
Compagnie Camerounaise de l'Aluminum	Aluminium smelting	1,623,127	XAF	46.7	46.7
<b>Canada</b>					
Ivanhoe Mines Ltd <sup>(b)</sup>	Copper and gold mining	83,638,128	Common	19.7	19.7
<b>United States</b>					
Cloud Peak Energy Resources LLC	Coal mining	29,400,000	(c)	48.3	48.3

The Group's principal associates are held by intermediate holding companies and not directly by Rio Tinto plc or Rio Tinto Limited.

The Group comprises a large number of operations and it is not practical to include all of them in this list. The list therefore only includes those associates that have a more significant impact on the profit or operating assets of the Group.

With the exception of Ivanhoe Mines Ltd, the core assets of which are located in Mongolia, all associates operate mainly in the countries in which they are incorporated.

- (a) Mineração Rio do Norte SA is accounted for as an associated company because the Group has significant influence through representation on its board of directors.
- (b) Ivanhoe Mines Ltd is accounted for as an associated company because the Group has significant influence through representation on its board of directors and participation in the technical committee that is responsible for its Oyu Tolgoi project. On 28 October 2009, Rio Tinto completed the second tranche of its private placement investment in Ivanhoe Mines Ltd, increasing its ownership by 9.8 per cent to 19.7 per cent of Ivanhoe's common shares. The second tranche consisted of 46,304,473 common shares at a subscription price of US\$8.38 per share for a total consideration of US\$388 million. If Rio Tinto were to exercise and convert all of its remaining warrants and securities of Ivanhoe, it would own 257,931,578 common shares of Ivanhoe representing 43.1 per cent of Ivanhoe's common shares. Refer to note 48 - Events after the statement of financial position date.
- (c) Through its holdings in Rio Tinto Energy America Inc. and Kennecott Management Services Company, the Group holds 48 per cent of membership interest in Cloud Peak Energy Resources LLC. The remaining 52 per cent ownership interest is held by Cloud Peak Energy Inc., whose stock is traded on the New York Stock Exchange.

### 40 Principal jointly controlled assets and other proportionally consolidated units

At 31 December 2009

Name and country of operation	Principal activities	Group interest (%)
<b>Australia</b>		
Tomago Aluminium Joint Venture	Aluminium smelting	51.6
Bengalla <sup>(a)</sup>	Coal mining	30.3
Blair Athol Coal <sup>(b)</sup>	Coal mining	71.2
Hail Creek	Coal mining	82
Kestrel	Coal mining	80
Mount Thorley <sup>(c)</sup>	Coal mining	60.6
Warkworth	Coal mining	42.1
Northparkes Mine	Copper/gold mining and processing	80
Gladstone Power Station	Power generation	42.1
Robe River Iron Associates	Iron ore mining	53
Hope Downs Joint Venture	Iron ore mining	50
HIs melt®	Iron technology	60
<b>Brazil</b>		
Consórcio de Alumínio Maranhão	Alumina production	10
<b>Canada</b>		
Alouette	Aluminium production	40
Diavik	Mining and processing of diamonds	60
<b>Indonesia</b>		
Grasberg expansion	Copper and gold mining	40

The Group comprises a large number of operations, and it is not practical to include all of them in this list. The list therefore only includes those proportionally consolidated units that have a more significant impact on the profit or operating assets of the Group.

The Group's proportionally consolidated units are held by intermediate holding companies and not directly by Rio Tinto plc or Rio Tinto Limited.

- (a) The Group owns a 40 per cent interest in Bengalla through its 75.71 per cent investment in Coal and Allied, giving a beneficial interest to the Group of 30.3 per cent.
- (b) The Group has a direct interest of 57.2 per cent in Blair Athol Coal, and an additional 14 per cent interest through its investment in Leichhardt Coal Pty Limited, which is disclosed as a jointly controlled entity in note 38.
- (c) The Group owns an 80 per cent interest in Mount Thorley through its 75.71 per cent investment in Coal and Allied, giving a beneficial interest to the Group of 60.6 per cent.

## 41 Purchases and sales of subsidiaries, joint ventures, associates and other interests in businesses

### Acquisitions

On 28 October 2009, Rio Tinto completed the second tranche of its private placement investment in Ivanhoe Mines Ltd, increasing its ownership by 9.8 per cent to 19.7 per cent of Ivanhoe's common shares. The second tranche consists of 46,304,473 common shares at a subscription price of US\$8.38 per share for a total consideration of US\$388 million.

There were no other significant acquisitions for the year ended 31 December 2009.

On 5 June 2009, Rio Tinto and BHP Billiton signed an agreement of core principles to establish a production joint venture covering the entirety of both companies' Western Australian iron ore assets. On 5 December 2009, Rio Tinto and BHP signed binding agreements on the proposed joint venture that cover all aspects of how the joint venture will operate and be governed. Completion of the joint venture had not occurred at 31 December 2009.

There were no significant acquisitions for the year ended 31 December 2008.

### 2009 Disposals

On 1 December 2009, Rio Tinto completed the sale of Alcan Composites, part of Alcan Engineered Products, to Schweiter Technologies for a total consideration of US\$349 million.

On 20 November 2009, Rio Tinto received US\$741 million in connection with Cloud Peak Energy Inc.'s initial public offering (IPO) and related transactions, comprising US\$434 million net proceeds from the sale of part of Rio Tinto's interest in Cloud Peak Energy Resources LLC (CPER), and a cash distribution by CPER of US\$307 million from the proceeds of its debt offering of US\$600 million. An additional US\$7 million was received as part of a working capital adjustment at 31 December 2009. Rio Tinto retains an interest in CPER of 48 per cent, which is now treated as an equity accounted unit (EAU).

US\$660 million of sales proceeds arose from these transactions and US\$151 million was received as dividends from an EAU. The sales proceeds comprised the gross IPO proceeds of US\$459 million, 52 per cent of the cash distribution by CPER (representing the percentage not retained by the Group) and US\$38 million of deferred consideration.

On 1 October 2009, Rio Tinto completed the sale of its Jacobs Ranch coal mine to Arch Coal Inc. for a final cash consideration of US\$764 million.

On 18 September 2009, Rio Tinto completed the sale of its Corumbá iron ore mine and associated river logistics operations to Vale SA for cash consideration of US\$750 million.

On 26 January 2009, Rio Tinto completed the sale of its 50 percent equity share of the Alcan Ningxia aluminium joint venture in China to Qingtongxia Aluminium Group Co. Ltd (QTX) for gross cash consideration of US\$125 million.

The carrying value of the Group's share of the major classes of assets and liabilities at the date of sale were:

	2009
Goodwill	184
Intangible assets	169
Property, plant & equipment	2,021
Investments in equity accounted units	11
Inventories	288
Other financial assets	251
Borrowings	(12)
Deferred tax liabilities	(82)
Provisions	(796)
Outside equity shareholders	(1)
<b>Net assets</b>	<b>2,033</b>
Add: Divestment of investment in associate	80
Less: Retained investment in associates	(359)
Less: Recycled gains and losses and movements in other comprehensive income	(18)
<b>Net assets and investments in associates disposed of</b>	<b>1,736</b>
<b>Consideration</b>	
Cash proceeds (net of transaction costs) <sup>(a)</sup>	2,424
Deferred consideration	46
Disposal costs	(42)
<b>Net consideration</b>	<b>2,428</b>
<b>Gain on disposal</b>	<b>692</b>
Net cash inflow from disposals	2,424
Acquisitions of subsidiaries, joint ventures and associates	(396)
<b>Cash flow from disposals/acquisitions of subsidiaries, joint ventures and associates</b>	<b>2,028</b>

(a) Cash proceeds were stated net of US\$20 million cash and cash equivalents transferred on sale of subsidiaries.

## Notes to the financial statements continued

### 41 Purchases and sales of subsidiaries, joint ventures, associates and other interests in businesses continued

#### 2008 Disposals

On 5 March 2008, the Group completed the sale of its interest (Rio Tinto share 40 per cent) in the Cortez gold mine (previously in the Copper product group) for a sales price which included cash consideration of US\$1,695 million. The Group benefits from a deferred bonus payment in the event of a significant discovery of additional reserves and resources at the Cortez mine and also retains a contingent royalty interest in the future production of the property.

On 16 April 2008, the Group completed the sale of its joint venture interest (Rio Tinto share 70.3 per cent) in the Greens Creek mine to Hecla Mining Company. Greens Creek, which mines silver, gold, zinc and lead, was previously part of the Copper product group. The sale price was US\$750 million, comprising a cash component of US\$700 million with the balance in the common stock of Hecla Mining Company.

The aggregate profit on disposal of interests in businesses (including investments) in 2008 was US\$2,231 million (US\$1,470 million net of tax). These gains have been excluded from Underlying earnings, as shown in note 2.

The Cash flow statement includes US\$2,563 million in 'Net disposals/(acquisitions) of subsidiaries, joint ventures & associates', comprising US\$2,572 million in disposal proceeds, net of US\$9 million paid for acquisitions. In accordance with IAS 7, these proceeds were stated net of US\$5 million cash and cash equivalents transferred on sale of subsidiaries.

Non-cash disposal proceeds of US\$88 million were received during the year.

### 42 Directors' and key management remuneration

Aggregate remuneration, calculated in accordance with the Companies Act 2006, of the directors of the parent companies was as follows:

	2009 US\$'000	2008 US\$'000
Emoluments	18,021	10,620
Long term incentive plans	3,092	2,647
	<b>21,113</b>	<b>13,267</b>
Pension contributions: defined contribution plans	389	338
Gains made on exercise of share options	20	-

The aggregate remuneration incurred by Rio Tinto plc in respect of its directors was US\$17,784,000 (2008: US\$13,214,000). The aggregate pension contribution to defined contribution plans was US\$342,000 (2008: US\$338,000). The aggregate remuneration, including pension contributions and other retirement benefits, incurred by Rio Tinto Limited in respect of its directors was US\$3,718,000 (2008: US\$391,000). The aggregate pension contribution to defined contribution plans was US\$47,000 (2008: US\$43,000).

During 2009, three directors (2008: two) accrued retirement benefits under defined benefit arrangements, and two director (2008: one) accrued retirement benefits under defined contribution arrangements.

Emoluments included in the table above have been translated from local currency at the average rate for the year with the exception of bonus payments which, together with amounts payable under long term incentive plans, have been translated at the year end rate. Detailed information concerning directors' remuneration, shareholdings and options is shown in the Remuneration report, including Tables 1 to 5, on pages 116 to 129 of the *2009 Annual report*.

Aggregate compensation, representing the expense recognised under EU IFRS, of the Group's key management, including directors, was as follows:

	2009 US\$'000	2008 US\$'000
Short term employee benefits and costs	35,881	21,086
Post employment benefits	3,692	3,664
Termination benefits	1,357	-
Share based payments	34,476	(5,360)
	<b>75,406</b>	<b>19,390</b>

The figures shown above include employment costs which comprise of social security and accident premiums in the UK and US and payroll taxes in Australia paid by the employer as a direct additional cost of hire. In total, they amount to US\$2,269,000 (2008: US\$1,389,000) and although disclosed here, are not included in Table 1 of the Remuneration report.

More detailed information concerning the remuneration of key management is shown in the Remuneration report, including Tables 1 to 5 on pages 116 to 129 of the *2009 Annual report*.

## 43 Auditors' remuneration

	2009 US\$m	2008 US\$m
<b>Group Auditors' remuneration <sup>(a)</sup></b>		
Audit services pursuant to legislation		
– audit of the Group's annual accounts	2.3	3.2
– audit of the accounts of the Group's subsidiaries <sup>(b)</sup>	20.9	26.5
Audit services in connection with divestment programme <sup>(f)</sup>	22.0	24.4
	<b>45.2</b>	54.1
Other services		
– services in connection with capital raising	4.2	–
– services in connection with bid defence	–	9.4
– services in connection with divestment programme	8.4	25.8
– taxation services <sup>(c)</sup>	2.1	3.3
– other services	2.2	2.6
Total other services	<b>16.9</b>	41.1
	<b>62.1</b>	95.2
<b>Remuneration payable to other accounting firms <sup>(d)</sup></b>		
Audit services pursuant to legislation		
– audit of accounts of the Group's subsidiaries <sup>(b)</sup>	0.5	0.2
Non audit services		
– taxation services <sup>(c)</sup>	9.1	15.8
– financial systems design and implementation	–	0.2
– internal audit	8.4	7.1
– litigation services	0.1	–
– other services <sup>(e)</sup>	12.2	42.0
	<b>30.3</b>	65.3
Fees in respect of pension scheme audits	0.1	0.3
	<b>30.4</b>	65.6
	<b>92.5</b>	160.8

- (a) The remuneration payable to PricewaterhouseCoopers, the Group Auditors, is approved by the Audit committee. The committee sets the policy for the award of non audit work to the auditors and approves the nature and extent of such work, and the amount of the related fees, to ensure that independence is maintained. The fees disclosed above consolidate all payments made to PricewaterhouseCoopers by the Companies and their subsidiaries, together with the Group's share of the payments made by proportionally consolidated units. Non-audit services arise largely from assurance and/or regulation related work.
- (b) Fees payable for the 'audit of the accounts of the Group's subsidiaries' includes the statutory audit of subsidiaries and other audit work performed to support the audit of the Group financial statements.
- (c) 'Taxation services' includes tax compliance and advisory services. Tax compliance involves the preparation or review of returns for corporation, income, sales and excise taxes. Tax advisory services includes advice on non recurring acquisitions and disposals, advice on transfer pricing and advice on employee global mobility.
- (d) 'Remuneration payable to other accounting firms' does not include fees for similar services payable to suppliers of consultancy services other than accountancy firms.
- (e) 'Other services' in 2009 and 2008 in respect of other accounting firms includes costs relating to capital raising, divestments and similar corporate services, pension fund and payroll administration, advice on accounting matters, secondments of accounting firms' staff, forensic audit and other consultancy.
- 'Other services' in 2008 in respect of other accounting firms includes one off costs related to the rejection by the board of the pre-conditional takeover proposal from BHP Billiton which was withdrawn in November 2008.
- (f) Audit services represent assurance provided in respect of carve-out financial statements.

## Notes to the financial statements continued

### 44 Related party transactions

Information about material related party transactions of the Rio Tinto Group is set out below:

#### **Subsidiary companies and proportionally consolidated units**

Details of investments in principal subsidiary companies are disclosed in note 37.

Information relating to proportionally consolidated units can be found in note 40.

#### **Equity accounted units**

Transactions and balances with equity accounted units are summarised below. Purchases relate largely to amounts charged by jointly controlled entities for toll processing of bauxite and alumina. Sales relate largely to charges for supply of coal to jointly controlled marketing entities for onward sale to third party customers.

	2009 US\$m	2008 US\$m
Income statement items		
Purchases from equity accounted units	(2,558)	(2,770)
Sales to equity accounted units	2,088	3,011
Balance sheet items		
Investments in equity accounted units (note 14) (a)	6,735	5,053
Loans to equity accounted units	338	515
Loans from equity accounted units	(157)	(195)
Trade and other receivables: amounts due from equity accounted units (note 17)	941	688
Trade and other payables: amounts due to equity accounted units (note 25)	(402)	(280)
Cash flow statement items		
Net funding of equity accounted units	(265)	(334)

(a) Further information about investments in equity accounted units is set out in notes 38 and 39.

In November 2009, as part of the disposal process of Cloud Peak, Rio Tinto Energy America Inc. and Cloud Peak Energy Resources LLC (CPER) agreed for existing Rio Tinto plc guaranteed surety bonds and letters of credit, principally securing the reclamation obligations for the Cloud Peak business, to continue for a transition period. The surety bonds are expected to be replaced by CPER during the first half of 2010. The amount outstanding on these guarantees at the year end is US\$449 million.

#### **Pension funds**

Information relating to pension fund arrangements is disclosed in note 50.

#### **Directors and key management**

Details of directors' and key management remuneration are set out in note 42 and in the Remuneration report on pages 104 to 129.

### 45 Exchange rates in US\$

The principal exchange rates used in the preparation of the 2009 financial statements are:

	Annual average		Year end	
	2009	2008	2009	2008
Sterling	1.57	1.86	1.61	1.44
Australian dollar	0.79	0.86	0.89	0.69
Canadian dollar	0.88	0.94	0.95	0.82
South African rand	0.12	0.12	0.14	0.11
Euro	1.39	1.47	1.44	1.41

## 46 Rights issues

The terms of the rights issues were 21 New Rio Tinto plc Shares offered for every 40 existing shares at 1,400 pence per share and 21 New Rio Tinto Limited Shares offered for every 40 existing shares at A\$28.29 per share. The rights issues were fully underwritten and were completed on 2 July 2009 and 3 July 2009 respectively. The net proceeds from the rights issues of US\$14.8 billion were used to pay down Group borrowings.

Although Rio Tinto plc's functional currency is the US dollar, the UK element of the rights issue was denominated in Sterling. At the time the Group announced its half year results, the offer of rights was treated as a derivative financial liability under IFRS prevailing at that time because the company was not issuing a fixed number of shares for a fixed amount of US dollars (Rio Tinto Limited's functional currency is the Australian dollar and the Australian element of the rights issue was denominated in Australian dollars so there was no equivalent issue for Rio Tinto Limited). This gave rise to a gain of US\$827 million in the Group's half year income statement. In October 2009, the IASB approved an amendment to IAS 32 which allows the offer of rights to be treated as an equity instrument, provided they are offered pro rata to all shareholders. The EU endorsed this amendment in January 2010 and the gain of US\$827 million was therefore reversed in the second half of 2009.

Both Rio Tinto plc and Rio Tinto Limited entered into a series of forward US dollar derivative exchange contracts to minimise exposure to foreign exchange rates and to provide confidence in the absolute dollar proceeds from the rights issues. Proceeds from the rights issues were used for a partial prepayment of the US dollar denominated Alcan acquisition facility. The forward contracts taken out by both companies are accounted for as derivatives. The contracts entered into by Rio Tinto plc to fix the Sterling proceeds in US dollars, which is the company's functional currency, are considered to be, in substance, share issue costs and accordingly, the losses on these contracts from inception to receipt of proceeds have been recognised in equity, within share premium. Rio Tinto Limited's functional currency is the Australian dollar and, therefore, the losses on the contracts entered into by Rio Tinto Limited have been recognised in the income statement and excluded from Underlying earnings. The losses on Rio Tinto plc and Rio Tinto Limited contracts are included within 'Other investing cash flows' in the statement of cash flow.

The rights issues were at a discount to the then market price. Accordingly, earnings per share for all periods up to the date on which the shares were issued have been adjusted for the bonus element of the rights issues. The bonus factor for Rio Tinto plc was 1.2105 and for Rio Tinto Limited was 1.2679. 2008 comparatives for both earnings per share and ordinary dividends per share have been restated accordingly.

## 47 Bougainville Copper Limited ('BCL')

Mining has been suspended at the Panguna mine since 1989. Safe mine access by company employees has not been possible since that time and an accurate assessment of the condition of the assets cannot therefore be made. Considerable funding would be required to recommence operations to the level which applied at the time of the mine's closure in 1989. An 'Order of Magnitude' study undertaken in 2008 indicates that costs in a range of US\$2 billion to US\$4 billion would be required to reopen the mine assuming all site infrastructure is replaced. The directors consider that the Group does not currently realise a benefit from its interest in BCL and therefore BCL information continues to be excluded from the financial statements. BCL reported a net profit of US\$3 million for the financial year (2008: net loss of US\$2 million). This is based upon actual transactions for the financial year. The aggregate amount of capital and reserves reported by BCL as at 31 December 2009 was US\$138 million (2008: US\$113 million). The Group owns 214,887,966 shares in BCL, representing 53.6 per cent of the issued share capital. The investment of US\$195 million was fully provided against in 1991. At 31 December 2009, the number of shares in BCL held by the Group, multiplied by the share price, resulted in an amount of US\$114 million (2008: US\$101 million).

## 48 Events after the statement of financial position date

On 29 January 2010, US\$2.0 billion of Facility D of the Alcan facility was paid. An additional US\$2.0 billion was paid on 26 February 2010, leaving US\$4.5 billion outstanding on the facility.

All of Tranches A and B of the Alcan facility have now been repaid. Facility B of the acquisition facility is a revolving facility of which US\$2.1 billion was undrawn at 31 December 2009. On 5 February 2010, in accordance with the acquisition facility agreement, proceeds from the sale of the majority of Alcan Packaging to Amcor were used to cancel US\$2.0 billion of the outstanding capacity. At the same time, the Group voluntarily surrendered the remaining US\$0.1 billion of the facility.

Rio Tinto completed the sale of Alcan Packaging global pharmaceuticals, global tobacco, food Europe and food Asia divisions to Amcor for a total consideration of US\$1,948 million on 1 February 2010. The consideration has been adjusted to exclude the Medical Flexibles operations and to reflect the actual business performance over the past six months. The final consideration remains subject to certain customary post-close adjustments.

The sale of Maules Creek to Aston Resources was completed on 18 February 2010.

The sale of the Alcan Packaging Food Americas division to Bemis Company Inc., for a total all-cash consideration of US\$1.2 billion was completed on 1 March 2010.

These divestments have not been reflected in the 2009 results, and will be reflected in the period in which the sales are completed.

On 1 March 2010, Rio Tinto announced that it has agreed to acquire 15 million shares in Ivanhoe Mines Ltd. at a subscription price of C\$16.31 per share, increasing its ownership in Ivanhoe Mines by 2.7 per cent to 22.4 per cent. The total consideration for this acquisition is C\$244.7 million. The shares are being issued to Rio Tinto in satisfaction of an agreement with Ivanhoe Mines in 2008 to finance equipment for the Oyu Tolgoi copper-gold complex in Mongolia's South Gobi region. After the completion of the acquisition, Rio Tinto will own 98.6 million shares of Ivanhoe Mines. If Rio Tinto were to execute all of its shares purchase warrants and convert its US\$350 million loan into shares it would own approximately 267.6 million shares of Ivanhoe Mines representing 44.0 per cent of Ivanhoe Mines.

## Notes to the financial statements continued

### 49 Share based payments

Rio Tinto plc and Rio Tinto Limited ('the Companies') have a number of share based payment plans, which are described in detail in the Remuneration report. These plans have been accounted for in accordance with the fair value recognition provisions of 'IFRS 2 Share-based Payment', which means that IFRS 2 has been applied to all grants of employee share based payments that had not vested as at 1 January 2004.

The charge/(credit) that has been recognised in the income statement for Rio Tinto's share based compensation plans, and the related liability (for cash-settled plans), is set out in the table below.

	Charge/(credit) recognised for the year		Liability at the end of the year	
	2009 US\$m	2008 US\$m	2009 US\$m	2008 US\$m
Equity-settled plans	76	61	—	—
Cash-settled plans	101	(83)	111	43
Total	177	(22)	111	43

#### Effect of the rights issues

All options and awards outstanding when the rights issues took place have been adjusted to nullify any impact on the economic position of the participant at exercise. For Rio Tinto plc options the fair values and exercise prices have been reduced by the bonus element and the number of options and awards has been increased by the same proportion.

For Rio Tinto Limited awards, 'top-up' awards have been granted to increase the number held with a corresponding decrease in the associated fair value. For Rio Tinto Limited options the exercise price has been reduced so that their intrinsic value measured at June 2009 remains unchanged as a result of the rights issue.

The 2008 comparatives have been restated as if the rights issues had taken place prior to the 1st January 2008. This is to ensure the figures are comparable with the 2009 results which include the impact of the rights issues.

#### Lattice-based option valuation model

The fair value of share options is estimated as at the date of grant using a lattice-based option valuation model. The significant assumptions used in the valuation model are disclosed below. Expected volatilities are based on the historical volatility of Rio Tinto's share returns under the UK and Australian listings. Historical data was used to estimate employee forfeiture and cancellation rates within the valuation model. Under the Share Option Plans, it is assumed that after options have vested 20 per cent per annum of participants will exercise their options when the market price is at least 20 per cent above the exercise price of the option. Participants in the Share Savings Plans are assumed to exercise their options immediately after vesting. The implied lifetime of options granted is derived from the output of the option valuation model and represents the period of time that options granted are expected to be outstanding. The risk-free rate used in the valuation model is equal to the yield available on UK and Australian zero-coupon government bonds (for plc and Limited options respectively) at the date of grant with a term equal to the expected term of the options.

#### Summary of options outstanding

A summary of the status of the Companies' equity-settled share option plans at 31 December 2009, and changes during the year ended 31 December 2009, is presented below.

#### Options outstanding at 31 December 2009

	Number	Weighted average exercise price per option £ / A\$	Weighted average remaining contractual life Years	Aggregate intrinsic value US\$m 2009
Rio Tinto plc Share Savings Plan (£9 – £27)	1,474,390	20.90	2.2	31
Rio Tinto Limited Share Savings Plan (A\$12 – A\$67)	2,139,259	48.17	3.2	51
Rio Tinto plc Share Option Plan (£7 – £48)	5,902,934	17.60	5.9	161
Rio Tinto Limited Share Option Plan (A\$16 – A\$119)	2,439,297	42.04	6.4	73
	11,955,880			316

As at 31 December 2008 there were 11,922,094 options outstanding with an aggregate intrinsic value of US\$19 million.

#### Options exercisable at 31 December 2009

Rio Tinto plc Share Option Plan (£7 – £23)	3,523,088	14.19	4.2	112
Rio Tinto Limited Share Option Plan (A\$16 – A\$55)	1,383,290	36.66	5.0	47
	4,906,378			159

As at 31 December 2009, there were no options exercisable under either the Rio Tinto plc or the Rio Tinto Limited Share Savings Plans.

### Share Savings Plans

Awards under these plans are settled in equity and accounted for accordingly. The fair value of each award on the day of grant was estimated using a lattice-based option valuation model, including allowance for the exercise price being at a discount to market price. The key assumptions used in the valuation are noted in the following table.

	Risk-free interest rate %	Expected volatility %	Dividend yield %	Forfeiture rates %	Cancellation rates <sup>(a)</sup> %	Implied lifetime Years
<b>Awards made in 2009</b>						
- Rio Tinto plc	1.5-2.8	47.0	1.8	5.0	5.0	2.2-5.2
- Rio Tinto Limited	5.4-5.6	38.0	1.5	5.0	5.0	3.2-5.2

(a) In addition to the regular cancellation rates above it is assumed that on the anniversary of date of grant a proportion of employees will cancel their awards in favour of new awards if the then share price is less than the exercise price. The proportion assumed is a sliding scale from 20 per cent cancelling if the then share price equals the exercise price to 100 per cent cancelling if the then share price is 75 per cent of the exercise price or less.

### Rio Tinto plc – Share Savings Plan

	Weighted average exercise price 2009 Number	Weighted average exercise price 2008 Number
Options outstanding at 1 January	1,661,006	1,718,565
Granted	453,616	532,423
Forfeited	(57,375)	(45,695)
Exercised	(269,227)	(465,378)
Cancellations	(160,546)	(66,597)
Expired	(153,084)	(12,312)
Options outstanding at 31 December	1,474,390	1,661,006
Weighted average fair value, at date of grant, of options granted during the year (£)	9.27	1.55
Share price, at date of grant, of options granted during the year (£)	29.72	16.94
Weighted average share price at the time the options were exercised during the year (£)	18.29	39.45

Comparatives have been updated for the impact of the rights issues as explained in the section 'Effect of the rights issues' on page 202.

### Rio Tinto Limited – Share Savings Plan

	Weighted average exercise price 2009 Number	Weighted average exercise price 2008 Number
Options outstanding at 1 January	1,901,417	2,634,607
Granted	1,183,090	413,271
Forfeited	(95,677)	(285,641)
Exercised	(340,646)	(797,744)
Cancellations	(374,471)	(46,602)
Expired	(134,454)	(16,474)
Options outstanding at 31 December	2,139,259	1,901,417
Weighted average fair value, at date of grant, of options granted during the year (A\$)	20.89	5.15
Share price, at date of grant, of options granted during the year (A\$)	64.68	52.06
Weighted average share price at the time the options were exercised during the year (A\$)	46.43	101.10

Comparatives have been updated for the impact of the rights issues as explained in the section 'Effect of the rights issues' on page 202.

## Notes to the financial statements continued

### 49 Share based payments continued

#### Share Option Plans

The Group has a policy of settling these awards in equity, although the directors at their discretion can offer a cash alternative. The awards are accounted for in accordance with the requirements applying to equity-settled, share based payment transactions. The performance conditions in relation to Total Shareholder Return ('TSR') have been incorporated in the measurement of fair value for these awards by modelling the correlation between Rio Tinto's TSR and that of the index. The relationship between Rio Tinto's TSR and the index was simulated many thousands of times to derive a distribution which, in conjunction with the lattice-based option valuation model, was used to determine the fair value of the options.

The key assumptions are noted in the following table.

	Risk-free interest rate %	Expected volatility %	Dividend yield %	Turnover rates %	Implied lifetime Years
<b>Awards made in 2009</b>					
– Rio Tinto plc	2.3	46.0	4.6	3.0	4.4
– Rio Tinto Limited	3.8	36.0	4.1	3.0	4.6

A summary of the status of the Companies' performance-based share option plans at 31 December 2009, and changes during the year ended 31 December 2009, is presented below.

#### Rio Tinto plc – Share Option Plan

	2009 Number	Weighted average exercise price 2009 £	2008 Number	Weighted average exercise price 2008 £
Options outstanding at 1 January	5,647,992	17.25	6,004,326	15.49
Granted	1,284,749	16.53	332,519	47.28
Forfeited	(112,917)	17.30	(152,870)	26.59
Exercised	(916,890)	14.03	(535,983)	13.47
Options outstanding at 31 December	5,902,934	17.60	5,647,992	17.25
Weighted average fair value, at date of grant, of options granted during the year (£)		5.49		17.04
Weighted average share price, at date of grant, of options granted during the year (£)		17.44		46.21
Weighted average share price at the time the options were exercised during the year (£)		26.89		42.26

Comparatives have been updated for the impact of the rights issues as explained in the section 'Effect of the rights issues' on page 202.

In addition to the equity-settled options shown above, there were 133,546 cash-settled options outstanding at 31 December 2009. The total liability for these awards at 31 December 2009 was US\$4 million (2008: less than US\$1 million).

#### Rio Tinto Limited – Share Option Plan

	2009 Number	Weighted average exercise price 2009 A\$	2008 Number	Weighted average exercise price 2008 A\$
Options outstanding at 1 January	2,711,678	38.82	3,351,754	34.73
Granted	540,422	33.45	63,633	118.07
Forfeited	(43,559)	40.24	(45,231)	80.12
Exercised	(769,244)	24.73	(658,478)	22.83
Options outstanding at 31 December	2,439,297	42.04	2,711,678	38.82
Weighted average fair value, at date of grant, of options granted during the year (A\$)		13.35		44.04
Weighted average share price, at date of grant, for options granted during the year (A\$)		40.03		103.48
Weighted average share price at the time the options were exercised during the year (A\$)		54.35		108.92

Comparatives have been updated for the impact of the rights issues as explained in the section 'Effect of the rights issues' on page 202.

In addition to the equity-settled options shown above there were 44,717 cash-settled options outstanding at 31 December 2009. The total liability for these awards at 31 December 2009 was US\$2 million (2008: less than US\$1 million).

### Share Ownership Plan

The fair values of awards of Matching and Free Shares made by Rio Tinto are taken to be the market value of the shares on the date of purchase. These awards are settled in equity. The total fair value of shares awarded during the year was US\$1 million (2008: US\$2 million).

### Mining Companies Comparative Plan

Awards under this plan are accounted for in accordance with the requirements applying to cash-settled, share based payment transactions. If any awards are ultimately settled in shares, the liability is transferred direct to equity as the consideration for the equity instruments issued. The grant date fair values of the awards made prior to 2008 are taken to be the market value of the shares at the date of award reduced by 50 per cent for anticipated relative TSR performance. The grant date fair value of the awards made in 2008 and 2009 were calculated using a Monte Carlo simulation model. In addition, for the valuations after 2005, the market value is reduced for non receipt of dividends between measurement date and date of vesting (excluding awards for executive directors and product group chief executive officers). Forfeitures are assumed prior to vesting at three per cent per annum of outstanding awards, except for the 2009 awards where no allowance has been made for forfeitures. In accordance with the method of accounting for cash-settled awards, fair values are subsequently re-measured each year to reflect the market price of shares at the measurement date and the number of awards expected to vest based on the current and anticipated TSR performance. This re-measurement at 31 December 2008 and 31 December 2009 was calculated using a Monte Carlo simulation model.

A summary of the status of the Companies' performance-based share plans at 31 December 2009, and changes during the year, is presented below.

#### Rio Tinto plc – Mining Companies Comparative Plan

	2009 Number	Weighted average fair value at grant date 2009 £	2008 Number	Weighted average fair value at grant date 2008 £
Non vested shares at 1 January	3,148,648	12.21	3,847,057	7.11
Awarded	191,887	13.56	471,804	39.71
Forfeited	(31,116)	16.19	(173,640)	13.43
Failed performance conditions	(145,215)	5.81	(534,881)	5.33
Vested	(840,023)	5.81	(461,692)	5.33
Non-vested shares at 31 December	2,324,181	14.98	3,148,648	12.21
Weighted average share price at date of vesting (£)		16.13		45.38

	2009 Number	Total fair value 2009 £'000	2008 Number	Total fair value 2008 £'000
Shares issued in settlement of shares vested during the year	292,719	4,801	141,146	6,486
Total cash payments made in settlement of shares vested during the year		9,236		14,628

Comparatives have been updated for the impact of the rights issues as explained in the section 'Effect of the rights issues' on page 202.

#### Rio Tinto Limited – Mining Companies Comparative Plan

	2009 Number	Weighted average fair value at grant date 2009 A\$	2008 Number	Weighted average fair value at grant date 2008 A\$
Non-vested shares at 1 January	2,162,867	26.97	2,674,827	19.03
Awarded	32,284	32.74	209,521	88.42
Forfeited	(36,541)	35.13	(40,807)	45.31
Failed performance conditions	(87,442)	15.03	(384,978)	13.58
Vested	(555,525)	15.03	(295,696)	13.58
Non-vested shares at 31 December	1,515,643	31.97	2,162,867	26.97
Weighted average share price at date of vesting (A\$)		39.80		108.13

	2009 Number	Total fair value 2009 A\$'000	2008 Number	Total fair value 2008 A\$'000
Shares issued in settlement of shares vested during the year	175,916	7,261	129,845	14,706
Total cash payments made in settlement of shares vested during the year		17,088		19,217
Total cash payments made in settlement of shares vested during previous years		–		141

Comparatives have been updated for the impact of the rights issues as explained in the section 'Effect of the rights issues' on page 202.

## Notes to the financial statements continued

### 49 Share based payments continued

#### Management Share Plan

The Management Share Plan was introduced during 2007 to provide conditional share-based awards to management. The vesting of these awards is dependent on service and/or performance based conditions being met. The awards will be settled in equity including the dividends accumulated from date of award to vesting. The awards are accounted for in accordance with the requirements applying to equity-settled share based payment transactions. The fair value of each award on the day of grant is equal to the share price on the day of grant less a small adjustment for the timing of dividends. Forfeitures are assumed prior to vesting at five per cent per annum of outstanding awards.

A summary of the status of the Companies' share plans at 31 December 2009, and changes during the year, is presented below.

#### Rio Tinto plc – Management Share Plan

	2009 Number	Weighted average fair value at grant date 2009 £	2008 Number	Weighted average fair value at grant date 2008 £
Non-vested awards at 1 January	862,850	36.89	416,673	24.95
Awarded	1,593,271	17.84	533,569	45.56
Forfeited	(196,816)	25.77	(57,603)	33.30
Vested	(127,497)	31.50	(29,789)	32.15
Non-vested awards at 31 December	2,131,808	24.00	862,850	36.89

	2009 Number	Weighted average share price 2009 £	2008 Number	Weighted average share price 2008 £
Shares issued in respect of vested awards during the year	127,497	22.77	4,605	40.19

Comparatives have been updated for the impact of the rights issues as explained in the section 'Effect of the rights issues' on page 202.

In addition to the equity-settled awards shown above, there were 145,258 cash-settled awards outstanding at 31 December 2009. The total liability for these awards at 31 December 2009 was US\$6 million (2008: US\$3 million).

#### Rio Tinto Limited – Management Share Plan

	2009 Number	Weighted average fair value at grant date 2009 A\$	2008 Number	Weighted average fair value at grant date 2008 A\$
Non-vested awards at 1 January	511,643	84.06	328,288	67.65
Awarded	735,282	43.30	222,542	106.87
Forfeited	(119,565)	65.25	(35,123)	77.18
Vested	(36,557)	71.77	(4,064)	67.51
Non-vested awards at 31 December	1,090,803	59.06	511,643	84.06

	2009 Number	Weighted average share price 2009 A\$	2008 Number	Weighted average share price 2008 A\$
Shares issued in respect of vested awards during the year	36,557	50.42	3,503	95.27

Comparatives have been updated for the impact of the rights issues as explained in the section 'Effect of the rights issues' on page 202.

In addition to the equity-settled awards shown above there were 9,593 cash-settled awards outstanding at 31 December 2009. The total liability for these awards at 31 December 2009 was less than US\$1 million (2008: less than US\$1 million).

**Bonus Deferral Plan**

The Bonus Deferral Plan was introduced during 2009 and is made up of two parts; the Bonus Deferral Award and the Company Contributed Award. The Bonus Deferral Award was established for the mandatory deferral of 100 per cent of the 2008 Bonus for executive directors and product group executives and 50 per cent of the 2008 Bonus for other executives. In addition, in order to enhance retention of key employees the Company Contributed Award was made in respect of 25 per cent of the gross annual basic salary for other executives. The vesting of these awards is dependent only on service conditions being met. The awards will be settled in equity including the dividends accumulated from date of award to vesting. The awards are accounted for in accordance with the requirements applying to equity-settled share based payment transactions. The fair value of each award on the day of grant is equal to the share price on the day of grant less a small adjustment for the timing of dividends vesting. Forfeitures are assumed prior to vesting at three per cent per annum of outstanding awards.

A summary of the status of the Companies' share plans at 31 December 2009, and changes during the year, is presented below.

**Rio Tinto plc – Bonus Deferral Plan**

	2009 Number	Weighted average fair value at grant date 2009 £
Non-vested awards at 1 January	–	–
Awarded	536,149	17.32
Forfeited	(4,907)	17.32
Vested	(43,329)	17.32
Non-vested awards at 31 December	<b>487,913</b>	<b>17.32</b>

**Shares issued in respect of vested awards during the year**

	2009 Number	Weighted average share price at grant date 2009 £
Shares issued in respect of vested awards during the year	9,171	29.75

In addition to the equity-settled awards shown above, there were 8,000 cash-settled awards outstanding at 31 December 2009. The total liability for these awards at 31 December 2009 was less than US\$1 million.

**Rio Tinto Limited – Bonus Deferral Plan**

	2009 Number	Weighted average fair value at grant date 2009 A\$
Non-vested awards at 1 January	–	–
Awarded	278,405	41.75
Forfeited	(13,460)	41.75
Vested	(13,006)	41.75
Non-vested awards at 31 December	<b>251,939</b>	<b>41.75</b>

**Shares issued in respect of vested awards during the year**

	2009 Number	Weighted average share price at grant date 2009 A\$
Shares issued in respect of vested awards during the year	9,714	53.13

## Notes to the financial statements continued

### 50 Post retirement benefits

#### Description of plans

The Group operates a number of pension and post retirement healthcare plans around the world. Some of these plans are defined contribution and some are defined benefit, with assets held in separate trusts, foundations and similar entities. Valuations of these plans are produced and updated annually to 31 December by qualified actuaries. Plans that were previously sponsored by the Alcan Packaging business were previously excluded from this note and reflected in the value of the assets held for sale. Any plans that are not now expected to be sold with these businesses are now reflected in this note rather than within 'Assets held for sale'.

Rio Tinto has a number of retirement plans which, within the same legal arrangement, have sections providing benefits on a defined benefit basis and sections providing benefits on a defined contribution basis. In prior years these arrangements were presented as a defined benefit plan only, although they had characteristics of both types of plan. Those sections providing benefits on a defined contribution basis are now presented as defined contribution plans. The comparative information in all of the tables in this note has been adjusted to conform to the current year presentation. The comparative statements of financial position, income statements and statements of comprehensive income were not affected by this change.

#### Pension plans

The majority of the Group's pension obligations are in Canada, the UK, the US, Switzerland and the Eurozone. There are some defined benefit obligations in Australia but the retirement arrangements there are predominantly defined contribution. In general the Group has a policy of moving towards defined contribution provision.

There are a number of pension arrangements in the UK. The defined benefit sections of these arrangements are linked to final pay and are closed to new members, with new employees being admitted to defined contribution sections.

In Australia, the main arrangements are principally defined contribution in nature but there are sections providing defined benefits linked to final pay, typically paid in lump sum form.

A number of defined benefit pension plans are sponsored by the US and Canadian entities. The main plans are two Canadian plans for salaried and bargaining employees. Benefits for salaried staff are generally linked to final average pay, while benefits for bargaining employees are reviewed in negotiation with unions.

In Europe, there are defined benefit plans in Switzerland, the Netherlands, Germany and France. The largest single plan is in Switzerland and provides benefits linked to final average pay.

The Group also operates a number of unfunded defined benefit plans, which are included in the figures below.

#### Post retirement healthcare plans

Certain subsidiaries of the Group, mainly in the US and Canada, provide health and life insurance benefits to retired employees and in some cases to their beneficiaries and covered dependants. Eligibility for cover is dependent upon certain age and service criteria. These arrangements are unfunded, and are included in the figures below.

#### Plan assets

The proportions of the total fair value of assets in the pension plans for each asset class at the balance sheet date were:

	2009	2008 <sup>(a)</sup>
Equities	54.9%	51.3%
Bonds	33.6%	36.6%
Property	5.5%	7.1%
Other	6.0%	5.0%
	<b>100.0%</b>	<b>100.0%</b>

(a) Prior year comparatives have been adjusted to conform to the current year presentation. The sections providing benefits on a defined contribution basis are now presented as defined contribution plans. Further details are provided above.

The assets of the plans are generally managed on a day-to-day basis by external specialist fund managers. These managers may invest in the Group's securities subject to limits imposed by the relevant fiduciary committees and local legislation. The approximate total holding of Group securities within the plans is US\$19 million (2008: \$6 million).

### Main assumptions (rates per annum)

The main assumptions for the valuations of the plans under IAS 19 are set out below. Information on the sensitivity of the results to the main assumptions is set out in the sensitivity section on page 212.

	UK	Australia <sup>(a)</sup>	US	Canada	Eurozone	Switzerland	Other (mainly Africa) <sup>(b)</sup>
<b>At 31 December 2009</b>							
Rate of increase in salaries	5.0%	4.1%	4.0%	3.5%	2.4%	2.7%	7.7%
Rate of increase in pensions	3.4%	2.4%	—	0.8%	1.5%	—	5.7%
Discount rate	5.5%	4.8%	5.9%	6.5%	5.2%	2.9%	8.9%
Inflation	3.5%	2.4%	2.5%	2.3%	2.1%	1.5%	5.7%
<b>At 31 December 2008</b>							
Rate of increase in salaries	4.4%	3.9%	3.0%	2.7%	2.4%	2.7%	6.2%
Rate of increase in pensions	2.7%	1.5%	—	0.4%	1.6%	—	4.2%
Discount rate	6.3%	3.3%	6.1%	7.4%	5.6%	3.3%	7.3%
Inflation	2.8%	2.0%	1.5%	1.4%	1.8%	1.5%	4.2%

(a) The discount rate shown for Australia is after tax.

(b) The assumptions vary by location for the 'Other' plans. Assumptions shown are for Southern Africa.

The main financial assumptions used for the healthcare plans, which are predominantly in the US and Canada, were: discount rate: 6.0 per cent (2008: 6.5 per cent), medical trend rate: 7.5 per cent reducing to 5.1 per cent by the year 2015 broadly on a straight line basis (2008: 7.0 per cent, reducing to 5.0 per cent by the year 2015), claims costs based on individual company experience.

For both the pension and healthcare arrangements the post retirement mortality assumptions allow for future improvements in longevity. The mortality tables used imply that a man aged 60 at the balance sheet date has a weighted average expected future lifetime of 24 years (2008: 24 years) and that a man aged 60 in 2029 would have a weighted average expected future lifetime of 26 years (2008: 26 years).

	UK	Australia	US	Canada	Eurozone	Switzerland	Other (mainly Africa) <sup>(a)</sup>
<b>Long term rate of return expected at 1 January 2009</b>							
Equities	7.4%	7.0%	7.6%	7.2%	7.4%	6.5%	11.1%
Bonds	4.5%	3.9%	4.0%	5.2%	3.8%	3.1%	7.1%
Property	5.5%	5.0%	5.1%	5.2%	5.4%	4.5%	9.1%
Other	3.6%	2.4%	2.3%	2.2%	2.5%	2.4%	5.0%
<b>Long term rate of return expected at 1 January 2008</b>							
Equities	7.7%	9.1%	7.7%	7.4%	7.7%	6.6%	11.4%
Bonds	4.9%	5.9%	5.0%	4.4%	4.5%	3.4%	7.9%
Property	6.0%	7.2%	6.0%	5.7%	6.0%	4.9%	9.7%
Other	4.2%	3.7%	3.2%	3.0%	3.0%	2.3%	6.3%

(a) The assumptions vary by location for the 'Other' plans. Assumptions shown are for Southern Africa.

The expected rate of return on pension plan assets is determined as management's best estimate of the long term returns of the major asset classes – equities, bonds, property and other – weighted by the allocation of assets among the categories at the measurement date. The expected rate of return is calculated using geometric averaging. The expected rates of return shown have been reduced to allow for plan expenses including, where appropriate, taxes incurred within pension plans on investment returns. Based on the assumptions made and the distribution of assets the weighted average expected return on assets as at 1 January 2009 was 5.9 per cent (2008: 6.4 per cent) and is expected to be 6.4 per cent as at 1 January 2010.

The sources used to determine management's best estimate of long term returns are numerous and include country-specific bond yields, which may be derived from the market using local bond indices or by analysis of the local bond market, and country-specific inflation and investment market expectations derived from market data and analysts' or governments' expectations as applicable.

## Notes to the financial statements continued

### 50 Post retirement benefits continued

#### Total expense recognised in the income statement

	Pension benefits	Other benefits	2009 Total US\$m	2008 Total US\$m
Current employer service cost for defined benefit plans	(178)	(15)	(193)	(285)
Interest cost	(771)	(55)	(826)	(882)
Expected return on assets	581	–	581	857
Past service cost	(15)	4	(11)	(3)
Gains on curtailment and settlement	72	52	124	5
<b>Total defined benefit expense</b>	<b>(311)</b>	<b>(14)</b>	<b>(325)</b>	<b>(308)</b>
Current employer service cost for defined contribution and Industry-wide plans	(199)	–	(199)	(194)
<b>Total expense recognised in the income statement</b>	<b>(510)</b>	<b>(14)</b>	<b>(524)</b>	<b>(502)</b>

The above expense amounts are included as an employee cost within net operating costs. In 2009, US\$61 million (pre-tax) of curtailment and settlement gains relating to the sale of businesses have been excluded from Underlying earnings (2008: nil).

#### Total amount recognised in other comprehensive income before tax

	2009 US\$m	2008 US\$m
Actuarial losses	(919)	(1,666)
(Loss)/gain on currency translation on plans using US dollar functional currency	(70)	321
Gain on application of asset limit	19	26
<b>Total loss recognised in other comprehensive income <sup>(a)</sup></b>	<b>(970)</b>	<b>(1,319)</b>
<b>Cumulative amount recognised in other comprehensive income at 31 December</b>	<b>(1,800)</b>	<b>(830)</b>

(a) Actuarial loss includes US\$126 million loss related to equity accounted units (2008: US\$5 million loss).

#### (Deficits)/surpluses in the plans

The following amounts were measured in accordance with IAS 19 at 31 December:

	Pension benefits	Other benefits	2009 Total US\$m	2008 <sup>(a)</sup> Total US\$m	2007 <sup>(a)</sup> Total US\$m	2006 <sup>(a)</sup> Total US\$m	2005 <sup>(a)</sup> Total US\$m
<b>Total fair value of plan assets</b>	<b>12,406</b>	<b>1</b>	<b>12,407</b>	<b>9,306</b>	<b>14,350</b>	<b>4,656</b>	<b>4,069</b>
Present value of obligations – funded	(15,138)	(10)	(15,148)	(11,044)	(14,822)	(4,472)	(4,269)
Present value of obligations – unfunded	(1,071)	(1,314)	(2,385)	(1,784)	(2,089)	(597)	(596)
<b>Present value of obligations – total</b>	<b>(16,209)</b>	<b>(1,324)</b>	<b>(17,533)</b>	<b>(12,828)</b>	<b>(16,911)</b>	<b>(5,069)</b>	<b>(4,865)</b>
Unrecognised past service cost	–	(7)	(7)	(12)	(2)	3	–
Effect of asset limit	–	–	–	(19)	(45)	–	–
Aggregate (deficit) to be shown in the statement of financial position	(3,803)	(1,330)	(5,133)	(3,553)	(2,608)	(410)	(796)
Comprising:							
– Deficits	(3,820)	(1,330)	(5,150)	(3,713)	(3,313)	(770)	(996)
– Surpluses	17	–	17	160	705	360	200
<b>Net (deficits)/surpluses on pension plans</b>	<b>(3,803)</b>	<b>–</b>	<b>(3,803)</b>	<b>(2,648)</b>	<b>(1,519)</b>	<b>48</b>	<b>(324)</b>
<b>Unfunded post retirement healthcare obligation</b>	<b>–</b>	<b>(1,330)</b>	<b>(1,330)</b>	<b>(905)</b>	<b>(1,089)</b>	<b>(458)</b>	<b>(472)</b>

(a) Prior year comparatives have been adjusted to conform to the current year presentation. The sections providing benefits on a defined contribution basis are now presented as defined contribution plans. Further details are provided on page 208.

The surplus amounts shown above are included in the statement of financial position as Trade and other receivables. See note 17.

Deficits are shown in the statement of financial position as Post retirement benefits. See note 27.

### Contributions to plans

Contributions to defined benefit pension plans during 2009 totalled US\$560 million (2008: US\$421 million). Contributions of US\$190 million (2008: US\$184 million) were made to defined contribution arrangements and US\$9 million (2008: US\$10 million) to industry-wide plans; these are charged against profits and are included in the figures for defined contribution current employer service costs shown above.

Contributions for other benefits totalled US\$46 million (2008: US\$53 million).

Contributions to defined benefit pension plans for 2010 are estimated to be around US\$200 million higher than for 2009. The increase relates to UK, Canada and the US where the impact of the global financial crisis is now included in the funding valuations. Furthermore, the inclusion of plans which were previously classified within 'Assets held for sale' contributed to the increase. Healthcare plans are generally unfunded and contributions for future years will be equal to benefit payments and therefore cannot be predetermined.

### Movements in the present value of the defined benefit obligation and in the fair value of assets

The amounts shown below include, where appropriate, 100 per cent of the costs, contributions, gains and losses in respect of employees who participate in the plans and who are employed in operations that are proportionally consolidated or equity accounted. Consequently, the costs, contributions, gains and losses do not correspond directly to the amounts disclosed above in respect of the Group. Defined contribution plans and industry-wide plans are excluded from the movements below.

	Pension benefits	Other benefits	2009 Total US\$m	2008 <sup>(a)</sup> Total US\$m
<b>Change in present value of obligation:</b>				
Present value of obligation at start of the year	(11,935)	(893)	(12,828)	(16,911)
Current employer service cost	(189)	(15)	(204)	(285)
Interest cost	(771)	(55)	(826)	(882)
Contributions by plan participants	(119)	(2)	(121)	(93)
Experience (loss)/gain	(155)	16	(139)	(37)
Changes in actuarial assumptions (loss)/gain	(1,601)	(70)	(1,671)	1,684
Benefits paid	903	48	951	1,014
Previously in Assets held for sale <sup>(b)</sup>	(1,291)	(365)	(1,656)	-
Inclusion of arrangements	-	(3)	(3)	(3)
No longer consolidated	-	21	21	-
Past service cost	(15)	4	(11)	8
Curtailments	48	32	80	6
Settlements	161	20	181	28
Currency exchange rate (loss)/gain	(1,245)	(62)	(1,307)	2,643
Present value of obligation at end of the year	(16,209)	(1,324)	(17,533)	(12,828)

	2009	2008 <sup>(a)</sup>	2007 <sup>(a)</sup>	2006 <sup>(a)</sup>	2005 <sup>(a)</sup>
Gains and losses on obligations					
Experience (losses)/gains: (i.e. variances between the estimate of obligations and the subsequent outcome)	(139)	(37)	(41)	(7)	246
As a percentage of the present value of the year end obligations	(1)%	0%	0%	0%	6%
Change in assumptions (loss)/gain (US\$m)	(1,671)	1,684	315	124	(180)

(a) Prior year comparatives have been adjusted to conform to the current year presentation. The sections providing benefits on a defined contribution basis are now presented as defined contribution plans. Further details are provided on page 208.

(b) Plans that were previously sponsored by the Rio Tinto Alcan Packaging business were previously excluded from this note and reflected in the value of the assets and liabilities held for sale. Any plans that are not now expected to be sold with these businesses are now reflected in this note rather than within 'Assets held for sale'.

## Notes to the financial statements continued

## 50 Post retirement benefits continued

	Pension benefits	Other benefits	2009 Total US\$m	2008 <sup>(a)</sup> Total US\$m
<b>Change in plan assets:</b>				
Fair value of plan assets at the start of the year	9,306	–	9,306	14,350
Expected return on plan assets	581	–	581	857
Actuarial gain/(loss) on plan assets	891	–	891	(3,308)
Contributions by plan participants	119	2	121	93
Contributions by employer	581	46	627	482
Benefits paid	(903)	(48)	(951)	(1,014)
Previously in Assets held for sale <sup>(b)</sup>	881	1	882	–
Inclusion of arrangements	–	–	–	8
Refunds of contributions	(27)	–	(27)	–
Settlements	(137)	–	(137)	(29)
Currency exchange rate gain/(loss)	1,114	–	1,114	(2,133)
Fair value of plan assets at the end of the year	12,406	1	12,407	9,306
Actual return on plan assets			1,472	(2,451)

	2009	2008 <sup>(a)</sup>	2007 <sup>(a)</sup>	2006 <sup>(a)</sup>	2005 <sup>(a)</sup>
Difference between the expected and actual return on plan assets:					
Gain/(loss) (US\$m)	891	(3,308)	(129)	256	116
As a percentage of year end plan assets	7%	(36%)	(1%)	5%	3%

(a) Prior year comparatives have been adjusted to conform to the current year presentation. The sections providing benefits on a defined contribution basis are now presented as defined contribution plans. Further details are provided on page 208.

(b) Plans that were previously sponsored by the Rio Tinto Alcan Packaging business were previously excluded from this note and reflected in the value of the asset held for sale. Any plans that are not now expected to be sold with these businesses are now reflected in this note rather than within 'Assets held for sale'.

**Sensitivity**

The values reported for the defined benefit pension obligations are sensitive to the actuarial assumptions used for projecting future benefit payments and discounting those payments. The approximate sensitivities to the principal assumptions used to measure the obligations are:

Assumption	Change in assumption	Approximate decrease/(increase) in obligations	
		Pensions US\$m	Other US\$m
Discount rate	increase of 0.5 percentage points	892	70
	decrease of 0.5 percentage points	(949)	(74)
Inflation	increase of 0.5 percentage points	(540)	(51)
	decrease of 0.5 percentage points	513	43
Salary increases	increase of 0.5 percentage points	(120)	(2)
	decrease of 0.5 percentage points	116	2
Demographic – allowance for future improvements in longevity	participants assumed to have the mortality rates of individuals who are one year older	356	27
	participants assumed to have the mortality rates of individuals who are one year younger	(356)	(27)

**Post retirement healthcare – sensitivity to changes in assumptions**

An increase of one per cent in the assumed medical cost trend rates would increase the aggregate of the current service cost and interest cost components of the post retirement healthcare expense by US\$6 million (2008: US\$8 million), and increase the benefit obligation for these plans by US\$98 million (2008: US\$85 million). A decrease of one per cent in the assumed medical cost trend rates would decrease the aggregate of the current service cost and interest cost components of the post retirement healthcare expense by US\$5 million (2008: US\$7 million), and decrease the benefit obligation for these plans by US\$83 million (2008: US\$75 million).

## 51 Rio Tinto Limited balance sheet <sup>(a)</sup>

As at 31 December	Note	2009 A\$m	2008 A\$m
<b>Non current assets</b>			
Investments <sup>(b)</sup>	52	10,956	6,729
Loans to subsidiaries	52	221	264
Deferred tax assets		190	-
Available for sale financial assets	52	4	18
Other assets		1	2
		11,372	7,013
<b>Current assets</b>			
Loans to subsidiaries	52	11,377	8,338
Trade and other receivables		1	39
Cash and cash equivalents		6	5
		11,384	8,382
<b>Current liabilities</b>			
Loans from subsidiaries		(1,661)	(6,524)
Tax payable		(242)	(1,237)
		(1,903)	(7,761)
<b>Net current assets</b>		9,481	621
<b>Non current liabilities</b>			
Loans from subsidiaries		(1,040)	(2,866)
		(1,040)	(2,866)
<b>Net assets</b>		19,813	4,768
<b>Shareholders' equity</b>			
Share capital		5,728	1,587
Other reserves		394	387
Retained earnings		13,691	2,794
<b>Total equity</b>	52	19,813	4,768

(a) Prepared under Australian IFRS (AIFRS). In relation to Rio Tinto Limited there are no significant measurement differences between AIFRS and EU IFRS.

(b) Investments in subsidiaries are accounted for at cost. Such investments include both investments in shares issued by the subsidiary and other parent entity interests that in substance form part of the parent entity's investment in the subsidiary. These include investments in the form of interest-free loans which have no fixed repayment terms and which have been provided to subsidiaries as an additional source of long term capital. Loans from subsidiaries on equivalent terms are deducted from investments. Trade amounts receivable from subsidiaries and payable to subsidiaries in the normal course of business and other amounts advanced on commercial terms and conditions are included in receivables or payables as appropriate.

The Rio Tinto Limited parent financial statements, including balance sheet, income statement and cash flow statement, were approved by the directors on 5 March 2010 and signed on their behalf by:

Jan du Plessis Chairman

Tom Albanese Chief executive

Guy Elliott Chief financial officer

## Notes to the financial statements continued

### 52 Other Rio Tinto Limited balance sheet disclosures <sup>(a)</sup>

	Rio Tinto Limited <sup>(a)</sup>	
	2009 A\$m	2008 A\$m
<b>Investments in Group companies</b>		
At 1 January	6,729	6,912
Additions, including net contributions from share based payments	4,432	(86)
Movements in long term loans classified as equity	543	(37)
Impairments, net	(748)	(60)
At 31 December	10,956	6,729
<b>Available for sale investments</b>		
At 1 January	18	8
Fair value adjustment on available for sale investments	(2)	1
Additions	–	72
Disposals	(12)	(63)
At 31 December	4	18
<b>Total investments</b>	<b>10,960</b>	<b>6,747</b>
<b>Loans to subsidiaries</b>		
At 1 January	8,602	6,331
Advances	2,996	2,271
At 31 December	11,598	8,602
– non current	221	264
– current	11,377	8,338
<b>Deferred tax liability</b>		
At 1 January	–	(1)
Charged to profit and loss account	–	1
At 31 December (relating to timing differences)	–	–
<b>Statement of changes in equity</b>		
Total equity at 1 January	4,768	9,799
Fair value adjustment on available for sale investments, net of tax	(1)	(1)
Fair value adjustment on available for sale investments transferred to income statement	1	–
Share based payments	7	(236)
Net income recognised directly in equity	7	(237)
Profit for the financial year	13,051	4,572
Total recognised income and expense for the year	13,058	4,335
Transactions with equity holders in their capacity as equity holders:		
Ordinary shares issued <sup>(b)</sup>	4,141	–
Loss on purchase/sale of treasury stock <sup>(c)</sup>	–	(5,788)
Dividends paid <sup>(d)</sup>	(2,154)	(3,578)
Total equity at 31 December	19,813	4,768
<b>Contingent liabilities</b>		
Bank and other performance guarantees <sup>(e)</sup>	10,596	9,374

(a) Prepared under AIFRS (see note (a) on page 213).

(b) 150,015,297 Ordinary shares were issued during 2009 as a result of the Rio Tinto Limited rights issue (2008: nil). The terms of Rio Tinto Limited right issue were 21 New Rio Tinto Limited Shares offered for every 40 existing shares at A\$28.29 per share. The rights issue was fully underwritten and was completed on 3 July 2009. Further details are provided in note 46.

(c) During 2008, Rio Tinto Limited purchased Rio Tinto plc treasury shares from Rio Tinto plc at the market value of Rio Tinto plc shares at the time of the transaction. Rio Tinto Limited subsequently sold these shares back to Rio Tinto plc for a nominal consideration. The shares were then cancelled by Rio Tinto plc.

(d) Includes DLC dividends at 31 December 2009 amounting to A\$1,690 million (2008: A\$2,800 million).

(e) Bank and other performance guarantees relate principally to the obligations of subsidiary companies.

Pursuant to the DLC merger, both Rio Tinto plc and Rio Tinto Limited issued deed poll guarantees by which each guaranteed contractual obligations incurred by the other or guaranteed by the other. These guarantees are excluded from the figures above.

## 53 Rio Tinto Limited income statement

	Rio Tinto Limited <sup>(a)</sup>	
	2009 A\$m	2008 A\$m
Revenue <sup>(b)</sup>	14,674	5,543
Impairment charges <sup>(c)</sup>	(748)	(60)
Other operating costs <sup>(d)</sup>	(1,023)	(1,368)
Operating profit	12,903	4,115
Finance costs	(163)	(18)
Profit before taxation	12,740	4,097
Taxation	311	475
<b>Profit for the financial year</b>	<b>13,051</b>	<b>4,572</b>

(a) Prepared under AIFRS (see note (a) on page 213).

(b) Revenue mainly relates to dividends received during the year amounting to A\$14,363 million (2008: A\$5,173 million).

(c) Impairment charges result from a review of investment carrying values which were adjusted to their estimated recoverable value.

(d) Other operating costs includes exchange gains and losses.

## 54 Rio Tinto Limited cash flow statement

	Rio Tinto Limited <sup>(a)</sup>	
	2009 A\$m	2008 A\$m
Dividends received	14,326	3,785
<b>Cash flow from operating activities</b>	<b>14,326</b>	<b>3,785</b>
Interest received	203	298
Interest paid	(159)	(18)
Tax received	485	6
<b>Cash flow from operating activities after financing costs and tax</b>	<b>14,855</b>	<b>4,071</b>
<b>Cash flows from investing activities</b>		
Purchase of investments	(4,526)	(68)
Proceeds from subsidiary capital reduction	64	–
Proceeds from sale of investments in subsidiaries	89	–
Proceeds from sale of available for sale financial assets	14	64
<b>Cash used in investing activities</b>	<b>(4,359)</b>	<b>(4)</b>
<b>Cash flows from financing activities</b>		
Loans (repaid)/raised	(12,437)	5,303
Proceeds from issue of share capital	4,096	–
Purchase of treasury stock from Rio Tinto plc	–	(5,788)
Dividends paid to Rio Tinto Limited shareholders	(2,154)	(3,578)
<b>Net cash used in financing activities</b>	<b>(10,495)</b>	<b>(4,063)</b>
<b>Net increase in cash and cash equivalents</b>	<b>1</b>	<b>4</b>
Opening cash and cash equivalents	5	1
<b>Closing cash and cash equivalents</b>	<b>6</b>	<b>5</b>

(a) Prepared under AIFRS (see note (a) on page 213).

(b) The prior year comparative information has been restated to provide more useful information about cash flows relating to receipt and settlement of tax balances and to ensure consistency in presentation with the current year cash flow presentation.

# Rio Tinto plc

## Company balance sheet

At 31 December

	Note	2009 US\$m	2008 US\$m
<b>Fixed assets</b>			
Investments	B	22,458	2,287
		22,458	2,287
<b>Current assets</b>			
Amounts owed by subsidiaries		5,778	9,962
Other receivables and prepayments		1	-
Cash at bank and in hand		2	3
		5,781	9,965
<b>Creditors due within one year</b>			
Amounts owed to subsidiaries		(435)	(446)
Dividends payable		(8)	(7)
		(443)	(453)
<b>Net current assets</b>		5,338	9,512
<b>Total assets less current liabilities</b>		27,796	11,799
<b>Creditors due after more than one year</b>		(96)	(136)
<b>Net assets</b>		27,700	11,663
<b>Capital and reserves</b>			
Called up share capital	C	246	160
Share premium account	D	4,174	4,705
Other reserves	D	11,965	29
Profit and loss account	D	11,315	6,769
<b>Equity shareholders' funds</b>		27,700	11,663

(a) The Rio Tinto plc company balance sheet has been prepared in accordance with applicable UK accounting standards. Note A explains the principal accounting policies.

(b) Profit after tax for the year amounted to US\$5,164 million (2008: US\$4,404 million). As permitted by section 408 of the United Kingdom Companies Act 2006, no profit and loss account for the Rio Tinto plc parent company is shown. The company has taken advantage of the exemption within FRS 1 'Cash flow statements (revised 1996)' from preparing a cash flow statement.

The Rio Tinto plc company balance sheet, profit and loss account and the related notes, were approved by the directors on 5 March 2010 and the balance sheet is signed on their behalf by

Jan du Plessis Chairman

Tom Albanese Chief executive

Guy Elliott Chief financial officer

Rio Tinto plc

Registered number: 719885

## A Principal accounting policies under UK GAAP

### a Basis of Accounting

The Rio Tinto plc entity financial statements have been prepared under the historical cost convention, except for financial guarantees which have been measured at fair value as set out in note (e) below and in accordance with applicable UK accounting standards. The directors have reviewed the Company's existing accounting policies and consider that they are consistent with the requirements of Financial Reporting Standard ('FRS') 18 'Accounting Policies'. The financial statements have been prepared on a going concern basis.

The directors have reviewed the Company's existing accounting policies and consider that they are consistent with last year.

The principal accounting policies are set out below.

### b Deferred tax

Full provision is made for deferred taxation on all timing differences that have arisen but not reversed at the balance sheet date, except that deferred tax assets are only recognised to the extent that it is more likely than not that they will be recovered. Deferred tax is measured at the average tax rates that are expected to apply in the periods in which the timing differences are expected to reverse, based on tax rates and laws that have been enacted or substantively enacted by the balance sheet date. Deferred tax is measured on an undiscounted basis.

### c Currency translation

The Company's local or 'functional' currency is the US dollar. Transactions denominated in other currencies, including the issue of shares, are translated at the rate of exchange ruling on the date of the transaction. Monetary assets and liabilities denominated in other currencies are translated at the rate of exchange ruling at the end of the financial year. Exchange rates used are consistent with the rates used by the Group as disclosed in the consolidated financial statements (see note 45). Exchange differences are charged or credited to the profit and loss account in the year in which they arise.

### d Investments

Fixed asset investments are valued at cost less impairment provisions. Investments are reviewed for impairment if events or changes in circumstances indicate that the carrying amount may not be recoverable. When a review for impairment is conducted, the recoverable amount is assessed by reference to the net present value of expected future cash flows of the relevant income generating unit or disposal value if higher. The discount rate applied is based upon the Company's weighted average cost of capital, with appropriate adjustment for the risks associated with the relevant unit.

### e Financial guarantees

Obligations for financial guarantees issued by the Company to other Group companies are reflected as liabilities at fair value, in accordance with FRS 26 'Financial Instruments – Measurement'. Such obligations result in corresponding increases in the carrying value of amounts owed by subsidiaries. Payments received are set off against the asset recognised which is initially recorded at fair value.

### f Share based payments

Since 2007, most of the Company's share based payment plans have been settled by the issue of shares from Treasury. Previously they were settled through new share issues. The fair value of the grant is recognised as an addition to the cost of the investment in the subsidiary in which the relevant employees work. The fair value is recognised over the relevant vesting period, with a corresponding adjustment to the profit and loss account reserve. Payments received from the Company's subsidiaries in respect of these share based payments result in an adjustment to reduce the cost of the investment. The fair value of the share plans is determined at the date of grant, taking into account any market based vesting conditions attached to the award (eg Total Shareholder Return). When market prices are not available, the Company uses fair values provided by independent actuaries using a lattice based option valuation model.

Non market vesting conditions (eg earnings per share targets) are taken into account in estimating the number of awards likely to vest. The estimate of the number of awards likely to vest is reviewed at each balance sheet date up to the vesting date, at which point the estimate is adjusted to reflect the actual awards issued. No adjustment is made after the vesting date even if the awards are forfeited or not exercised.

### g Revenue recognition

Interest is accounted for on the accruals basis. Dividend income is recognised when the right to receive payment is established.

### h Dividends

Dividends payable are recognised when they meet the criteria for a present obligation (ie when they have been approved).

### i Treasury shares

The consideration paid for shares repurchased by the Company and held as treasury shares is recognised as a reduction in shareholders' funds through the profit and loss account reserve.

## B Rio Tinto plc fixed assets

	2009 US\$m	2008 US\$m
<b>Fixed asset investments <sup>(a)</sup></b>		
Shares in Group companies:		
At 1 January	2,287	2,278
Additions	20,171	9
At 31 December	<b>22,458</b>	<b>2,287</b>

(a) US\$20.1 billion of the increase in investments is attributable to the recapitalisation of Rio Tinto International Holdings, which holds the Group's investment in Rio Tinto Alcan Inc.

## C Rio Tinto plc called up share capital

	2009 US\$m	2008 US\$m
<b>Issued and fully paid up share capital</b>		
At 1 January	160	172
Ordinary shares purchased and cancelled	86	(12)
At 31 December	<b>246</b>	<b>160</b>

(a) During the year 524,460,478 shares (2008: nil shares) were issued as a result of Rio Tinto plc rights issue. 440,018 shares (2008: 183,714 shares) were issued pursuant to share plans and 874,925 shares (2008: 763,919 shares) were reissued from treasury pursuant to share plans. During 2008, 67,880,000 shares were reissued from treasury to Rio Tinto Limited and were then bought back and cancelled.

## D Rio Tinto plc share premium and reserves

At 31 December 2009

	Share premium account US\$m	Other reserves US\$m	Profit and loss account US\$m
At 1 January	4,705	29	6,769
Adjustment for share based payments	28	–	52
Premium on issue of shares	4	–	–
Rights issue expenses including mark to market losses on forward contracts	(563)	–	–
Merger reserve arising from Rio Tinto plc's rights issue		11,936	–
Profit for the financial year	–	–	5,164
Dividends paid	–	–	(670)
At 31 December	<b>4,174</b>	<b>11,965</b>	<b>11,315</b>

At 31 December 2008

	Share premium account US\$m	Other reserves US\$m	Profit and loss account US\$m
At 1 January	1,932	17	1,862
Sale of treasury shares	2,767	–	1,956
Cancellation of shares	–	12	–
Adjustment for share based payments	–	–	64
Premium on issue of shares	6	–	–
Profit for the financial year	–	–	4,404
Dividends paid	–	–	(1,517)
At 31 December	<b>4,705</b>	<b>29</b>	<b>6,769</b>

## E Rio Tinto plc contingent liabilities

	2009 US\$m	2008 US\$m
<b>Bank and other performance guarantees in respect of subsidiaries <sup>(a)</sup></b>	<b>18,706</b>	<b>35,033</b>

(a) In 2009, the above amount includes US\$8.5 billion (2008: US\$27.9 billion) guaranteed by the Company to finance the acquisition of Alcan Inc. Of the available Alcan acquisition debt facilities, US\$7.1 billion (2008: US\$5.9 billion) was undrawn at year end.

(b) Rio Tinto plc has given a guarantee to the Rio Tinto Pension Fund in the UK that it will pay any contributions due from Group companies participating in that fund, pro rata to its ownership of those companies, in the event that the companies fail to meet their contribution requirements.

# Rio Tinto financial information by business unit

Years ended 31 December

US\$ millions	Rio Tinto interest %	Gross revenue <sup>(a)</sup>		EBITDA <sup>(b)</sup>		Net earnings <sup>(c)</sup>	
		2009	2008	2009	2008	2009	2008
<b>Iron Ore</b>							
Hamersley (inc. HIsmelt®) <sup>(d)</sup>	100.0	8,874	11,006	5,190	7,038	3,283	4,642
Robe River <sup>(e)</sup>	53.0	2,186	2,728	1,422	1,983	718	1,062
Iron Ore Company of Canada	58.7	1,006	2,065	344	1,251	112	443
Rio Tinto Brasil	(f)	30	176	(15)	73	(19)	44
Dampier Salt	68.4	453	377	203	95	88	40
Product group operations		12,549	16,352	7,144	10,440	4,182	6,231
Evaluation projects/other		49	175	(32)	(228)	(56)	(214)
		12,598	16,527	7,112	10,212	4,126	6,017
<b>Aluminium</b>							
(g)	Product group operations	11,992	18,253	582	4,023	(587)	1,342
	Evaluation projects/other	46	44	12	(87)	9	(71)
		12,038	18,297	594	3,936	(578)	1,271
<b>Copper</b>							
Kennecott Utah Copper	100.0	2,368	2,609	1,449	1,587	818	998
Escondida	30.0	2,039	2,402	1,327	1,464	748	836
Grasberg joint venture	(h)	991	53	706	38	385	4
Palabora	57.7	635	560	123	167	17	49
Northparkes	80.0	173	124	98	(1)	53	(12)
Product group operations		6,206	5,748	3,703	3,255	2,021	1,875
Evaluation projects/other		-	-	(229)	(395)	(155)	(278)
		6,206	5,748	3,474	2,860	1,866	1,597
<b>Energy</b>							
US Coal	(i)	1,813	1,869	497	397	257	147
Rio Tinto Coal Australia	(j)	3,870	5,142	1,799	2,900	1,013	1,721
Rössing	68.6	403	548	83	260	24	101
Energy Resources of Australia	68.4	620	418	358	352	138	141
Product group operations		6,706	7,977	2,737	3,909	1,432	2,110
Evaluation projects/other		3	41	(15)	461	(12)	471
		6,709	8,018	2,722	4,370	1,420	2,581
<b>Diamonds &amp; Minerals</b>							
Diamonds	(k)	450	840	(7)	395	(68)	137
Rio Tinto Iron and Titanium	(l)	1,284	1,919	209	755	(9)	295
Rio Tinto Minerals	(m)	882	1,061	187	183	78	86
Product group operations		2,616	3,820	389	1,333	1	518
Evaluation projects/other		2	-	820	(41)	799	(44)
		2,618	3,820	1,209	1,292	800	474
<b>Other Operations</b>							
		4,743	7,378	(30)	127	(188)	(133)
Inter-segment transactions		(876)	(1,723)	(28)	58	(28)	25
Other items				(719)	(378)	(547)	(366)
Central exploration and evaluation				(22)	(160)	5	(133)
Net interest						(578)	(1,030)
<b>Underlying earnings</b>							
Items excluded from Underlying earnings				14,312	22,317	6,298	10,303
				159	1,553	(1,426)	(6,627)
<b>Total</b>		<b>44,036</b>	<b>58,065</b>	<b>14,471</b>	<b>23,870</b>	<b>4,872</b>	<b>3,676</b>
Depreciation and amortisation in subsidiaries				(3,427)	(3,475)		
Impairment charges				(1,573)	(8,030)		
Depreciation and amortisation in equity accounted units				(440)	(414)		
Taxation and finance items in equity accounted units				(739)	(718)		
<b>Profit before finance items and taxation</b>				<b>8,292</b>	<b>11,233</b>		

Refer to notes a) to m) on page 221.

## Rio Tinto financial information by business unit continued

	Rio Tinto interest %	Capital expenditure <sup>(n)</sup>		Depreciation & amortisation		Operating assets <sup>(o)</sup>		Employees	
		2009 US\$m	2008 US\$m	2009 US\$m	2008 US\$m	2009 US\$m	2008 US\$m	2009 Number	2008 Number
<b>Iron Ore</b>									
Hammersley (inc. HIsmelt®) <sup>(d)</sup>	100.0	1,337	1,860	506	466	7,530	5,170	6,556	6,321
Robe River <sup>(e)</sup>	53.0	599	683	140	111	2,751	1,622	1,114	1,011
Iron Ore Company of Canada	58.7	180	256	86	83	808	482	2,027	2,094
Rio Tinto Brasil <sup>(f)</sup>		11	146	3	14	5	207	666	841
Dampier Salt	68.4	21	27	18	21	179	154	405	394
Other		—	24	10	10	(10)	(3)	607	448
		2,148	2,996	763	705	11,263	7,632	11,375	11,109
<b>Aluminium</b>									
	(g)	1,690	2,417	1,551	1,543	35,992	34,735	22,919	24,634
<b>Copper</b>									
Kennecott Utah Copper	100.0	176	316	296	246	1,533	1,750	1,878	1,915
Escondida	30.0	213	120	104	98	1,399	849	997	960
Grasberg joint venture <sup>(h)</sup>		79	32	47	25	378	426	2,162	2,185
Palabora	57.7	16	40	67	57	(2)	117	2,030	2,116
Northparkes	80.0	17	105	25	15	301	187	186	210
Other		52	191	2	1	1,419	894	359	143
		553	804	541	442	5,028	4,223	7,612	7,529
<b>Energy</b>									
US Coal <sup>(i)</sup>		176	204	99	150	(89)	1,090	2,388	2,477
Rio Tinto Coal Australia <sup>(j)</sup>		456	449	205	194	2,040	1,134	3,289	3,206
Rössing	68.6	24	73	27	20	324	229	1,415	1,307
Energy Resources of Australia	68.4	30	144	64	51	263	212	521	448
		686	870	395	415	2,538	2,665	7,613	7,438
<b>Diamonds &amp; Minerals</b>									
Diamonds <sup>(k)</sup>		250	652	104	175	1,293	1,340	1,040	1,401
Rio Tinto Iron and Titanium <sup>(l)</sup>		247	563	129	118	2,626	2,125	4,121	4,105
Rio Tinto Minerals <sup>(m)</sup>		22	63	57	68	693	792	2,214	2,580
Other		—	5	—	—	—	30	—	103
		519	1,283	290	361	4,612	4,287	7,375	8,189
<b>Other Operations</b>									
		228	458	216	332	1,756	3,375	14,021	14,901
Net assets held for sale <sup>(p)</sup>		—	—	—	—	3,462	3,204	27,732	28,386
Other items		54	151	111	91	(1,959)	(811)	3,347	3,547
Less: equity accounted units		(522)	(491)	(440)	(414)				
<b>Total</b>		5,356	8,488	3,427	3,475	62,692	59,310	101,994	105,785
Less: Net debt						(18,861)	(38,672)		
<b>Total Rio Tinto shareholders' equity</b>						43,831	20,638		

Refer to notes d) to p) on page 221.

Business units have been classified according to the Group's management structure. Generally, business units are allocated to product groups based on their primary product. The Energy group includes both coal and uranium businesses. The Diamonds & Minerals product group includes businesses with products such as borates, talc and titanium dioxide feedstock together with diamonds operations. The Copper group includes certain gold operations in addition to copper. The Aluminium group excludes Alcan Engineered Products which is included in 'Other Operations' and Alcan Packaging which is included in 'Net assets held for sale'.

The following changes have been made to the way Rio Tinto presents its financial information by business unit during 2009: The Diamonds & Minerals product group has been reinstated alongside the Iron Ore, Copper, Aluminium and Energy product groups. This reflects Rio Tinto's corporate strategy of investing in and operating large, long term, cost competitive mines and businesses, driven not by choice of commodity but by the quality of each opportunity. Alcan Engineered Products was reclassified from 'Aluminium' to 'Other Operations' during the year. Information for 2008 has been reclassified accordingly.

Post retirement assets/(liabilities), net of tax and minorities, which were previously included in Business Units' operating assets (including equity accounted units), are now classified as central items. 2008 comparatives have been reclassified accordingly.

- (a) Gross sales revenue includes 100 per cent of subsidiaries' sales revenue and the Group's share of the sales revenue of equity accounted units (after adjusting for intra-subsidiary/equity accounted unit sales).
- (b) EBITDA of subsidiaries and the Group's share of EBITDA relating to equity accounted units represents profit before: tax, net finance items, depreciation and amortisation. Underlying EBITDA excludes the same items that are excluded from Underlying earnings.
- (c) Net earnings represent profit after tax for the year attributable to the shareholders of the Rio Tinto Group. Earnings of subsidiaries are stated before finance items but after the amortisation of discount related to provisions. Earnings attributable to equity accounted units include interest charges and amortisation of discount except that, from 2009 onwards, RBM earnings are before charging interest on third party debt. Earnings attributed to business units do not include amounts that are excluded in arriving at Underlying earnings.
- (d) Includes Rio Tinto's interests in Hamersley (100 per cent) and HIsmelt® (60 per cent).
- (e) The Group holds 65 per cent of Robe River Iron Associates, of which 30 per cent is held through a 60 per cent owned subsidiary. The Group's net beneficial interest is, therefore, 53 per cent, net of amounts attributable to outside equity shareholders.
- (f) Rio Tinto completed the sale of its 100 per cent interest in the Corumbá mine, effective 18 September 2009.
- (g) Includes the Alcan group acquired in 2007, excluding Alcan Packaging which is shown as an 'Asset held for sale', and excluding Alcan Engineered Products which is shown as part of 'Other Operations', together with the aluminium businesses previously owned by Rio Tinto.
- (h) Under the terms of a joint venture agreement, Rio Tinto is entitled to 40 per cent of additional material mined as a consequence of expansions and developments of the Grasberg facilities since 1998.
- (i) As a result of the IPO of Cloud Peak Energy Inc., on 20 November 2009, Rio Tinto now holds a 48.3 per cent interest in the Antelope, Cordero Rojo and Spring Creek mines and a 24.1 per cent interest in the Decker mine. These interests were formerly reported under Rio Tinto Energy America but are now managed by Cloud Peak Energy. Rio Tinto completed the sale of its 100 per cent interest in the Jacobs Ranch mine on 1 October 2009. US Coal also includes the Group's 100 per cent interest in Colowyo mine.
- (j) Includes Rio Tinto's 75.7 per cent interest in Coal and Allied, which is managed by Rio Tinto Coal Australia, a 100 per cent subsidiary of Rio Tinto. The Group owns a 40 per cent interest in Bengalla and an 80 per cent interest in Mount Thorley through its investment in Coal and Allied, giving a beneficial interest in those companies to the Group of 30.3 per cent and 60.6 per cent, respectively.
- (k) Diamonds includes Rio Tinto's interests in Argyle (100 per cent), Diavik (60 per cent) and Murowa (77.8 per cent).
- (l) Includes Rio Tinto's interests in Rio Tinto Fer et Titane (RTFT) (100 per cent), QMM (80 per cent) and Richards Bay Minerals (RBM) (attributable interest of 37 per cent). RBM's net earnings for 2009 onwards exclude interest charges on third party debt and its operating assets are shown before deducting net debt.
- (m) Includes Rio Tinto's interests in Rio Tinto Borax (100 per cent) and Luzenac Talc (100 per cent).
- (n) Capital expenditure comprises the net cash outflow on purchases less disposals of property, plant and equipment, capitalised evaluation costs and purchases less disposals of other intangible assets. The details provided include 100 per cent of subsidiaries' capital expenditure and Rio Tinto's share of the capital expenditure of equity accounted units. Amounts relating to equity accounted units not specifically funded by Rio Tinto are deducted before arriving at total capital expenditure for the Group.
- (o) Operating assets of subsidiaries comprise net assets excluding post retirement assets and liabilities, net of tax, and are before deducting net debt. Operating assets are less outside shareholders' interests, which are calculated by reference to the net assets of the relevant companies (ie net of such companies' debt). For equity accounted units, Rio Tinto's net investment excluding post retirement assets and liabilities (net of tax), is shown.
- (p) Net assets held for sale include Alcan Packaging and other assets held for sale.

## Australian Corporations Act – summary of ASIC relief

Pursuant to section 340 of the Corporations Act 2001 ('Corporations Act'), the Australian Securities and Investments Commission issued an order dated 27 January 2006 (as amended on 22 December 2006) that granted relief to Rio Tinto Limited from certain requirements of the Corporations Act in relation to the Company's financial statements and associated reports. The order essentially continues the relief that has applied to Rio Tinto Limited since the formation of the Group's Dual Listed Companies ('DLC') structure in 1995. The order applied to Rio Tinto Limited's financial reporting obligations for financial years and half-years ending between 31 December 2005 and 31 December 2009 (inclusive).

In essence, instead of being required under the Corporations Act to prepare consolidated financial statements covering only itself and its controlled entities, the order allows Rio Tinto Limited to prepare consolidated financial statements in which it, Rio Tinto plc and their respective controlled entities are treated as a single economic entity. In addition, those consolidated financial statements are to be prepared:

- in accordance with the principles and requirements of International Financial Reporting Standards as adopted by the European Union ('EU IFRS') rather than the Australian equivalents of International Financial Reporting Standards ('AIFRS') (except for one limited instance in the case of any concise report), and in accordance with United Kingdom financial reporting obligations generally;
- on the basis that the transitional provisions of International Financial Reporting Standard 1 "First-time Adoption of International Financial Reporting Standards" should be applied using the combined financial statements previously prepared for Rio Tinto Limited, Rio Tinto plc and their respective controlled entities under Generally Accepted Accounting Principles in the United Kingdom, under which the DLC merger between Rio Tinto Limited and Rio Tinto plc was accounted for using 'merger', rather than 'acquisition', accounting (reflecting that neither Rio Tinto Limited nor Rio Tinto plc was acquired by, or is controlled by, the other, and meaning that the existing carrying amounts, rather than fair values, of assets and liabilities at the time of the DLC merger were used to measure those assets and liabilities at formation);
- on the basis that Rio Tinto Limited and Rio Tinto plc are a single company (with their respective shareholders being the shareholders in that single company); and
- with a reconciliation, from EU IFRS to AIFRS, of the following amounts: consolidated profit for the financial year, total consolidated comprehensive income for the financial year and total consolidated equity at the end of the financial year (see page 136).

Those consolidated financial statements must also be audited in accordance with relevant United Kingdom requirements. Rio Tinto Limited must also prepare a Directors' report which satisfies the content requirements of the Corporations Act (applied on the basis that the consolidated entity for those purposes is the Group), except that the order allows Rio Tinto Limited to prepare a separate Remuneration report that is merely cross-referenced in the Directors' report, instead of including in the Directors' report the Remuneration report otherwise required by the Corporations Act. The separate Remuneration report (see pages 104 to 129) must include all the information required to be included in a Remuneration report under the Corporations Act, as well as the information required by AIFRS (namely, AASB 124 'Related Party Disclosures') dealing with compensation of directors and executives who are 'key management personnel', and certain other disclosures.

Rio Tinto Limited is also required to comply generally with the lodgement and distribution requirements of the Corporations Act (including timing requirements) in relation to those consolidated financial statements (including any concise financial statements), the Auditor's report and the Directors' report. The separate Remuneration report is also required to be lodged with the Australian Securities and Investments Commission at the same time as the consolidated financial statements, and Rio Tinto Limited must not distribute or make available the Remuneration report without the consolidated financial statements and Directors' report. At the Company's AGM, it is required to allow shareholders to vote on a non binding resolution to adopt the Remuneration report, on the same basis as would otherwise be required for a Remuneration report under the Corporations Act.

Rio Tinto Limited is not required to prepare separate consolidated financial statements solely for it and its controlled entities. Rio Tinto Limited is required to prepare and lodge parent entity financial statements for itself in respect of each relevant financial year, in accordance with the principles and requirements of AIFRS (other than in respect of key management personnel compensation disclosures under AASB 124, which as noted above are instead incorporated into the separate Remuneration report), and to have those statements audited. Those financial statements are not required to be laid before the Company's AGM or distributed to shareholders as a matter of course.

However, Rio Tinto Limited must:

- include in the consolidated financial statements for the Group, as a note, Rio Tinto Limited's parent entity balance sheet, income statement, statement of changes in equity and statement of cash flows, prepared in accordance with AIFRS; and
- make available the full parent entity financial statements free of charge to shareholders on request, and also include a copy of them on the Company's website.

The parent entity financial statements are available for download from the Rio Tinto website at [www.riotinto.com](http://www.riotinto.com). Shareholders may also request a copy free of charge by contacting the Rio Tinto Limited company secretary.

# Directors' declaration

## Directors' statement of responsibilities in relation to the Group financial statements, Rio Tinto plc financial statements and Rio Tinto Limited financial statements

The directors are responsible for preparing the Annual report, the Remuneration report and the financial statements in accordance with applicable law and regulations.

UK and Australian company law requires the directors to prepare financial statements for each financial year. Under these laws the directors have elected to prepare the Group financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union, the Rio Tinto plc financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law) and the Rio Tinto Limited parent company financial statements in accordance with Australian International Financial Reporting Standards (AIFRSs). In preparing the Group financial statements, the directors have also elected to comply with IFRSs, issued by the International Accounting Standards Board (IASB). Under UK and Australian company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and the companies and of the profit or loss of the companies and Group for that period. In preparing these financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether IFRSs as adopted by the European Union, applicable UK Accounting Standards and AIFRSs have been followed, subject to any material departures disclosed and explained in the Group and parent company financial statements respectively;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and the companies will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the transactions of the companies and the Group and disclose with reasonable accuracy at any time the financial position of the companies and the Group and enable them to ensure that the Group financial statements comply with the Companies Act 2006, the Corporations Act 2001 as amended by the Australian Securities and Investments Commission Order dated 27 January 2006 (as amended on 22 December 2006) and Article 4 of the IAS Regulation, the Rio Tinto plc financial statements comply with the Companies Act 2006, the Rio Tinto Limited parent company financial statements comply with the Corporations Act as amended by the Australian Securities and Investments Commission Order dated 27 January 2006 (as amended on 22 December 2006) and the Remuneration Report complies with the Companies Act 2006, the Corporations Act 2001 as amended by the Australian Securities and Investments Commission Order dated 27 January 2006 (as amended on 22 December 2006) and Australian Accounting Standard AASB 124 'Related Party Disclosure'.

They are also responsible for safeguarding the assets of the companies and the Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors are responsible for the maintenance and integrity of the Group's website. Legislation governing the preparation and dissemination of financial statements may differ between jurisdictions in which the Group reports.

Each of the current directors, whose names and function are listed on pages 84 to 87 in the Governance section confirm that, to the best of their knowledge:

- the Rio Tinto Group financial statements and notes, which have been prepared in accordance with IFRS as adopted by the EU, Corporations Act 2001 as amended by the Australian Securities and Investments Commission Order dated 27 January 2006 (as amended on 22 December 2006), Companies Act 2006 and Article 4 of the IAS Regulation, give a true and fair view of the assets, liabilities, financial position and profit of the Group; and
- the Rio Tinto plc financial statements and notes, which have been prepared in accordance with United Kingdom Generally Accepted Accounting Practice and the Companies Act 2006 give a true and fair view of the assets, liabilities, financial position and profit of the company.
- the Rio Tinto Limited parent company financial statements and notes, which have been prepared in accordance with Australian International Financial Reporting Standards (AIFRSs) and Corporations Act 2001 as amended by the Australian Securities and Investments Commission Order dated 27 January 2006 (as amended on 22 December 2006) give a true and fair view of the assets, liabilities, financial position and profit of the company.
- the Overview and Performance sections of the Annual report include a fair review of the development and performance of the business and the position of the Group, together with a description of the principal risks and uncertainties that it faces.
- there are reasonable grounds to believe that each of the Rio Tinto Group, Rio Tinto plc and Rio Tinto Limited will be able to pay its debts as and when they become due and payable.

The directors have been given the declarations by the chief executive officer and chief financial officer required by section 295A of the Corporations Act 2001.

## Directors' declaration continued

### **Disclosure of information to auditors**

The directors in office at the date of this report have each confirmed that:

- so far as he or she is aware, there is no relevant audit information of which the Group's auditors are unaware; and
- he or she has taken all the steps that he or she ought to have taken as a director to make himself or herself aware of any relevant audit information and to establish that the Group's auditors are aware of that information.

This declaration is made in accordance with a resolution of the board.



**Jan du Plessis** Chairman  
5 March 2010



**Tom Albanese** Chief executive  
5 March 2010



**Guy Elliott** Chief financial officer  
5 March 2010

## Auditor's independence declaration

As lead auditor for the audit of Rio Tinto Limited for the year ended 31 December 2009, I declare that to the best of my knowledge and belief, there have been

- a) no contraventions of the auditor independence requirements of the Corporations Act 2001 in relation to the audit; and
- b) no contraventions of any applicable code of professional conduct in relation to the audit.

This declaration is in respect of Rio Tinto Limited and the entities it controlled during the period.

**Robert Hubbard**  
Partner  
PricewaterhouseCoopers  
Brisbane  
5 March 2010

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# Independent auditors' report of PricewaterhouseCoopers LLP to the members of Rio Tinto plc and PricewaterhouseCoopers to the members of Rio Tinto Limited

For the purpose of this report, the terms 'we' and 'our' denote PricewaterhouseCoopers LLP in relation to UK legal, professional and regulatory responsibilities and reporting obligations to the members of Rio Tinto plc and PricewaterhouseCoopers in relation to Australian legal, professional and regulatory responsibilities and reporting obligations to the members of Rio Tinto Limited.

We have audited the financial statements of Rio Tinto (the Group financial statements) for the year ended 31 December 2009 which comprise the Group income statement, the Group statement of comprehensive income, the Group cash flow statement, the Group statement of financial position, the Group statement of changes in equity and notes 1 to 50 and the Rio Tinto financial information by business unit.

PricewaterhouseCoopers LLP has audited the Rio Tinto plc financial statements for the year ended 31 December 2009 which comprise the Rio Tinto plc balance sheet and the related notes. PricewaterhouseCoopers has audited the Rio Tinto Limited financial statements for the year ended 31 December 2009 which comprise the Rio Tinto Limited balance sheet, Other Rio Tinto Limited balance sheet disclosures, Rio Tinto Limited income statement and Rio Tinto Limited cash flow statement (notes 51 to 54). PricewaterhouseCoopers has also audited the Reconciliation with Australian IFRS.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law in the United Kingdom and applicable law in Australia as amended by the Australian Securities and Investments Commission Order dated 27 January 2006 (as amended on 22 December 2006) (the "ASIC Order" described in the Australian Corporations Act – Summary of ASIC relief) and International Financial Reporting Standards (IFRSs) as adopted by the European Union.

The financial reporting framework that has been applied in the preparation of the Rio Tinto plc parent company financial statements is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The financial reporting framework that has been applied in the preparation of the Rio Tinto Limited financial statements (included in notes 51 to 54) is applicable law and Australian International Financial Reporting Standards (AIFRS).

## **Respective responsibilities of directors and auditors**

As explained more fully in the Directors' declaration set out on page 223, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland) and Australian Auditing Standards. Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors and the Independence requirements of the Australian Corporations Act 2001.

This report, including the opinions, has been prepared for and only for the members of Rio Tinto plc and Rio Tinto Limited as a body in accordance with Sections 495 to 497A of the Companies Act 2006 (in respect of Rio Tinto plc) and Section 308 of the Australian Corporations Act 2001 (in respect of Rio Tinto Limited) and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

## **Scope of the audit of the financial statements**

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the circumstances of the Group, of Rio Tinto Plc and of Rio Tinto Limited and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the directors; and the overall presentation of the financial statements.

In conducting its audit, PricewaterhouseCoopers has complied with the independence requirements of the Australian Corporations' Act 2001.

## Independent auditors' report of PricewaterhouseCoopers LLP to the members of Rio Tinto plc and PricewaterhouseCoopers to the members of Rio Tinto Limited continued

### **Opinion of PricewaterhouseCoopers LLP on the financial statements to the members of Rio Tinto plc**

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of Rio Tinto plc's affairs as at 31 December 2009 and of the Group's profit and cash flows for the year then ended;
- the Group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the Rio Tinto plc company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the LAS Regulation.

### **Separate opinion in relation to IFRSs as issued by the IASB**

As explained in note 1 to the Group financial statements, the Group in addition to complying with its legal obligation to apply IFRSs as adopted by the European Union, has also applied IFRSs as issued by the International Accounting Standards Board (IASB). In our opinion the Group financial statements comply with IFRSs as issued by the IASB.

### **Opinion on other matters prescribed by the Companies Act 2006**

In our opinion:

- the part of the Directors' Remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006;
- the information given in the Corporate governance section of the Annual report with respect to Rules 7.2.5 and 7.2.6 of the Disclosure and Transparency Rules issued by the Financial Services Authority is consistent with the financial statements; and
- the information given in the Directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements.

### **Matters on which we are required to report by exception**

We have nothing to report in respect of the following:

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- adequate accounting records have not been kept by Rio Tinto plc, or returns adequate for our audit have not been received from branches not visited by us; or
- the Rio Tinto plc company financial statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit; or
- a corporate governance statement has not been prepared by Rio Tinto plc.

Under the Listing Rules we are required to review:

- the directors' statement, set out on page 223, in relation to going concern; and
- the part of the Corporate governance section of the Annual report relating to the Rio Tinto plc's compliance with the nine provisions of the June 2008 Combined Code specified for our review.

### **Ross Hunter (Senior Statutory Auditor)**

for and on behalf of PricewaterhouseCoopers LLP Chartered Accountants and Statutory Auditors  
London  
5 March 2010

### **Opinion of PricewaterhouseCoopers on the financial statements to the members of Rio Tinto Limited**

In our opinion:

- the financial statements give a true and fair view of the state of the Group and of Rio Tinto Limited's profit and cash flows for the year then ended;
- the Group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the Group financial statements have been properly prepared in accordance with the ASIC Order;
- the Rio Tinto Limited company financial statements (included in notes 51 to 54 of the Group financial statements) give a true and fair view of the state of its affairs as at 31 December 2009; and
- the Rio Tinto Limited company financial statements have been properly prepared in accordance with AIFRS

### **Separate opinion in relation to IFRSs as issued by the IASB**

As explained in Note 1 to the Group financial statements, the Group in addition to complying with its legal obligation to comply with IFRSs as adopted by the European Union, has also complied with the IFRSs as issued by the International Accounting Standards Board (IASB). In our opinion the Group financial statements comply with IFRSs as issued by the IASB.

### **Opinion on other matters**

In our opinion:

- the auditable information about the remuneration of key management personnel contained within the Remuneration report included in the accompanying Annual report complies with the requirements of the ASIC Order;
- the information given in the Directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements.

### **Robert Hubbard**

Partner  
PricewaterhouseCoopers  
Brisbane  
5 March 2010

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# Financial Summary 2000-2009

US\$m	2000	2001	2002	2003	2004	2005	2006	2007 <sup>(i)</sup>	2008	2009
Gross sales revenue <sup>(d)</sup>	9,972	10,438	11,119	12,119	14,530	20,742	25,440	33,518	58,065	44,036
Share of equity accounted units' sales revenue <sup>(e)</sup>	(2,097)	(2,286)	(2,404)	(2,551)	(1,576)	(1,709)	(2,975)	(3,818)	(3,801)	(2,211)
<b>Consolidated sales revenue</b>	<b>7,875</b>	<b>8,152</b>	<b>8,715</b>	<b>9,568</b>	<b>12,954</b>	<b>19,033</b>	<b>22,465</b>	<b>29,700</b>	<b>54,264</b>	<b>41,825</b>
Underlying/Adjusted PBIT <sup>(f)</sup>	2,912	3,102	2,696	2,266	3,224	7,301	9,912	10,517	17,683	9,843
Finance costs <sup>(g)</sup>	(403)	(404)	(291)	(298)	(207)	(207)	(193)	(570)	(1,706)	(1,058)
Exchange differences and derivatives <sup>(h)</sup>					224	(191)	83	253	(322)	528
Other exclusions from Underlying / Adjusted earnings <sup>(i)</sup>	–	(715)	(1,094)	126	622	409	438	(364)	(6,477)	(1,453)
<b>Profit before tax ("PBT")</b>	<b>2,509</b>	<b>1,983</b>	<b>1,311</b>	<b>2,094</b>	<b>3,863</b>	<b>7,312</b>	<b>10,240</b>	<b>9,836</b>	<b>9,178</b>	<b>7,860</b>
Tax on Exclusions	–	132	42	–	57	33	(357)	60	988	(91)
Tax on Underlying/Adjusted PBT	(819)	(850)	(750)	(567)	(676)	(1,847)	(2,016)	(2,150)	(4,730)	(1,985)
Loss after tax from discontinued operations	–	–	–	–	–	–	–	–	(827)	(449)
Attributable to outside shareholders	(183)	(186)	48	(19)	53	(283)	(429)	(434)	(933)	(463)
<b>Net earnings</b>	<b>1,507</b>	<b>1,079</b>	<b>651</b>	<b>1,508</b>	<b>3,297</b>	<b>5,215</b>	<b>7,438</b>	<b>7,312</b>	<b>3,676</b>	<b>4,872</b>
<b>Underlying/Adjusted earnings <sup>(f)</sup></b>	<b>1,507</b>	<b>1,662</b>	<b>1,530</b>	<b>1,382</b>	<b>2,272</b>	<b>4,955</b>	<b>7,338</b>	<b>7,443</b>	<b>10,303</b>	<b>6,298</b>
Earnings per share (basic) – continuing operations <sup>(s)</sup>	89.7c	64.1c	38.7c	89.4c	195.4c	312.6c	456.2c	464.9c	286.8c	301.7c
<b>Underlying/Adjusted earnings per share (basic) – continuing operations <sup>(s)</sup></b>	<b>89.7c</b>	<b>98.8c</b>	<b>90.9c</b>	<b>82.0c</b>	<b>134.6c</b>	<b>297.0c</b>	<b>450.1c</b>	<b>473.2c</b>	<b>656.2c</b>	<b>357.1c</b>
Dividends per share: declared for year <sup>(i)</sup>										
Rio Tinto shareholders (US cents)	47.02c	48.24c	49.06c	52.33c	62.95c	65.46c	85.07c	111.23c	111.22c	45.00c
Rio Tinto plc (pence)	31.78p	34.08p	30.64p	30.36p	33.91p	36.91p	44.22p	56.20p	67.49p	28.84p
Rio Tinto Limited (Aus. cents)	83.77c	94.24c	86.61c	73.34c	84.88c	86.26c	110.69c	125.72c	146.22c	51.56c
<b>Net assets</b>										
Fixed Assets <sup>(j)</sup>	15,044	14,879	16,136	19,418	20,131	20,848	25,803	75,888	67,651	72,706
Other assets less liabilities	1,380	1,896	1,463	1,804	2,356	2,587	3,026	11,609	8,469	10,078
Provisions (including deferred tax)	(3,299)	(3,194)	(3,612)	(4,536)	(6,087)	(6,383)	(7,007)	(16,013)	(14,987)	(17,998)
Net debt	(5,050)	(5,711)	(5,747)	(5,646)	(3,809)	(1,313)	(2,437)	(45,191)	(38,672)	(18,861)
Outside shareholders' interests	(864)	(827)	(778)	(1,003)	(714)	(791)	(1,153)	(1,521)	(1,823)	(2,094)
<b>Rio Tinto shareholders' funds</b>	<b>7,211</b>	<b>7,043</b>	<b>7,462</b>	<b>10,037</b>	<b>11,877</b>	<b>14,948</b>	<b>18,232</b>	<b>24,772</b>	<b>20,638</b>	<b>43,831</b>
<b>Capital expenditure <sup>(k)</sup></b>	<b>(811)</b>	<b>(1,407)</b>	<b>(1,417)</b>	<b>(1,611)</b>	<b>(2,218)</b>	<b>(2,554)</b>	<b>(3,988)</b>	<b>(4,968)</b>	<b>(8,488)</b>	<b>(5,356)</b>
<b>Acquisitions</b>	<b>(3,332)</b>	<b>(958)</b>	<b>(106)</b>	<b>–</b>	<b>(3)</b>	<b>(2)</b>	<b>(303)</b>	<b>(37,539)</b>	<b>(9)</b>	<b>(396)</b>
<b>Disposals</b>	<b>141</b>	<b>299</b>	<b>233</b>	<b>405</b>	<b>1,510</b>	<b>323</b>	<b>24</b>	<b>13</b>	<b>2,572</b>	<b>2,424</b>
<b>Cash flows from operations <sup>(l)</sup></b>	<b>3,304</b>	<b>3,285</b>	<b>3,619</b>	<b>3,359</b>	<b>4,265</b>	<b>8,031</b>	<b>10,923</b>	<b>12,569</b>	<b>20,668</b>	<b>13,834</b>
<b>Cash flows before financing activities <sup>(m)</sup></b>	<b>(1,502)</b>	<b>213</b>	<b>977</b>	<b>1,024</b>	<b>2,799</b>	<b>4,460</b>	<b>3,714</b>	<b>(34,251)</b>	<b>8,702</b>	<b>5,855</b>
<b>Ratios</b>										
Operating margin <sup>(n)</sup>	29%	30%	24%	19%	24%	37%	42%	34%	32%	24%
Net debt to total capital <sup>(o)</sup>	38%	42%	41%	34%	23%	8%	11%	63%	63%	29%
Underlying / Adjusted earnings: shareholders' funds <sup>(p)</sup>	21%	23%	21%	16%	22%	37%	44%	35%	45%	20%
Interest cover <sup>(q)</sup>	11	11	13	11	20	59	89	20	10	9

## Financial Summary 2000-2009 continued

- (a) Information for the years 2000 to 2003 is stated under UK GAAP and has not been restated except where indicated below.
- (b) Shareholders' funds for 2001 and prior years were restated following the implementation of FRS 19 in 2002.
- (c) Information for the years 2004 to 2009 is stated under EU IFRS. The Group implemented IAS 39 on 1 January 2005 without restatement of comparatives.
- (d) Adjustments have been made for 2002 and subsequent years to include in sales revenue, certain amounts charged to customers for freight and handling costs, which previously were deducted from operating costs.
- (e) Certain units that were equity accounted under UK GAAP are proportionally consolidated under EU IFRS and vice-versa. Gross sales revenue includes the sales revenue of equity accounted units in addition to Consolidated sales revenue (after adjusting for intra-subsidiary/equity accounted units sales). Consolidated revenue includes subsidiaries sales to equity accounted units which are not included in sales revenue.
- (f) Underlying earnings is an additional measure of earnings, which is reported by Rio Tinto with its EU IFRS results to provide greater understanding of the underlying business performance of its operations. It is defined in note 2 to the Financial Statements. Underlying earnings is similar but not identical to the Adjusted earnings measure that Rio Tinto reported with its UK GAAP results. Adjusted earnings was defined as excluding exceptional items of such magnitude that their exclusion was necessary in order that adjusted earnings fulfilled their purpose of reflecting the underlying performance of the Group. Underlying profit before interest and tax (PBIT) and Adjusted PBIT are similar to Underlying earnings and Adjusted earnings except that they are stated before tax and interest.
- (g) Finance costs include net interest and amortisation of discount.
- (h) Under EU IFRS, certain gains and losses on exchange and on revaluation of derivatives are included in the Group's Net earnings. Under UK GAAP, these did not have an impact on the income statement. These items are excluded from Underlying earnings.
- (i) Dividends per share are the amounts declared in respect of each financial year. These usually include an Interim dividend paid in the year, and a Final dividend paid after the end of the year. The Special dividend of 90 US cents per share paid in 2006 is not included in the table. 2000 to 2008 ordinary dividends per share have been restated using a number of shares which reflects the discounted price of the July 2009 rights issues ('the bonus factor').
- (j) Fixed Assets include property, plant and equipment, intangible assets, goodwill, and investments in and long term loans to equity accounted units.
- (k) Capital expenditure comprises purchases less disposals of property, plant and equipment, capitalised evaluation costs and purchases less disposals of other intangible assets plus direct funding provided to equity accounted units for Rio Tinto's share of their capital expenditure. The figures include 100 per cent of subsidiaries' capital expenditure, but exclude that of equity accounted units except where directly funded by Rio Tinto.
- (l) Total cash flow from operations comprises Cash flow from consolidated operations together with Dividends from equity accounted units. Exploration and evaluation costs charged against income were previously included in Cash used in investing activities but are now included within Cash flow from operating activities. As a result, exploration and evaluation costs expensed have been reclassified in the comparative periods within the cash flow statement.
- (m) Cash flow before financing activities is stated before deducting dividends payable to Rio Tinto shareholders, which involved restatement of 2003 and prior years.
- (n) Operating margin is the percentage of Underlying/Adjusted PBIT, after excluding tax on equity accounted units, to Gross sales revenue.
- (o) Total capital comprises year end shareholders' funds plus net debt and outside shareholders' interests.
- (p) Underlying/Adjusted earnings: shareholders' funds represents Underlying or Adjusted earnings expressed as a percentage of the mean of opening and closing equity attributable to Rio Tinto shareholders.
- (q) Interest cover represents the number of times interest payable less receivable (excluding the amortisation of discount but including capitalised interest) is covered by Underlying operating profit, less amortisation of discount, plus dividends from equity accounted units. Underlying operating profit is similar to Underlying earnings but is stated before tax, interest and share of profit after tax of equity accounted units.
- (r) The 31 December 2007 balance sheet was restated for the revisions to Alcan's fair value accounting which was finalised in 2008.
- (s) 2009 earnings per share from continuing operations and Underlying earnings per share have been calculated using a number of shares which reflects the discounted price of the July rights issues ('the bonus factor'). 2000 to 2008 comparatives have been restated accordingly.

## Summary financial data in Australian dollars, Sterling and US dollars<sup>(b)</sup>

2009 A\$ <sup>m</sup>	2008 A\$ <sup>m</sup>	2009 £ <sup>m</sup>	2008 £ <sup>m</sup>			2009 US\$m	2008 US\$m
<b>55,742</b>	67,517	<b>28,048</b>	31,218	Gross sales revenue		<b>44,036</b>	58,065
<b>52,943</b>	63,098	<b>26,640</b>	29,174	Consolidated sales revenue		<b>41,825</b>	54,264
<b>9,949</b>	10,672	<b>5,006</b>	4,934	Profit before tax from continuing operations		<b>7,860</b>	9,178
<b>7,322</b>	6,321	<b>3,684</b>	2,923	Profit for the year from continuing operations		<b>5,784</b>	5,436
<b>(568)</b>	(962)	<b>(286)</b>	(445)	Loss for the year from discontinued operations		<b>(449)</b>	(827)
<b>6,167</b>	4,274	<b>3,103</b>	1,976	Net earnings attributable to Rio Tinto shareholders		<b>4,872</b>	3,676
<b>7,972</b>	11,980	<b>4,011</b>	5,539	Underlying earnings <sup>(a)</sup>		<b>6,298</b>	10,303
<b>381.9c</b>	333.5c	<b>192.2p</b>	154.2p	Basic earnings per ordinary share from continuing operations <sup>(c)</sup>		<b>301.7c</b>	286.8c
<b>452.0c</b>	763.0c	<b>227.5p</b>	352.8p	Basic Underlying earnings per ordinary share <sup>(a)(c)</sup>		<b>357.1c</b>	656.2c
				Dividends per share to Rio Tinto shareholders			
<b>82.97c</b>	139.33c	<b>37.85p</b>	64.91p	– paid		<b>55.6c</b>	124.3c
<b>51.56c</b>	82.97c	<b>28.84p</b>	37.85p	– proposed final dividend		<b>45.0c</b>	55.6c
<b>7,411</b>	10,119	<b>3,729</b>	4,678	Cash flow before financing activities		<b>5,855</b>	8,702
<b>(21,192)</b>	(56,046)	<b>(11,715)</b>	(26,856)	Net debt		<b>(18,861)</b>	(38,672)
<b>49,248</b>	29,910	<b>27,224</b>	14,332	Equity attributable to Rio Tinto shareholders		<b>43,831</b>	20,638

(a) Underlying earnings exclude impairment charges and other net expenses of US\$1,426 million (2008: US\$6,627 million), which are analysed in note 2.

(b) The financial data above has been extracted from the financial statements. The Australian dollar and Sterling amounts are based on the US dollar amounts, retranslated at average or closing rates as appropriate, except for the dividends which are the actual amounts payable restated for the bonus factor of the rights issues. For further information on these exchange rates, see note 45.

(c) Basic earnings per ordinary share and basic Underlying earnings per ordinary share do not recognise the dilution resulting from share options in issue. 2009 earnings per share from continuing operations reflect the bonus element of the rights issues completed in July 2009. 2008 comparatives for both earnings per share and ordinary dividends per share have been restated accordingly.

# Shareholder information

## Dividends

Both Companies have paid dividends on their shares every year since incorporation in 1962. The rights of Rio Tinto shareholders to receive dividends are explained under the description of the Dual Listed Companies' Structure on page 232.

### Dividend policy

The aim of Rio Tinto's progressive dividend policy is to increase the US dollar value of ordinary dividends over time. The rate of the total annual dividend, in US dollars, is determined taking into account the results for the past year and the outlook for the current year. Under Rio Tinto's dividend policy, the interim dividend is set at one half of the total ordinary dividend for the previous year and the final ordinary dividend is expected to be at least equal to the previous interim dividend. This policy was suspended in 2009 due to the recapitalisation of the balance sheet.

### Dividend determination

The majority of the Group's sales are transacted in US dollars, making this the most reliable measure for the Group's global business performance. It is Rio Tinto's main reporting currency and consequently the natural currency for dividend determination. Dividends determined in US dollars are translated at exchange rates prevailing two days prior to the announcement and are then declared payable in sterling by Rio Tinto plc and in Australian dollars by Rio Tinto Limited. On request, shareholders of Rio Tinto plc can

elect to receive dividends in Australian dollars and shareholders of Rio Tinto Limited can elect to receive dividends in sterling.

### 2009 dividends

On announcing the US\$14.8 billion (net) rights issues on 5 June 2009, the directors announced that an interim dividend would not be paid for 2009. The 2009 final dividend of 45 US cents per share was declared by the directors on 11 February 2010 and the applicable translation rate was US\$1.5606 to the pound sterling and US\$0.87285 to the Australian dollar.

Final dividends of 28.84 pence or 51.56 Australian cents per share and 180 US cents per Rio Tinto plc ADR (each representing four shares) will be paid on 1 April 2010.

From 2010, the Group is committed to a progressive dividend policy over the longer term. The charts below set out the amounts of interim, final and special cash dividends paid or payable on each share or ADR in respect of each financial year, but before deduction of any withholding tax.

These have been restated for the impact of the rights issue.

### Dividend reinvestment plan (DRP)

Rio Tinto offers a DRP to registered shareholders, which provides the opportunity to use cash dividends to purchase Rio Tinto shares in the market free of commission. Due to local legislation the DRP cannot be extended to shareholders in the US, Canada and certain other countries.

## Market listings and share prices

The prices of Rio Tinto plc and Rio Tinto Limited shares and Rio Tinto plc ADRs are available during the day on the Rio Tinto and other websites.

### Rio Tinto plc

The principal market for Rio Tinto plc shares is the London Stock Exchange (LSE), the shares trade through the Stock Exchange Electronic Trading Service (SETS) system.

Central to the SETS system is the electronic order book on which an LSE member firm can post buy and sell orders, either on its own behalf or for its clients. Buy and sell orders are executed against each other automatically in strict price, then size, priority. The order book operates from 8.00 am to 4.30 pm daily. From 7.50 am to 8.00 am orders may be added to, or deleted from the book, but execution does not occur. At 8.00 am the market opens by means of an uncrossing algorithm which calculates the greatest volume of trades on the book which can be executed, then matches the orders, leaving unexecuted orders on the book at the start of trading.

All orders placed on the order book are firm and are for standard three day settlement. While the order book is vital to all market participants, orders are anonymous, with the counterparties being revealed to each other only after execution of the trade.

	2009	2008 restated	2007 restated	2006 restated	2005 restated
<b>Rio Tinto Group – US cents per share</b>					
Interim	–	55.61	42.53	32.73	31.50
Final	45.00	55.61	68.70	52.34	33.96
Special	–	–	–	–	90.00
<b>Total</b>	<b>45.00</b>	<b>111.22</b>	<b>111.23</b>	<b>85.07</b>	<b>155.46</b>
<b>Rio Tinto plc – UK pence per share</b>					
Interim	–	29.64	20.93	17.53	17.80
Final	28.84	37.85	35.27	26.69	19.11
Special	–	–	–	–	50.64
<b>Total</b>	<b>28.84</b>	<b>67.49</b>	<b>56.20</b>	<b>44.22</b>	<b>87.55</b>
<b>Rio Tinto Limited – Australian cents per share</b>					
Interim	–	63.25	49.64	42.94	41.37
Final	51.56	82.97	76.08	67.75	44.89
Special	–	–	–	–	118.98
<b>Total</b>	<b>51.56</b>	<b>146.22</b>	<b>125.72</b>	<b>110.69</b>	<b>205.24</b>
<b>Rio Tinto plc – US cents per ADR</b>					
Interim	–	222.44	170.12	130.92	126.00
Final	180.00	222.44	274.80	209.36	135.84
Special	–	–	–	–	360.00
<b>Total</b>	<b>180.00</b>	<b>444.88</b>	<b>444.92</b>	<b>340.28</b>	<b>621.84</b>

Use of the order book is not mandatory but all trades, regardless of size, executed over the SETS system are published immediately. The only exception to this is where a Worked Principal Agreement (WPA) is entered into for trades greater than eight times Normal Market Size (NMS). Rio Tinto plc has an NMS of 100,000 shares.

Publication of trades entered under a WPA is delayed until the earlier of 80 per cent of the risk position assumed by the member firm taking on the trade being unwound or the end of the business day.

Rio Tinto plc has a sponsored American Depository Receipt (ADR) facility with JPMorgan Chase Bank NA (JPMorgan) under a Deposit Agreement, dated 13 July 1988, as amended on 11 June 1990, as further amended and restated on 15 February 1999 and as further amended and restated on 18 February 2005 when JPMorgan became Rio Tinto plc's depository. The ADRs evidence Rio Tinto plc American Depository Shares (ADS), each representing four ordinary shares. The shares are registered with the US Securities and Exchange Commission (SEC), are listed on the New York Stock Exchange (NYSE) and are traded under the symbol 'RTP'.

Rio Tinto plc shares are also listed on Euronext.

As at 18 February 2010, there were 49,536 holders of record of Rio Tinto plc's shares. Of these holders, 328 had registered addresses in the US and held a total of 310,454 Rio Tinto plc shares, representing 0.02 per cent of the total number of Rio Tinto plc shares issued and outstanding as at such date. In addition,

90,316,380 Rio Tinto plc shares were registered in the name of a custodian account in London which represented 5.92 per cent of Rio Tinto plc shares issued and outstanding. These shares were represented by 22,579,095 Rio Tinto plc ADRs held of record by 390 ADR holders. In addition, certain accounts of record with registered addresses other than in the US hold shares, in whole or in part, beneficially for US persons.

#### ADR holders

ADR holders may instruct JPMorgan as to how the shares represented by their ADRs should be voted.

ADR holders can receive the *Annual report* on request.

Rio Tinto is subject to the US Securities and Exchange Commission (SEC) reporting requirements for foreign companies. A Form 20-F, which corresponds with the Form 10-K in US public companies, will be filed with the SEC. Rio Tinto's Form 20-F and other filings can be viewed on the Rio Tinto website as well as the SEC website at [www.sec.gov](http://www.sec.gov)

#### Rio Tinto Limited

Rio Tinto Limited shares are listed on the Australian Securities Exchange (ASX).

The ASX is the principal trading market for Rio Tinto Limited shares. The ASX is a national stock exchange operating in the capital city of each Australian State with an automated trading system.

As at 18 February 2010, there were 186,008 holders of record of Rio Tinto Limited shares.

Of these holders, 298 had registered addresses in the US, representing approximately 0.03 per cent of the total number of Rio Tinto Limited shares issued and outstanding as of such date. In addition, nominee accounts of record with registered addresses other than in the US may hold Rio Tinto Limited shares, in whole or in part, beneficially for US persons.

#### Investment warning

The following table shows share prices for the period indicated, the reported high and low middle market quotations, which represent an average of bid and asked prices, for Rio Tinto plc's shares on the LSE based on the LSE Daily Official List, the highest and lowest sale prices of the Rio Tinto plc ADRs as reported on the NYSE composite tape and the high and low closing sale prices of Rio Tinto Limited shares based upon information provided by the ASX. There is no established trading market in the US for Rio Tinto Limited's shares.

Past performance of shares is not necessarily a guide to future performance. The value of shares and investments and the income derived from them can go down as well as up, and investors may not get back the amount they invested.

#### Exchange controls and foreign investment

#### Rio Tinto plc

There are no UK foreign exchange controls or other restrictions on the import or export of capital or on the payment of dividends to non

	Pence per Rio Tinto plc share		US\$ per Rio Tinto plc ADS		A\$ per Rio Tinto Limited share	
	High	Low	High	Low	High	Low
2005	2,657	1,472	183.29	111.57	69.10	38.82
2006	3,322	2,352	253.33	176.09	87.97	65.38
2007	5,784	2,505	478.35	193.60	146.90	69.50
2008	7,078	1,049	554.93	60.72	156.10	32.00
2009	3,420	1,140	223.75	78.50	74.89	29.38
Aug 2009	2,610	2,245	179.19	145.41	62.88	56.11
Sep 2009	2,740	2,312	183.37	147.87	61.74	55.25
Oct 2009	3,000	2,505	202.49	157.34	67.50	56.85
Nov 2009	3,310	2,693	223.75	178.55	73.78	62.59
Dec 2009	3,420	3,087	219.99	200.00	74.89	69.80
Jan 2010	3,638	3,053	240.43	192.64	80.00	68.00
2008						
First quarter	5,850	4,159	464.00	331.31	137.10	101.00
Second quarter	7,078	5,233	554.93	419.75	156.10	124.17
Third quarter	5,764	3,310	468.24	226.50	137.50	84.50
Fourth quarter	3,487	1,049	254.24	60.72	95.00	32.00
2009						
First quarter	2,047	1,140	143.30	78.50	45.11	29.38
Second quarter	2,608	1,784	216.46	125.68	60.89	41.65
Third quarter	2,740	1,885	183.37	120.00	62.88	46.63
Fourth quarter	3,420	2,505	223.75	157.34	74.89	56.85

### Shareholder information continued

resident holders of Rio Tinto plc shares or that affect the conduct of Rio Tinto plc's operations. The Bank of England, however, administers financial sanctions against specified targets related to certain regimes. There are no restrictions under Rio Tinto plc's articles of association or under UK law that limit the right of non resident owners to hold or vote Rio Tinto plc shares.

#### Rio Tinto Limited

Under current Australian legislation, the Reserve Bank of Australia does not restrict the import and export of funds and no permission is required for the movement of funds into or out of Australia, except that restrictions apply to certain financial transactions relating to specified individuals and entities associated with certain regimes. The Department of Foreign Affairs and Trade has responsibility for the administration of restrictions relating to terrorists and their sponsors, and the former Iraqi regime.

Rio Tinto Limited may be required to deduct withholding tax from foreign remittances of dividends, to the extent that they are unfranked, and from payments of interest. There are no restrictions under the constitution of Rio Tinto Limited that limit the right of non residents to hold or vote Rio Tinto Limited shares.

However acquisitions of interests in shares, voting power or certain other equity instruments in Australian companies by foreign interests are subject to review and approval by the Treasurer of the Commonwealth of Australia under the Foreign Acquisitions and Takeovers Act 1975 (the Takeovers Act). The Takeovers Act applies to any acquisition of 15 per cent or more of the outstanding shares, of or voting power in, an Australian company or to any transaction that results in one non resident, or a group of associated non residents, controlling 15 per cent or more of the shares of or voting power in, an Australian company. The Takeovers Act also applies to any transaction which results in a group of non associated non residents controlling 40 per cent or more of the shares of or voting power in, an Australian company. Persons who are proposing such acquisitions or transactions are required to notify the Treasurer of their intention. The Treasurer has the power to order divestment in cases where such acquisitions or transactions have already occurred. The Takeovers Act does not affect the rights of owners whose interests are held in compliance with the legislation.

#### Dual listed companies structure

In 1995, Rio Tinto shareholders approved the terms of the dual listed companies merger (the DLC merger) which was designed to place the

shareholders of both Companies in substantially the same position as if they held shares in a single enterprise owning all of the assets of both Companies. As a condition of its approval of the DLC merger, the Australian Government required Rio Tinto plc to reduce its shareholding in Rio Tinto Limited to 39 per cent by the end of 2005. Consistent with the commitments made to the Australian Government in 1995, the Rio Tinto plc shareholding in Rio Tinto Limited has been reduced over time and currently stands at 28.2 per cent.

Following the approval of the DLC merger, both Companies entered into a DLC Merger Sharing Agreement (the Sharing Agreement) through which each Company agreed to ensure that the businesses of Rio Tinto plc and Rio Tinto Limited are managed on a unified basis, to ensure that the boards of directors of each Company are the same, and to give effect to certain arrangements designed to provide shareholders of each Company with a common economic interest in the combined enterprise.

In order to achieve this third objective, the Sharing Agreement provided for the ratio of dividend, voting and capital distribution rights attached to each Rio Tinto plc share and to each Rio Tinto Limited share to be fixed in an Equalisation Ratio which has remained unchanged at 1:1. The Sharing Agreement has provided for this ratio to be revised in special circumstances where, for example, certain modifications are made to the share capital of one Company, such as rights issues, bonus issues, share splits and share consolidations, but not to the share capital of the other. Outside these specified circumstances, the Equalisation Ratio can only be altered with the approval of shareholders under the Class Rights Action approval procedure described under Voting rights. In addition, any adjustments are required to be confirmed by the auditors.

One consequence of the DLC merger is that Rio Tinto is subject to a wide range of laws, rules and regulatory review across multiple jurisdictions. Where these rules differ Rio Tinto, as a Group, aims to comply with the strictest applicable level.

Consistent with the creation of a single combined enterprise under the DLC merger, directors of each Company act in the best interests of Rio Tinto as a whole. When matters may involve a conflict of interests between the shareholders of each Company they must be approved under the Class Rights Action approval procedure.

To ensure that the boards of both Companies are identical, resolutions to appoint or remove directors must be put to shareholders

of both as a joint electorate as Joint Decisions as described under Voting rights, and it is a requirement that a person can only be a director of one Company if that person is also a director of the other Company. So, for example, if a person was removed as a director of Rio Tinto plc, he or she would also cease to be a director of Rio Tinto Limited.

#### Dividend rights

The Sharing Agreement provides for dividends paid on Rio Tinto plc and Rio Tinto Limited shares to be equalised on a net cash basis, that is without taking into account any associated tax credits. Dividends are determined in US dollars and are then, except for ADR holders, translated and paid in sterling and Australian dollars. The Companies are also required to announce and pay their dividends and other distributions as close in time to each other as possible.

In the unlikely event that one Company did not have sufficient distributable reserves to pay the equalised dividend or the equalised capital distribution, it would be entitled to receive a top up payment from the other Company. The top up payment could be made as a dividend on the DLC Dividend Share, or by way of a contractual payment.

If the payment of an equalised dividend would contravene the law applicable to one of the Companies, then they may depart from the Equalisation Ratio. However, should such a departure occur, then the relevant Company will put aside reserves to be held for payment on the relevant shares at a later date.

Rio Tinto shareholders have no direct rights to enforce the dividend equalisation provisions of the Sharing Agreement.

The DLC Dividend Share can also be utilised to provide the Group with flexibility for internal funds management by allowing dividends to be paid between the two parts of the Group. Such dividend payments are of no economic significance to the shareholders of either Company, as they will have no effect on the Group's overall resources.

#### Voting rights

In principle, the Sharing Agreement provides for the public shareholders of Rio Tinto plc and Rio Tinto Limited to vote as a joint electorate on all matters which affect shareholders of both Companies in similar ways. These are referred to as Joint Decisions. Such Joint Decisions include the creation of new classes of share capital, the appointment or removal of directors and auditors and the receiving of annual financial statements. Joint Decisions are voted on a poll.

The Sharing Agreement also provides for the protection of the public shareholders of each Company by treating the shares issued by each Company as if they were separate classes of shares issued by a single company. So decisions that do not affect the shareholders of both Companies equally require the separate approval of the shareholders of both Companies. Matters requiring this approval procedure are referred to as Class Rights Actions and are voted on a poll.

Thus, the interests of the shareholders of each Company are protected against decisions which affect them and the shareholders in the other Company differently, by requiring their separate approval. For example, fundamental elements of the DLC merger cannot be changed unless approved by shareholders under the Class Rights Action approval procedure.

Exceptions to these principles can arise in situations such as where legislation requires the separate approval of a decision by the appropriate majority of shareholders in one Company and where approval of the matter by shareholders of the other Company is not required.

Where a matter has been expressly categorised as either a Joint Decision or a Class Rights Action, the directors do not have the power to change that categorisation. If a matter falls within both categories, it is treated as a Class Rights Action. In addition, the directors can determine that matters not expressly listed in either category should be put to shareholders for their approval under either procedure.

To facilitate the joint voting arrangements each Company has entered into shareholder voting agreements. Each Company has issued a Special Voting Share to a special purpose company held in trust by a common Trustee.

Rio Tinto plc has issued its Special Voting Share (RTP Special Voting Share) to RTL Shareholder SVC and Rio Tinto Limited has issued its Special Voting Share (RTL Special Voting Share) to RTP Shareholder SVC. The total number of votes cast on Joint Decisions by the public shareholders of one Company are voted at the parallel meeting of the other Company. The role of these special purpose companies in achieving this is described below.

In exceptional circumstances, certain public shareholders of the Companies can be excluded from voting at the respective Company's general meetings because they have acquired shares in one Company in excess of a given threshold without making an offer for all the shares in the other Company. If this should occur, the votes cast by these excluded shareholders will be disregarded.

Following the Companies' general meetings the overall results of the voting on Joint Decisions and the results of voting on separate decisions will be announced to the stock exchanges, published on the Rio Tinto website and announced to the media in the UK and Australia.

At a Rio Tinto plc shareholders' meeting at which a Joint Decision will be considered, each Rio Tinto plc share will carry one vote and the holder of its Special Voting Share will have one vote for each vote cast by the public shareholders of Rio Tinto Limited. The holder of the Special Voting Share is required to vote strictly and only in accordance with the votes cast by public shareholders for and against the equivalent resolution at the parallel Rio Tinto Limited shareholders' meeting.

The holders of Rio Tinto Limited ordinary shares do not actually hold any voting shares in Rio Tinto plc by virtue of their holding in Rio Tinto Limited and cannot enforce the voting arrangements relating to the Special Voting Share.

At a Rio Tinto Limited shareholders' meeting at which a Joint Decision will be considered, each Rio Tinto Limited share will carry one vote and, together with the Rio Tinto Limited ordinary shares held by Tinto Holdings Australia, the holder of its Special Voting Share will carry one vote for each vote cast by the public shareholders of Rio Tinto plc in their parallel meeting. Tinto Holdings Australia and the holder of the Special Voting Share are required to vote strictly, and only, in accordance with the votes cast for and against the equivalent resolution at the parallel Rio Tinto plc shareholders' meeting.

The holders of Rio Tinto plc ordinary shares do not actually hold any voting shares in Rio Tinto Limited by virtue of their holding in Rio Tinto plc and cannot enforce the voting arrangements relating to the Special Voting Share.

### **Capital distribution rights**

If either of the Companies goes into liquidation, the Sharing Agreement provides for a valuation to be made of the surplus assets of both Companies. If the surplus assets available for distribution by one Company on each of the shares held by its public shareholders exceed the surplus assets available for distribution by the other Company on each of the shares held by its public shareholders, then an equalising payment between the two Companies shall be made, to the extent permitted by applicable law, such that the amount available for distribution on each share held by public shareholders of each Company conforms to the Equalisation

Ratio. The objective is to ensure that the public shareholders of both Companies have equivalent rights to the assets of the combined Group on a per share basis, taking account of the Equalisation Ratio.

The Sharing Agreement does not grant any enforceable rights to the shareholders of either Company upon liquidation of a Company.

### **Limitations on ownership of shares and merger obligations**

The laws and regulations of the UK and Australia impose restrictions and obligations on persons who control interests in public quoted companies in excess of defined thresholds that, under certain circumstances, include obligations to make a public offer for all of the outstanding issued shares of the relevant company. The threshold applicable to Rio Tinto plc under UK law and regulations is 30 per cent and to Rio Tinto Limited under Australian law and regulations is 20 per cent.

As part of the DLC merger, the articles of association of Rio Tinto plc and the constitution of Rio Tinto Limited were amended with the intention of extending these laws and regulations to the combined enterprise and, in particular, to ensure that a person cannot exercise control over one Company without having made offers to the public shareholders of both Companies. It is consistent with the creation of the single economic enterprise and the equal treatment of the two sets of shareholders, that these laws and regulations should operate in this way. The articles of association of Rio Tinto plc and the constitution of Rio Tinto Limited impose restrictions on any person who controls, directly or indirectly, 20 per cent or more of the votes on a Joint Decision. If, however, such a person only has an interest in either Rio Tinto Limited or Rio Tinto plc, then the restrictions will only apply if they control, directly or indirectly, 30 per cent or more of the votes at that Company's general meetings.

If one of the thresholds specified above is breached then, subject to certain limited exceptions and notification by the relevant Company, such persons may not attend or vote at general meetings of the relevant Company, may not receive dividends or other distributions from the relevant Company, and may be divested of their interest by the directors of the relevant Company. These restrictions will continue to apply until such persons have either made a public offer for all of the publicly held shares of the other Company, or have reduced their controlling interest below the thresholds specified, or have acquired through a permitted means at least 50 per cent of the publicly held shares of each Company.

### Shareholder information continued

These provisions are designed to ensure that offers for the publicly held shares of both Companies would be required to avoid the restrictions set out above, even if the interests which breach the thresholds are only held in one of the Companies. The directors do not have the discretion to exempt a person from the operation of these rules.

Under the Sharing Agreement, the Companies agree to cooperate to enforce the restrictions contained in their articles of association and constitution and also agree that no member of the Rio Tinto Group shall accept a third party offer for Rio Tinto Limited shares unless such acceptance is approved by a Joint Decision of the public shareholders of both Companies.

#### Guarantees

In 1995, each Company entered into a Deed Poll Guarantee in favour of creditors of the other Company. Pursuant to the Deed Poll Guarantees, each Company guaranteed the contractual obligations of the other Company and the obligations of other persons which are guaranteed by the other Company, subject to certain limited exceptions. Beneficiaries under the Deed Poll Guarantees may make demand upon the guarantor thereunder without first having recourse to the Company or persons whose obligations are being guaranteed. The obligations of the guarantor under each Deed Poll Guarantee expire upon termination of the Sharing Agreement and under other limited circumstances, but only in respect of obligations arising after such termination and, in the case of other limited circumstances, the publication and expiry of due notice. The shareholders of the Companies cannot enforce the provision of the Deed Poll Guarantees.

#### Supplementary information

##### General shareholder enquiries

Computershare Investor Services PLC and Computershare Investor Services Pty Limited are the share registrars for Rio Tinto plc and Rio Tinto Limited, respectively. All enquiries and correspondence concerning shareholdings, other than shares held in ADR form, should be directed to the respective registrar. Their addresses and telephone numbers are given under Useful addresses on the back page. Shareholders should notify Computershare promptly of any change of address.

Enquiries concerning Rio Tinto plc ADRs should be directed to JPMorgan Chase Bank NA whose address and telephone number are also given under Useful addresses.

##### Investor Centre

Investor Centre is Rio Tinto's free, secure, self service website, where shareholders can manage their holdings online. The website enables shareholders to:

- View share balances
- Change address details
- View payment and tax information
- Update payment instructions

In addition, shareholders who register their email address on Investor Centre, can be notified electronically of events such as annual general meetings, and can receive shareholder communications such as the annual report or notice of meeting electronically online.

Rio Tinto plc shareholders  
[www.investorcentre.co.uk/riotinto](http://www.investorcentre.co.uk/riotinto)

Rio Tinto Limited shareholders  
[www.computershare.com.au](http://www.computershare.com.au)

##### Consolidation of share certificates

If a certificated shareholding in Rio Tinto plc is represented by several individual share certificates, they can be replaced by one consolidated certificate. There is no charge for this service. Share certificates should be sent to Computershare together with a letter of instruction.

##### Share warrants to bearer

All outstanding share warrants to bearer of Rio Tinto plc have been converted into registered ordinary shares under the terms of a Scheme of Arrangement sanctioned by the Court in 2001. Holders of any outstanding share warrants to bearer should contact the company secretary of Rio Tinto plc for an application form in order to obtain their rights to registered ordinary shares.

##### Former Alcan Inc. Shareholders

Former Alcan Inc. shareholders who have not tendered their Alcan shares to the Rio Tinto offer of US\$101.00 per Common share are entitled to claim their funds by sending a letter of transmittal together with their stock certificate to Computershare Investor Services Inc., whose details are given under Useful addresses. A copy of the letter of transmittal can be downloaded from the Rio Tinto website. [www.riotinto.com/shareholders](http://www.riotinto.com/shareholders)

##### Corporate nominee service

Computershare in conjunction with Rio Tinto plc, operate a corporate nominee service for private individuals. Further information can be obtained from Computershare.

##### Rio Tinto on the web

Rio Tinto maintains a substantial amount of information on its website, including this and previous annual reports, many other publications and links to Group company websites.

It is the responsibility of the directors to ensure that processes are in place to maintain information and preserve the integrity of the Rio Tinto website. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

##### Publications

The following publications are on the website but hardcopies can be obtained free of charge on request from the company secretaries:

*2009 Annual report*

*2009 Annual review*

*Parent entity financial statements for Rio Tinto Limited*

*The way we work* – Rio Tinto's statement of business practice

*Review magazine* – Rio Tinto's quarterly magazine for shareholders

## Substantial shareholders

Under the UK Disclosure and Transparency Rules and the Australian Corporations Act, any shareholder of Rio Tinto plc with voting

rights of three per cent or more or any person with voting power of five per cent or more in Rio Tinto Limited, is required to provide the companies with notice. Excluding the interest

held by Tinto Holdings Australia Pty Limited in Rio Tinto Limited, the shareholders who have provided such, or an equivalent, notice are:

### Rio Tinto plc

	Date of notice	Number of shares	Percentage of issued share capital
Barclays PLC	12 Jul 2006	42,129,019	4.02
The Capital Group Companies, Inc	13 Jun 2006	41,031,494	3.90
Capital Research and Management Company	16 July 2009	75,461,183	4.95
AXA S.A.	29 Jan 2008	48,493,873	4.86
Shining Prospect Pte. Ltd	2 Feb 2008	119,705,134	12.00
BlackRock Inc.	1 Dec 2009	127,744,871	8.38

### Rio Tinto Limited

Shining Prospect Pte. Ltd <sup>1</sup>	4 Feb 2008	-
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#### Notes

1. Shining Prospect Pte. Ltd, a Singapore based entity owned by Chinalco (Aluminum Corporation of China) acquired 119,705,134 Rio Tinto plc shares on 1 February 2008. Through the operation of Corporations Act as modified, this gives these entities and their associates voting power of 9.32 per cent in the Rio Tinto Group on a joint decision matter, making them substantial shareholders of Rio Tinto Limited as well as of Rio Tinto plc.
2. As far as it is known, Rio Tinto is not directly or indirectly owned or controlled by another corporation or by any government.
3. Rio Tinto is not aware of any arrangement which may result in a change of control.

## Analysis of ordinary shareholders

As at 18 February 2010

	Rio Tinto plc		
	No of accounts	%	Shares
1 to 1,000 shares	35,338	71.34	12,613,718
1,001 to 5,000 shares	11,405	23.02	22,836,800
5,001 to 10,000 shares	997	2.01	6,867,978
10,001 to 25,000 shares	555	1.12	8,573,048
25,001 to 125,000 shares	600	1.21	35,363,949
125,001 to 250,000 shares	190	0.38	34,156,307
250,001 to 1,250,000 shares	297	0.60	172,763,058
1,250,001 to 2,500,000	60	0.12	104,857,635
2,500,001 and over	93	0.19	1,036,235,722
ADRs	1	0.00	90,316,380
Publicly held shares	49,536	100	1,524,584,595
Shares held in treasury			4,419,276
Tinto Holdings Australia Pty Limited			
			1,529,003,871
			100

Number of holdings less than  
marketable parcel of A\$500

	Rio Tinto Limited		
	No of accounts	%	Shares
152,899	82.20	46,220,757	7.62
29,493	15.86	58,776,415	9.69
2,365	1.27	16,305,270	2.69
920	0.49	13,573,752	2.24
248	0.13	11,437,387	1.88
30	0.02	5,155,174	0.85
36	0.02	19,007,142	3.13
5	0.00	10,071,958	1.66
11	0.01	255,210,865	42.05
-	-	-	-
186,007	100	435,758,720	71.81
		171,072,520	28.19
	100	606,831,240	100
		2,440	

## Twenty largest registered shareholders

In accordance with the ASX Listing Rules, below are the names of the twenty largest registered holders of Rio Tinto Limited shares and the number of shares and the percentage of issued capital each holds:

### Rio Tinto Limited

	Number of shares	Percentage of issued share capital
1 Tinto Holdings Australia Pty Limited	171,072,520	28.19
2 HSBC Custody Nominees (Australia) Limited	85,679,627	14.12
3 JP Morgan Nominees Australia Limited	64,267,120	10.59
4 National Nominees Limited	53,343,702	8.79
5 Citicorp Nominees Pty Limited	13,918,306	2.29
6 ANZ Nominees Limited	11,791,068	1.94
7 Cogent Nominees Pty Limited	8,141,201	1.34
8 UBS Wealth Management Australia Nominees Pty Ltd	3,835,054	0.63
9 Citicorp Nominees Pty Limited	3,690,746	0.61
10 Queensland Investment Corporation	3,660,711	0.60
11 Australian Foundation Investment Company Limited	3,573,706	0.59
12 AMP Life Limited	3,309,624	0.55
13 Argo Investments Limited	2,393,539	0.39
14 UBS Nominees Limited	2,322,435	0.38
15 Australian Reward Investment Alliance	2,021,359	0.33
16 Perpetual Trustee Company Limited	1,960,255	0.32
17 RBC Dexia Investor Services Australia Nominees Pty Limited	1,374,370	0.23
18 RBC Dexia Investor Services Australia Nominees Pty Limited	1,072,295	0.18
19 Citicorp Nominees Pty Limited	990,225	0.16
20 Citicorp Nominees Pty Limited	982,361	0.16
	439,400,224	72.41

#### Notes

1. Tinto Holdings Australia Pty Limited is a wholly owned subsidiary of Rio Tinto plc.
2. Other large registered shareholders are nominees who hold securities on behalf of beneficial shareholders.

# Definitions and exchange rates

## Non mining definitions

Throughout this document, the collective expressions Rio Tinto, Rio Tinto Group and Group are used for convenience only. Depending on the context in which they are used, they mean Rio Tinto plc and/or Rio Tinto Limited and/or one or more of the individual companies in which Rio Tinto plc and/or Rio Tinto Limited directly or indirectly own investments, all of which are separate and distinct legal entities.

Unless the context indicates otherwise, the following terms have the meanings shown below:

<u>ADR</u>	American Depository Receipt evidencing American Depository Shares (ADS).
<u>Australian dollars</u>	Australian currency. Abbreviates to A\$.
<u>AIFRS</u>	International Financial Reporting Standards as adopted in Australia.
<u>Billion</u>	One thousand million.
<u>Canadian dollars</u>	Canadian currency. Abbreviates to C\$.
<u>Company/Companies</u>	Rio Tinto plc and/or Rio Tinto Limited, as the context so requires.
<u>DLC merger</u>	Dual listed companies merger (1995).
<u>EU IFRS</u>	International Financial Reporting Standards as adopted by the European Union.
<u>IASB</u>	International Accounting Standards Board.
<u>IFRS</u>	International Financial Reporting Standards.
<u>LBMA</u>	London Bullion Market Association.
<u>LME</u>	London Metal Exchange.
<u>Pounds sterling</u>	UK currency. Abbreviates to £, pence or p.
<u>Public shareholders</u>	The holders of Rio Tinto plc shares that are not companies in the Rio Tinto Limited group and the holders of Rio Tinto Limited shares that are not companies in the Rio Tinto plc group.
<u>Rand</u>	South African currency. Abbreviates to R.
<u>Rio Tinto Limited</u>	Rio Tinto Limited, and, where the context permits, its subsidiaries and associated companies.
<u>Rio Tinto Limited group</u>	Rio Tinto Limited and its subsidiaries and associated companies.
<u>Rio Tinto Limited shareholders</u>	The holders of Rio Tinto Limited shares.
<u>Rio Tinto Limited share</u>	The shares in Rio Tinto Limited.
<u>Rio Tinto Limited/RTL</u>	The DLC Dividend Share in Rio Tinto Limited.
<u>DLC Dividend Share</u>	
<u>Rio Tinto Limited/RTL</u>	The Special Voting Share in Rio Tinto Limited.
<u>Special Voting Share</u>	
<u>Rio Tinto plc</u>	Rio Tinto plc and its subsidiaries and associated companies.
<u>Rio Tinto plc ADS</u>	An American Depository Share representing the right to receive four Rio Tinto plc ordinary shares.
<u>Rio Tinto plc group</u>	Rio Tinto plc and its subsidiaries and associated companies.
<u>Rio Tinto plc ordinary shares</u>	The shares of 10p each in Rio Tinto plc.
<u>Rio Tinto plc shareholders</u>	The holders of Rio Tinto plc shares.
<u>Rio Tinto plc shares</u>	Rio Tinto plc ordinary shares
<u>Rio Tinto plc/RTP</u>	The DLC Dividend Share of 10p in Rio Tinto plc.
<u>DLC Dividend Share</u>	
<u>Rio Tinto plc/RTP</u>	The Special Voting Share of 10p in Rio Tinto plc
<u>Special Voting Share</u>	
<u>Share/shares</u>	Rio Tinto Limited shares or Rio Tinto plc ordinary shares, as the context requires.
<u>Sharing Agreement</u>	The agreement, dated 21 December 1995, as amended between Rio Tinto Limited and Rio Tinto plc relating to the regulation of the relationship between Rio Tinto Limited and Rio Tinto plc following the DLC merger.
<u>US dollars</u>	United States currency. Abbreviates to dollars, \$ or US\$ and US cents or USc.

## Mining and technical definitions

<u>Alumina</u>	Aluminium oxide. It is extracted from bauxite in a chemical refining process and is subsequently the principal raw material in the electro-chemical process by which aluminium is produced.
<u>Anode and cathode copper</u>	At the final stage of the smelting of copper concentrates, the copper is cast into specially shaped slabs called anodes for subsequent refining to produce refined cathode copper.
<u>Bauxite</u>	Mainly hydrated aluminium oxides ( $\text{Al}_2\text{O}_3 \cdot 2\text{H}_2\text{O}$ ). Principal ore of alumina, the raw material from which aluminium is made.
<u>Bioleaching</u>	The deliberate use of bacteria to speed the chemical release of metals from ores.
<u>Block caving</u>	An underground bulk mining method. It involves undercutting the orebody to induce ore fracture and collapse by gravity. The broken ore is recovered through draw points below.
<u>Borates</u>	A generic term for mineral compounds which contain boron and oxygen.
<u>Cathode copper</u>	Refined copper produced by electrolytic refining of impure copper or by electro-winning.
<u>Classification</u>	Separating crushed and ground ore into portions of different size particles.
<u>Coking coal</u>	By virtue of its carbonisation properties, it is used in the manufacture of coke, which is used in the steel making process. Also known as metallurgical coal.
<u>Concentrate</u>	The product of a physical concentration process, such as flotation or gravity concentration, which involves separating ore minerals from unwanted waste rock. Concentrates require subsequent processing (such as smelting or leaching) to break down or dissolve the ore minerals and obtain the desired elements, usually metals.
<u>Cutoff grade</u>	The lowest grade of mineralised material considered economic to process. It is used in the calculation of the quantity of ore present in a given deposit.

<b>Flotation</b>	A method of separating finely ground minerals using a froth created in water by specific reagents. In the flotation process certain mineral particles are induced to float by becoming attached to bubbles of froth whereas others, usually unwanted, sink.
<b>Grade</b>	The proportion of metal or mineral present in ore, or any other host material, expressed in this document as per cent, grams per tonne or ounces per ton.
<b>Head grade</b>	The average grade of ore delivered to the mill.
<b>Ilmenite</b>	Mineral composed of iron, titanium and oxygen.
<b>Metallurgical coal</b>	By virtue of its carbonisation properties, it is used in the manufacture of coke, which is used in the steel making process. Also known as coking coal.
<b>Mineral resource</b>	A concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral resources are subdivided in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
<b>Ore</b>	A rock from which a metal(s) or mineral(s) can be economically and legally extracted.
<b>Ore milled</b>	The quantity of ore processed.
<b>Ore reserve</b>	The economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses which may occur when the materials are mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are subdivided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.
<b>Rock mined</b>	The quantity of ore and waste rock excavated from the mine. In this document, the term is only applied to surface mining operations.
<b>Rutile</b>	A mineral composed of titanium and oxygen ( $TiO_2$ ).
<b>Stripping ratio</b>	The tonnes of waste material which must be removed to allow the mining of one tonne of ore.
<b>Solvent extraction and electrowinning (SX-EW)</b>	Processes for extracting metal from an ore and producing pure metal. First the metal is leached into solution; the resulting solution is then purified in the solvent extraction process; the solution is then treated in an electro-chemical process (electro-winning) to recover cathode copper.
<b>Tailing</b>	The rock wastes which are rejected from a concentrating process after the recoverable valuable minerals have been extracted.
<b>Titanium dioxide feedstock</b>	A feedstock rich in titanium dioxide, produced, in Rio Tinto's case, by smelting ores containing titanium minerals.
<b>Zircon</b>	Zirconium mineral ( $ZrSiO_4$ ).

## Conversion of weights and measures

1 troy ounce = 31.1 grams	1 short ton = 2,000 pounds
1 kilogram = 32.15 troy ounces	1 long ton = 2,240 pounds
1 kilogram = 2.2046 pounds	1 gram per metric tonne = 0.02917 troy ounces per short ton
1 metric tonne = 1,000 kilograms	1 gram per metric tonne = 0.03215 troy ounces per metric tonne
1 metric tonne = 2,204.6 pounds	1 kilometre = 0.6214 miles
1 metric tonne = 1.1023 short tons	

## Exchange rates

The following tables show, for the periods and dates indicated, certain information regarding the exchange rates for the pound sterling and Australian dollar, based on the Noon Buying Rates for pounds sterling and Australian dollars expressed in US dollars per £1.00 and per A\$1.00.

### Pounds sterling

Year ended 31 December*	Period end	Average rate	High	Low
2009	1.62	1.57	1.70	1.35
2008	1.44	1.86	2.03	1.44
2007	1.99	2.00	2.11	1.92
2006	1.96	1.84	1.98	1.72
2005	1.73	1.82	1.93	1.71

### Australian dollars

Year ended 31 December*	Period end	Average rate	High	Low
2009	0.890	0.790	0.940	0.620
2008	0.698	0.852	0.983	0.607
2007	0.878	0.839	0.937	0.772
2006	0.788	0.753	0.791	0.706
2005	0.734	0.763	0.799	0.727

\* The Noon Buying Rate on such dates differed slightly from the rates used in the preparation of Rio Tinto's financial statements as of such date. No representation is made that pound sterling and Australian dollar amounts have been, could have been or could be converted into dollars at the Noon Buying Rate on such dates or at any other dates.

# Financial calendar

## 2010

14 January	Fourth quarter 2009 operations review
11 February	Announcement of results for 2009
24 February	Rio Tinto plc and Rio Tinto Limited shares and Rio Tinto plc ADRs quoted "ex-dividend" for 2009 final dividend
26 February	Record date for 2009 final dividend for Rio Tinto plc shares and ADRs
2 March	Record date for 2009 final dividend for Rio Tinto Limited shares
11 March	Plan notice date for election under the dividend reinvestment plan for the 2009 final dividend
1 April	Payment date for 2009 final dividend to holders of Ordinary shares and ADRs
15 April	Annual general meeting for Rio Tinto plc
15 April	First quarter 2010 operations review
22 April	Annual general meeting for Rio Tinto Limited
14 July	Second quarter 2010 operations review
5 August	Announcement of half year results for 2010
11 August	Rio Tinto plc and Rio Tinto Limited shares and Rio Tinto plc ADRs quoted "ex-dividend" for 2010 interim dividend
13 August	Record date for 2010 interim dividend for Rio Tinto plc shares and ADRs
17 August	Record date for 2010 interim dividend for Rio Tinto Limited shares
18 August	Plan notice date for election under the dividend reinvestment plan for the 2010 interim dividend
9 September	Payment date for 2010 interim dividend to holders of Ordinary shares and ADRs
14 October	Third quarter 2010 operations review
2011	
January	Fourth quarter 2010 operations review
February	Announcement of results for 2010

## Useful information and contacts

### Registered offices

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Please contact the respective registrar if you have any queries about your shareholding.

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### Investor Centre

To find out more about Investor Centre, go to [www.investorcentre.co.uk/riotinto](http://www.investorcentre.co.uk/riotinto)

### Holders of Rio Tinto American Depositary Receipts (ADRs)

Please contact the ADR administrator if you have any queries about your ADRs.

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