RIO TINTO PLC
Form 20-F
May 27, 2010

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SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549
FORM 20-F

(Mark One)

o Registration statement pursuant to Section 12 (b) or 12(g) of the Securities Exchange Act of 1934
or

x **Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the financial year ended: 31 December 2009
or

o Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the transition period from: _____ to _____
or

o Shell company report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
Date of event requiring this shell company report _____

Commission file number: 1-10533	Commission file number: 0-20122
Rio Tinto plc	**Rio Tinto Limited** **ABN 96 004 458 404**
(Exact name of Registrant as specified in its charter)	(Exact name of Registrant as specified in its charter)
England and Wales	**Victoria, Australia**
(Jurisdiction of incorporation or organisation)	(Jurisdiction of incorporation or organisation)
2 Eastbourne Terrace **London, W2 6LG, United Kingdom**	**Level 33, 120 Collins Street** **Melbourne, Victoria 3000, Australia**
(Address of principal executive offices)	(Address of principal executive offices)

Julie Parent, T: 514-848-8519, E: julie.parent@riotinto.com
(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	**Name of each exchange on which registered**	**Name of each exchange on which registered**	**Title of each class**
American Depositary Shares*	New York Stock Exchange		
Ordinary Shares of 10p each**	New York Stock Exchange		
7.125% Notes due 2013	New York Stock Exchange	New York Stock Exchange	7.125% Notes due 2013
5.875% Notes due 2013	New York Stock Exchange	New York Stock Exchange	5.875% Notes due 2013

6.500% Notes due 2018	New York Stock Exchange	New York Stock Exchange	6.500% Notes due 2018
7.125% Notes due 2028	New York Stock Exchange	New York Stock Exchange	7.125% Notes due 2028
8.900% Notes due 2014	New York Stock Exchange	New York Stock Exchange	8.900% Notes due 2014
9.250% Notes due 2019	New York Stock Exchange	New York Stock Exchange	9.250% Notes due 2019

* Evidenced by American Depositary Receipts. Each American Depositary Share Represents one Rio Tinto plc Ordinary Shares of 10p each.

** Not for trading, but only in connection with the listing of American Depositary Shares, pursuant to the requirements of the Securities and Exchange Commission

Securities registered or to be registered pursuant to Section 12(g) of the Act:

Title of each class	**Title of each class**
None	Shares

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None None

Indicate the number of outstanding shares of each of the Issuer s classes of capital or common stock as of the close of the period covered by the annual report:

Title of each class	**Number**	**Number**	**Title of each class**
Ordinary Shares of 10p each	1,529,003,871	606,831,240	Shares
DLC Dividend Share of 10p	1	1	DLC Dividend Share
Special Voting Share of 10p	1	1	Special Voting Share

Indicate by check mark if the registrants are well-known seasoned issuers, as defined in rule 405 of the Securities Act.

Yes x No o

If this report is an annual or transition report, indicate by check mark if the registrants are not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes o No x

Note Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrants: (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days:

Yes x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).* Yes x No o

* This requirement does not apply to the registrant until its fiscal year ending December 31, 2011.

Indicate by check mark whether the registrants are large accelerated filers, accelerated filers, or non-accelerated filers. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer x Accelerated filer o Non-accelerated filer o Smaller reporting companyo

(Do not check if a smaller reporting company)

Indicate by check mark which basis of accounting the registrants have used to prepare the financial statements included in this filing:

US GAAP o International Financial Reporting Standards as issued by the International Accounting Standards Board x Other o

If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrants have elected to follow:

Item 17 o Item 18 o

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes o No x

EXPLANATORY NOTE

The Rio Tinto Group is a leading international mining group, combining Rio Tinto plc and Rio Tinto Limited in a dual listed companies (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. This annual report on Form 20-F, including the financial statements, is presented on a combined basis for the Rio Tinto Group.

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Rio Tinto
PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

SELECTED FINANCIAL DATA

The selected consolidated financial data below has been derived from the historical audited consolidated financial statements of the Rio Tinto Group. The selected consolidated financial data should be read in conjunction with, and qualified in their entirety by reference to, the *2009 Financial statements* and notes thereto. The financial statements as included on pages A-1 to A-82 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).

RIO TINTO GROUP

Income Statement Data

For the years ending 31 December **Amounts in accordance with IFRS**	**2009** **US$m**	2008 US$m	2007 US$m	2006 US$m	2005 US$m
Consolidated revenue	**41,825**	54,264	29,700	22,465	19,033
Group operating profit (a)	**7,506**	10,194	8,571	8,974	6,922
Profit for the year from continuing operations	**5,784**	5,436	7,746	7,867	5,498
Loss after tax from discontinued operations	**(449)**	(827)			
Profit for the year	**5,335**	4,609	7,746	7,867	5,498
Basic earnings per share (b)					
Profit from continuing operations (US cents)	**301.7**	286.8	464.9	456.2	312.6
Loss after tax from discontinued operations (US cents)	**(25.5)**	(52.7)			
Profit for the year per share (US cents)	**276.2**	234.1	464.9	456.2	312.6
Diluted earnings per share (b)					
Profit from continuing operations (US cents)	**300.7**	285.5	462.9	454.3	311.6
Loss after tax from discontinued operations (US cents)	**(25.4)**	(52.4)			
Profit for the year per share (US cents)	**275.3**	233.1	462.9	454.3	311.6

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Dividends per share	**2009**	2008	2007	2006	2005
Dividends declared during the year (b)					
US cents					
interim		55.6	42.5	32.7	31.5
final and special	**45.0**	55.6	68.7	52.3	124.0
UK pence					
interim		29.6	20.9	17.5	17.8
final and special	**28.8**	37.9	35.3	26.7	69.8
Australian cents					
interim		63.3	49.6	42.9	41.4
final and special	**51.6**	83.0	76.1	67.8	163.9
Dividends paid during the year (US cents) (b)					
ordinary and special	**55.6**	124.3	94.8	156.7	68.3
Weighted average number of shares basic (millions) (b)	**1,763.6**	1,570.1	1,572.9	1,630.5	1,668.2
Weighted average number of shares diluted (millions) (b)	**1,769.6**	1,577.3	1,579.6	1,637.1	1,673.9

Statement of Financial Position Data at 31 December Amounts in accordance with IFRS	**2009 US$m**	2008 US$m	Restated (c) 2007 US$m	2006 US$m	2005 US$m
Total assets	**97,236**	89,616	101,091	34,494	29,803
Share capital / premium	**9,344**	5,826	3,323	3,190	3,079
Total equity / Net assets	**45,925**	22,461	26,293	19,385	15,739
Equity attributable to Rio Tinto shareholders	**43,831**	20,638	24,772	18,232	14,948

Notes

(a) Group operating profit under IFRS includes the effects of charges and reversals resulting from impairments and profit and loss on disposals of interests in businesses. Group operating profit amounts shown above exclude equity accounted operations,

finance items, tax and discontinued operations.

(b) The rights issues were at a discount to the then market price. Accordingly, earnings per share and dividends per share for all periods up to the date on which the shares were issued have been adjusted for the bonus element of the issue. The bonus factor for Rio Tinto plc was 1.2105 and for Rio Tinto Limited was 1.2679.

(c) The 31 December 2007 balance sheet has been restated for the revisions to Alcan s fair value accounting which were finalised in 2008.

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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 page 10.

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.

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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. The sensitivity of earnings to key assumptions is described in more detail in the Financial review on pages 87 to 93. 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 *2009 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.

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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%

Note 50 to the 2009 Financial statements provides detailed information on the financial impact of these plans, including the expected return on assets as used for financial reporting purposes; how actual returns have compared to the expected rate historically; and the level of contributions expected during the year after the statement of financial position date.

The total provision for post-retirement costs is set out in note 27 to the *2009 Financial statements*.

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

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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 *2009 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.

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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 , b 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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Item 4. Information on the Company

INTRODUCTION

Rio Tinto

Rio Tinto is a leading international business involved in each stage of metal and mineral production. The worldwide Group produces aluminium, copper, diamonds, coal, iron ore, uranium, gold and industrial minerals (borates, titanium dioxide, salt, talc and 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 integral part of placing sustainable development at the heart of every activity. We operate as a global organisation with one set of standards and values, sharing best practices across the Group.

The Rio Tinto Group combines Rio Tinto plc, which is listed on the London Stock Exchange and headquartered in London, and Rio Tinto Limited, which is listed on the Australian Securities Exchange and has executive offices in Melbourne.

Businesses include open pit and underground mines, mills, refineries and smelters as well as a number of research and service facilities. The Group consists of wholly and partly owned subsidiaries, jointly controlled assets, jointly controlled entities and associated companies, the principal entities being listed in notes 37 to 40 of the *2009 Financial Statements.*

Operational structure

The Group consists of a number of wholly and partly owned subsidiaries, joint ventures and associated companies. Rio Tinto s management structure is designed to facilitate a clear focus on business performance and is structured into five product groups and two global support groups:

Aluminium

Copper

Diamonds & Minerals

Energy

Iron Ore

Exploration

Technology & Innovation

The chief executive of each product group and the global head of each business support group report to the chief executive of Rio Tinto.

Nomenclature and financial data

Rio Tinto plc and Rio Tinto Limited operate as one business organisation, referred to in this report as Rio Tinto, the Rio Tinto Group or, more simply, the Group. These collective expressions are used for convenience only, since both Companies, and the individual companies in which they directly or indirectly own investments, are separate and distinct legal entities.

Limited , plc , Pty , Inc , Limitada , L.L.C. , A.S. or SA have generally been omitted from Group compa names,except to distinguish between Rio Tinto plc and Rio Tinto Limited. Financial data in United States dollars (US$) is derived from, and should be read in conjunction with, the *2009 Financial statements*. In general, financial data in pounds sterling (£) and Australian dollars (A$) have been translated from the consolidated financial statements and have been provided solely for convenience; exceptions arise where data can be extracted directly from source records. Certain key information has been provided in all three currencies in the *2009 Financial statements*.

Rio Tinto Group sales revenue, profit before finance items and tax, net earnings and operating assets for 2008 and 2009 attributable to the product groups and geographical areas are shown in notes 31 and 32 to the *2009 Financial statements*. In the Performance section, operating assets and sales revenue for 2008 and 2009 are consistent with the

financial information by business unit in the *2009 Financial statements*.

The tables on pages 25 to 28 show production for 2007, 2008 and 2009 and include estimates of proven and probable ore reserves. Words and phrases, often technical, have been used which have particular meanings; definitions of these terms are in the Glossary on pages 164 to 165. The weights and measures used are mainly metric units; conversions into other units are shown on page 165.

History

Rio Tinto s predecessor companies were formed in 1873 and 1905. The Rio Tinto Company was formed by investors in 1873 to mine ancient copper workings at Rio Tinto, near Seville in southern Spain. The Consolidated Zinc Corporation was incorporated in 1905 to treat zinc bearing mine waste at Broken Hill, New South Wales, Australia.

The RTZ Corporation (formerly The Rio Tinto-Zinc Corporation) was formed in 1962 by the merger of The Rio Tinto Company and The Consolidated Zinc Corporation.

CRA Limited (formerly Conzinc Riotinto of Australia Limited) was formed at the same time by a merger of the Australian interests of The Consolidated Zinc Corporation and The Rio Tinto Company.

Between 1962 and 1995, both RTZ and CRA discovered important mineral deposits, developed major mining projects and also grew through acquisition.

RTZ and CRA were unified in 1995 through a dual listed companies structure. This means the Group, with its common board of directors, is 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.

In 1997, the RTZ Corporation became Rio Tinto plc and CRA Limited became Rio Tinto Limited, together known as the Rio Tinto Group. Over the past decade, the Group has continued to invest in developments and acquisitions in keeping with its strategy.

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In 2007, Rio Tinto completed an agreed takeover of the Canadian aluminium producer Alcan Inc. in a US$38 billion transaction that transformed the Group s aluminium product group into a global leader in aluminium. With copper and iron ore, this gave the Group a major role in the production of the three key metals associated with the growth and urbanisation of China and other developing countries.

In 2009, the Group completed rights issues that were fully underwritten. The net proceeds from the rights issues of US$14.8 billion were used to pay down Group borrowings.

Contact details

Rio Tinto plc is registered in England and Wales under company number 719885 with its registered office at 2 Eastbourne Terrace, London, W2 6LG (telephone: +44 20 7781 2000). Rio Tinto Limited is registered in Victoria, Australia under ABN 96 004 458 404 with its registered office at Level 33, 120 Collins Street, Melbourne, Victoria 3000 (telephone: +61 3 9283 3333). Rio Tinto s agent for service in the US is Shannon Crompton, secretary of Rio Tinto s US holding companies, who may be contacted at Rio Tinto Services Inc., 80 State Street, Albany, New York, 12207-2543.

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.

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.

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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.

Key performance indicators

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.

Notes

(a) The accounting information in these charts is drawn up in accordance with 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, IFRS requires that the profit for the year reported in the income statement should also include earnings attributable to outside shareholders in subsidiaries.

All injury frequence rate (AIFR)

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.

All injury frequency rate	Per 200,000 hours worked
2005	1.35
2006	1.10
2007	1.21[(1)]
2008	0.98
2009	0.82

(1) Rio Tinto including former Alcan

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

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Underlying earnings

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*.

Underlying earnings [(a)] [(b)]	**US$ m**
2005	4,955
2006	7,338
2007	7,443
2008	10,303
2009	6,298

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.

Total shareholder return

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 111.

Total shareholder return (TSR)	**%**
2005	78.5
2006	7.5
2007	92.7
2008	(71.5)
2009	172.5

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.

Net debt

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.

Net debt [(a)]	**US$ m**
2005	1,313
2006	2,437
2007	45,191
2008	38,672
2009	18,861

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

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

The Group s capital projects are listed on page 22 in the Capital projects section.

Capital expenditure [(a)]	**US$ m**
2005	2,554
2006	3,988
2007	4,968
2008	8,488
2009	5,356

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.

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Operating cash flows

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.

Operating cash flows [a]	US$ m
2005	8,031
2006	10,923
2007	12,569
2008	20,668
2009	13,834

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.

Greenhouse gas emissions intensity

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.

Greenhouse gas emissions intensity

Indexed relative to 2008	Group intensity
2005	109.4
2006	110.8
2007	110.2
2008	113.1[1]
	100.0[2]
2009	92.5[2]

(1) Excluding former Alcan

(2) Including former Alcan

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.

Group overview

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

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.

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 (1)

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

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Contribution to gross sales revenue: 27%

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 (1)

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

Contribution to gross sales revenue: 14%

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 (1)

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: 6%

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 (1)

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

Contribution to gross sales revenue: 15%

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 (1)

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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
Contribution to gross sales revenue: 29%
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 ore bodies of the future.
Product overview
No one can spend a day without using a metal or mineral. In the production and supply of metals and minerals, Rio Tinto is one of the world s most diversified companies. Major products are aluminium, iron ore, copper, molybdenum, coal, uranium, diamonds, gold, borates, titanium dioxide, salt and talc.
Segmental analyses of sales revenue by product and by destination have been included in Note 32 to the *2009 Financial statements*.
Bauxite, alumina, aluminium
In a closely integrated value chain, the mineral bauxite is refined into alumina which is smelted into aluminium metal. Aluminium is one of the most widely used metals from tennis racquets to aircraft. Rio Tinto is a leading global supplier of bauxite, alumina and primary aluminium.
Silver
Silver is a good conductor of electricity and does not corrode. It is used in many electrical and electronic applications and is the principal ingredient of photographic and x-ray film. Silver is also a metal of beauty, used to make lasting products for the home and person. Rio Tinto produces silver as a by-product of its copper production.
Molybdenum
Molybdenum is a metallic element frequently used in alloys with stainless steel and other metals. It enhances the metal s toughness, high temperature strength and corrosion resistance. We produce molybdenum as a by-product from the Kennecott Utah Copper operations.
Gold
Gold has enjoyed a mystique and value unrivalled by other metals. Most gold that is not stored as bullion for investment purposes goes into jewellery. Gold s conductivity and non corrosive properties make it a vital fabrication material in technology, electronics, space exploration and dentistry. We produce gold as a by-product from our copper mines.
Coal
Coal is plentiful, relatively inexpensive, and safe and easy to transport. We are one of the world s largest producers of thermal coal, used for electricity generation in power stations. We also produce higher value coking, or metallurgical, coal which, when treated into coke, is used in furnaces with iron ore to produce steel.
Uranium

Uranium is one of the most powerful natural energy sources known, used in the production of clean, stable, base load electricity. After uranium ore is mined, it is milled into uranium oxide, the mine product that is sent away for further processing into fuel rods for nuclear power stations.

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Iron ore
Iron is the key ingredient in the production of steel, one of the most fundamental and durable products for modern day living, from railways to paperclips. Our mines are located in Australia and Canada.

Copper
About two thirds of copper production is used in electrical applications due to its high conductivity. It helps power our lives, in homes and factories, cars, computers, phones and equipment. Further major uses are in air conditioning and refrigeration, plumbing and roofing.

Borates
Mineral borates are used in hundreds of products and processes. They are a vital ingredient of many home and automotive applications, and are essential nutrients for crops. They are commonly used in vitreous applications such as fibreglass products, ceramics, LCD television screens, pharmaceutical and heat resistant glass.

Diamonds
Gem diamonds share the role with gold as a luxury commodity in jewellery. Rio Tinto offers diamond products across a wide range, from the pink, champagne and cognac stones from Argyle in Australia, to the spectacular whites of Diavik in Canada and Murowa in Zimbabwe.

Salt
Salt is one of the basic raw materials for the chemicals industry and is indispensable to a wide array of automotive, construction and electronic products, as well as for water treatment, food and healthcare.

Talc
Talc is hydrated magnesium silicate and is the softest rock in the world. It is an important ingredient in the manufacture of paper, paints, moulded plastics for cars and other familiar products. Rio Tinto produces various grades of talc for niche markets.

Gypsum
Gypsum is a key ingredient in wallboard, plaster, cement and is used in agriculture markets. Rio Tinto s Dampier Salt operations at Lake MacLeod, Australia, provide high quality natural gypsum to the markets in Africa, Asia and Australia.

Titanium dioxide
The minerals ilmenite and rutile, together with titanium slag, can be transformed into a white titanium dioxide pigment or titanium metal. The white pigment is a key component in paints, plastics, paper, inks, textiles, food, sunscreen and cosmetics. Titanium metal s key properties of lightweight, chemical inertness and high strength make it ideal for use in medical applications and in the aerospace industry.

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Market review

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.

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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.

Marketing channels

All sales and marketing activity is conducted by Rio Tinto s Product Groups who utilise a range of sales and marketing channels to interact with customers. These channels include direct sales, sales via distributors and sales via agents. No customer facing sales and marketing activity is handled outside of the Product Groups.

Governmental regulation

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

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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.

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 51.

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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 half 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 the first half of 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.

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Capital projects

Completed in 2009	Capital Expenditure US$ million (100% basis)	
Diamonds Diavik underground development (Rio Tinto 60%)	787	Capital investment of $563 million was approved in November 2007 in addition to $224 million invested in 2006-2007 for the feasibility studies and related capital projects. The underground mine produced its first ore in the first quarter of 2010.
Iron ore expansion of Hope Downs mine from 22 million tonnes per annum to 30 million tonnes per annum (Rio Tinto 50%).	350	Approved in August 2007, the expansion work was completed during the first half of 2009.
Iron ore construction of the Mesa A mine in the Pilbara region of Western Australia (Rio Tinto 53%). The mine is expected to have an initial production of 20 million tonnes per annum, increasing to 25 million tonnes by 2011.	901	Approved in November 2007, first production took place in the first quarter of 2010.
Completed in 2008		
Aluminium Development of the 360,000 tonne per annum greenfield Sohar smelter in Oman (Rio Tinto 20%).	1,700	Approved in February 2005, first hot metal was produced in June 2008.
Aluminium Aluminium Spent potlining recycling plant in Quebec (Rio Tinto 100%)	225	Approved in September 2006, the plant commenced operations in June 2008.
Titanium dioxide Construction by QMM (Rio Tinto 80%) of a greenfield ilmenite operation in Madagascar and associated upgrade of processing facilities at QIT in Canada.	1,000	Construction is substantially complete. First production of ilmenite took place at the end of 2008.
	952	

Iron ore Cape Lambert port expansion (Rio Tinto 53%) from 55 to 80 million tones per annum and additional rolling stock and infrastructure.		Approved in January 2007, the project was completed at the end of 2008, ahead of time and within budget.

Completed in 2007

Iron ore Expansion of Hamersley s (Rio Tinto share 100%) Mount Tom Price mine to 28 million tonnes per annum capacity.	226	Project completed in March 2007.
Iron ore Brownfields mine expansion of Hamersley s (Rio Tinto 100%) Yandicoogina mine from 36 million tonnes per annum to 52 million tonnes per annum.	530	First ore was produced in May 2007, with the project completed at the end of the third quarter of 2007 on time and on budget.
Iron ore Expansion of Hamersley s (Rio Tinto 100%) Dampier port (Phase B) from 116 million tonnes per annum to 140 million tonnes per annum capacity and additional rolling stock and infrastructure.	803	This project was completed at the end of 2007 on schedule and on budget.
Iron ore Hope Downs development (Rio Tinto share: 50% of mine and 100% of infrastructure). Construction of 22 million tonnes per annum mine and related infrastructure.	980	First production occurred in November 2007, three months ahead of schedule. The first train load took place in December 2007.

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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
Acquired in 2009			
Copper	Ivanhoe Mines	388	The purchase of an additional 9.8% interest increasing the Group s total holding to 19.7%
Acquired in 2008			
None			
Acquired in 2007			
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
Divested in 2009		

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
Divested in 2008			
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
Divested in 2007			
Diamonds & Minerals	Lassing and Ennsdorf	6	Rio Tinto Minerals disposed of its operations at Lassing and Ennsdorf in Austria

During the first quarter of 2010, Rio Tinto completed a further $3.5 billion of divestments comprising the sale of the majority of the Alcan Packaging businesses to Amcor for $1.95 billion, the sale of Alcan Packaging Food

Americas to Bemis Company, Inc for $1.2 billion and the sale of two undeveloped coal properties in Australia for $0.3 billion.

In March 2010 Rio Tinto acquired an additional 15 million shares in Ivanhoe Mines Ltd, increasing its ownership in Ivanhoe Mines by 2.7 per cent to 22.4 per cent. The total consideration for this acquisition was US$241 million.

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Metals and minerals production

	Rio Tinto % share (a)	2009 Production Total	2009 Production Rio Tinto share	2008 Production Total	2008 Production Rio Tinto share	2007 Production Total	2007 Production Rio Tinto share
ALUMINA (000 tonnes)							
Gardanne (France) (b) (c)	100.0			38	38	21	21
Gove (Australia) (b)	100.0	**2,519**	**2,519**	2,325	2,325	405	405
Jonquière (Vaudreuil) (Canada) (b)	100.0	**1,125**	**1,125**	1,370	1,370	252	252
Queensland Alumina (Australia) (b) (d)	80.0	**3,959**	**3,167**	3,842	3,074	3,816	1,766
São Luis (Alumar) (Brazil) (b)	10.0	**1,657**	**166**	1,504	150	288	29
Yarwun (Australia)	100.0	**1,347**	**1,347**	1,293	1,293	1,260	1,260
Specialty Plants (Canada/France/Germany) (b) (c)	100.0	**492**	**492**	758	758	144	144
Rio Tinto total			**8,815**		9,008		3,877
ALUMINIUM (000 tonnes)							
Alma (Canada) (b)	100.0	**435**	**435**	424	424	80	80
Alouette (Sept-Îles) (Canada) (b)	40.0	**573**	**229**	572	229	109	44
Alucam (Edéa) (Cameroon) (b)	46.7	**73**	**34**	91	43	19	9
Anglesey (UK) (e)	51.0	**106**	**54**	118	60	147	75
Arvida (Canada) (b)	100.0	**171**	**171**	172	172	32	32
Beauharnois (Canada) (b) (f)	100.0	**11**	**11**	50	50	10	10
Bécancour (Canada) (b)	25.1	**420**	**105**	415	104	80	20
Bell Bay (Australia)	100.0	**177**	**177**	178	178	177	177
Boyne Island (Australia)	59.4	**556**	**331**	556	330	548	325
Dunkerque (France) (b)	100.0	**244**	**244**	254	254	49	49
Grande-Baie (Canada) (b)	100.0	**215**	**215**	212	212	40	40
ISAL (Reykjavik) (Iceland) (b)	100.0	**190**	**190**	187	187	35	35
Kitimat (Canada) (b)	100.0	**224**	**224**	247	247	47	47
Lannemezan (France) (b) (g)	100.0			5	5	5	5
Laterrière (Canada) (b)	100.0	**235**	**235**	234	234	44	44
Lochaber (UK) (b)	100.0	**38**	**38**	43	43	8	8
Lynemouth (UK) (b)	100.0	**109**	**109**	165	165	33	33
Ningxia (Qingtongxia) (China) (b) (h)		**10**	**5**	163	81	31	15
Sebree (US) (b)	100.0	**193**	**193**	197	197	37	37
Shawinigan (Canada) (b)	100.0	**99**	**99**	100	100	18	18
Sohar (Oman) (i)	20.0	**351**	**70**	49	10		
SORAL (Husnes) (Norway) (b)	50.0	**98**	**49**	171	86	32	16
Saint-Jean-de-Maurienne (France) (b)	100.0	**101**	**101**	130	130	25	25
Tiwai Point (New Zealand)	79.4	**271**	**215**	316	250	351	279
Tomago (Australia) (b)	51.6	**528**	**272**	523	270	97	50

Rio Tinto total			**3,808**		4,062		1,473
BAUXITE (000 tonnes)							
Awaso (Ghana) (b) (j)	80.0	**440**	**352**	796	637	216	173
Gove (Australia) (b)	100.0	**7,185**	**7,185**	6,245	6,245	985	985
Porto Trombetas (MRN) (Brazil) (b)	12.0	**15,645**	**1,877**	18,063	2,168	3,392	407
Sangaredi (Guinea) (b)	(k)	**11,216**	**5,047**	13,181	5,931	2,502	1,126
Weipa (Australia)	100.0	**16,235**	**16,235**	20,006	20,006	18,209	18,209
Rio Tinto total			**30,696**		34,987		20,900
BORATES (000 tonnes) (l)							
Rio Tinto Minerals Boron (US)	100.0	**411**	**411**	591	591	541	541
Rio Tinto Minerals Tincalayu (Argentina)	100.0	**13**	**13**	19	19	19	19
Rio Tinto total			**424**		610		560
COAL HARD COKING (000 tonnes)							
Rio Tinto Coal Australia							
Hail Creek Coal (Australia)	82.0	**6,308**	**5,173**	6,049	4,960	5,012	4,110
Kestrel Coal (Australia)	80.0	**2,868**	**2,294**	3,089	2,471	2,586	2,069
Rio Tinto total hard coking coal			**7,467**		7,431		6,179

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Metals and minerals production (continued)

	Rio Tinto % share (a)	2009 Production Total	2009 Production Rio Tinto share	2008 Production Total	2008 Production Rio Tinto share	2007 Production Total	2007 Production Rio Tinto share
COAL OTHER* (000 tonnes)							
Rio Tinto Coal Australia							
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
Total Australian other coal			**23,103**		22,356		24,388
US Coal							
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
Total US coal			**109,520**		130,755		125,083
Rio Tinto total other coal			**132,623**		153,111		149,471
COPPER (mined) (000 tonnes)							
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
Rio Tinto total			**804.7**		698.5		737.9
COPPER (refined) (000 tonnes)							
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
Rio Tinto total			**412.4**		321.6		390.0

DIAMONDS (000 carats)							
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
Rio Tinto total			**14,026**		20,816		26,023
GOLD (mined) (000 ounces)							
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
Rio Tinto total			**1,111**		501		1,233
GOLD (refined) (000 ounces)							
Kennecott Utah Copper (US)	100.0	**479**	**479**	303	303	523	523

* Coal other includes thermal coal and semi-soft coking coal.

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Metals and minerals production (continued)

	Rio Tinto % share (a)	**2009 Production Total**	**2009 Production Rio Tinto share**	2008 Production Total	2008 Production Rio Tinto share	2007 Production Total	2007 Production Rio Tinto share
IRON ORE (000 tonnes)							
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
Rio Tinto total			**171,547**		153,394		144,707
LEAD (000 tonnes)							
Greens Creek (US) (s)				4.6	3.2	17.0	11.9
MOLYBDENUM (000 tonnes)							
Bingham Canyon (US)	100.0	**11.3**	**11.3**	10.6	10.6	14.9	14.9
PIG IRON (000 tonnes)							
HIsmelt® (Australia)	60.0			144	87	115	69
SALT (000 tonnes)							
Dampier Salt (Australia) (x)	68.4	**8,555**	**5,848**	8,974	6,135	7,827	5,242
SILVER (mined) (000 ounces)							
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
Rio Tinto total			**8,569**		7,176		13,002
SILVER (refined) (000 ounces)							
Kennecott Utah Copper (US)	100.0	**4,050**	**4,050**	3,252	3,252	4,365	4,365
TALC (000 tonnes)							
Rio Tinto Minerals talc (Australia/Europe/North America) (y)	100.0	**888**	**888**	1,163	1,163	1,281	1,281

TITANIUM DIOXIDE FEEDSTOCK (000 tonnes)							
Rio Tinto Iron & Titanium (Canada/South Africa) (z) (aa)	100.0	**1,147**	**1,147**	1,524	1,524	1,458	1,458
URANIUM (000 lbs U_3O_8)							
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
Rio Tinto total			**14,140**		14,200		12,616
ZINC (000 tonnes)							
Greens Creek (US) (s)				13.9	9.8	50.8	35.7

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Metals and minerals production (continued)

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 numbers refer to B_2O_3 quantities in thousands of tonnes.

(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 with an effective date of 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 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.

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Ore reserves (under Industry Guide 7)

For the purposes of this combined Annual report on Form 20-F estimates of ore reserves have been prepared in accordance with the SEC s Industry Guide 7 under the United States Securities Act of 1933 and the following definitions:

An Ore Reserve means that part of a mineral deposit that can be economically and legally extracted or produced at the time of the reserves determination. To establish this, studies appropriate to the type of mineral deposit involved have been carried out to estimate the quantity, grade and value of the ore mineral(s) present. In addition, technical studies have been completed to determine realistic assumptions for the extraction of the minerals including estimates of mining, processing, economic, marketing, legal, environmental, social and governmental factors. The degree of these studies is sufficient to demonstrate the technical and economic feasibility of the project and depends on whether or not the project is an extension of an existing project or operation. The estimates of minerals to be produced include allowances for ore losses and the treatment of unmineralised materials which may occur as part of the mining and processing activities. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proven Ore Reserves as defined below.

The term economically , as used in the definition of reserves, implies that profitable extraction or production under defined investment assumptions has been established through the creation of a mining plan, processing plan and cash flow model. The assumptions made must be reasonable, including costs and operating conditions that will prevail during the life of the project.

Ore reserves presented in accordance with SEC Industry Guide 7 do not exceed the quantities that, it is estimated, could be extracted economically if future prices were to be in line with the average of historical prices for the three years to 30 June 2009, or contracted prices where applicable. For this purpose, contracted prices are applied only to future sales volumes for which the price is predetermined by an existing contract; and the average of historical prices is applied to expected sales volumes in excess of such amounts. Moreover, reported ore reserve estimates have not been increased above the levels expected to be economic based on Rio Tinto s own long term price assumptions.

The term legally , as used in the definition of reserves, does not imply that all permits needed for mining and processing have been obtained or that other legal issues have been completely resolved. However, for reserves to exist, there is reasonable assurance of the issuance of these permits or resolution of legal issues. Reasonable assurance means that, based on applicable laws and regulations, the issuance of permits or resolution of legal issues necessary for mining and processing at a particular deposit will be accomplished in the ordinary course and in a timeframe consistent with the Company s current mine plans.

The term proven reserves means reserves for which (a) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; grade and/or quality are computed from the results of detailed sampling; and (b) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well established. Proven reserves represent that part of an orebody for which there exists the highest level of confidence in data regarding its geology, physical characteristics, chemical composition and probable processing requirements.

The term probable reserves means reserves for which quantity and grade and/or quality are computed from information similar to that used for proven reserves, but the sites for inspection, sampling and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven reserves, is high enough to assume continuity between points of observation. This means that probable reserves generally have a wider drill hole spacing than for proven reserves.

The amount of proven and probable reserves shown below does not necessarily represent the amount of material currently scheduled for extraction, because the amount scheduled for extraction may be derived from a life of mine plan predicated on prices and other assumptions which are different to those used in the life of mine plan prepared in accordance with Industry Guide 7.

The estimated ore reserve figures in the following tables are as of 31 December 2009. 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. Commodity price information is given in footnote (a).
Where operations are not managed by Rio Tinto the reserves are published as received from the managing company.

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Ore reserves (under Industry Guide 7)

	Type of mine (b)	Total ore reserves at end 2009 Tonnage	Grade	Interest %	Rio Tinto share
BAUXITE (c)		millions of tonnes	% Al_2O_3		Recoverable mineral millions of tonnes
Reserves at operating mines					
Gove (Australia)	O/P	186	49.4	100.0	186
Porto Trombetas (Brazil)	O/P	214	49.6	12.0	26
Sangaredi (Guinea)	O/P	130	52.4	23.0	30
Weipa (Australia)	O/P	1,699	52.7	100.0	1,699
Rio Tinto total					**1,941**

			Grade		Marketable product
BORATES (d)			millions of tonnes		millions of tonnes
Reserves at operating mine					
Rio Tinto Minerals - Boron (US) (e)					
mine		O/P	**22.3**	100.0	22.3
stockpiles (f)		S/P	**2.3**	100.0	2.3
Rio Tinto total					**24.6**

		Coal type (h)	Marketable reserves	Marketable coal quality (i)	(i)		Marketable reserves
COAL (g)			millions of tonnes	Calorific value MJ/kg	Sulphur content %		millions of tonnes
Reserves at operating mines							
Rio Tinto Coal Australia							
Bengalla (Australia)	O/C	SC	126	28.21	0.47	30.3	38
Blair Athol (Australia) (j)	O/C	SC	18	26.17	0.31	71.2	13
Hail Creek (Australia) (k)	O/C	MC	209	32.20	0.35	82.0	172

Hunter Valley Operations (Australia) (l)	O/C	SC + MC	278	28.99	0.54	75.7	210
Kestrel (Australia)	U/G	SC + MC	128	31.60	0.59	80.0	102
Mount Thorley Operations (Australia)	O/C	SC + MC	24	29.41	0.43	60.6	14
Warkworth (Australia)	O/C	SC + MC	270	30.68	0.44	42.1	114
Total Australian coal							**663**
US Coal							
Antelope (US) (m) (n)	O/C	SC	265	20.59	0.24	48.3	128
Colowyo (US) (o)	O/C	SC	17	23.92	0.44	100.0	17
Cordero Rojo (US) (m)	O/C	SC	372	19.54	0.29	48.3	180
Decker (US) (m) (p)	O/C	SC	2	21.87	0.40	24.1	1
Spring Creek (US) (m)	O/C	SC	272	21.75	0.33	48.3	131
Total US coal							456
Rio Tinto total reserves at operating mines							1,119
Undeveloped reserves (q)							
Rio Tinto Coal Australia							
Clermont (Australia)	O/C	SC	189	27.90	0.33	50.1	95
Mount Pleasant (Australia)	O/C	SC	350	26.73	0.51	75.7	265
Rio Tinto total undeveloped reserves							**360**

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Ore reserves (under Industry Guide 7)

	Type of mine (b)	Total ore reserves at end 2009 Tonnage	Grade	Average mill recovery %	Interest %	Rio Tinto share
COPPER		**Millions of tonnes**	**% Cu**			**Recoverable metal millions of tonnes**
Reserves at operating mines						
Bingham Canyon (US) (r)						
mine	O/P	484	0.48	85	100.0	1.992
stockpiles (f)	S/P	40	0.33	85	100.0	0.113
Escondida (Chile)						
sulphide mine	O/P	1,652	1.07	82	30.0	4.352
sulphide leach mine	O/P	2,289	0.53	33	30.0	1.198
oxide mine (s)	O/P	73	0.94	68	30.0	0.140
sulphide stockpiles (f)	S/P	7	1.26	82	30.0	0.023
sulphide leach stockpiles (f)	S/P	88	0.88	33	30.0	0.076
oxide stockpiles (f)	S/P	49	0.62	68	30.0	0.062
Grasberg (Indonesia)	O/P+ U/G	2,590	1.00	89	(t)	7.061
Northparkes (Australia) (u)						
mine	O/P+ U/G	74	0.87	89	80.0	0.460
stockpiles (f)	S/P	6	0.36	85	80.0	0.014
Palabora (South Africa) (v)	U/G	75	0.60	88	57.7	0.228
Rio Tinto total reserves at operating mines						**15.719**
Undeveloped reserves (q)						
Eagle (US)	U/G	4	2.93	95	100.0	0.102
Oyu Tolgoi (Mongolia) (w)	O/P	930	0.50	87	19.7	0.794
Rio Tinto total undeveloped reserves						**0.896**

DIAMONDS (c)		**Millions of tonnes**	**carats per tonne**			**Recoverable diamonds millions of carats**
Reserves at operating mines						
Argyle (Australia)						
AK1 pipe mine	O/P+ U/G	83	2.1		100.0	174.9
AK1 pipe stockpiles (f)	S/P	2	1.6		100.0	3.2

Diavik (Canada)	O/P+ U/G	20	3.0		60.0	35.8
Murowa (Zimbabwe)						
mine	O/P	20	0.7		77.8	10.8
stockpiles (f)	S/P	0.02	1.2		77.8	0.02
Rio Tinto total						**224.7**

GOLD

		millions of tonnes	**grammes per tonne**			**Recoverable metal millions of ounces**
Reserves at operating mines						
Bingham Canyon (US) (r)						
mine	O/P	484	0.25	62	100.0	2.471
stockpiles (f)	S/P	40	0.20	62	100.0	0.159
Grasberg (Indonesia)	O/P+ U/G	2,590	0.86	69	(t)	13.006
Northparkes (Australia) (u)						
mine	U/G	74	0.35	74	80.0	0.489
stockpiles (f)	S/P	5.9	0.20	76	80.0	0.023
Rio Tinto total reserves at operating mines						**16.149**
Undeveloped reserves (q)						
Eagle (US) (x)	U/G	4	0.29	73	100.0	0.025
Oyu Tolgoi (Mongolia) (w)	U/G	930	0.36	71	19.7	1.497
Rio Tinto undeveloped reserves						**1.522**

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Ore reserves (under Industry Guide 7)

	Type of mine (b)	Total ore reserves at end 2009 Tonnage	Grade	Average mill recovery %	Interest %	Rio Tinto share
IRON ORE (c)		**Millions of tonnes**	**%Fe**			**Marketable product millions of tonnes**
Reserves at operating mines						
Hamersley wholly owned (Australia)						
Brockman 2 (Brockman ore) (y)	O/P	15	62.7		100.0	15
Brockman 4 (Brockman ore)	O/P	621	62.0		100.0	621
Marandoo (Marra Mamba ore) (z)	O/P	49	61.5		100.0	49
Mt Tom Price (Brockman ore)	O/P					
mine		76	63.7		100.0	76
stockpiles (f)	S/P	17	63.0		100.0	17
Mt Tom Price (Marra Mamba ore) (aa)	O/P	23	61.1		100.0	23
Nammuldi (Marra Mamba ore) (bb)	O/P	18	61.2		100.0	18
Paraburdoo (Brockman ore)	O/P	15	63.1		100.0	15
Turee Syncline Central (Brockman Ore (cc)	O/P	74	61.9		100.0	74
Western Turner Syncline (Brockman ore)	O/P	314	61.9		100.0	314
Yandicoogina (Pisolite ore HG)						
mine	O/P	206	58.5		100.0	206
stockpiles (f)	S/P	3	58.5		100.0	3
Yandicoogina (Process product) (dd)	O/P	102	58.9		100.0	102
Hamersley Channar (Australia)						
Brockman ore	O/P	81	63.0		60.0	48
Hamersley Eastern Range (Australia)						
Brockman ore (ee)	O/P	71	62.8		54.0	38
Hope Downs 1 (Australia)						
Marra Mamba ore (ff)	O/P	353	61.4		50.0	176
Iron Ore Company of Canada (Canada) (gg)	O/P	584	65.0		58.7	343
Robe River (Australia)						
Pannawonica (Pisolite ore)						
mine	O/P	246	57.3		53.0	130
stockpiles (f)	S/P	21	56.8		53.0	11
West Angelas (Marra Mamba Ore)						
mine	O/P	340	61.8		53.0	180
stockpiles (f)	S/P	7	58.3		53.0	4
Rio Tinto total		**614**				**2,464**

MOLYBDENUM

		Millions of tonnes	%Mo			Recoverable metal millions of tonnes
Reserves at operating mine						
Bingham Canyon (US) (r) (hh)						
mine	O/P	484	0.046	69	100.0	0.154
stockpiles (f)	S/P	40	0.023	69	100.0	0.006
Rio Tinto total						**0.160**

NICKEL

		millions of tonnes	%Ni			Recoverable metal millions of tonnes
Undeveloped reserves (q)						
Eagle (US)	U/G	4	3.47	87	100.0	**0.110**

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Ore reserves (under Industry Guide 7)

	Type of mine (b)	Total ore reserves at end 2009 Tonnage	Grade	Average mill recovery %	Interest %	Rio Tinto share
SILVER						**Recoverable metal**
		millions of tonnes	**grammes per tonne**			**millions of ounces**
Reserves at operating mines						
Bingham Canyon (US) (r)						
mine	O/P	484	2.11	73	100.0	23.982
stockpiles (f)	S/P	40	1.82	73	100.0	1.733
Grasberg (Indonesia)	O/P+ U/G	2,590	4.18	70	(t)	79.698
Rio Tinto total						**105.413**

TALC (d)						**Marketable product millions**
		millions of tonnes				**of tonnes**
Reserves at operating mines						
Rio Tinto Minerals talc (Europe/N. America/Australia)	O/P+ U/G					
mine		33.2			100.0	33.2
stockpiles		0.3			100.0	0.3
Rio Tinto total						**33.5**

TITANIUM DIOXIDE FEEDSTOCK (d)						**Marketable product millions**
		millions of tonnes				**of tonnes**
Reserves at operating mines						
QIT (Canada)	O/P	51.4			100.0	51.4
QMM (Madagascar)	D/O	11.9			80.0	9.5
RBM (South Africa) (ii)						
mine	D/O	24.4			37.0	9.0
stockpiles (f)	S/P	0.6			37.0	0.2
Rio Tinto total						**70.1**

URANIUM		millions of tonnes	$\%U_3O_8$			Recoverable metal millions of tonnes
Reserves at operating mines						
Energy Resources of Australia (Australia)						
Ranger #3 mine	O/P	6.3	0.242	83	68.4	0.009
Ranger #3 stockpiles (f)	S/P	21.4	0.104	83	68.4	0.013
Rössing (Namibia)						
mine	O/P	186.7	0.031	85	68.6	0.033
stockpiles (f)	S/P	6.0	0.034	85	68.6	0.001
Rio Tinto total						**0.056**

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Ore reserves (under Industry Guide 7)

	Type of mine (b)	Proven ore reserves at end 2009 Tonnage	Grade	Drill hole Spacing(jj)	Probable ore reserves at end 2009 Tonnage	Grade	Drill hole Spacing(jj)
BAUXITE (c)		millions of tonnes	% Al_2O_3		millions of tonnes	% Al_2O_3	
Reserves at operating mines							
Gove (Australia)	O/P	140	49.4	50m x 100m	46	49.2	200m x 200m
Porto Trombetas (Brazil)	O/P	150	49.7	200m x 200m	64	49.2	Max 400m
Sangaredi (Guinea)	O/P				130	52.4	75m x 75m
Weipa (Australia)	O/P	339	51.9	150m x 150m	1,360	53.0	300m x 300m

BORATES (d)		millions of tonnes			millions of tonnes		
Reserves at operating mine							
Rio Tinto Minerals - Boron (US) (e)							
mine	O/P	14.8		120m x 120m	7.5		445m x 445m
stockpiles (f)	S/P				2.3		

		Recoverable reserves total	% Yield to give marketable reserves	Marketable Reserves Proven	Drill hole spacing(jj)	Probable	Drill hole spacing(jj)
COAL (g)		millions of tonnes		millions of tonnes		millions of tonnes	
Reserves at operating mines							
Rio Tinto Coal Australia							
Bengalla (Australia)	O/C	167	75	64	350m	62	500m
Blair Athol (Australia) (j)	O/C	22	82	18	150m	0.3	150m
Hail Creek (Australia) (k)	O/C	410	51	61	1000m	149	2000m
Hunter Valley Operations (Australia) (l)	O/C	403	69	218	300m	60	500m
Kestrel (Australia)	U/G	153	83	47	500m	81	1000m
Mount Thorley Operations (Australia)	O/C	37	65	21	125m	3	500m

Warkworth (Australia)	O/C	413	65	149	450m	121	1000m
US Coal							
Antelope (US) (m) (n)	O/C	265	100	255	300m	10	500m
Colowyo (US) (o)	O/C	17	100	14	140m	3	300m
Cordero Rojo (US) (m)	O/C	372	100	289	250m	84	400m
Decker (US) (m) (p)	O/C	2	100	2	250m		
Spring Creek (US) (m)	O/C	272	100	234	300m	38	400m
Undeveloped reserves (q)							
Rio Tinto Coal Australia							
Clermont (Australia)	O/C	197	96	185	220m	4	150 to 300m
Mount Pleasant (Australia)	O/C	459	76			350	125m to 500m

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Ore reserves (under Industry Guide 7)

	Type of mine (b)	Proven ore reserves at end 2009			Probable ore reserves at end 2009		
		Tonnage	Grade	Drill hole spacing (jj)	Tonnage	Grade	Drill hole spacing (jj)
COPPER		**millions of tonnes**	**%Cu**		**millions of tonnes**	**%Cu**	
Reserves at operating mines							
Bingham Canyon (US) (r)							
mine	O/P	285	0.54	88m	199	0.40	106m
stockpiles (f)	S/P	32	0.37		8	0.19	
Escondida (Chile)							
sulphide mine	O/P	718	1.15	55m x 55m	933	1.00	85m x 85m
sulphide leach mine	O/P	552	0.53	60m x 60m	1,738	0.53	100m x 100m
oxide mine (s)	O/P	17	0.87	45m x 45m	56	0.96	50m x 50m
sulphide stockpiles (f)	S/P	7	1.26				
sulphide leach stockpiles (f)	S/P	88	0.88				
oxide stockpiles (f)	S/P	49	0.62				
Grasberg (Indonesia)	O/P + U/G	816	1.12	13m to 47m	1,774	0.95	42m to 97m
Northparkes (Australia) (u)							
mine	O/P + U/G	4	0.65	25 x 25 x 50m	70	0.88	50 x 50 x 100m
stockpiles (f)	S/P	6	0.36				
Palabora (South Africa) (v)	U/G	75	0.60	76m			
Undeveloped reserves (q)							
Eagle (US)	U/G				3.6	2.93	25m
Oyu Tolgoi (Mongolia) (w)	O/P	127	0.58	50m	803	0.48	75m x 100m
DIAMONDS (c)		**millions of tonnes**	**carats per tonne**		**millions of tonnes**	**Carats per tonne**	
Reserves at operating mines							
Argyle (Australia)							
AK1 pipe mine	O/P + U/G	23	1.1	50m x 50m	61	2.5	50m x 50m

AK1 pipe stockpiles (f)	S/P	0.7	2.9		1.2	0.8	
Diavik (Canada)	O/P + U/G	9	3.1	24m to 40m	11	2.9	24m to 40m
Murowa (Zimbabwe)							
mine	O/P				20	0.7	50m
stockpiles (f)	S/P				0.02	1.2	

GOLD		**millions of tonnes**	**grammes per tonne**		**millions of tonnes**	**grammes per tonne**	
Reserves at operating mines							
Bingham Canyon (US) (r)							
mine	O/P	285	0.28	88m	199	0.22	106m
stockpiles (f)	S/P	32	0.22		8	0.11	
Grasberg (Indonesia)	O/P + U/G	816	1.07	13m to 47m	1,774	0.77	42m to 97m
Northparkes (Australia) (u)							
mine	O/P + U/G	4	0.52	25 x 25 x 50m	70	0.34	50 x 50 x 100m
stockpiles (f)	S/P	6	0.20				
Undeveloped reserves (q)							
Eagle (US) (x)	UG				3.6	0.29	25m
Oyu Tolgoi (Mongolia) (w)	O/P	127	0.93	50m	803	0.27	75m to 100m

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Ore reserves (under Industry Guide 7)

	Type of mine (b)	Proven ore reserves at end 2009 Tonnage	Grade	Drill hole spacing (jj)	Probable ore reserves at end 2009 Tonnage	Grade	Drill hole spacing (jj)
IRON ORE (c)		millions of tonnes	%Fe		millions of tonnes	%Fe	
Reserves at operating mines							
Hamersley wholly owned (Australia)							
Brockman 2 (Brockman Ore) (y)	O/P	13	62.7	50m x 50m	3	62.8	Max 100m
Brockman 4 (Brockman Ore)	O/P	366	62.2	50m x 50m	255	61.9	200m x 100m
Marandoo (Marra Mamba Ore) (z)	O/P	39	61.8	75m x 75m	10	60.3	Max 150m
Mt Tom Price (Brockman Ore) mine	O/P	34	63.8	30m x 30m	42	63.6	60m x 30m
stockpiles (f)	S/P				17	63.0	
Mt Tom Price (Marra Mamba Ore) (aa)	O/P	20	61.4	60m x 30m	3	59.0	60m x 30m
Nammuldi (Marra Mamba Ore) (bb)	O/P	16	61.4	50m x 50m	2	60.1	100m x 50m
Paraburdoo (Brockman ore)	O/P	9	63.1	30m x 30m	5	63.1	60m x 30m
Turee Syncline Central (Brockman Ore) (cc)	O/P				74.0	61.9	120m x 120m
Western Turner Syncline (Brockman ore)	O/P	222	62.5	60m x 60m	92	60.5	60m x 60m
Yandicoogina (Pisolite ore HG) mine	O/P	206	58.5	50m x 50m			
stockpiles (f)	S/P				3	58.5	
Yandicoogina (Process product) (dd)	O/P	102	58.9	50m x 50m			
Hamersley Channar (Australia) (Brockman Ore)	O/P	59	63.1	60m x 60m	21	62.7	Max 120m
Hamersley Eastern Range (Australia) (Brockman ore) (ee)	O/P	55	62.8	60m x 60m	16	62.9	Max 120m
Hope Downs 1 (Australia) (Marra Mamba Ore) (ff)	O/P	26	61.7	50m x 50m	327	61.4	50m x 50m
Iron Ore Company of Canada (Canada) (gg)	O/P	440	65.0	122m x 61m	144	65.0	122m x 122m
Robe River (Australia)							
Pannawonica (Pisolite Ore) mine	O/P	227	57.3	max 70m x 70m	18	57.0	max 100m x 100m
stockpiles (f)	S/P	3	57.0		19	56.8	

West Angelas (Marra Mamba Ore)							
mine	O/P	173	62.1	max 50m x 50m	167	61.4	max 200m x 50m
stockpiles (f)	S/P	1	59.7		7	58.1	

MOLYBDENUM		**millions of tonnes**	**%Mo**		**millions of tonnes**	**%Mo**	
Reserves at operating mine							
Bingham Canyon (US) (r) (hh)							
mine	O/P	285	0.047	88m	199	0.046	106m
stockpiles (f)	S/P	32	0.025		8	0.015	

NICKEL		**millions of tonnes**	**%Ni**		**millions of tonnes**	**%Ni**	
Undeveloped reserves (q)							
Eagle (US)	U/G				3.6	3.47	25m

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Ore reserves (under Industry Guide 7)

	Type of mine (b)	Proven ore reserves at end 2009 Tonnage	Grade	Drill hole spacing (jj)	Probable ore reserves at end 2009 Tonnage	Grade	Drill hole spacing (jj)
SILVER		**millions of tonnes**	**grammes per tonne**		**millions of tonnes**	**grammes per tonne**	
Reserves at operating mines							
Bingham Canyon (US) (r)							
mine	O/P	285	2.36	88m	199	1.75	106m
stockpiles (f)	S/P	32	2.06		8	0.90	
Grasberg (Indonesia)	O/P + U/G	816	4.24	13m to 47m	1,774	4.16	42m to 97m
TALC (d)		**millions of tonnes**			**millions of tonnes**		
Reserves at operating mines							
Rio Tinto Minerals talc (Europe/N.America/Australia)							
mine	O/P + U/G	24.2		10m to 50m	9.0		15m to 100m
stockpiles	S/P	0.3					
TITANIUM DIOXIDE		**millions of tonnes**			**millions of tonnes**		
FEEDSTOCK (d)							
Reserves at operating mines							
QIT (Canada)	O/P	27.9		max 60m x 60m	23.5		min 60m x 60m
QMM (Madagascar)	D/O	11.4		200m x 100m	0.5		400m x 100m
RBM (South Africa) (ii)							
Mine	D/O	8.9		50m x 50m	15.5		800m x 100m
stockpiles (f)	S/P	0.6					
URANIUM		**millions of tonnes**	**% U_3O_8**		**Millions of tonnes**	**% U_3O_8**	
Reserves at operating mines							
Energy Resources of Australia (Australia)							
Ranger #3 mine	O/P	3.2	0.242	25m x 25m	3.1	0.242	50m x 50m
Ranger #3 stockpiles (f)	S/P	21.4	0.104				
Rössing (Namibia)							
mine	O/P	19.4	0.029	20m x 20m	167.2	0.031	120m x 120m

stockpiles (f)	S/P	6.0	0.034

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Ore reserves (under Industry Guide 7)

Notes

(a) Commodity prices (based on a three year average historical price to 30 June 2009) used to test whether the reported reserve estimates could be economically extracted, include the following benchmark prices:

Ore reserve	Unit	US$
Aluminium	pound	1.09
Copper	pound	2.99
Gold	ounce	779
Iron Ore		
Australian benchmark (fines)	dmtu*	1.01
Atlantic benchmark (fines)	dmtu*	1.03
Molybdenum	pound	25.18
Nickel	pound	12.13
Silver	ounce	13.71

* dry metric tonne unit

Prices for all other commodities are determined by individual contract negotiation. The reported reserves for these commodities have been tested to confirm that they could be economically extracted using a combination of existing contract prices until expiry and thereafter three year historical prices.

(b) Type of mine: O/P = open pit, O/C = open cut, U/G = underground, D/O = dredging operation

(c) 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.

(d) Reserves of industrial minerals are expressed in terms of marketable product, i.e. after all mining and processing losses. In the case of borates, the marketable product is B_2O_3.

(e) RTM Boron reserve tonnage increased due to conversion of mineralised material as part of a pit design update.

(f) Stockpile components of reserves are shown for all operations at the relevant mine.

(g) Coal reserves are shown as both recoverable and marketable. The yield factors shown reflect the impact of further processing, where necessary, to provide marketable coal. All reserves at operating mines are assigned, all undeveloped reserves are unassigned. By assigned and unassigned, we mean the following: assigned reserves means coal which has been committed by the coal company to operating mine shafts, mining equipment, and plant facilities, and all coal which has been leased by the company to others; unassigned reserves represent coal which has not been committed, and which would require new mineshafts, mining equipment, or plant facilities before operations could begin in the property.

(h) Coal type: SC: steam/thermal coal, MC: metallurgical/coking coal.

(i) 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 according to Australian Standards. MJ/kg = megajoules per kilogramme. 1 MJ/kg = 430.2 Btu/lb.

(j) Blair Athol reserve depletions were due to production.

(k) Hail Creek reserves increased as a result of a major model update including an upgrade of some mineralised material to reserves.

(l) Hunter Valley Operations reserves decreased due to production and mine design updates.

(m) 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.

(n) Antelope reserves decreased following production as well as a model update.

(o) Colowyo reserves were depleted through production.

(p) Decker reduced reserves through production and a contract buy out.

(q) The term 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.

(r) Bingham Canyon reserve tonnages decreased through production and mine design changes including updated geotechnical inputs.

(s) Escondida oxide reserve changes followed updating of economic considerations, geometallurgical inputs and material reclassification.

(t) 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.

(u) Northparkes underground reserves declined due to production and revision of the mining model.

(v) The reduction in Palbora reserves follows production.

(w) Rio Tinto increased its interest in the Oyu Tolgoi project from 9.9 per cent to 19.7 per cent.

(x) The Eagle gold reserve is reported for the first time following a model update.

(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) Yandicoogina (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) 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 proven 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.

(hh) Molybdenum grades interpolated from exploration drilling assays have been factored based on a long reconciliation history to blasthole and mill samples.

(ii) 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.

(jj) Drill hole spacings are either average distances, a specified grid distance (a regular pattern of drill holes the distance between the drill holes along the two axes of the grid will be aligned to test the size, shape and continuity of the mineral deposit; as such there may be different distances between the drill holes along the two axes of a grid) or the maximum drill hole spacing that is sufficient to determine the reserve category for a particular deposit. As the continuity of mineralisation varies from deposit to deposit, the drill hole spacing required to categorise a reserve varies between and within deposit types.

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Mines and production facilities

Group mines

(Rio Tinto s interest 100% unless otherwise shown)

Mine	Location	Access	Title/lease
BAUXITE			
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
COPPER			
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
DIAMONDS & MINERALS			
Diamonds			
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
Industrial Minerals			
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

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Group mines (continued)

Mines	History	Type of mine	Power source
BAUXITE			
CBG Sangaredi (23%)	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)
Gove	Bauxite mining commenced in 1970 feeding both the Gove refinery and export market capped at two million tonnes per annum. Bauxite export ceased in 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
MRN Porto Trombetas (12%)	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	Open cut	On site generation (heavy oil, diesel)

	(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		
Weipa/Ely	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
COPPER			
Escondida (30%)	Production started in 1990 and expanded in phases to 2002 when new concentrator was completed; production	Open pit	Supplied from SING grid under various contracts with local generating companies

	from Norte started in 2005 and the sulphide leach produced the first cathode during 2006		
Grasberg joint venture (40% of production)	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
Kennecott Utah Copper Bingham Canyon	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
Northparkes (80%)	Production started in 1995; interest acquired in 2000	Open pit and underground	Supplied from State grid
Palabora (57.7%)	Development of 20 year underground mine commenced in 1996 with open pit closure in 2003	Underground	Supplied by ESKOM via grid network
DIAMONDS & MINERALS			
Diamonds			
Argyle Diamonds	Interest increased from 59.7% following purchase	Open pit to underground in future	Long term contract with Ord Hydro Consortium and on

	of Ashton Mining in 2000. Underground mine project approved in 2005 to extend mine life to 2018		site Generation
Diavik (60%)	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
Murowa (77.8%)	Discovered in 1997. Small scale production started in 2004	Open pit	Supplied by ZESA with diesel generator back up
Industrial Minerals			
Rio Tinto Minerals Boron	Deposit discovered in 1925 and acquired by Rio Tinto in 1967	Open pit	On site co-generation units
Rio Tinto Minerals Talc	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
Rio Tinto Fer et Titane Lac Tio	Production started 1950; interest acquired in 1989	Open pit	Long term contract with Hydro-Quebec
		Mineral sand dredging	On site diesel generators

QIT Madagascar Minerals (80%)	Began as exploration project 1980s; construction approved 2005; ilmenite production started end of 2008		
Richards Bay Minerals (37%)	Production started 1977; interest acquired 1989. Fifth mining plant commissioned in 2000. One mining plant decommissioned in 2008	Beach sand dredging	Contract with ESKOM

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Group mines (continued)
(Rio Tinto s interest 100% unless otherwise shown)

Mine	Location	Access	Title/lease
ENERGY			
Energy Resources of Australia (68.4%) Ranger	Northern Territory, Australia	Road	Mining tenure granted by Federal Government
Rio Tinto Coal Australia 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
Cloud Peak Energy 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
	Namib Desert, Namibia	Rail, road and port	Federal lease

Rössing Uranium (68.6%)			
IRON ORE			
Hamersley Iron Brockman Marandoo Mount Tom Price Nammuldi Paraburdoo Yandicoogina Channar (60%) Eastern Range (54%)	Hamersley Ranges, Western Australia	Railway and port (owned by Hamersley 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

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Group mines (continued)

Mine	History	Type of mine	Power source
ENERGY			
Energy Resources of Australia (68.4%) Ranger	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
Rio Tinto Coal Australia 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%)	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 Antelope (48.3%) Cordero Rojo (48.3%) Decker (24.1%) Spring Creek (48.3%)	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 (100%)	Colowyo was acquired in 1995	Open cut	Supplied by IPPs and Cooperatives through national grid service
Rössing Uranium (68.6%)	Production began in 1978	Open pit	Namibian National Power
IRON ORE			
Hamersley Iron Brockman Marandoo Mount Tom Price Nammuldi Paraburdoo Yandicoogina Channar (60%) Eastern Range (54%)	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
Hope Downs joint venture (50% mine, 100% infrastructure)	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
Iron Ore Company of Canada (58.7%)	Interest acquired in 2000 through North. Current	Open pit	Supplied by Newfoundland Hydro under long term

	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		contract
Robe River Iron Associates (53%) Mesa J West Angelas	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
Dampier Salt (68.4%)	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 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

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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)**
ALUMINIUM				
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 Péribonka lease to 2058	Hydroelectric power	2,919 megawatts
Vigelands power station	Nr Kristiansand, Norway	100% freehold	Hydroelectric power	26 megawatts

COPPER

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
Kennecott Utah Copper	Magna, Salt Lake City, Utah, US	100% freehold	Thermal power station	175 megawatts

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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)
ALUMINIUM				
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	217,000 tonnes per year aluminium

			aluminium slab, molten metal, remelt	
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,	73.3% freehold; 26.7% leasehold	Refinery producing alumina	3,959,000 tonnes per year alumina

	Australia	(of which more than 80% expires in 2026 and after)		
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
Sebree	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	Aluminium smelter producing aluminium, billet, slab, small form	365,000 tonnes per year aluminium

		certain Crown land)	foundry, super purity, remelt	
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

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Group smelters and refineries (continued)
(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)
COPPER				
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
DIAMONDS & MINERALS				
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
IRON ORE				

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

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Item 4A. Unresolved Staff Comments

There are no unresolved written comments from the SEC staff regarding its periodic reports under the Exchange Act received more than 180 days before 31 December 2009.

Item 5. Operating and Financial Review and Prospects

This Item contains forward looking statements and attention is drawn to the Cautionary statement on page 10.

This Item includes a discussion of the main factors affecting the Group s Profit for the year , as measured in accordance with International Financial Reporting Standards (IFRS). In monitoring its financial performance, the Group also focuses on that part of the Profit for the year attributable to equity shareholders of Rio Tinto, which is referred to as Net earnings , and on an additional measure called Underlying earnings . The latter measure, which is also based on the amounts attributable to Rio Tinto shareholders, is reported to provide greater understanding of the underlying business performance of Rio Tinto operations. This measure is used by management to track the performance of the Group on a monthly basis. The earnings of the Group s product groups as reviewed by management exclude amounts that are outside the scope of underlying earnings. Net earnings and underlying earnings have been reconciled on page 51 and the exclusions in arriving at underlying earnings have been analysed on page 53.

In this report, the sales revenue of the parent companies and their subsidiaries is referred to as Consolidated sales revenue . Rio Tinto also reports a sales revenue measure that includes its share of jointly controlled entities and associates, which is referred to as Gross sales revenue . This latter measure is considered informative because a significant part of the Group s business is conducted through operations that are subject to equity accounting.

This Item is comprised of the following:

Chairman s statement providing a high level review of the Group

Chief executive s statement providing a high level review of the Group s operations

Group financial performance

Operating reviews for each of the principal product groups and global support groups

Financial review of the Group

Chairman s statement

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.

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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, along with Sam Walsh, chief executive, Rio Tinto Iron Ore and Australia, who joined the boards effective 5 June 2009.

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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

5 March 2010

Chief executive s statement

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.

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 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.

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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. 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.

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.

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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

5 March 2010

Recent Developments

On 29 March 2010 four Rio Tinto employees who were detained on 5 July 2009 were convicted by the Shanghai Number One Intermediate People s Court on charges of receiving bribes and obtaining commercial secrets. Internal investigations were carried out that did not uncover any evidence to substantiate the wrongdoing, but Rio Tinto was informed that clear evidence was presented in court that showed beyond doubt that the four convicted employees had accepted bribes. As the actions of the four employees were in direct violation of Chinese law and Rio Tinto s code of conduct their employment with the company has been terminated. Three defendants appealed, but the Shanghai Higher People s Court upheld the trial court s decision and sentences for all four defendants on 17 May 2010.

On 2 May 2010 the Australian Federal Government announced proposals to implement a new resource super tax that would see profits generated from Australia s non-renewable resources taxed at 40 per cent. A consultative period has commenced with the proposed tax currently scheduled to come into effect on 1 July 2012. We are currently evaluating the impact of this proposed tax on our operations and projects in Australia.

Rio Tinto has been negotiating contracts with its iron ore customers for pricing on a quarterly rather than an annual basis. The Group has recently signed agreements with the majority of Asian customers which to date account for close to 40 per cent of the Group s total iron ore sales volumes. This development reflects the recent structural shift away from annual benchmark pricing.

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Group financial performance

The Group uses a number of key performance indicators (KPI s) to monitor financial performance. These are summarised and discussed on pages 13 to 17 of this report.

Acquisition of Alcan

During 2007, the Group acquired 100 per cent of the issued share capital of Alcan Inc. Alcan s results have been included for the entire years ended 31 December 2008 and 2009, whereas in 2007, Alcan s results were included from 24 October 2007. This has had a significant effect on comparability of the periods.

Net earnings and underlying earnings

Both net earnings and underlying earnings deal with amounts attributable to equity shareholders of Rio Tinto. However, IFRS requires that the profit for the period reported in the income statement should also include earnings attributable to outside shareholders in subsidiaries. The profit for the period is reconciled to net earnings and to underlying earnings as follows:

	2009 US$m	2008 US$m	2007 US$m
Profit from continuing operations	**5,784**	5,436	7,746
Loss after tax from discontinued operations	**(449)**	(827)	
Profit for the year	**5,335**	4,609	7,746
Less: attributable to outside equity shareholders	**(463)**	(933)	(434)
Attributable to equity shareholders of Rio Tinto (net earnings)	**4,872**	3,676	7,312
Exclusions from underlying earnings	**1,426**	6,627	131
Underlying earnings attributable to shareholders of Rio Tinto	**6,298**	10,303	7,443

2009 financial performance compared with 2008

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

Changes from 2008 to 2009		Underlying earnings US$m	Net earnings US$m
2008		10,303	3,676
Prices	(6,879)		
Exchange rates	484		
Volumes	652		
General inflation	(172)		
Energy	318		
Other cash costs	742		
Exploration and evaluation costs (including disposals of undeveloped properties)	890		
Interest, tax, other	(40)		
Total changes in Underlying earnings		(4,005)	(4,005)
Profits on disposal of interests in businesses			(971)

Net impairment charges		6,854
Exchange differences and gains/(losses) on derivatives		(815)
Chinalco break fee		(182)
Restructuring/severance costs from global headcount reduction		(174)
Other		489
2009	**6,298**	**4,872**

(a) See Note 2 on page A-25 of the *2009 Financial statements* for a reconciliation of underlying earnings to net earnings.

The table below shows average prices and year-end prices, for 2009 and 2008 and the 2009 year end price for the principal commodities for which the Group receives payments based on spot market pricing:

	Year end price 2009	**Year end price 2008**	**Average price 2009**	**Average price 2008**
Copper (US$/lb)	3.33	1.32	2.32	3.20
Aluminium (US$/tonne)	2,207	1,454	1,665	2,572
Gold (US$/oz)	1,104	865	970	872
Molybdenum (US$/lb)	11	10	11	31

The effect of price movements on all major commodities in 2009 was to decrease earnings by $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

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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 the 2009 fiscal year (twelve months commencing 1 April 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 the 2009 fiscal year were settled in the US$115-130 per tonne range, a decline of approximately 60 per cent on the record levels of the 2008 fiscal year.

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 $484 million.

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 $652 million relative to 2008.

A reduction in cash costs during 2009 increased underlying earnings by $742 million compared with 2008. Controllable operating cost savings of $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 spend along with programmes to reduce operating costs across the production sites.

Lower energy costs across the Group boosted underlying earnings by a further $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 $890 million compared with 2008. In line with Rio Tinto s exploration policy, the $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 above net of the $483 million gain on disposal of the undeveloped Kintyre uranium project in 2008.

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 $452 million lower than in 2008, mainly reflecting a decline in interest rates, and lower debt in 2009 following completion of the rights issues.

2008 financial performance compared with 2007

2008 underlying earnings of US$10,303 million and net earnings of US$3,676 million were, respectively, US$2,860 million above and US$3,636 million below the comparable measures for 2007. The principal factors explaining the movements are set out in table below:

Changes from 2007 to 2008		Underlying earnings US$m	Net earnings US$m
2007		7,443	7,312
Effect of changes in:			
Prices	4,983		
Exchange rates	299		

Volumes	233		
General inflation	(336)		
Energy	(219)		
Other cash costs	(882)		
Exploration and evaluation costs (net of disposals of exploration properties)	(47)		
Interest, tax, other	(1,171)		
Total change in Underlying earnings		2,860	2,860
Profits on disposal of interests in businesses			1,469
Impairment (charges) less reversals			(8,293)
Exchange differences and gains/(losses) on derivatives			653
Other, including divestment and takeover defence costs			(325)
2008		**10,303**	**3,676**

(a) See Note 2 on page A-25 of the *2009 Financial statements* for a reconciliation of underlying earnings to net earnings.

The effect of price movements on all major commodities during 2008 was to increase earnings by US$4,983 million compared with 2007. Prices for the Group s major traded products remained strong for the first nine months of 2008 in an environment of favourable economic conditions and strong demand. However, these favourable market conditions came to an end at the end of the third quarter of 2008, as significant financial turbulence led to sharp declines in the rate of global demand for commodities and in the price of most of the Group s principal products.

Rio Tinto negotiated strong benchmark pricing levels for its iron ore production, with effect from 1 April 2008. Agreements were reached with major iron ore customers for a 96.5 per cent increase for lump ore and 79.9 per cent increase for fines for the 2008 contract year, representing an 85.7 per cent weighted average increase. Since the beginning of the third quarter

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of 2008, the spot price for iron ore suffered a decline similar to the commodities listed above. However Rio Tinto s exposure to this decline was ameliorated by its long term contract portfolio.

Contract prices for the seaborne thermal and coking coal markets reflected strong demand and tight supply. Aluminium inventories were written down by US$185 million at the year end to reflect realisable values.

There was a sharp appreciation of the US dollar in late 2008 relative to the currencies in which Rio Tinto incurs the majority of its costs. However, the effect on average exchange rates for 2008 was not significant compared with 2007. In 2008, the Australian and Canadian dollars strengthened in the first half of the year and then weakened sharply in the second half such that the average exchange rate for both currencies for 2008 was within one per cent of the prior year. The effect of all currency movements was to increase underlying earnings relative to 2007 by US$299 million.

Higher sales volumes from iron ore growth projects, coking and thermal coal and the inclusion of a full year of Alcan s operations were partly offset by lower copper and gold volumes at Escondida, Kennecott Utah Copper, Grasberg and Northparkes. The overall impact of all volume movements was an increase of US$233 million relative to 2007.

The Group continued to invest further in the future development of the business with an increased charge to underlying earnings of US$530 million from exploration and evaluation costs. In line with Rio Tinto s policy, the US$483 million gain on disposal of the Kintyre undeveloped property was recognised within underlying earnings. The net impact on underlying earnings from the change in exploration and evaluation costs was a decrease of US$47 million compared with 2007. Increased energy costs reduced underlying earnings by US$219 million. Higher freight, contractor, maintenance and input costs were experienced throughout the Group, notably in the Energy, Copper and Diamonds & Minerals product groups, as industry supply constraints persisted.

The effective tax rate on underlying earnings, excluding equity accounted units was 31.6 per cent compared with a rate of 25.7 per cent in 2007. The increase compared with 2007 relates to the absence of the 2007 Canadian tax rate benefit, the adverse impact in 2008 of foreign exchange movements, particularly the revaluation of Canadian dollar denominated tax balances, and increased expenditure in 2008 on growth projects on which no tax relief is recognised.

The Group interest charge was US$765 million higher than in 2007, mainly reflecting a full year of increased net debt following the acquisition of Alcan. The debt under the Alcan acquisition facilities continued to incur an interest rate of 30 to 40 basis points over US$ LIBOR during 2008.

Exclusions from underlying earnings 2007-2009

Earnings contributions from Group businesses and business segments are based on underlying earnings. Amounts excluded from net earnings in arriving at underlying earnings are summarised in the discussion of year on year results below.

	2009 US$m	2008 US$m	2007 US$m
Profit less losses on disposal of interests in businesses	**499**	1,470	1
Net impairment charges[1]	**(1,552)**	(8,406)	(113)
Exchange differences and gains/(losses) on derivatives (including those relating to equity accounted units)	**28**	843	190
Chinalco break fee[2]	**(182)**		
Restructuring/severance costs from global headcount reduction	**(231)**	(57)	
Other exclusions	**12**	(477)	(209)
Total excluded in arriving at underlying earnings	**(1,426)**	(6,627)	(131)

1. Net impairment charges include impairment charges of

US$1,103 million (2008: US$7,579 million; 2007: US$113 million) and loss after tax of discontinued operations of US$449 million (2008: US$827 million; 2007; nil).

2. The Chinalco break fee was US$195 million pre-tax.

2009

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 $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 complete.

Of the Group s total post-tax impairment charge of $1.6 billion, $0.5 billion relates to Alcan Engineered Products, $0.5 billion relates to Alcan Packaging, $0.2 billion relates to the Group s aluminium businesses and $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 $195 million ($182 million post-tax) to Chinalco which has been excluded from underlying earnings.

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

2008

Profit on disposal relates to the disposal of the Cortez gold mine and the Greens Creek silver/zinc/lead mine. These disposals were part of the previously announced divestment programme.

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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. These costs totalled US$270 million (net of tax) in 2008 and were excluded from underlying earnings. Other charges excluded from underlying earnings comprise costs relating to non recurring acquisitions, disposals and similar corporate projects.

Of the Group s total post tax impairment charge of US$8.4 billion (which includes US$0.8 million in respect of discontinued operations) US$7.9 billion relates to the Group s aluminium businesses including the Packaging unit.

The acquisition price of Alcan anticipated significant growth in smelter and refinery capacity, but following the significant weakening in economic and market circumstances during 2008, many of these growth projects were deferred. These deferrals, together with the weak economic environment and increases in input costs, resulted in the impairment charge.

In measuring the amount of the impairment, the Group compared the carrying value of the upstream aluminium business with its value in use, assessed using discounted cash flow techniques. This follows the requirements of the accounting standards as, in the Group s view, the upstream aluminium business fair value less cost to sell was lower than its value in use. For the purposes of the annual goodwill impairment test, goodwill was allocated to a group of cash generating units that included both Alcan and the aluminium activities previously owned by Rio Tinto which are now managed as a single business.

The impairment charge did not trigger the covenant under the Alcan acquisition facilities, which requires that the ratio of net debt to underlying EBITDA be no greater than 4.5 times.

Exchange differences and gains/(losses) on derivatives of US$843 million relates to a gain of US$1.9 billion on Australian dollar intragroup liabilities, held by Group entities with a US dollar functional currency offset by a loss of US$1.7 billion on external US dollar debt held by an entity with an Australian dollar functional currency. The weakening of the Australian dollar against the US dollar, particularly towards the end of 2008, led to these significant movements. The tax on exchange gains and losses includes a benefit of US$254 million through recovery of tax relating to the prior years. It also includes tax relief for losses on US dollar denominated debt. The pre-tax loss is offset by gains on intragroup balances which are largely not subject to tax.

An impairment of discontinued operations of US$827 million relating to Packaging was recognised outside of underlying earnings. As required by IFRS 5 Non-current Assets Held-for-Sale and Discontinued Operations, the amount of this impairment was determined by reference to the Group s best estimate of expected proceeds to be realized on the sale of Packaging, less an estimate of remaining costs to sell. The Packaging business was valued based upon an assessment of its fair value, which is required because this business was presented as an Asset Held for Sale in the Group balance sheet. Engineered Products was also valued based upon an assessment of its fair value, as the Group s intention is to sell this group of businesses.

2007

In 2007 an impairment charge of US$328 million after tax was recognised at Argyle following a decline in value as a result of large increases in the estimated capital costs of the underground project. This was partly offset by the reversal of the residues of the impairments of Tarong Coal and Palabora.

Other exclusions from underlying earnings in 2007, a charge of US$209 million, mainly comprised non recurring consequences of the Alcan acquisition, including Integration costs. Of this total, US$146 million resulted from the sale of Alcan inventories that were revalued based on selling prices at the date of acquisition

Group financial results by product group 2007 2009

	2009	2008	2007
	US$m	US$m	US$m
Iron Ore	**4,126**	6,017	2,664
Aluminium	**(578)**	1,271	1,051
Copper	**1,866**	1,597	3,373
Energy	**1,420**	2,581	498
Diamonds & Minerals	**800**	474	475

Other operations	**(188)**	(133)	167
Inter-segment transactions	**(28)**	25	
Other items	**(547)**	(366)	(540)
Exploration and evaluation	**5**	(133)	20
Net interest	**(578)**	(1,030)	(265)
Group underlying earnings	**6,298**	10,303	7,443
Exclusions from underlying earnings	**(1,426)**	(6,627)	(131)
Net Earnings	**4,872**	3,676	7,312

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Sustainable development

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.

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

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, including greenhouse gas emissions intensity, which is discussed in the section 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.

Greenhouse gas emissions intensity

Indexed relative to 2008	**Group intensity**
2005	109.4
2006	110.8
2007	110.2
2008	113.1(1)
	100.0(2)
2009	92.5(2)

(1) Rio Tinto excluding former Alcan

(2) Rio Tinto including former Alcan

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.

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_2-e associated with third party transport of our products and raw materials.

An estimated 120 million tonnes of CO_2-e associated with customers using our coal in electricity generation and steel production.

Approximately 330 million tonnes of CO_2-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.

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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. In Australia the Carbon Pollution Reduction Scheme cap and trade bill was brought before, but not passed by, the Senate. Australian legislation was enacted for reporting energy use and GHG emissions, and legislation for the use of renewable energy may be expanded. The requirement to purchase Renewable Energy Certificates will increase operating costs. The US House of Representativea passed a cap and trade bill. In the EU, some of Rio Tinto s operations are subject to the second phase of the EU emissions trading scheme. This exposure will increase when the third phase starts in 2013. The proposed legislation will increase operating costs as the Group will have to purchase emissions permits, the number of which would increase over time. 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. All Australian legislated reporting requirements were met in 2009.

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. Depending on the mix of commodity production, we would expect some reversal of this positive performance in future years as production levels increase.

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.

Total energy use	**Petajoules**
2005	245[1]
2006	257[1]
2007	540[2]
2008	553[2]
2009	497[2]

(1) Rio Tinto

(2) Rio Tinto including former Alcan

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.

Assurance

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. Their full assurance statement is on page 33 of the 2009 *Annual report.*

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Aluminium

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.

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: 5%

Underlying earnings contribution* 2007-2009	**US$m**
2007 Underlying earnings	1,040
Effect of changes in:	
Prices and exchange	(207)
Inflation	(55)
Volumes	1,073
Costs	(86)
Tax and other	(495)
2008 Underlying earnings	1,271
Effect of changes in:	
Prices and exchange	(2,243)
Inflation	(4)
Volumes	(41)
Costs	233
Tax and other	206
2009 Underlying earnings	(578)

2007 comparatives have been restated to remove Engineered Products.

* See note 31 on page A-44 and note 51 on page A-80 of the *2009 Financial statements* for a reconciliation of underlying earnings by

product group to consolidated net profit for the year as determined under IFRS. All amounts presented by the product groups exclude net interest and other centrally reported items.

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.

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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.

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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.

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.

All injury frequency rate	**Per 200,000 hours worked**
2005	1.41
2006	1.45
2007	1.67(1)
2008	1.33
2009	1.04

(1) Including former Alcan

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.

Aluminium greenhouse gas emissions intensity

Indexed relative to 2008	**Group intensity**
2005	117.7
2006	119.4
2007	117.0
2008	118.7(1)
	100.0(2)
2009	90.1(2)

(1) Rio Tinto excluding former Alcan

(2) Rio Tinto including former Alcan

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.

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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.

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Copper

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.

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: 16%

Underlying earnings contribution* 2007-2009	**US$m**
2007 Underlying earnings	3,479
Effect of changes in:	
Prices and exchange	(185)
Inflation	(49)
Volumes	(963)
Costs	(620)
Tax and other	(66)
2008 Underlying earnings	1,597
Effect of changes in:	
Prices and exchange	(487)
Inflation	(40)
Volumes	556
Costs	304
Tax and other	(64)
2009 Underlying earnings	1,866

* See note 31 on page A-44 and

note 51 on page A-80 of the *2009 Financial statements* for a reconciliation of underlying earnings by product group to consolidated net profit for the year as determined under IFRS. All amounts presented by the product groups exclude net interest and other centrally reported items.

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.

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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 Kenncott 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

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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
2005	1.26
2006	1.31
2007	1.24
2008	1.06
2009	0.67

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 cathode greenhouse gas emissions intensity

Indexed relative to 2008	Group intensity
2005	74.6
2006	84.6
2007	72.7
2008	100.0
2009	81.3

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 mineralisation is substantial and has a grade

which is higher than the average grade of the open pit reserve.

Current ore reserves are expected to enable open pit operations to continue until 2020 with additional mineralised material 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 mineralised material 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.

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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 mineralised material 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.

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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. Refer to note 48 of the *2009 Financial statements*.

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 mineralised materials are sufficient for several decades, 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.

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Diamonds and Minerals

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.

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: 4%

Underlying earnings contribution* 2007-2009	**US$m**
2007 Underlying earnings	483
Effect of changes in:	
Prices and exchange	331
Inflation	(50)
Volumes	(49)
Costs	(167)
Tax and other	(74)
2008 Underlying earnings	474
Effect of changes in:	
Prices and exchange	(298)
Inflation	(24)
Volumes	(245)
Costs	88
Tax and other	805
2009 Underlying earnings	800

* See note 31 on page A-44 and

note 51 on page A-80 of the *2009 Financial statements* for a reconciliation of underlying earnings by product group to consolidated net profit for the year as determined under IFRS. All amounts presented by the product groups exclude net interest and other centrally reported items.

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.

Underlying 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.

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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

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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**
2005	1.43
2006	0.92
2007	0.92
2008	0.58
2009	0.71

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 Performance 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.

Titanium slag and iron greenhouse gas emissions intensity

Indexed relative to 2008	**Group intensity**
2005	101.1
2006	102.7
2007	102.3
2008	100.0
2009	110.7

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 RTIT 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 RTIT 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

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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.

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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.

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Energy

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.

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: 19%

Underlying earnings contribution* 2007-2009	**US$m**
2007 Underlying earnings	498
Effect of changes in:	
Prices and exchange	1,623
Inflation	(51)
Volumes	177
Costs	257
Tax and other	77
2008 Underlying earnings	2,581
Effect of changes in:	
Prices and exchange	(592)
Inflation	(54)
Volumes	(67)
Costs	136
Tax and other	(584)
2009 Underlying earnings	1,420

* See note 31 on page A-44 and

note 51 on page A-80 of the *2009 Financial statements* for a reconciliation of underlying earnings by product group to consolidated net profit for the year as determined under IFRS. All amounts presented by the product groups exclude net interest and other centrally reported items.

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.

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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.

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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 mineralisation.

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.

Safety

All injury frequency rate	**Per 200,000 hours worked**
2005	1.31
2006	0.89
2007	0.90
2008	0.87
2009	0.71

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	**Group intensity**
2005	82.8
2006	86.2
2007	95.7
2008	100.0
2009	98.6

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

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project. Coal & Allied also has a 36.5 per cent interest in Port Waratah Coal Services which operates the Kooragang 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 mineralized material 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.

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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.

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Iron Ore

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.

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: 53%

Underlying earnings contribution* 2007-2009	**US$m**
2007 Underlying earnings	2,664
Effect of changes in:	
Prices and exchange	3,654
Inflation	(71)
Volumes	165
Costs	(446)
Tax and other	51
2008 Underlying earnings	6,017
Effect of changes in:	
Prices and exchange	(2,920)
Inflation	(22)
Volumes	694
Costs	352
Tax and other	5
2009 Underlying earnings	4,126

* See note 31 on page A-44 and note 51 on page A-80 of the *2009 Financial statements* for a

reconciliation of underlying earnings by product group to consolidated net profit for the year as determined under IFRS. All amounts presented by the product groups exclude net interest and other centrally reported items.

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.

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.

Building on 2009 s success in removing bottlenecks to achieve sustained production at or above nameplate capacity.

Fully extracting benefits from operations integration though 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.

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Advancing the Orissa, India, and Simandou, Guinea, development projects.

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.

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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.

All injury frequency rate	**Per 200,000 hours worked**
2005	1.58
2006	1.27
2007	0.98
2008	0.91
2009	0.81

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.

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.

Australian coal greenhouse gas emissions intensity

Indexed relative to 2008	**Group intensity**
2005	77.6
2006	76.1
2007	81.4
2008	100.0
2009	87.3

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.

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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. On 19 March 2010, Rio Tinto signed a memorandum of understanding with Chinalco to establish a joint venture covering the development and operation of the Simandou iron ore project in Guinea of which Rio Tinto owns 95 per cent. Chinalco will acquire a 47 per cent interest in the new joint venture by providing US$1.35 billion on an earn-in basis through sole funding of ongoing development work over the next two to three years. Once the funding is complete Rio Tinto and Chinalco s effective interests in the Simandou project will be 50.35 per cent and 44.65 per cent respectively.

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 mineralised materials, 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.

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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.

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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.

All injury frequency rate	Per 200,000 hours worked
2005	0.55
2006	0.88
2007	1.25
2008	0.97
2009	0.61

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-

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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

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Technology and 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 Río 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.

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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

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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.

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Financial review

Cash flow

2009 compared with 2008

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.

2008 compared with 2007

Cash flow from operations, including dividends from equity accounted units, was a record US$20,668 million, 64 per cent higher than 2007 due to the effect of higher commodity prices for the first nine months of the year.

Tax paid for 2008 increased to US$3,899 million, US$478 million higher than for 2007 largely due to the increase in taxable profits and the payment of tax on the disposal of the Greens Creek and Cortez mines. Net interest paid of US$1,538 million for 2008 was US$1,049 million higher than 2007, arising mostly from interest paid on the Alcan debt.

The Group invested at record levels, in particular in expansion projects. Capital expenditure on property, plant and equipment and intangible assets was US$8,574 million in 2008, an increase of US$3,574 million over 2007. This included the expansion of the Cape Lambert port and the Hope Downs mine in Western Australia, the expansion of the Yarwun alumina refinery and the construction of the Clermont thermal coal mine in Queensland, the A418 dike at the Diavik diamond mine and the completion of the Madagascar ilmenite mine. Certain major capital projects were deferred or slowed to bring capital expenditure down to US$4 billion in 2009.

The net cash proceeds of disposals in 2008 were US$2,563 million, and related to Cortez, Greens Creek and Alcan s aerospace service centres business. Acquisitions less disposals were US$37,526 million in 2007 mainly relating to the acquisition of Alcan.

Dividends paid in 2008 of US$1,933 million were US$426 million higher than dividends paid in 2007, following the 31 per cent increase in the 2007 final dividend which was paid in 2008. The share buyback programme was discontinued after the announcement of the Alcan acquisition on 12 July 2007: returns to shareholders from the on-market buyback of Rio Tinto plc shares in 2007 totalled US$1,648 million.

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 6 to 9. The effectiveness of internal control procedures continues to be a high priority in the Rio Tinto

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Group. The boards statement on internal control is set out on page 158.

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 Depositary 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 *2009 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*.

As at 31 December 2009, the Group had contractual cash obligations arising in the ordinary course of business as follows:

Contractual cash obligations	Total US$m	Less than 1 year US$m	Between 1 and 3 years US$m	Between 3 and 5 years US$m	After 5 years US$m
Expenditure commitments in relation to:					
Operating leases	1,850	484	628	287	451
Other (mainly capital commitments)	3,875	2,439	1,050	308	78

Long-term debt and other financial obligations					
Debt (a)	23,189	878	9,550	6,036	6,725
Interest payments (b)	8,024	942	1,794	1,431	3,857
Unconditional purchase obligations (c)	12,807	1,339	2,167	1,897	7,404
Other (mainly trade payables)	7,291	4,979	1,798	269	245
Total	**57,036**	**11,061**	**16,987**	**10,228**	**18,760**

Notes

(a) Debt obligations include bank borrowings repayable on demand.

(b) Interest payments have been projected using the interest rate applicable at 31 December 2009, including the impact of currency and interest rate swap agreements where appropriate. Much of the debt is subject to variable interest rates. Future interest payments are subject, therefore, to change in line with market rates.

(c) 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 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

Information regarding the Group s closedown and restoration obligations is provided in note 27 to the *2009 Financial statements*.

Foreign Exchange

The following sensitivities give the estimated effect on underlying earnings assuming that each exchange rate moved in isolation. The relationship between currencies and commodity prices is a complex one and movements in exchange rates can cause movements in commodity prices and vice versa. Where the functional currency of an operation is that of a country for which

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production of commodities is an important feature of the economy, such as the Australian dollar, there is a certain degree of natural protection against cyclical fluctuations, in that the currency tends to be weak, reducing costs in US dollar terms, when commodity prices are low, and vice versa.

Earnings sensitivities-exchange rates

	Average exchange rate for 2009 US cents	Effect on underlying earnings of 10% change in full year average +/- US$m
Australian dollar	79	444
Canadian dollar	88	171
Euro	139	22
Chilean peso	US$1= 558 pesos	20
New Zealand dollar	64	14
South African rand	12	43
UK sterling	157	19

The effect on net earnings, of a 10% change in the full year average exchange rate, is not materially different to the effect on underlying earnings as disclosed above. The exchange rate sensitivities quoted above include the effect on operating costs of movements in exchange rates but exclude the effect of the revaluation of foreign currency financial assets and liabilities. They should therefore be used with care.

The sensitivities below are presented on financial assets and liabilities, and non-financial instruments, such as pensions provisions, and deferred tax and include the Rio Tinto share of the sensitivities of equity accounted units, and give the estimated effect on underlying earnings, net earnings and equity of a ten per cent strengthening in the full year closing US dollar exchange rate, assuming that each exchange rate moved in isolation. These balances will not remain constant throughout 2010, however, and therefore these numbers should be used with care.

Earnings sensitivities-exchange on financial assets/liabilities

	Closing exchange rate US cents	Effect on net earnings of 10% strengthening of US dollar US$m	Of which amount impacting underlying earnings US$m	Effect of items impacting directly on equity US$m

Functional currency of business unit				
Australian dollar	89	190	80	(1)
Canadian dollar	95	(64)	(6)	114
South African rand	14	13	2	(42)
Euro	144	254	15	12
New Zealand dollar	73	17	18	

Notes

(a) The sensitivities show the net sensitivity of US dollar exposures in Australian dollar functional currency companies, for example, and Australian dollar exposures in US dollar functional currency companies.

(b) 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.

The functional currency of many operations within the Rio Tinto Group is the local currency in the country of operation. The former Alcan aluminium and alumina producing operations primarily use a US dollar functional currency. Foreign currency gains or losses arising on translation to US dollars of the net assets of non US dollar functional currency operations are taken to equity and, with effect from 1 January 2004, recorded in a currency translation reserve. A weakening of the US dollar would have a positive effect on equity. The approximate translation effects on the Group s net assets of ten per cent movements from the year end exchange rates are as follows:

Net assets sensitivities-exchange on translation

	Closing exchange rate US cents	Effect on net assets of 10% change in closing rate +/- US$m
Australian dollar	89	2,366
Euro	144	678
Canadian dollar	95	219

Further 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*

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Financial statements.

Commodity prices

The approximate effect on the Group s underlying and net earnings of a ten per cent change from the full year average market price in 2009 for the following products would be:

Exchange sensitivities-commodity prices

	Unit	Average market price for 2009 US$	Effect on underlying and net earnings of 10% change in full year average +/- US$m
Copper	Pound	2.32	268
Aluminium	Tonne	1,665	465
Gold	Ounce	970	63
Molybdenum	Pound	11	20
Iron ore	dmtu		638

The sensitivities give the estimated impact on net earnings of changes in prices assuming that all other variables remain constant. These should be used with care. As noted previously, the relationship between currencies and commodity prices is a complex one and changes in exchange rates can influence commodity prices and vice versa.

The table below summarises the impact of changes in the market price on the following commodity derivatives including the Rio Tinto share of equity accounted units, and those aluminium forward and option contracts embedded in electricity purchase contracts outstanding at 31 December 2009. 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. Own use contracts are contracts to buy or sell non financial items that 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.

Earnings sensitivities-commodity price on financial assets/liabilities

	Effect on net earnings of 10% increase from year-end price US$m	Effect of items impacting directly on Rio Tinto share of equity of 10% increase from year-end price US$m

Copper	(1)	(18)
Aluminium	(74)	(24)
Oil	3	
	(72)	(41)

These sensitivities should be used with care. The relationship between currencies and commodity prices is a complex one and changes in exchange rates can influence commodity prices and vice versa.
Further 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*.

Sales revenue

Commodity	Source	Unit	2009 US$	2008 US$	2007 US$
Aluminium	LME	Tonne (c)	1,665	2,572	2,638
Copper	LME	Pound	2.32	3.20	3.24
Gold	LBMA	Ounce	970	872	691
Iron ore	Australian benchmark (fines) (a)	dmtu (b)	1.09	1.29	0.79
Molybdenum	Metals Week: quote for dealer oxide price	Pound	11	31	30

Notes

(a) average for the calendar year

(b) dry metric tonne unit

(c) restated from Pound to Tonne

The above table shows published benchmark prices for Rio Tinto s commodities for the last three years where these are publicly available, and where there is a reasonable degree of correlation between the benchmark and Rio Tinto s realised prices. The prices

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set out in the table are the averages for each of the calendar years, 2007, 2008 and 2009.

The Group s sales revenue will not necessarily move in line with these benchmarks for a number of reasons which are discussed below.

The discussion of revenues below relates to the Group s gross revenue from sales of commodities, including its share of the revenue of equity accounted units, as included in Note 51 Financial Information by Business Unit to the *2009 Financial statements*.

Iron Ore

The sales revenues of the Iron Ore group decreased by 24 per cent in 2009 compared with 2008. There was a 37 per cent weighted average decrease in the benchmark price, mainly effective from 1 April 2009, which resulted in a 15 per cent decrease in the average Australian iron ore fines price received for the calendar year. In the first half of 2009, 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 provisional basis.

There was an 86 per cent weighted average increase in the benchmark price for 2008 compared with 2007, mainly effective from 1 April 2008 which resulted in a 63 per cent increase in the average Australian iron ore fines price received for the 2008 calendar year. In addition, spot market sales had a significant positive impact. Although the price for iron ore on the spot market decreased in the last quarter of 2008, the impact on Rio Tinto was limited since the vast majority of its iron ore spot market sales were made in the first nine months of the year when spot prices were in excess of long term contracts. IOC enjoyed a more stable operating environment in 2008 after the resolution of the industrial action in 2007.

Aluminium

The Aluminium group s sales revenues are from aluminium and related products such as alumina and bauxite. The 2009 sales revenues of the Aluminium group decreased by 34 per cent against 2008. The average aluminium market price in 2009 was US$1,665 per tonne compared with US$2,572 per tonne in 2008. The decline in LME prices that commenced in mid 2008 continued into 2009, with some improvement in the second half of 2009, resulting in a year-end price of US$2,207 per tonne.

Aluminium production for 2009 was four per cent lower than 2008, as production was closed or curtailed due to market conditions; while bauxite production decreased by 12 per cent from 2008, mainly due to production curtailments at Weipa, Australia; and alumina production was two per cent lower in 2009, following production cuts at the Vaudreuil (Jonquiere) and Gardanne alumina refineries announced in early 2009.

The 2008 sales revenues of the Aluminium group decreased by one per cent against 2007 on a combined adjusted basis and increased by 195 per cent on a non adjusted basis due to the inclusion of a full year of Alcan. The average aluminium price of US$2,572 per tonne was two per cent lower than the 2007 average price. Aluminium prices were strong for the first nine months of the year. The fourth quarter of 2008 saw a sharp fall in aluminium prices. The decline in prices underlined the weakness in demand, which caused a build-up of LME stocks during 2008. Despite the fact that the fall in aluminium prices was accompanied by a fall in costs, producers also responded to the downturn and the weakness in demand by cutting back output. However, these have not been of sufficient magnitude to support prices as LME stocks rose during 2008.

Aluminium production for 2008 was unchanged overall from the prior year, while bauxite and alumina production rose by 12 per cent and six per cent respectively over 2007. The bauxite production increase reflected investment in increased capacity at Weipa and the alumina production reflected a 23 per cent increase at the Gove refinery as it continued to increase capacity.

Energy

A significant proportion of Rio Tinto s coal production is sold under long term contracts. In Australia, the prices applying to sales under the long term contracts are generally renegotiated annually; but prices are fixed at different times of the year and on a variety of bases. For these reasons, average realised prices will not necessarily reflect the movements in any of the publicly quoted benchmarks. Moreover, there are significant product specification differences between mines. Sales volumes will vary during the year and the timing of shipments will also result in differences between average realised prices and benchmark prices.

As a result, of the initial public offering (IPO) of Cloud Peak Energy Inc on November 20, 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 and 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.

Sales revenues for the Energy group decreased by 16 per cent in 2009 compared with 2008 due to lower realised Australian coal prices, partially offset by an increase in the US thermal coal price. 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 from the Group s Australian operations was comparable with 2008.

Sales revenues for the Energy group increased by 72 per cent in 2008 compared with 2007 due to higher prices and sales volumes. Asian seaborne thermal coal spot prices came off their highs in the second half of 2008 due to the general slump in demand across all economies in reaction to the global economic downturn. Published 2008 market indications for Australian thermal coal showed an increase of 93 per cent and an increase of 145 per cent in the coking coal benchmark price. Revenues of the Group s Australian coal operations increased by 126 per cent in 2008 due to higher thermal coal prices and higher coking prices. Hard coking coal production from the Queensland coal operations increased by 20 per cent compared with 2007 as a result of higher demand and increasing port capacity.

Rio Tinto Energy America s 2008 revenues benefited from new contracts at higher prices. Volumes in 2008 were higher than 2007 due to investment and expansion at Antelope, Jacobs Ranch and Spring Creek mines to meet the robust market demands of Powder River Basin coal. In the US, published market indications of spot prices for Wyoming Powder River Basin thermal coal 8800 BTU (0.80 sulphur) showed an increase of 36 per cent for the average spot price in 2008 compared with 2007.

Copper

The Copper group also produces gold and molybdenum as significant by-products. The 2009 average copper price of 232

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US cents per pound was 28 per cent below the 2008 average price. The 2009 gold price averaged US$970 per ounce, an increase of 11 per cent on the prior year, whilst the average molybdenum price was US$11 per pound, a decrease of 65 per cent compared with 2008.

Sales revenues for the Copper group in 2009 increased by eight per cent compared with 2008. The effect of provisional pricing of copper sales resulted in a benefit to underlying earnings of $213 million in 2009, compared to a charge of $207 million in 2008. At the end of 2009 the Group had 267 million pounds of copper sales that were provisionally priced at 335 US cents per pound. The final price of these sales will be determined during the first half of 2010. This compared with 183 million pounds of open shipments at 31 December 2008 provisionally priced at 133 US cents per pound.

The 2008 average copper price of 320 US cents per pound was one per cent below the 2007 average price. The gold price averaged US$872 per ounce, an increase of 26 per cent on the prior year, whilst the average molybdenum price was US$31 per pound, an increase of three per cent compared with 2007.

Sales revenue for the Copper group in 2008 decreased by 30 per cent compared with 2007. Higher by-product prices were more than offset by lower volumes of copper, gold and molybdenum. Kennecott Utah Copper sales were impacted by a scheduled smelter shutdown during the second half of 2008. Escondida experienced lower volumes due to lower grades and operational difficulties at the Laguna Seca SAG mill, and Grasberg was adversely impacted by a pit wall failure in September 2008. Diamond prices realised by Rio Tinto depend on the size and quality of diamonds in the product mix.

Diamonds & Minerals

Diamond prices realised by Rio Tinto depend on the size and quality of diamonds in the product mix. Sales revenue for Diamond in 2009 decreased by 46 per cent compared with 2008, primarily due to the global economic slowdown, as demand for luxury items decreased. However, there was an improvement in prices for rough diamonds in the latter half of 2009. Sales revenue decreased by 18 per cent in 2008 against 2007, primarily due to lower grades processed.

The prices applying to industrial minerals are generally negotiated with individual customers, based on a variety of factors such as product specification, volumes, etc. Therefore, average realised prices will not necessarily reflect the movements in any publicly quoted benchmarks. Sales revenue for Minerals in 2009 decreased by 27 per cent compared with 2008, due to a decline in demand resulting from the global economic crisis. Borates production fell by 30 per cent, and Talc production declined by 24 per cent, compared with 2008.

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 page A-62.

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 November 30, 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 Product businesses is ongoing.

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The rapid collapse in market conditions experienced in the latter stages of 2008, persisted through most of 2009. Sales revenues fell 35% 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 February 1, 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 August 16, 2009, and it was accepted by Rio Tinto on December 23, 2009.

On 31 March 2010 Rio Tinto received a binding offer from Sun Capital Partners to acquire the Alcan Beauty Packaging business. A period of exclusivity with Sun Capital Partners has been agreed, and Rio Tinto will respond to the binding offer following consultation with the relevant European works councils.

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Item 6. Directors, Senior Management and Employees

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.

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. 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, with effect since 1 April 2010. Bob was elected 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.

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 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.

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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 and senior independent director of Cadbury plc from 2007 and 2008 respectively until Mar 2010. Chairman of the Audit committee until April 2009.
7. Michael Fitzpatrick 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 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 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 Non executive director FCGA, age 55
Appointment and election: Appointed a director of Rio Tinto plc and Rio Tinto Limited on 9 February 2010. Ann was elected by shareholders at the 2010 annual general meetings and was appointed chairman of the Audit Committee at the conclusion of the 2010 annual general meetings.
Skills and experience: 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.

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10. Richard Goodmanson 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 Non executive directorBA, 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 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. Hon. Paul Tellier Non executive director LL.L, B.Litt(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.

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14. 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 was elected by shareholders 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.

Directors who left the Group during 2009 and 2010

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.
Sir David Clementi MA, MBA Director of Rio Tinto plc and Rio Tinto Limited from 2003 until his retirement at the conclusion of the 2010 annual general meetings.
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

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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) upon leaving the Group: 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.

David Mayhew Director of Rio Tinto plc and Rio Tinto Limited from 2000 until his retirement at the conclusion of the 2010 annual general meetings.

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) upon leaving the Group: 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.

Notes

(a) Audit committee
(Vivienne Cox, Michael Fitzpatrick, Ann Godbehere, Lord Kerr and Paul Tellier)

(b) Remuneration committee
(Michael Fitzpatrick, Richard Goodmanson, Andrew Gould, and Paul Tellier)

(c) Nominations committee
(Jan du Plessis, Robert Brown, Vivienne Cox, Sir Rod Eddington, Michael Fitzpatrick, Yves Fortier, Richard Goodmanson, Andrew Gould, Lord Kerr and Paul Tellier)

(d) Committee on social and environmental accountability
(Robert Brown, Sir Rod Eddington, Yves Fortier, Richard Goodmanson and Lord Kerr)

(e) Independent
(Robert Brown, Vivienne Cox, Sir Rod Eddington, Michael Fitzpatrick, Yves Fortier, Ann Godbehere, Richard Goodmanson, Andrew Gould, Lord Kerr and Paul Tellier)

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Executive committee members

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 53

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

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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 57

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 94, 95 and 97.

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 49

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.

Employees

Information on the Group s employees including their costs, is in notes 4 and 36 to the *2009 Financial statements.*

In September 2009, Rio Tinto Minerals` (RTM) borate business, U.S. Borax, began negotiating with International Warehouse & Longshore Union, Local 30 (Union), to reach a new labour agreement at Boron Operations. The Union refused to extend the existing labor agreement after it expired on November 4, 2009, though bargaining continued no agreement was reached and RTM operations initiated a lock out of 560 represented members of its Boron California Operations workforce on 31 January 2010. An agreement was reached with a new six year contract in place with effect from 17 May 2010.

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Remuneration

The Remuneration report to shareholders dated 5 March 2010 has been reproduced below, except that the page numbers have been revised to reflect those in this combined Annual report on Form 20-F, Tables 3, 4 a, 4b, and 5 have been augmented to show share interests as at the latest practicable date.

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 136. 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.

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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:

Business alignment

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:

- Drive and reward behaviours to achieve annual, mid and long term business priorities consistent with shareholder value creation
- Are competitive to attract and retain with stretching performance targets from a shareholder perspective
- Align executives with shareholders through shareholding requirements

Empowerment

Reward employees for doing their jobs well by differentiating top performers who deliver shareholder value and behave consistently with *The way we work*.

This means providing incentive plan features that:

- Reward employees based on what they can control
- Create a direct relationship between the payout from the plan and the individual s performance
- Promote the right level of risk-taking from a shareholder perspective

Simplicity

Keep the remuneration arrangements, including incentive plan design, simple.

This means providing:

- Plan features that are easy to understand
- Communication that is concise and comprehensive

Transparency

Demonstrate internal equity to employees for greater buy-in and to ensure global mobility between businesses of key management.

This means providing:

- Clear direction on the behaviour Rio Tinto is seeking
- Open and timely information on performance targets and how rewards are determined

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.

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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
Salary (fixed)	Provides the fixed element of the remuneration package Target median of international companies of similar size, global reach and complexity, including other large natural resource companies	Salaries frozen since March 2008	Salaries will remain frozen in 2010 for executives
Short term incentive plan (STIP) (at risk)	Focuses participants on achieving calendar year performance goals which contribute to sustainable shareholder value	Maximum STIP opportunity of 120 per cent of salary and 60 per cent of salary awarded for target performance Payable wholly in cash Performance targets include earnings, cash flow, safety and individual performance objectives	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 Increased focus on financial (earnings and cash flow) targets Safety continues to be an integral part of the STIP framework
Performance Options Share Option Plan (SOP) (at risk)	Rewards participants for increasing the share price and delivering strong TSR performance against other companies	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 Target (and maximum) face value of 300 per cent of salary	No changes 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

		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	
Performance Shares Mining Companies Comparative Plan (MCCP) (at risk)	Rewards participants for increasing the share price and delivering strong TSR performance against other companies	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 Target award equal to face value of 200 per cent of base salary 150 per cent of target award vesting for being ranked first (ie a maximum award of 300 per cent of base salary) 23 per cent of the maximum potential award vests for median performance 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	No changes to the length of the performance period or the overall individual/plan limits Performance measures amended to: 50 per cent performance relative to the HSBC Global Mining Index 50 per cent performance relative to the Morgan Stanley Capital World Index (MSCI) 150 per cent of target award vesting for outperformance of the relevant index by eight per cent per annum (top quartile) 23 per cent of the maximum potential award vesting for index performance 0 per cent vesting below Index performance 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

Service Awards Management Share Plan (MSP) (usually service based)	Enhance the Group s ability to attract and retain key staff in an increasingly tight and competitive labour market	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 Shares to satisfy the awards are purchased in the market and no new shares are issued to satisfy awards	From 2010, MSP awards granted to Group executives will be subject to performance criteria, other than in exceptional circumstances (eg recruitment)
Post-employment Benefits (fixed)	Provides locally competitive post-employment benefits for participants in a cost efficient manner	Post-employment benefit arrangements offered	No change
Shareholding requirement	Provides alignment with shareholders interests	Two times salary over a five year period for executive directors and PGCEOs	Requirement extended to the Executive committee

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.

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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 109 and 110.

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The table below illustrates the balance of performance measures for 2009.

STIP measures 2009

	Executive directors and Group executives %	PGCEOs %
Business measures Rio Tinto Group	**50.00**	**20.00**
Earnings flexed / unflexed (50% / 50%)	25.00	10.00
Cash flow flexed / unflexed (50% / 50%)	25.00	10.00
Business measures Product group		**30.00**
Earnings flexed / unflexed (50% / 50%)		15.00
Cash flow flexed / unflexed (50% / 50%)		15.00
Total business weighting	**50.00**	**50.00**
Individual objectives	**37.50**	**37.50**
Safety Rio Tinto Group / Product group	**12.50**	**12.50**
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
Total individual weighting	**50.00**	**50.00**
TOTAL (business + individual)	**100.00**	**100.00**

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 2010 onwards

	Executive directors and Group executives %	PGCEOs %

Business measures Rio Tinto Group*	**52.50**	**21.00**
Earnings flexed / unflexed (50% / 50%)*	26.25	10.50
Cash flow flexed / unflexed (50% / 50%)*	26.25	10.50
Business measures Product group*		**31.50**
Earnings flexed / unflexed (50% / 50%)*		15.75
Cash flow flexed / unflexed (50% / 50%)*		15.75
Safety Rio Tinto Group / Product group**	**17.50**	**17.50**
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
Total business weighting	**70.00**	**70.00**
Individual objectives	30.00	30.00
Total individual weighting	**30.00**	**30.00**