

BHP BILLITON LTD  
Form 20-F  
September 15, 2008  
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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 20-F**

(Mark One)

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED 30 JUNE 2008

OR

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

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 \_\_\_\_\_

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 001-09526

**BHP BILLITON LIMITED**

**(ABN 49 004 028 077)**

(Exact name of Registrant as specified in its charter)

**VICTORIA, AUSTRALIA**

(Jurisdiction of incorporation or organisation)

**180 LONSDALE STREET, MELBOURNE, VICTORIA**

**3000 AUSTRALIA**

(Address of principal executive offices)

Securities registered or to be registered pursuant to section 12(b) of the Act.

Commission file number: 001-31714

**BHP BILLITON PLC**

**(REG. NO. 3196209)**

(Exact name of Registrant as specified in its charter)

**ENGLAND AND WALES**

(Jurisdiction of incorporation or organisation)

**NEATHOUSE PLACE, VICTORIA, LONDON, UNITED**

**KINGDOM**

(Address of principal executive offices)

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<u>Title of each class</u>	<u>Name of each exchange on which registered</u>	<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
American Depositary Shares*	New York Stock Exchange	American Depositary Shares*	New York Stock Exchange
Ordinary Shares**	New York Stock Exchange	Ordinary Shares, nominal value US\$0.50 each**	New York Stock Exchange

\* Evidenced by American Depositary Receipts. Each American Depositary Receipt represents two ordinary shares of BHP Billiton Limited or BHP Billiton Plc, as the case may be.

\*\* Not for trading, but only in connection with the listing of the applicable American Depositary Shares.

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

None

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

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.

	<u>BHP Billiton Limited</u>	<u>BHP Billiton Plc</u>
Fully Paid Ordinary Shares	3,358,359,496	2,231,121,202

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

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

Yes  No

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 registrant (1) has 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 registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

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

Large accelerated filer  Accelerated filer  Non-accelerated filer

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

U.S. GAAP  International Financial Reporting Standards as issued by the International Accounting Standards Board  Other

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

Item 17  Item 18

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

Yes  No

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<b>12.</b>	<b>Description of securities other than equity securities</b>	Not applicable
<b>13.</b>	<b>Defaults, dividend arrearages and delinquencies</b>	There have been no defaults, dividend arrearages or delinquencies
<b>14.</b>	<b>Material modifications to the rights of security holders and use of proceeds</b>	There have been no material modifications to the rights of security holders and use of proceeds since our last Annual Report
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### **Information Relating to the US Offer for Rio Tinto plc**

BHP Billiton Limited and BHP Billiton Plc ( BHP Billiton ) plan to register the offer and sale of securities it would issue to Rio Tinto plc US shareholders and Rio Tinto plc ADS holders by filing with the U.S. Securities and Exchange Commission (the SEC ) a Registration Statement (the Registration Statement ), which will contain a prospectus (the Prospectus ), as well as other relevant materials. No such materials have yet been filed. This communication is not a substitute for any Registration Statement or Prospectus that BHP Billiton may file with the SEC.

U.S. INVESTORS AND U.S. HOLDERS OF RIO TINTO PLC SECURITIES AND ALL HOLDERS OF RIO TINTO PLC ADSs ARE URGED TO READ ANY REGISTRATION STATEMENT, PROSPECTUS AND ANY OTHER DOCUMENTS MADE AVAILABLE TO THEM AND/OR FILED WITH THE SEC REGARDING THE POTENTIAL TRANSACTION, AS WELL AS ANY AMENDMENTS AND SUPPLEMENTS TO THOSE DOCUMENTS, WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION.

Investors and security holders will be able to obtain a free copy of the Registration Statement and the Prospectus as well as other relevant documents filed with the SEC at the SEC s website (<http://www.sec.gov>), once such documents are filed with the SEC. Copies of such documents may also be obtained from BHP Billiton without charge, once they are filed with the SEC.

### **Information for US Holders of Rio Tinto Limited Shares**

BHP Billiton Limited is not required to, and does not plan to, prepare and file with the SEC a registration statement in respect of the Rio Tinto Limited Offer. Accordingly, Rio Tinto Limited shareholders should carefully consider the following:

The Rio Tinto Limited Offer will be an exchange offer made for the securities of a foreign company. Such offer is subject to disclosure requirements of a foreign country that are different from those of the United States. Financial statements included in the document will be prepared in accordance with foreign accounting standards that may not be comparable to the financial statements of United States companies.

### **Information Relating to the US Offer for Rio Tinto plc and the Rio Tinto Limited Offer for Rio Tinto shareholders located in the US**

It may be difficult for you to enforce your rights and any claim you may have arising under the U.S. federal securities laws, since the issuers are located in a foreign country, and some or all of their officers and directors may be residents of foreign countries. You may not be able to sue a foreign company or its officers or directors in a foreign court for violations of the U.S. securities laws. It may be difficult to compel a foreign company and its affiliates to subject themselves to a U.S. court s judgment.

You should be aware that BHP Billiton may purchase securities of either Rio Tinto plc or Rio Tinto Limited otherwise than under the exchange offer, such as in open market or privately negotiated purchases.

This Report is issued subject to the Important Notices appearing on page 188 of this Report.

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### **1 KEY INFORMATION**

#### **1.1 Our business**

We are the world's largest diversified natural resources company, our objective being to create long-term value through the discovery, development and conversion of natural resources, and the provision of innovative customer and market-focused solutions.

We have significant businesses producing alumina and aluminium, copper, energy (thermal) coal, iron ore, nickel, manganese, metallurgical coal, oil and gas and uranium, as well as gold, zinc, lead, silver and diamonds. We have approximately 41,000 employees, and 61,000 contractors, working in more than 100 operations in over 25 countries.

The Group is headquartered in Melbourne, Australia, and consists of the BHP Billiton Limited Group and the BHP Billiton Plc Group as a combined enterprise, following the completion of the Dual Listed Company (DLC) merger in June 2001. BHP Billiton Limited and BHP Billiton Plc have each retained their separate corporate identities and maintained their separate stock exchange listings, but they are operated and managed as if they are a single unified economic entity, with their boards and senior executive management comprising the same people.

BHP Billiton Limited has a primary listing on the Australian Securities Exchange (ASX) in Australia and secondary listings on the Frankfurt Stock Exchange in Germany and the Zurich Stock Exchange in Switzerland. BHP Billiton Plc has a primary listing on the London Stock Exchange (LSE) in the UK and a secondary listing on the Johannesburg Stock Exchange in South Africa. In addition, BHP Billiton Limited American Depositary Receipts (ADRs) and BHP Billiton Plc ADRs trade on the New York Stock Exchange (NYSE) in the US.

As at 30 June 2008, we had a market capitalisation of approximately US\$225 billion. For the year ended 30 June 2008, we reported revenue of US\$59.5 billion, profit from operations of US\$24.1 billion, net profit attributable to shareholders of US\$15.4 billion and net operating cash flow of US\$18.2 billion.

We operate nine Customer Sector Groups (CSGs) aligned with the commodities which we extract and market, being:

Petroleum

Aluminium

Base Metals

Diamonds and Specialty Products

Stainless Steel Materials

Iron Ore

Manganese

Metallurgical Coal

Energy Coal

**Pre-conditional offers for Rio Tinto**

On 6 February 2008, we announced the terms of two inter-conditional offers for the entire ordinary share capital of Rio Tinto plc and Rio Tinto Limited, which, together with their respective subsidiaries operate as a single economic entity under a dual listed company structure known as Rio Tinto.

Rio Tinto is a leading international mining group, producing alumina and aluminium, bauxite, copper, diamonds, iron ore, metallurgical and energy coal and uranium as well as other base metals and industrial minerals. In 2007, Rio Tinto acquired Alcan, Inc., making its aluminium product group a global leader in aluminium. The total cost of the acquisition amounted to US\$38.7 billion in cash, including fees.

Under the announced offers, we will offer 3.4 BHP Billiton shares for each Rio Tinto share tendered.

The offers are subject to certain pre-conditions relating to merger control and regulatory approvals in a number of jurisdictions, including the approval of anti-trust authorities in the European Union, the United States, Australia, Canada and South Africa and foreign investment authorities in Australia. On 2 July 2008, the US Department of Justice and the Federal Trade Commission granted early termination of the Hart-Scott-Rodino waiting period for the offers, which satisfied part of the merger control pre-conditions. We

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can only invoke a pre-condition to allow the offers not to proceed or to be withdrawn where it is of material significance to us in the context of the offers and the UK Panel on Takeovers and Mergers has given its prior approval.

Once the pre-conditions have been satisfied or waived, we will be obliged to make the offers on the terms announced (or terms not substantially less favourable to Rio Tinto shareholders). The offers will be subject to certain conditions being satisfied or waived, including:

acceptances for more than 50 per cent of the ordinary shares in Rio Tinto plc and for more than 50 per cent of the publicly held shares in Rio Tinto Limited,

the passing by BHP Billiton shareholders of all necessary resolutions to implement and effect the offers, and

the receipt of all necessary outstanding regulatory approvals.

We believe the combination of BHP Billiton and Rio Tinto is a logical and compelling combination for both companies and will unlock unique value and substantial benefits to BHP Billiton shareholders and Rio Tinto shareholders. If we are successful in acquiring all of the shares of Rio Tinto on the announced terms, our current intention is to return up to US\$30 billion to shareholders through a share buyback within 12 months of completion of the acquisition.

## **1.2 Chairman's Review**

This year, we reported another record profit of US\$15.4 billion, the seventh consecutive full-year profit increase. This represents a 602 per cent increase in attributable profit since 2001. Over the same period, Total Shareholder Returns, the movement in our share price plus dividends, have increased by 863 per cent, reflecting progressive dividend increases and the market value of the Company. We also rebased our dividend for the second successive year. This represents a 150 per cent increase over the past three years.

Unfortunately, mining stocks have seen a significant de-rating since May this year on the back of short-term uncertainty. This is disappointing for the management and shareholders of BHP Billiton.

While we expect commodity markets to remain volatile in the short term, we are confident that longer-term market fundamentals should support growth in commodity demand and, therefore, our revenues.

Margins and cash flow will be impacted by cost inflation. But our strategy to ensure we have a suite of long-life, low-cost assets, diversified by geography and commodity, that can be expanded and are largely export oriented, is proving successful at delivering consistent results for all our stakeholders.

To fully appreciate the role BHP Billiton and the resources industry generally is playing today, it is essential to look at what is happening to the world's economies.

Central to the world's economic growth is the development of the new economies – China in particular, Russia, India and, to a lesser extent, Brazil. Counteracting these forces is the relative shrinkage of the United States' economy and the lessening influence of the United Kingdom and Europe. Asia is becoming increasingly dominant, today accounting for nearly 30 per cent of global Gross Domestic Product (GDP).

These economic shifts are having many consequences. For BHP Billiton, rapid and continuing Asian growth has put pressure on demand for our products, which are essential for the building and production of city infrastructure and personal goods that characterise Asia's urbanisation and industrialisation.

I have no doubt that economic growth in the Asian region will slow at some point but, if I look at China specifically, the slow down is concentrated in regions oriented to the light export sector. The sectors of the economy oriented more towards domestic

consumption are still performing well despite increasing input costs, particularly for energy.

We expect Asian demand for our products to continue. Our response has been to streamline our business to enable us to produce as much product as fast as possible within the non-negotiable framework of the highest safety and environmental standards.

In operating our business at full capacity and continually seeking opportunities to increase the volumes of product available to our customers, it is the Board's duty to ensure we are creating real and tangible value for shareholders. We are proud to report that during the year we continued to deliver new projects to boost product volumes and we achieved strong profit margins across our businesses.

It is not only demand for our products that is being impacted by global economic shifts. As the world's largest diversified resources company, we are watching the creation of competitor companies that are spearheading the economic emergence of countries like Russia, Brazil and China.

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It is in this global context that the Board endorsed a proposal to combine BHP Billiton and Rio Tinto, two leading resources companies that together could help meet the developing economies' demand for resources better and faster than the two companies do apart. A combined company would have a greater ability to develop the next generation of large-scale projects to provide greater volumes of product for the benefit of its customers, the communities in which it operates and its shareholders.

In making the pre-conditional offer for Rio Tinto, the Board remains absolutely focused on value for shareholders. We are confident that both sets of shareholders would share the value of a combined company.

On behalf of the Board, I want to thank our senior management team for their efforts this year. They have performed magnificently and, under the new leadership of Marius Kloppers, the Company has stepped up efforts to meet a new realm of global challenges and opportunities.

## **BOARD RENEWAL**

Building an exceptional board is a cornerstone of an effective corporate governance system and planning for board renewal is a continuous process.

The process of putting together the best board for the business has to start with the business strategy and an assessment of the strengths and weaknesses of current members. New non-executive Directors must fill an essential role in line with the strategic intent of the business and bring to the Company the skills determined by the Board.

Attracting exceptional people will not of itself create exceptional directors; the candidates have to fit together as a team.

BHP Billiton has an exceptional group of high-performing, skilful, professional people, diverse in knowledge, gender and geography, who have overseen incredible growth in the business over the last seven years.

The tone at the top and within the Board has fostered an environment in which we are committed to high ethical standards, fairness, full compliance with legal requirements and resistance to market pressures for short-term results.

During the year, we engaged external search firms to assist with Board renewal, which resulted in the appointment of David Morgan, Keith Rumble and Alan Boeckmann. These non-executive Directors have the required functional expertise; they are independent of thought and satisfy the independence test of the various jurisdictional codes of corporate governance.

We also completed a review of the Board Committees, including an examination of the respective Committee charters, and a performance review of each Director, including the Chairman, to ensure that our Board criteria is maintained. These reviews were facilitated by external advisers.

In conclusion, it has been a stellar year for the Company and its stakeholders and I compliment my Board colleagues and senior management team for their commitment and dedication to the delivery of our strategy.

## **1.3 Chief Executive Officer's Report**

BHP Billiton shareholders can look back on the 2008 financial year with a real sense of pride in what we've achieved and in the performance of our people.

Since my appointment as CEO in October 2007, we have continued to follow our strategy to own and operate world-class assets across a diverse range of mineral, metal and energy products, focused on the upstream end of the production process. From the combination of our strategy, the efforts of our people and a favorable commodity price environment, we have been able to deliver record financial performance.

While we can report financial success, I regret to report we have not performed well on safety. In FY2008, 11 of our employees died at work. Many more lives will have been impacted, some forever, by these tragic and avoidable events. We have reflected deeply on what more we must do to reach our goal of Zero Harm. In FY2009, we are making even greater efforts to improve our safety performance.

Despite turbulent global economic conditions, we continue to see enormous opportunity for the Company. While continuing to further our existing strategy, we have refined our operational focus in order to give maximum clarity of responsibility to our operating units. We are also embracing the concept of simplicity even more deeply, ensuring that we focus our effort and resources on key opportunities and value drivers. For our shareholders, this means the Company is easier to understand, more focused and more valuable.

In the past year, our strategy has produced stronger annual production in 13 of our commodities, with record production in seven of those. This was achieved in an environment of industry-wide supply disruptions and input cost pressures. Our strong track record of project delivery also continued through the year, enabling, for example, our Western Australia Iron Ore business to post an eighth consecutive annual production record. A record performance in our Petroleum business reflected the successful commissioning of three new major projects. We expect volume growth from our Petroleum business to continue at around 10 per cent a year, a significant value creator at a time of historically high oil prices.



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Ten major projects, spanning five commodities, started production during the year. The Board approved a further seven for development, bringing our total number of projects in either execution or feasibility to 28, representing an expected capital investment of US\$24.8 billion. We also have other medium-term growth options with expected capital commitments in excess of US\$90 billion, spanning our existing commodity range and beyond.

Our results were outstanding in the context of a challenging supply environment which was characterised by unexpected disruptions, rising input prices, skills shortages and the further devaluation of the US dollar. Our strong performance demonstrates the power of our uniquely diversified and high-margin portfolio across the energy, steelmaking and non-ferrous product suites.

Given this future growth pipeline, you may question why we are pursuing a combination with Rio Tinto. Within our industry, the two companies are uniquely complementary, and, as such, we believe a combined company would unlock synergies and provide greater value than the two companies can provide separately. BHP Billiton does not need Rio Tinto to have a great future, but we believe the two companies combined will be better placed to meet the world's future need for our products.

We have a critical role in providing the raw materials for growth that so many economies need; economies going through industrialisation and urbanisation on a scale and intensity not experienced before. We are resourcing the future.

I have been fortunate to take the helm of a well-run business, focused on its customers' needs, with a great team responding well to the opportunities for our sector. In a year's time, I hope to report we have been able to improve our Company even further.

## 1.4 Selected key measures

### 1.4.1 Financial information

Our selected financial information reflects the operations of the BHP Billiton Group, and should be read in conjunction with the 2008 financial statements, together with the accompanying notes.

We prepare our financial statements in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board, and as outlined in note 1 Accounting Policies to the financial statements. We publish our consolidated financial statements in US dollars.

	2008	2007 <sup>(a)</sup>	2006 <sup>(a)</sup>	2005 <sup>(a)</sup>
<b>Consolidated Income Statement (US\$M except per share data)</b>				
Revenue	59,473	47,473	39,099	31,150
Profit from operations	24,145	19,724	15,716	9,810
Profit attributable to members of BHP Billiton Group	15,390	13,416	10,450	6,396
Dividends per ordinary share paid during the period (US cents)	56.0	38.5	32.0	23.0
Dividends per ordinary share declared in respect of the period (US cents)	70.0	47.0	36.0	28.0
Earnings per ordinary share (basic) (US cents) <sup>(b)</sup>	275.3	229.5	173.2	104.4
Earnings per ordinary share (diluted) (US cents) <sup>(b)</sup>	275.1	229.0	172.4	104.0
Number of ordinary shares (millions)				
At period end	5,589	5,724	5,964	6,056
Weighted average	5,590	5,846	6,035	6,124
Diluted	5,605	5,866	6,066	6,156
<b>Consolidated Balance Sheet (US\$M)</b>				
Total assets	75,889	61,404	51,343	45,077
Share capital	2,861	2,922	3,242	2,845
Total equity attributable to members of BHP Billiton Group	38,335	29,667	24,218	17,575
<b>Other financial information</b>				
Net operating cash flow (US\$M)	18,159	15,957	11,325	9,117
Gearing <sup>(c)</sup>	17.8%	25.0%	27.2%	32.8%

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- (a) On 1 July 2007, the Group adopted the policy of recognising its proportionate interest in the assets, liabilities, revenues and expenses of jointly controlled entities within each applicable line item of the financial statements. All such interests were previously recognised using the equity method. Comparative figures for the years 2007 to 2005 that are affected by the policy change have been restated. Total assets for 2006 and 2005, Profit from operations for 2005 and Net operating cash flow for 2005 have been restated but are unaudited.
- (b) The calculation of the number of ordinary shares used in the computation of basic earnings per share is the aggregate of the weighted average number of ordinary shares outstanding during the period of BHP Billiton Limited and BHP Billiton Plc after deduction of the number of shares held by the Billiton share repurchase scheme and the Billiton Employee Share Ownership Trust, the BHP Performance Share Plan Trust and the BHP Bonus Equity Plan Trust and adjusting for the BHP Billiton Limited bonus share issue. Included in the calculation of fully diluted earnings per share are shares and options contingently issuable under Employee Share Ownership Plans.
- (c) Refer to section 10 Glossary for definitions

### **1.4.2 Operational information**

Our Board and Group Management Committee monitor a range of financial and operational performance indicators, reported on a monthly basis, to measure performance over time. We also monitor a comprehensive set of health, safety, environment and community contribution indicators.

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	2008	2007	2006
<b>People and Licence to operate - Health, safety, environment and community</b>			
Total Recordable Injury Frequency Rate (TRIFR) <sup>(a)</sup>	5.9	7.4	8.7
Voluntary community contribution (US\$M) <sup>(a)</sup>	141.0	103.4	81.3
<b>Production</b>			
Total petroleum products (million barrels of oil equivalent)	129.50	116.19	117.36
Alumina ( 000 tonnes)	4,554	4,460	4,187
Aluminium ( 000 tonnes)	1,298	1,340	1,362
Copper cathode and concentrate ( 000 tonnes)	1,375.5	1,250.1	1,267.8
Nickel ( 000 tonnes)	167.9	187.2	176.2
Iron ore ( 000 tonnes)	112,260	99,424	97,072
Metallurgical coal ( 000 tonnes)	35,193	38,429	35,643
Energy coal ( 000 tonnes)	80,868	87,025	85,756

(a) Refer to section 10 Glossary for definitions

**1.5 Risk factors**

We believe that, because of the international scope of our operations and the industries in which we are engaged, there are numerous factors which may have an effect on our results and operations. The following describes the material risks that could affect the BHP Billiton Group.

***Fluctuations in commodity prices may negatively impact our results***

The prices we obtain for our oil, gas, minerals and other commodities are determined by, or linked to, prices in world markets, which have historically been subject to substantial variations. The Group's usual policy is to sell its products at the prevailing market prices. The diversity provided by the Group's broad portfolio of commodities may not fully insulate the effects of price changes. Fluctuations in commodity prices can occur due to sustained price shifts reflecting underlying global economic and geopolitical factors, industry demand and supply balances, product substitution and national tariffs. Additionally, the volatility in prices for most of our commodities will occur. The synchronisation of global commodity markets and influence of demand from China has in recent years impacted and may continue to impact price volatility. The impact on global economic growth, particularly in the developed economies, of the US sub-prime-induced global liquidity crisis may impact demand and prices for commodities. The influence of hedge and other financial investment funds participating in commodity markets has increased in recent years contributing to higher levels of price volatility. The impact of potential longer-term sustained price shifts and shorter-term price volatility creates the risk that our financial and operating results and asset values will be materially and adversely affected by unforeseen declines in the prevailing prices of our products.

***Our profits may be negatively affected by currency exchange rate fluctuations***

Our assets, earnings and cash flows are influenced by a wide variety of currencies due to the geographic diversity of the countries in which we operate. Fluctuations in the exchange rates of those currencies may have a significant impact on our financial results. The US dollar is the currency in which the majority of our sales are denominated. Operating costs are influenced by the currencies of those countries where our mines and processing plants are located and also by those currencies in which the costs of imported equipment and services are determined. The Australian dollar, South African rand, Chilean peso, Brazilian real and US dollar are the most important currencies influencing our operating costs. Given the dominant role of the US currency in our affairs, the US dollar is the currency in which we present financial performance. It is also the natural currency for borrowing and holding surplus cash. We do not generally believe that active currency hedging provides long-term benefits to our shareholders. We may consider currency protection measures appropriate in specific commercial circumstances, subject to strict limits established by our Board. Therefore, in any particular year, currency fluctuations may have a significant impact on our financial results.

***Failure to discover new reserves, maintain or enhance existing reserves or develop new operations could negatively affect our future results and financial condition***

The increased demand for commodities in recent years has resulted in existing reserves being depleted at an accelerated rate. Because our revenues and profits are related to our oil and gas and minerals operations, our results and financial conditions are directly related to the success of our exploration and acquisition efforts, and our ability to replace existing reserves. The depletion of reserves has necessitated increased exploration adjacent to established operations and development of new operations in less-developed countries. Additionally these activities may increase land tenure, infrastructure and related political risks. The rapid growth in demand for mining and petroleum industry related technical skills, supplies and critical equipment has led to shortages and delays in these areas. A failure in our ability to discover new reserves, enhance existing reserves or develop new operations in sufficient quantities to maintain or grow the current level of our reserves could negatively affect our results, financial condition and prospects.

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There are numerous uncertainties inherent in estimating ore and oil and gas reserves and geological, technical and economic assumptions that are valid at the time of estimation may change significantly when new information becomes available. Reserve restatements could negatively affect our reputation, results, financial condition and prospects.

### ***Reduction in Chinese demand may negatively impact our results***

The Chinese market has become a significant source of global demand for commodities. China now represents in excess of 53 per cent of global seaborne iron ore demand, 25 per cent of copper demand, 24 per cent of nickel demand and 16 per cent of energy demand. China's demand for these commodities has been driving global materials demand over the past decade.

While this increase represents a significant business opportunity, our exposure to China's economic fortunes and economic policies has increased. Sales into China generated US\$11.7 billion or 19.8 per cent of revenue in the year ended 30 June 2008.

In recent years, strong economic growth and infrastructure development in China has resulted in higher prices for the commodities we produce. A slowing in China's economic growth, potentially impacted by slowing developed economies, could result in lower prices for our products and therefore reduce our revenues.

In response to its increased demand for commodities, China is increasingly seeking strategic self-sufficiency in key commodities, including investments in additional developments in other countries. These investments may impact future commodity demand and supply balances and prices.

### ***Actions by governments or political events in the countries in which we operate could have a negative impact on our business***

We have operations in many countries around the globe some of which have varying degrees of political and commercial stability. We operate in emerging markets, which may involve additional risks that could have an adverse impact upon the profitability of an operation. These risks could include terrorism, civil unrest, nationalisation, renegotiation or nullification of existing contracts, leases, permits or other agreements, and changes in laws and policy as well as other unforeseeable risks. Risks relating to bribery and corruption may be prevalent in some of the countries in which we operate. If one or more of these risks occurs at one of our major projects, it could have a negative effect on the operations in those countries as well as the Group's overall operating results and financial condition.

Our business could be adversely affected by new government regulation such as controls on imports, exports and prices, new forms or rates of taxation and royalties. Increasing requirements relating to regulatory, environmental and social approvals can potentially result in significant delays in construction and may adversely impact upon the economics of new mining and oil and gas projects, the expansion of existing operations and results of our operations.

Infrastructure such as rail, ports, power and water is critical to our business operations. We have operations or potential development projects in countries where government provided infrastructure or regulatory regimes for access to infrastructure, including our own privately operated infrastructure, may be inadequate or uncertain. These may adversely impact the efficient operations and expansion of our businesses.

In South Africa, the Mineral and Petroleum Resources Development Act (2002) (MPRDA) came into effect on 1 May 2004. The law provides for the conversion of existing mining rights (so called Old Order Rights) to rights under the new regime (New Order Rights) subject to certain undertakings to be made by the company applying for such conversion. The Mining Charter requires that mining companies achieve 15 per cent ownership by historically disadvantaged South Africans of South African mining assets within five years and 26 per cent ownership within 10 years. If we are unable to convert our South African mining rights in accordance with the MPRDA and the Mining Charter, we could lose some of those rights.

We operate in several countries where ownership of land is uncertain and where disputes may arise in relation to ownership. In Australia, the Native Title Act (1993) provides for the establishment and recognition of native title under certain circumstances. In South Africa, the Extension of Security of Tenure Act (1997) and the Restitution of Land Rights Act (1994) provide for various landholding rights. Such legislation could negatively affect new or existing projects.

### ***We may not be able to successfully integrate our acquired businesses***

We have grown our business in part through acquisitions. We expect that some of our future growth will stem from acquisitions. There are numerous risks encountered in business combinations. These include adverse regulatory conditions and obligations, commercial objectives not achieved due to minority interests, unforeseen liabilities arising from the acquired businesses, retention of key staff, anticipated synergies and cost savings being delayed or not being achieved, uncertainty in sales proceeds from planned divestments, and planned expansion projects are delayed or higher cost than anticipated. These factors could negatively affect our financial condition and results of operations.

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### ***We may not recover our investments in mining and oil and gas projects***

Our operations may be impacted by changed market or industry structures, commodity prices, technical operating difficulties, inability to recover our mineral, oil or gas reserves and increased operating cost levels. These may impact the ability for assets to recover their historical investment and may require financial write-downs adversely impacting our financial results.

### ***Our non-controlled assets may not comply with our standards***

Some of our assets are controlled and managed by joint venture partners or by other companies. Some joint venture partners may have divergent business objectives which may impact business and financial results. Management of our non-controlled assets may not comply with our management and operating standards, controls and procedures (including health, safety, environment). Failure to adopt equivalent standards, controls and procedures at these assets could lead to higher costs and reduced production and adversely impact our results and reputation.

### ***Operating cost pressures and shortages could negatively impact our operations and expansion plans***

The strong commodity cycle and large numbers of projects being developed in the resources industry has led to increased demand for and shortages in skilled personnel, contractors, materials and supplies that are required as critical inputs to our existing operations and planned developments. Labour unions may seek to secure an increased share of the economic rent in the current environment. A number of key cost inputs consumed in our operations are commodity price-linked and have consequently been impacted by the higher commodity price environment.

A number of our operations are energy or water intensive and, as a result, the Group's costs and earnings could be adversely affected by rising costs or by supply interruptions. These could include: the unavailability of energy, fuel or water due to a variety of reasons including fluctuations in climate, significant increase in costs, inadequate infrastructure capacity, interruptions in supply due to equipment failure or other causes, and the inability to extend supply contracts on economical terms.

These factors have led, and could continue to lead to, increased capital and operating costs at existing operations, as well as impacting the cost and schedule of projects under development. Industrial action may impact our operations resulting in lost production and revenues.

### ***Health, safety and environmental exposures and related regulations may impact our operations and reputation negatively***

The nature of the industries in which we operate means that our activities are highly regulated by health, safety and environmental laws. As regulatory standards and expectations are constantly developing, we may be exposed to increased litigation, compliance costs and unforeseen environmental remediation expenses.

Potential health, safety and environmental events that may materially impact our operations include rockfall incidents in underground mining operations, aircraft incidents, light vehicle incidents, explosions or gas leaks, incidents involving mobile equipment, uncontrolled tailings breaches or escape of polluting substances.

Longer-term health impacts may arise due to unanticipated workplace exposures by employees or site contractors. These effects may create future financial compensation obligations.

We provide for mine and site remediation. We have mine closure plans for all of our operating and closed mine sites. Changes in regulatory or community expectations may result in the relevant plans not being adequate. This may impact financial provisioning and costs at the affected operations.

We contribute to the communities in which we operate by providing skilled employment opportunities, salaries and wages, taxes and royalties and community development programs. Notwithstanding these actions, local communities may become dissatisfied with the impact of our operations, potentially affecting costs and production, and in extreme cases viability.

Legislation requiring manufacturers, importers and downstream users of chemical substances, including metals and minerals, to establish that the substances can be used without negatively affecting health or the environment may impact our operations and markets. These potential compliance costs, litigation expenses, regulatory delays, remediation expenses and operational costs

could negatively affect our financial results.

We may continue to be exposed to increased operational costs due to the costs and lost time associated with the HIV/AIDS and malaria infection rate mainly within our African workforce. Because we operate globally, we may be affected by potential avian flu outbreaks in any of the regions in which we operate.

Despite our best efforts and best intentions, there remains a risk that health, safety and/or environmental incidents or accidents may occur that may negatively impact our reputation or licence to operate.



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### ***Unexpected natural and operational catastrophes may impact our operations***

We operate extractive, processing and logistical operations in many geographic locations both onshore and offshore. Our operational processes and geographic locations may be subject to operational accidents such as port and shipping incidents, fire and explosion, pitwall failures, loss of power supply, railroad incidents and mechanical failures. Our operations may also be subject to unexpected natural catastrophes such as earthquakes, flood, hurricanes and tsunamis. Existing business continuity plans and insurance arrangements may not provide protection for all of the costs that may arise from such events. The impact of these events could lead to disruptions in production and loss of facilities adversely affecting our financial results.

### ***Climate change and greenhouse effects may adversely impact our operations and markets***

We are a major producer of energy-related products such as energy coal, oil, gas, liquefied natural gas and uranium. Energy is also a significant input in a number of the Group's mining and processing operations. There is a substantial weight of scientific evidence concluding that CO<sub>2</sub> emissions from fossil fuel based energy consumption contribute to global warming, greenhouse effects and climate change.

A number of governments or governmental bodies have introduced or are contemplating regulatory change in response to the impacts of climate change. The December 1997 Kyoto Protocol established a set of greenhouse gas emission targets for developed countries that have ratified the Protocol. The European Union Emissions Trading System (EU ETS), which came into effect on 1 January 2005, has had an impact on greenhouse gas and energy-intensive businesses based in the EU. Our Petroleum assets in the UK are currently subject to the EU ETS as are our EU based customers. Elsewhere, there is current and emerging climate change regulation that will affect energy prices, demand and margins for carbon intensive products. The Australian Government's plan of action on climate change includes the introduction of a national emissions trading scheme by 2010 and a mandatory renewable energy target of 20 per cent by the year 2020. From a medium and long-term perspective, we are likely to see changes in the margins of our greenhouse-gas-intensive assets and energy-intensive assets as a result of regulatory impacts in the countries in which we operate. These regulatory mechanisms may be either voluntary or legislated and may impact our operations directly or indirectly via our customers. Inconsistency of regulations particularly between developed and developing countries may also change the attractiveness of the locations of some of our assets. Assessments of the potential impact of future climate change regulation are uncertain given the wide scope of potential regulatory change in the many countries in which we operate.

The physical impacts of climate change on our operations are highly uncertain and will be particular to the geographic circumstances. These may include changes in rainfall patterns, water shortages, rising sea levels, increased storm intensities, and higher average temperature levels. These effects may adversely impact the cost, production and financial performance of our operations.

### ***Our human resource talent pool may not be adequate to support the Group's growth***

The current strong commodity cycle and our pipeline of development projects have increased demand for highly skilled executives and staff with relevant industry and technical experience. The inability of the Group and industry to attract and retain such people may adversely impact our ability to adequately resource development projects and fill roles and vacancies in existing operations. Similar shortages have also impacted and may continue to affect key engineering, technical service, construction and maintenance contractors utilised by us in development projects and existing operations. These shortages may adversely impact the cost and schedule of development projects and the cost and efficiency of existing operations.

### ***Breaches in our information technology (IT) security processes may adversely impact the conduct of our business activities***

We maintain global IT and communication networks and applications to support our business activities. IT security processes protecting these systems are in place and subject to assessment as part of the review of internal control over financial reporting. These processes may not prevent future malicious action or fraud by individuals or groups, resulting in the corruption of operating systems, theft of commercially sensitive data, misappropriation of funds and disruptions to our business operations.

### ***A breach in our governance processes may lead to regulatory penalties and loss of reputation***

We operate in a global environment straddling multiple jurisdictions and complex regulatory frameworks. Our governance and compliance processes, which include the review of control over financial reporting, may not prevent future potential breaches of law, accounting or governance practice. Our business conduct and anti-trust protocols may not prevent instances of fraudulent behaviour and dishonesty nor guarantee compliance with legal or regulatory requirements. This may lead to regulatory fines, litigation, loss of operating licences or loss of reputation.

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**1.6 Forward looking statements**

This Annual Report contains forward looking statements, including statements regarding:

our proposal to acquire Rio Tinto and associated capital management initiatives

estimated reserves

trends in commodity prices

demand for commodities

plans, strategies and objectives of management

closure or divestment of certain operations or facilities (including associated costs)

anticipated production or construction commencement dates

expected costs or production output

anticipated productive lives of projects, mines and facilities

provisions and contingent liabilities.

Forward looking statements can be identified by the use of terminology such as intend , aim , project , anticipate , estimate , plan , believe , expect , may , should , will , continue or similar words. These statements discuss future expectations concerning the results of operations or financial condition, or provide other forward looking statements.

These forward looking statements are not guarantees or predictions of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this Annual Report. Readers are cautioned not to put undue reliance on forward looking statements.

For example, our future revenues from our operations, projects or mines described in this Annual Report will be based, in part, upon the market price of the minerals, metals or petroleum produced, which may vary significantly from current levels. These variations, if materially adverse, may affect the timing or the feasibility of the development of a particular project or the expansion of certain facilities or mines.

Other factors that may affect the actual construction or production commencement dates, costs or production output and anticipated lives of operations, mines or facilities include our ability to profitably produce and transport the minerals, petroleum and/or metals extracted to applicable markets; the impact of foreign currency exchange rates on the market prices of the minerals, petroleum or metals we produce; activities of government authorities in some of the countries where we are exploring or developing these projects, facilities or mines, including increases in taxes, changes in environmental and other regulations and political

uncertainty; and other factors identified in the description of the risk factors above.

We cannot assure you that our estimated economically recoverable reserve figures, closure or divestment of such operations or facilities, including associated costs, actual production or commencement dates, cost or production output or anticipated lives of the projects, mines and facilities discussed in this Annual Report, will not differ materially from the statements contained in this Annual Report.

Except as required by applicable regulations or by law, the Group does not undertake any obligation to publicly update or review any forward looking statements, whether as a result of new information or future events.

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**2 INFORMATION ON THE COMPANY**

**2.1 *BHP Billiton locations***

We extract and process minerals, oil and gas from our production operations located primarily in Australia, the Americas and southern Africa. We sell our product globally with our marketing activities centralised in Singapore, The Hague and Antwerp.

**Table of Contents****BHP Billiton Locations****Offices**

<b>Ref</b>	<b>Country</b>	<b>Location</b>
1	Angola	Saurimo <sup>(3)</sup>
2	Angola	Luanda <sup>(3)</sup>
3	Australia	Adelaide <sup>(2)</sup>
4	Australia	Brisbane <sup>(2)</sup> Melbourne <sup>(1) (2) (3)</sup>
5	Australia	(Global Headquarters)
6	Australia	Newcastle <sup>(2)</sup>
7	Australia	Perth <sup>(2) (3)</sup>
8	Belgium	Antwerp <sup>(2)</sup>
9	Brazil	Rio de Janeiro <sup>(2)(3)</sup>
10	Burundi	Bujumbura <sup>(3)</sup>
11	Canada	Vancouver <sup>(3)</sup>
12	Chile	Santiago <sup>(1) (2) (3)</sup>
13	China	Beijing <sup>(2) (3)</sup>
14	China	Lanzhou <sup>(2)</sup>
15	China	Shanghai <sup>(2)</sup>
16	Columbia	Bogota <sup>(3)</sup>
17	DRC	Kinshasa & Lubumbashi <sup>(3)</sup>
18	Gabon	Libreville & Franceville <sup>(3)</sup>
19	Guinea	Conakry <sup>(3)</sup>
20	India	New Delhi <sup>(2)</sup>
21	Indonesia	Jakarta <sup>(2)</sup>
22	Japan	Tokyo <sup>(2)</sup>
23	Kazakhstan	Almaty <sup>(3)</sup>
24	Korea	Seoul <sup>(2)</sup>
25	Liberia	Monrovia <sup>(3)</sup>
26	Mongolia	Ulaanbaatar <sup>(3)</sup>
27	Netherlands	The Hague <sup>(2)</sup>
28	New Caledonia	Noumea <sup>(2)</sup>
29	Philippines	Manila <sup>(2)</sup>
30	Russia	Moscow <sup>(3)</sup>
31	Singapore	Singapore <sup>(2) (3)</sup>
32	South Africa	Johannesburg <sup>(1) (2) (3)</sup>
33	South Africa	Richards Bay <sup>(2)</sup>
34	Switzerland	Baar <sup>(2)</sup>
35	UK	London <sup>(1)</sup>
36	UK	Sheffield <sup>(2)</sup>
37	US	Houston <sup>(1)(2)</sup>
38	US	Pittsburgh <sup>(2)</sup>

- (1) Corporate Centres  
(2) Marketing Offices  
(3) Minerals Exploration Offices

**Petroleum**

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<b>Ref</b>	<b>Country</b>	<b>Site/ Asset</b>	<b>Description</b>	<b>Ownership</b>
39	Algeria	Ohanet	Wet gas development	45%
40	Algeria	ROD	Onshore oil development, comprising development and production of six oil fields	45%
41	Australia	Bass Strait	Production of oil, condensate, LPG, natural gas and ethane	50%
42	Australia	Minerva	Operator of gas field development in the Otway Basin	90%
43	Australia	North West Shelf	One of Australia's largest resource projects, producing liquids, LNG and domestic gas	8.33-16.67%
44	Australia	Offshore Western Australia	Operator of Griffin and Stybarrow oil and gas development, and operator of Pyrenees project, currently under development	45-71.43%
45	Pakistan	Zamzama	Operator of onshore gas development	38.5%
46	Trinidad & Tobago	Angostura	Operator of oil and gas field	45%
47	UK	Bruce/Keith	Oil and gas production in the UK North Sea	16-31.83%
48	UK	Liverpool Bay	Operator of oil and gas developments in the Irish Sea	46.1%
49	US	Gulf of Mexico	Interests in several producing assets, including Atlantis, Neptune and Shenzi/Genghis Khan developments, and a significant exploration acreage position	4.95-100%

### Aluminium

<b>Ref</b>	<b>Country</b>	<b>Site/ Asset</b>	<b>Description</b>	<b>Ownership</b>
50	Australia	Worsley	Integrated alumina refinery/bauxite mine	86%
51	Brazil	Alumar	Alumina refinery and aluminium smelter	36-40%
52	Brazil	MRN	Bauxite mine	14.8%
53	Guinea	Guinea Alumina	Integrated alumina refinery/bauxite mine (currently in definition stage)	33.3%
54	Mozambi-que	Project Mozal	Aluminium smelter	47.1%
55	South Africa	Hillside/	Two aluminium smelters	100%
56	Suriname	Bayside Paranam	Alumina refinery and bauxite mines	45%

### Base Metals

<b>Ref</b>	<b>Country</b>	<b>Site/ Asset</b>	<b>Description</b>	<b>Ownership</b>
57	Australia	Cannington	Silver, lead and zinc mine in northwest Queensland	100%
58	Australia	Olympic Dam	Underground copper/uranium mine in South Australia	100%
59	Chile	Cerro Colorado	Open-cut mine producing copper cathode	100%
60	Chile	Escondida	Copper mines, located in northern Chile	57.5%
61	Chile	Spence	Open-cut mine producing copper cathode	100%
62	Peru	Antamina	Copper and zinc mine	33.75%
63	US	Pinto Valley	Copper mine	100%

### Diamonds and Specialty Products

<b>Ref</b>	<b>Country</b>	<b>Site/Asset</b>	<b>Description</b>	<b>Ownership</b>
64	Canada	EKATI	Diamond mine in Northwest Territories	80%

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65	Canada	Potash	Greenfield potash project near Saskatoon, Saskatchewan	100%
66	South Africa	Richards Bay Minerals	Integrated titanium smelter/mineral sands mine	50%

### Stainless Steel Materials

<i>Ref</i>	<i>Country</i>	<i>Site/Asset</i>	<i>Description</i>	<i>Ownership</i>
67	Australia	Nickel West	Nickel assets including Mt Keith and Leinster operations, Kalgoorlie nickel smelter and concentrator, Kwinana nickel refinery, Kambalda nickel concentrator, and Ravensthorpe nickel mine and processing facility	100%
68	Australia	Yabulu Refinery	Laterite nickel and cobalt processing plants northwest of Townsville	100%
69	Colombia	Cerro Matoso	Integrated ferronickel mining and smelting complex in northern Colombia	99.94%

### Iron Ore

<i>Ref</i>	<i>Country</i>	<i>Site/Asset</i>	<i>Description</i>	<i>Ownership</i>
70	Australia	Western Australia Iron Ore	Integrated mine, rail and port operations in the Pilbara	85-100%
71	Brazil	Samarco	Integrated mine, pipeline and port operations producing iron ore pellets	50%

### Manganese

<i>Ref</i>	<i>Country</i>	<i>Site/Asset</i>	<i>Description</i>	<i>Ownership</i>
72	Australia	GEMCO	Producer of manganese ore in the Northern Territory	60%
73	Australia	TEMCO	Producer of manganese alloys in Tasmania	60%
74	South Africa	Samancor Manganese	Integrated producer of manganese ore (Hotazel Manganese Mines), alloy (Metalloys) and manganese metal (Manganese Metal Company)	60%

### Metallurgical Coal

<i>Ref</i>	<i>Country</i>	<i>Site/Asset</i>	<i>Description</i>	<i>Ownership</i>
75	Australia	Illawarra Coal	Three underground coal mines supplying metallurgical coal primarily to steel industry	100%
76	Australia	Queensland Coal	Production of metallurgical coal for steel industry, including new loading terminal at Hay Point	50-80%
77	Indonesia	Maruwai	Deposit in central and east Kalimantan (currently in development) with first production expected mid-2009	100%

### Energy Coal

<i>Ref</i>	<i>Country</i>	<i>Site/Asset</i>	<i>Description</i>	<i>Ownership</i>
78	Australia	Hunter Valley Energy Coal	Mt Arthur Coal open-cut mine	100%
79	Colombia	Cerrejón	Export coal mine in La Guajira province	33.3%
80	South Africa	Energy Coal	Three energy coal mines	84-100%

South Africa



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81	US	New Mexico	Mine-mouth operations	100%
		Coal		

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### **2.2 Business overview**

#### **2.2.1 History and development**

Since 29 June 2001, we have operated under a Dual Listed Companies (DLC) structure. Under the DLC structure, the two parent companies, BHP Billiton Limited (formerly BHP Limited and before that The Broken Hill Proprietary Company Limited) and BHP Billiton Plc (formerly Billiton Plc) operate as a single economic entity, run by a unified Board and management team. More details of the DLC structure are located under section 2.12 Organisational structure of this Report.

BHP Billiton Limited was incorporated in 1885 and is registered in Australia with ABN 49 004 028 077. BHP Billiton Plc was incorporated in 1996 and is registered in England and Wales with registration number 3196209.

The registered office of BHP Billiton Limited is 180 Lonsdale Street, Melbourne, Victoria 3000, Australia, and its telephone number is 1300 55 47 57 (within Australia) or +61 3 9609 3333 (outside Australia). The registered office of BHP Billiton Plc is Neathouse Place, London SW1V 1BH, UK, and its telephone number is +44 20 7802 4000.

#### **2.2.2 Petroleum Customer Sector Group**

Our Petroleum CSG is a global oil and gas business with producing assets in six countries across six continents and exploration opportunities in a further six countries. If it were a stand-alone business, our Petroleum CSG would rank approximately 25th among listed oil and gas exploration and production companies (based on production volumes). We believe that being part of the BHP Billiton Group gives the business the financial resources, risk tolerance and global reach of a much larger company, enabling us to compete for access to large, complex opportunities with the industry super-majors. In addition, we have developed highly specialised capabilities in a number of areas, including deep water exploration and development. As a result, we are able to focus our exploration and development activities on large, potentially high-return opportunities, such as our current development projects in the Gulf of Mexico and offshore Western Australia.

We organise our Petroleum CSG on a functional basis, with exploration, development, production and marketing functions all led out of our Houston headquarters, using common systems and standards.

Our total oil and gas production in FY2008 was 129.5 million barrels of oil equivalent, an increase of 13 per cent over our total production of 115.05 million barrels of oil equivalent from continuing operations in FY2007. Given that our Atlantis project was ramping up during FY2008, our Neptune project in the Gulf of Mexico produced first oil in July 2008 and the Angel and North West Shelf Train 5 projects off Western Australia and the Shenzi project in the Gulf of Mexico are scheduled to commence operations in FY2009, we expect that our total production will continue to increase.

We sell our crude oil production to refiners around the world at market prices. Gas is generally marketed under long-term domestic contracts and we export LNG under long-term contracts. Almost three-quarters of our contracted LNG sales volumes are subject to contracts that are either within four years of expiry or contain provisions allowing prices to be reset. However, more than a quarter of our currently contracted volumes are subject to long-term fixed-price contracts, some of which were priced in a lower price environment. Our production assets are as follows:

##### **Bass Strait**

Together with our 50-50 joint venture partner, Esso Australia, a subsidiary of ExxonMobil, we have been producing oil and gas from Bass Strait, off the southeastern coast of the Australian mainland, for almost 40 years, having participated in the original discovery of hydrocarbons there in 1965. We dispatch the majority of our Bass Strait crude oil and condensate production to refineries along the east coast of Australia. Gas is piped ashore to our Longford processing facility, from where we sell our production to domestic distributors under inflation-linked contracts with periodic price reviews.

##### **North West Shelf**

We are a joint venture participant in the North West Shelf Project in Western Australia. The North West Shelf Project was developed in phases: the domestic gas phase, which supplies gas to the Western Australian domestic market mainly under long-term contracts, and a series of LNG expansion phases, which supply LNG to buyers in Japan, Korea and China under a series

of long-term contracts. We also produce LPG and condensate.

We are also a joint venture participant in four nearby oil fields. Both the North West Shelf gas and oil ventures are operated by Woodside Petroleum Ltd.

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### **Gulf of Mexico**

Our production in the Gulf of Mexico has expanded significantly, with the Atlantis field and the Genghis Khan portion of the Shenzi field coming on line in FY2008 and the Neptune field commencing production in July 2008. We now operate five fields in the Gulf of Mexico, and hold non-operating minority interests in a further three fields. We also own 25 per cent and 22 per cent respectively of the companies that own and operate the Caesar oil pipeline and the Cleopatra gas pipeline which transport oil and gas from the Green Canyon area, where a number of our fields are located, to connecting pipelines that transport product to the mainland. We deliver our oil production to refineries along the Gulf Coast of the United States. Our Shenzi project is scheduled to commence operations in FY2009.

### **Liverpool Bay and Bruce/Keith**

The Liverpool Bay integrated development consists of six offshore gas and oil fields in the Irish Sea, the Point of Ayr onshore processing plant in North Wales, and associated infrastructure. We deliver all of the Liverpool Bay gas by pipeline to E.ON's Connah's Quay power station. We own 46 per cent of and operate Liverpool Bay. We also hold a 16 per cent non-operating interest in the Bruce oil and gas field in the North Sea and operate the Keith field, a subsea tie-back, which is processed via the Bruce platform facilities.

### **Algeria**

Our Algerian assets consist of our effective 45 per cent interest in the Ohanet wet gas development and our 45 per cent interest in ROD, the production sharing contract which consists of six satellite oil fields that pump oil back to a dedicated processing train.

### **Zamzama**

We hold a 38.5 per cent interest in and operate the Zamzama gas project in Sindh province of Pakistan. During FY2008, Phase 2 of the project was completed. The design capacity of Zamzama is 470 MMcf/d of gas and 3,150 bbl/d of condensate. Gas is sold domestically.

### **Stybarrow**

During FY2008, first oil was produced at Stybarrow, a nine well subsea development in approximately 825 metres of water approximately 65 kilometres offshore north Western Australia. The project uses a floating production storage and offtake facility with capacity of approximately 80 Mbbbl of oil per day. We own 50 per cent of and operate the project.

### **Other Australia**

We are the operator of the Griffin project (45 per cent BHP Billiton) interest where oil and gas are produced via the Griffin venture, a floating production, storage and offloading facility. We pipe natural gas to shore, where it is delivered directly into a pipeline and sold domestically. We also operate the Minerva gas field located offshore Victoria in which we hold a 90 per cent interest.

### **Trinidad**

The Angostura project is an integrated oil and gas development located offshore east Trinidad. We are the operator of the field and have a 45 per cent interest in the production sharing contract for the project.

## **Information on Petroleum operations**

### *Significant oil and gas assets*

Production and reserve information for our most significant oil and gas assets are listed in the table below:

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Asset	Location	FY2008	Net Proved Reserves
		Net Production (MMboe)	(MMboe)
Bass Strait	Offshore SE Australia	41	484
North West Shelf	Offshore NW Australia	29	407
Atlantis	Gulf of Mexico	8	101
Shenzi/Genghis Khan	Gulf of Mexico	1	25
Liverpool Bay and Bruce/Keith	United Kingdom	12	40
Ohanet and ROD	Algeria	8	25

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The following table contains additional details of our production operations. This table should be read in conjunction with the production and reserve tables.

<b>Name, location and type of asset</b>	<b>Ownership and operation</b>	<b>Title/lease</b>	<b>Facilities</b>
<b>AUSTRALIA/ASIA</b>			
<b>Bass Strait</b>  Offshore Victoria, Australia  Oil and gas production	We hold a 50% interest in the Bass Strait fields.  Esso Australia owns the other 50% interest and is the operator.  Oil Basins Ltd holds a 2.5% royalty interest in 18 of the production licences.	The venture holds 20 <sup>1</sup> production licences and two retention leases issued by the Commonwealth of Australia with expiry dates ranging between 2009 and 2019.  <sup>1</sup> Includes one production licence with additional partner Santos Ltd	There are 20 producing fields with 21 offshore developments (14 steel jacket platforms, three subsea developments, two steel gravity based mono towers and two concrete gravity based platforms).  Onshore infrastructure includes the Longford Facility, which includes three gas plants and liquid processing facilities, interconnecting pipelines, the Long Island Point LPG and crude oil storage facilities and an ethane pipeline.  The Bass Strait production capacity is as follows:  Crude 200 Mbb/d  Gas 1,075 MMcf/d  LPG 5,150 tpd  Ethane 850 tpd
<b>North West Shelf (NWS) gas and gas liquids (LPG and condensate)</b>	We are a participant in the North West Shelf (NWS) Project, an unincorporated joint venture.	The venture holds nine production licences issued by the Commonwealth of Australia, of which	Production from the North Rankin and Perseus fields is currently processed through the North Rankin A platform, which has the capacity to produce 2,300 MMcf/d of gas and 60 Mbb/d of condensate.

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North Rankin, Goodwyn, Perseus, Echo-Yodel and Angel fields offshore, Dampier in northwestern Australia

Gas, LPG and condensate production and LNG liquefactions

We hold 8.33% of the original domestic gas joint venture. Our share of domestic gas production will progressively increase from 8.33% to 16.67% over the period from 2005 to approximately 2017. We also hold 16.67% of the Incremental Pipeline Gas (IPG) domestic gas joint venture, 16.67% of the original LNG joint venture, 12.5% of the China LNG joint venture, 16.67% of the LPG joint venture and approximately 15% of current condensate production.

Other participants in the respective NWS joint ventures are subsidiaries of Woodside Energy, Chevron, BP, Shell, Mitsubishi/Mitsui and the China National Offshore Oil Corporation.

Woodside Petroleum Ltd is the operator of the project.

six expire in 2022 and three expire five years after the end of production.

Production from the Goodwyn and Echo-Yodel fields is processed through the Goodwyn A platform, which has the capacity to produce 1,450 MMcf/d of gas and 110 Mbbbl/d of condensate. Four subsea wells in the Perseus field are tied into the Goodwyn A platform.

An onshore gas treatment plant at Withnell Bay has a current capacity to process approximately 600 MMcf/d of gas for the domestic market.

An existing four train LNG plant has the capacity to produce an average rate of 33,000 tonnes of LNG per day.

### **North West Shelf crude oil**

Approximately 30 kilometres northeast of the North Rankin gas and condensate field, offshore Western Australia, Australia

We hold a 16.67% working interest in oil production from these fields. The other 83.33% is held by Woodside Energy 33.34%, with BP Developments Australia, Chevron Australia, and Japan Australia LNG (MIMI) each holding 16.67%.

The venture holds three production licences issued by the Commonwealth of Australia, with expiry dates ranging between 2012 and 2018.

The oil is produced to a floating production storage and offloading unit, the Cossack Pioneer, which has a capacity of 140 Mbbbl/d and a storage capacity of 1.15 MMbbl of crude oil.

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<b>Name, location and type of asset</b>	<b>Ownership and operation</b>	<b>Title/lease</b>	<b>Facilities</b>
Crude oil production is from the Wanaea, Cossack, Lambert and Hermes oil fields	Woodside Petroleum Ltd is the operator of the project.		
<b>Griffin</b>  Situated in the Carnarvon Basin, 62 kilometres offshore Western Australia, Australia	We hold a 45% interest in the Griffin Venture. The other 55% is held by Mobil Exploration and Producing Australia (35%) and Inpex Alpha (20%).  We are the operator of the field.	The venture holds a production licence issued by the Commonwealth of Australia that expires in 2014. The licence may be renewed for a period covering five years after production ceases.	Oil and gas are produced via the Griffin venture, a floating production, storage and offloading facility. We pipe natural gas to shore, where it is delivered directly into a pipeline.  The Griffin venture has an original production design capacity of 80 Mbb/d of crude oil and 50 MMcf/d of gas.
<b>Minerva</b>  Comprises the Griffin, Chinook and Scindian offshore oil and gas fields.  Approximately 10 kilometres offshore in the Otway Basin of Victoria, Australia	We hold a 90% share of the Minerva venture. The other 10% is held by Santos (BOL) Pty Ltd.  We are the operator of the field.	The venture holds a production licence issued by the Commonwealth of Australia that expires five years after production ceases.	The Minerva development consists of two well completions in 60 metres of water. A single flow line transports gas to an onshore gas processing facility with an original production design capacity of 150 TJ/d and 600 bbl/d of condensate.
Single offshore gas reservoir with two compartments. Gas plant is situated approximately 4 kilometres inland from Port Campbell.			
<b>Stybarrow</b>  Situated in the Exmouth Sub-basin, 30 kilometres offshore Western Australia, Australia.	We own a 50% share of the Stybarrow venture. The other 50% interest is held by Woodside Energy.  We are the operator of the field.	The venture holds a production licence issued by the Commonwealth of Australia that expires five years after production ceases.	Oil is produced by the Stybarrow development which comprises of a floating production, storage and offshore loading facility, nine subsea well completions (including five producers, three water injectors and one gas injector) in 850 metres of water.



Comprises the Stybarrow and Eskdale oil and gas fields. The Stybarrow project achieved first oil production on 17 November 2007.

The Stybarrow facility has a crude oil production and storage capacity of 80 Mbb/d and 900 Mbbl respectively. Gas production is reinjected into the reservoirs.

**Zamzama**

Dadu Block, Sindh Province, Pakistan

We hold a 38.5% interest in the joint venture. The other 61.5% is owned by ENI Pakistan (M) Ltd (17.75%), PKP Exploration Ltd (9.375%), PKP Exploration Ltd 2 (9.375%), and Government Holdings (25%).

20-year development and production lease starting April 2002 from the Government of Pakistan (with an option to extend five years beyond the 20-year term).

Zamzama currently consists of five production wells and four process trains, with a total design capacity of 470 MMcf/d of gas and 3,150 bbl/d of condensate.

Onshore gas wells

We are the operator.

**AMERICAS**

**Atlantis (Green**

**Canyon 743)**

Gulf of Mexico, approximately 200

We hold a 44% working interest in the joint venture.

The other owner is BP (56%).

The venture holds a lease from the US as long as oil and gas are produced in paying quantities.

The production facility consists of a semi-submersible platform permanently moored in 2,155 metres of water.

The facility has nameplate processing

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<b>Name, location and type of asset</b>	<b>Ownership and operation</b>	<b>Title/lease</b>	<b>Facilities</b>
kilometres offshore of Fourchon, Louisiana, US	BP is the operator.		capacity of 200 Mbb/d of oil and 180 MMcf/d of gas.
Deepwater oil and gas field <b>Mad Dog (Green Canyon 782)</b>	We hold a 23.9% interest in the joint venture.  The other owners are BP (60.5%) and Chevron (15.6%).	The venture holds a lease from the US as long as oil and gas are produced in paying quantities.	Production commenced with the commissioning of wells and facilities in October 2007. The production facility consists of an integrated truss spar equipped with facilities for simultaneous production and drilling operations, permanently moored in 1,310 metres of water.
Gulf of Mexico, approximately 210 kilometres offshore of Fourchon, Louisiana, US	BP is the operator.		The facility has the capacity to process 100 Mbb/d of oil and 60 MMcf/d of gas.
Deepwater oil and gas field <b>West Cameron 76</b>	We hold a 33.76% interest in the joint venture.  The other owners are Eni Petroleum (40%), Merit Management Partners (15%) and Ridgewood Energy Company (11.24%).	The venture holds a lease from the US as long as oil and gas are produced in paying quantities.	The production facility consists of two conventional gas platforms with a capacity of 120 MMcf/d of gas and 800 bbl/d of condensate.
Gulf of Mexico, approximately 20 kilometres offshore, Central Louisiana, US			
Offshore gas and condensate fields <b>Genesis (Green Canyon 205)</b>	We are the operator. We hold a 4.95% interest in the joint venture.  The other owners are Chevron (56.67%) and ExxonMobil (38.38%).	The venture holds a lease from the US as long as oil and gas are produced in paying quantities.	The production facility consists of a floating cylindrical hull (spar) moored to the seabed with integrated drilling facilities and a capacity of 55 Mbb/d of oil and 72 MMcf/d of gas.
Gulf of Mexico, approximately 155 kilometres offshore of Fourchon, Louisiana, US			

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Chevron is the operator.

Deepwater oil and gas field

**Starlifter (West**

**Cameron 77)**

We hold a 30.95% interest in the joint venture.

The venture holds a lease from the US as long as oil and gas are produced in paying quantities.

The production facility consists of a single conventional gas platform with a capacity of 40 MMcf/d of gas and 450 bbl/d of condensate.

Gulf of Mexico, approximately 25 kilometres offshore, Central Louisiana, US

The other owners are McMoRan (33.75%), Seneca Resources (11.25%) Merit Management Partners (13.75%) and Ridgewood Energy Company (10.3%).

Offshore gas and condensate field

During the year Newfield Exploration sold its interest to McMoRan and tendered its resignation as operator.

Following approval by the Minerals Management Service in February 2008, we took over as successor operator.

**Mustang (West**

**Cameron 77)**

We hold a 43.66% interest in the joint venture.

The venture holds a lease from the US as long as oil and gas are produced in paying quantities.

The production facility consists of a single conventional gas platform with a capacity of 40 MMcf/d of gas and 450 bbl/d of condensate.

Gulf of Mexico, approximately 25

The other owners are Eni Petroleum (22.4%), Merit

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<b>Name, location and type of asset</b>	<b>Ownership and operation</b>	<b>Title/lease</b>	<b>Facilities</b>
kilometres offshore, Central Louisiana, US	Management Partners (19.4%) and Ridgewood Energy Company (14.54%).		
Offshore gas and condensate field	We are the operator.		
<b>Neptune</b>	We hold a 35% interest in the joint venture.	The venture holds a lease from the US as long as oil and gas are produced in paying quantities.	The project constructed a stand-alone tension-leg platform with a nominal capacity of 50 Mbb/d of oil and 50 MMcf/d of gas. First oil was achieved on 6 July 2008 and nominal production capacity of 50Mbb/d was achieved during the same month.
Gulf of Mexico, approximately 193 kilometres off the Louisiana coastline	The other owners are Marathon Oil (30%), Woodside Energy (20%) and Maxus US Exploration (15%).		
Deepwater oil and gas field	We are the operator.		
<b>Greater Angostura</b>	We hold a 45% interest in the joint venture.	The venture has entered into a production sharing contract with the Republic of Trinidad and Tobago that entitles the contractor to operate Angostura until 2021.	The Angostura development is an integrated oil and gas development. The infrastructure consists of a steel jacketed central processing platform with three satellite wellhead protector platforms and flow lines. A pipeline connects the processing platform to storage facilities at Guayaguayare, where an export pipeline has been installed to allow for offloading to tankers in Guayaguayare Bay.
Approximately 40 kilometres off the east coast of Trinidad	The other 55% is held by Total (30%) and Talisman Energy (25%).		
Shallow water oil and gas field	We are the operator.		
			The facility has the capacity to process 100 Mbb/d of oil.
<b>EUROPE/AFRICA/MIDDLE EAST</b>			
<b>Liverpool Bay</b>	We hold a 46.1% interest in the joint venture. The other 53.9% is held by Eni.	The joint venture holds three production licences issued by	The Liverpool Bay asset is an integrated development of six fields.

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Douglas and Douglas West oil fields, Hamilton, Hamilton North and Hamilton East gas fields, and Lennox oil and gas fields in the Irish Sea, approximately 10 kilometres off the northwest coast of England

We are the operator.

the Crown of the United Kingdom. One of these licences was extended in July 2007 for a further term which expires in 2025. The other licences expire in 2009 and 2016.

Oil from the Lennox and Douglas fields is treated at the Douglas complex and piped 17 kilometres to an oil storage barge for export by tankers.

Gas from the Hamilton, Hamilton North, Hamilton East and Lennox fields is initially processed at the Douglas complex then piped by subsea pipeline to the Point of Ayr gas terminal for further processing. The facility has the capacity to produce 308 MMcf/d of gas and 70 Mbb/d of oil and condensate.

**Bruce/Keith**

North Sea, approximately 380 kilometres northeast offshore of Aberdeen, Scotland

We hold a 16% interest in the Bruce field. The other 84% is owned by BP (37%), Total (43.25%) and Marubeni (3.75%).

BP is the operator of Bruce.

The joint venture holds three production licences issued by the Crown of the United Kingdom, which expire in 2011, 2015 and 2018.

Production is via an integrated oil and gas platform.

The throughput of the Bruce facility has, since 2002, been increased to 920 MMcf/d through de-bottlenecking and revising operating envelopes.

The Keith field is located adjacent to the Bruce field.

We hold a 31.83% interest in the Keith field. The other 68.17% is owned by BP (34.84%), Total (25%) and Marubeni (8.33%).

Offshore oil and gas fields

We are the operator of Keith.

The Keith field was developed as a tie-back to the Bruce platform facilities.

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<b>Name, location and type of asset</b>	<b>Ownership and operation</b>	<b>Title/lease</b>	<b>Facilities</b>
<b>Ohanet</b>  Approximately 1,300 kilometres southeast of Algiers, Algeria	We have an effective 45% interest in the Ohanet joint venture. The other 55% is held by Japan Ohanet Oil and Gas Co. Ltd. (30%), Woodside Energy (Algeria) Pty. Ltd. (15%) and Petrofac Energy Developments (Ohanet) LLC (10%).	The venture is party to a risk service contract with the title holder Sonatrach that expires in 2011, with an option to extend under certain conditions.	Ohanet is a wet gas (LPG and condensate) development consisting of four gas and condensate reservoirs and a gas processing plant with the capacity to treat 20 MMcf/d of wet gas and 61 Mbbbl/d of associated liquids (LPG and condensate).
Four wet gas fields	The project is operated by a Sonatrach/BHP Billiton staffed organisation.	Under this contract, the Ohanet joint venture is reimbursed and remunerated for its investments in liquids.	
<b>ROD Integrated Development</b>  Berkine Basin, 900 kilometres southeast of Algiers, Algeria	We hold a 45% interest in the 401a/402a production sharing contract, with ENI holding the remaining 55%.	The venture is party to a production sharing contract with the title holder Sonatrach that expires in 2016, with an option for two five-year extensions under certain conditions.	Comprises the development and production of six oil fields, the largest two of which, ROD and SFNE, extend into the neighbouring blocks 403a and 403d.
Six oil fields	We have an effective 38% interest in ROD unitised integrated development. ENI owns the remaining 62%. This interest is subject to a contractual determination to ensure that interest from participating association leases is accurately reflected. Future redetermination may be possible under certain conditions.		The ROD Integrated Development is being produced through a dedicated processing train located adjacent to BRN processing facilities on block 403, with the capacity to process approximately 80 Mbbbl/d of oil.
<b>Development projects</b>	A joint Sonatrach/ENI entity is the operator.		

**Australia/Asia**

*North West Shelf Train 5 expansion*

The expansion of the existing LNG processing facilities located on the Burrup Peninsula continues with the construction of the fifth LNG train. In June 2005, our Board approved our 16.67 per cent share of investment in a fifth LNG train expansion of the existing LNG processing facilities located on the Burrup Peninsula, which will increase total LNG production capacity to 43,500 tonnes per day. Our share of development costs, based on the operator's estimate, is approximately US\$350 million, with first production expected by end of first quarter FY2009.

*North West Shelf Angel development*

Development of the Angel gas and condensate field, approved in December 2005 is nearing completion. The development includes the installation of the venture's third major offshore production platform, which will have a capacity to produce 800 MMcf/d of gas and 50 Mbbl of condensate per day from the North West Shelf and associated infrastructure, including a new subsea 50 kilometre pipeline, that will be tied in to the first trunk line at the North Rankin platform. Our 16.67 per cent share of development costs, based on the operator's estimate, is approximately US\$200 million. The project is on schedule and budget with first production expected by end of 2008.

*North West Shelf North Rankin gas compression project*

In March 2008, the Board approved the North West Shelf gas compression project to recover remaining lower pressure gas from the North Rankin and Perseus gas fields. A new gas compression platform, North Rankin B (NRB), capable of producing 2,500 MMcf/d of gas will be constructed adjacent to the existing North Rankin A platform, 135 kilometres offshore from Karratha on the northwest coast of Western Australia. The two platforms will be connected by a 100 metre bridge and operate as a single facility. Our 16.67 per cent share of development costs is approximately US\$850 million. First gas is expected in 2012.

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*Pyrenees WA-12-R/WA-155-P*

In July 2007, the Board approved the Pyrenees project to develop the WA-12-R permit portion of the Crosby, Stickle and Ravensworth oil fields in the Exmouth Sub-basin, off the northwest coast of Western Australia. Project costs for the WA-12-R permit portion of the Pyrenees development are approximately US\$1.7 billion (approximately US\$1.2 billion our share). The WA-155-P permit portion of the Pyrenees project was approved by the Board in November 2007, incorporating the remainder of the Ravensworth field as it straddles both WA-12-R and WA-155-P permits. The combined development consists of subsea production and injection wells tied back to a floating production storage and offloading (FPSO) facility with an oil processing capacity of 96 Mbb/d. First production is expected during the second half of FY2010.

We own a 71.43 per cent operated interest in the WA-12-R permit, with Apache Energy Ltd owning the remaining 28.57 per cent. We own a 40 per cent operated interest in the WA-155-P permit, with Apache Energy Ltd owning 31.5 per cent and Inpex owning 28.5 per cent.

*Bass Strait Kipper gas field development*

Initial development of the Kipper gas field in the Gippsland Basin located offshore Victoria was approved by the Board in December 2007. The first phase of the project includes two new subsea wells, three new pipelines and platform modifications to supply 10 Mbb/d of condensate and 80 MMcf/d of gas. Gas and liquids will be processed via the existing Gippsland Joint Venture facilities. Our share of development costs, based on the operator's estimate, is approximately US\$500 million. First production is expected in 2011.

We own a 32.5 per cent interest in the Kipper Unit Joint Venture, with Esso Australia and Santos owning the remaining 67.5 per cent. We own a 50 per cent interest in the Gippsland Joint Venture.

*Bass Strait Turrum field development*

Further expansion of the Gippsland Basin facilities is underway with the Board approving the full field development of the Turrum oil and gas field in July 2008. Our 50 per cent share of the investment, based on the operator's estimate, is approximately US\$625 million and consists of a new platform, Marlin B, linked by a bridge to the existing Marlin A platform. The Turrum field, which will supply 10 Mbb/d of oil and 200 MMcf/d of gas, is located 42 kilometres from shore in approximately 60 metres of water. First production is expected in 2011.

*Scarborough*

We have a 50 per cent non-operated interest in the Scarborough gas field in WA-1-R (ExxonMobil holds the remaining 50 per cent and is the operator). We are still examining a number of concepts for field development.

***United States***

*Shenzi/Genghis Khan*

We have a 44 per cent interest, and will operate the Shenzi oil and gas project in the deepwater fields of Gulf of Mexico. Other owners of the project are Repsol (28 per cent) and Hess Corporation (28 per cent). The project is constructing a stand-alone tension-leg platform (TLP) with a nominal design capacity of 100 Mbb/d and 50 MMcf/d of gas. The hull and topsides were installed in July 2008. Installation of subsea equipment and development drilling and completion of wells continues per the approved program. First oil through the Shenzi TLP for the Shenzi Development is expected by the end of FY2009.

The Genghis Khan field is part of the same geological structure as the Shenzi project. As with Shenzi, we are the operator of Genghis Khan and hold a 44 per cent interest. Co-venturers are Hess Corporation and Repsol YPF, each with 28 per cent. The Genghis Khan development consists of a 3,841 metres tie-back to the existing Marco Polo TLP, which is owned in a joint venture by Enterprise and Helix, and is operated by Anadarko. First oil through Marco Polo occurred in October 2007. Gross costs for the Shenzi/Genghis Khan field development (net of acquisition costs) are US\$4.9 billion (US\$2.2 billion our share).





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### ***Exploration and appraisal***

We are focused on finding significant discoveries through wildcat drilling. We have exploration interests throughout the world, particularly the Gulf of Mexico, Western Australia, Latin America and Malaysia. During the year, our gross expenditure on exploration was US\$692 million. Our major exploration interests are as follows:

#### ***Australia/Asia***

##### *Thebe*

The Thebe-1 exploration well was drilled in July 2007 and is located approximately 300 kilometres off the northwest coast of Western Australia in water depths of 1,173 metres and approximately 50 kilometres north of the Scarborough gas field. The well and subsequent evaluation confirmed a gas column encountered in the Exmouth Plateau of the Carnarvon Basin.

Thebe-2 Appraisal well was drilled in February 2008 to a depth of 2,550 metres to appraise the reservoir discovered by Thebe-1. The results confirmed the presence of a high quality reservoir. Both wells have been plugged and abandoned while further appraisal options are evaluated.

BHP Billiton is the operator of Thebe-1 and Thebe-2 and holds a 100 per cent interest in the field.

##### *Browse*

The Browse basin is comprised of the Torosa, Brecknock and Calliance fields and is operated by Woodside Petroleum. It is divided into two joint ventures: East Browse and West Browse. We have an 8.33 per cent non-operated interest in East Browse and a 20 per cent non-operated interest in West Browse. An appraisal program is in progress and concurrently the operator is evaluating options for field development through engineering and site selection studies.

##### *Malaysia*

In March 2007, we were awarded two offshore blocks in Malaysia. We are the operator of the blocks under two separate Production Sharing Contracts. The minimum exploration program includes the acquisition and processing of seismic data for approximately 2,300 square kilometres across the two blocks, and the drilling of four exploration wells within the first seven years of the contracts. The initial seismic acquisition program commenced in June 2008.

#### ***Americas Gulf of Mexico***

##### *Puma Green Canyon/Western Atwater Foldbelt exploration*

The Puma-1 exploration well was drilled in January 2004. The well was drilled in 1,259 metres of water and encountered hydrocarbons in both the original hole and in two subsequent sidetrack bores. The first appraisal well was re-entered in January 2007 but did not encounter any commercial reserves and has been temporarily abandoned. A second appraisal well drilled in March 2007 also did not discover commercial reserves. An additional appraisal well is planned in FY2009 to further evaluate the Puma prospect.

Following an interim equity agreement, we hold a 29.8 per cent interest in Puma. The other 70.2 per cent is held by BP (46.2 per cent), Chevron (21.75 per cent) and Statoil (2.25 per cent), subject to future redetermination.

##### *Knotty Head Green Canyon/Wester Atwater Foldbelt exploration*

We currently own a 25 per cent interest in an exploration well on the Knotty Head Prospect, located in the Green Canyon area. Partners in the well are Nexen (25 per cent owner and operator), Anadarko (25 per cent) and Unocal (a wholly-owned subsidiary of Chevron (25 per cent)). Unocal spudded the exploration well in March 2005. The initial well was completed in mid-December 2005 followed by a sidetrack operation that was completed in early March 2006 to further evaluate the results of the discovery well. The well was drilled in 1,088 metres of water to a total depth of 10,422 metres and encountered hydrocarbons in both the original hole and the subsequent sidetrack. Additional appraisal work to further evaluate the economic potential of the prospect is in progress.

**Americas Colombia**

In June 2007, we signed a Joint Operating Agreement with Ecopetrol for the Fuerte Norte and Fuerte Sur blocks, located offshore in Colombia. We hold 75 per cent operated interest in each block with Ecopetrol holding the remaining 25 per cent. In October 2007 the Joint Venture entered into the second phase of the Exploration and Production Licences for the two Fuerte Blocks and subsequently undertook acquisition and processing of 3D seismic over the area.

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### **Americas Falkland Islands**

In December 2007, we farmed into Northern and Southern area licences offshore of the Falkland Islands. We acquired a 51 per cent interest from our joint venture partner Falkland Oil and Gas Limited (FOGL) and assumed operatorship in January 2008. The minimum exploration work program includes the drilling of two wells in the first phase by the end of 2010.

### **Europe/Africa/Middle East**

#### *Namibia*

We hold interests in two blocks located offshore in Namibia, known as the Northern and Southern Block, which we acquired in 2005. In November 2006, we farmed out a 25 per cent interest in these two blocks. Mitsui & Co Ltd acquired 15 per cent and the Petroleum Oil and Gas Corporation of South Africa (Pty) Ltd acquired 10 per cent with an option to consider additional equity. We remain the operator and hold the remaining 75 per cent interest.

### **2.2.3 Aluminium Customer Sector Group**

Our Aluminium business is a portfolio of assets at three stages of the aluminium value chain: we mine bauxite, we refine bauxite into alumina, and we smelt alumina into aluminium metal. We are the world's sixth-largest producer of aluminium, with total production in FY2008 of approximately 1.3 million tonnes of aluminium. We also produced approximately 16 million tonnes of bauxite and 4.6 million tonnes of alumina.

Approximately 55 per cent of our alumina production is used in our aluminium smelters and we sell the balance to other smelters. Our alumina sales are a mixture of long-term contract sales at LME-linked prices and spot sales at negotiated prices. Prices for our aluminium sales are generally linked to prevailing LME prices.

As with our other businesses, our strategy with bauxite and alumina is to own large, low-cost assets that provide good returns through the investment cycle and provide us with options for brownfield development. With aluminium smelters, where the availability and cost of power are critical, our investment decisions have been driven in part by the availability of stranded power generation capacity. For example, both Hillside and Mozal were originally built when there was excess electricity generating capacity in southern Africa.

We have interests in two sets of integrated bauxite mining/alumina refining assets:

#### **Boddington/Worsley**

The Boddington bauxite mine in Western Australia supplies bauxite ore via a 51 kilometre long conveyor to the Worsley alumina refinery. Worsley is one of the largest and lowest-cost refineries in the world, and is currently undergoing a major expansion (see Development projects below). Our share of Worsley's FY2008 production was 3.035 million tonnes of alumina. Worsley's export customers include our own Hillside, Bayside and Mozal smelters in southern Africa. Boddington has a reserve life of 24.5 years at current production rates. We own 86 per cent of the mine and the refinery.

#### **Onverdacht/Coermotibo/Paranam**

We own a 45 per cent interest in a joint venture that operates bauxite mines in the Onverdacht and Coermotibo areas of Suriname and the nearby Paranam alumina refinery. We are working on other mining options in the area to continue feeding Paranam after the current mines are exhausted. Our share of Paranam's FY2008 production was 983,000 tonnes of alumina.

We also own 14.8 per cent of Mineração Rio do Norte (MRN) which owns and operates a large bauxite mine in Brazil.

We have interests in the Alumar integrated alumina refinery/aluminium smelter and three stand-alone aluminium smelters:

**Alumar**

We own 36 per cent of the Alumar refinery and 40 per cent of the smelter. Alcoa operates both facilities. The operations, and their integrated port facility, are located at Sao Luis in the Maranhao province of Brazil. Alumar sources bauxite from MRN. Approximately 50 per cent of Alumar's alumina production is used to feed the smelter, while the remainder is exported. Our share of Alumar's FY2008 saleable production was 535,000 tonnes of alumina and 178,000 tonnes of aluminium. The Alumar refinery is currently undergoing a significant expansion (see Development projects below).

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### **Hillside and Bayside**

Our Hillside and Bayside smelters are located at Richards Bay, South Africa. Hillside's capacity of approximately 704,000 tpa makes it the largest aluminium smelter in the southern hemisphere, and it is one of the most efficient. Following the closure of potlines B and C Bayside has smelting capacity of approximately 96,000 tpa, but it also uses its own aluminium and liquid aluminium from Hillside to produce a range of value-added products such as rod, slab and extrusion. Both operations import alumina from our Worsley refinery and source power from Eskom, the South African state utility, under long-term contracts with prices linked to the LME price of aluminium except for Hillside Potline 3, the price for which is linked to the South African and US producer price indices.

In January 2008, Eskom determined that it had insufficient power to meet the national demand in South Africa, and mandated an emergency 10 per cent reduction in power consumption by many large industrial users, including BHP Billiton. Although our contracts with Eskom specify that power supply to our aluminium smelters can only be interrupted approximately one per cent of the time per calendar year, we have respected the emergency situation faced by the country and reduced our demand by the requested 10 per cent. To achieve this in the most economically efficient way, we have closed the B and C potlines at Bayside, reducing production there by approximately 92,000 tpa. Across all three southern Africa smelters (including Mozal), we expect production loss to be just over 120,000 tpa. The production cuts occurred primarily at Bayside, a 100 per cent BHP Billiton owned facility. A production sharing adjustment is currently being established between the Mozal partners (47.1 per cent BHP Billiton) to compensate us for taking the majority of the power reduction at a 100 per cent owned facility.

### **Mozal**

We own 47.1 per cent of and operate the Mozal aluminium smelter in Mozambique, which has a total capacity of approximately 563,000 tpa. Mozal sources power generated by Eskom via Motraco, a transmission joint venture between Eskom and the national electricity utilities of Mozambique and Swaziland. Tarriffs are fixed through to 2012 and will be linked to the LME aluminium price thereafter. Our share of Mozal's FY2008 production was 257,000 tonnes.

### **Information on the Aluminium CSG's bauxite mining operations**

The following table contains additional details of our mining operations. This table should be read in conjunction with the production and reserve tables.

<b>Name, location and type of mine and access</b>	<b>Ownership, operation and title/lease</b>	<b>History</b>	<b>Facilities and power source</b>
<b>Boddington bauxite mine</b>  123 kilometres southeast of Perth at Boddington, Western Australia, Australia  Open-cut mine	We own 86% of the Worsley joint venture. The other 14% interest is owned by Sojitz Alumina Pty Ltd (4%), and Japan Alumina Associates (Australia) Pty Ltd (10%).  Worsley Alumina Pty Ltd is the manager of the joint venture on behalf of the participants. Worsley Alumina Pty Ltd has the same ownership structure as the Worsley joint venture.	The Boddington bauxite mine opened in 1983 and was significantly extended in 2000.	The mine has a crushing plant with the capacity of approximately 13 mtpa of bauxite. Power is supplied from the Worsley alumina refinery site via a joint venture-owned powerline.  A description of the Worsley alumina refinery can be found in the table below.

The mine is accessible by sealed public roads. The ore is transported to Worsley alumina refinery via a 51 kilometre overland conveyor.

**Suriname  
Kaaimangrasie  
mine (Onverdacht)**

38 kilometres southeast of Paramaribo and 25 kilometres east of the Paranam refinery, Suriname

We hold a 2,656 square kilometre mining lease from the Western Australian government and two sub leases totalling 855 square kilometres from Alcoa of Australia Limited. In 2004, we renewed the lease for a second 21-year term. A further 21-year renewal is available.

We own 45% of the refining and mining joint venture. The other 55% interest is held by Suralco (a subsidiary of Alcoa World Alumina and Chemicals (AWAC), a venture of Alcoa and Alumina Limited).

The development of the Kaaimangrasie mine started in November 2005. Operations/delivery of bauxite to the refinery commenced in July 2006. The mine is scheduled to be operated until 2011.

Kaaimangrasie mine has a nominal production capacity of approximately 1.6 mtpa of bauxite; there are no processing facilities at the mine.

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<b>Name, location and type of mine and access</b>	<b>Ownership, operation and title/lease</b>	<b>History</b>	<b>Facilities and power source</b>
Open-cut mine	We manage all mining operations.		Electricity is sourced from Suralco and fuel sourced from an external provider.
The mine is accessible by a joint venture-owned haul road. The ore is hauled by truck over a distance of 25 kilometres to the Paranam refinery.	Suralco holds the exploitation licences, issued by the Government of Suriname, over the Kaaimangrasie deposit. These licences expire in 2032.		
<b>Suriname Klaverblad mine (Onverdacht)</b>	We own 45% of the refining and mining joint venture. The other 55% interest is held by Suralco.	The development of the Klaverblad mine started in July 2005. Delivery of bauxite to the refinery commenced in April 2007. The mine is scheduled to be operated until 2011.	Klaverblad mine has a nominal production capacity of approximately 1.4 mtpa of bauxite; there are no processing facilities at the mine.
23 kilometres southeast of Paramaribo and 13 kilometres east of the Paranam refinery, Suriname	We manage all mining operations.		Electricity is sourced from Suralco and fuel sourced from an external provider.
Open-cut mine			
The mine is accessible by a joint venture-owned haul road. The ore is hauled by truck over a distance of 12 kilometres to the Paranam refinery.			



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Name, location and type of mine and access	Ownership, operation and title/lease	History	Facilities and power source
<p><b>Suriname</b></p> <p><b>Coermotibo</b></p> <p>150 kilometres east of Paranam, Suriname</p> <p>Surface strip mine</p> <p>The mine is accessible by joint venture-owned haul roads</p> <p>The ore is hauled to the Coermotibo crushing and loading facility and subsequently barged along the Commewijne River to the Paranam refinery.</p>	<p>We own 45% of the Coermotibo joint venture. The other 55% interest is held by Suralco.</p> <p>We manage all mining operations.</p> <p>Suralco holds exploitation licences over the bauxite, issued by the Government of Suriname. These licences expire in 2032.</p>	<p>The Coermotibo mine started operations in 1991. Remnants mining will continue until July 2011.</p>	<p>Coermotibo mine has a nominal production capacity of 1.4 mtpa. There are primary crushing, beneficiation plant and barge loading facilities.</p> <p>Coermotibo generates its own electricity from power generators that run on diesel fuel.</p>
<p><b>MRN</b></p> <p>Oriximina, State of Pará, Brazil</p> <p>Open-cut mine</p>	<p>We own 14.8% of Mineração Rio do Norte S.A (MRN). The other 85.2% is owned by affiliates of Alcoa (18.2%), Rio Tinto (12%), Companhia Brasileira de Alumínio CBA (10%), VALE (40%) and Norsk Hydro (5%).</p> <p>MRN operates the mine.</p>	<p>Production started in 1979 and the last expansion occurred in 2003.</p>	<p>MRN beneficiation facilities consist of a crushing unit and a washing unit and a conveyor belt that transports the ore between the two units. The bauxite nominal production capacity is approximately 18 mtpa.</p> <p>MRN has its own power generation station using fuel oil.</p>

The mine is accessible by joint venture-owned haul roads. A joint venture-owned railroad connects the 28 kilometres between the plant and the port.

MRN holds valid mining rights granted by the Brazilian Federal Government to all its reserves until exhaustion of the reserves.

**Information on the Aluminium CSG s aluminium smelters and alumina refineries**

Operation and location	Ownership, operation and title	Plant type/product	Capacity
<b>Hillside aluminium smelter</b>	We own and operate the smelter.	The Hillside smelter uses the Aluminium Pechiney AP35 technology to produce standard aluminium ingots and aluminium T-Bars.	The nominal production capacity of the smelter is 0.704 mtpa of primary aluminium.
Richards Bay, 200 kilometres north of Durban, KwaZulu-Natal province, South Africa	We hold freehold title over the property, plant and equipment.  We have long-term leases over the harbour facilities.		The plant s power requirements are sourced from the national power supplier Eskom under long-term contracts. The prices in the contract for Hillside 1 and 2 are linked to the LME price for aluminium, while the prices for Hillside 3 are linked to the SA and US PPI.

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<b>Operation and location</b>	<b>Ownership, operation and title</b>	<b>Plant type/product</b>	<b>Capacity</b>
<p><b>Bayside aluminium smelter</b></p> <p>Richards Bay, 200 kilometres north of Durban, KwaZulu-Natal province, South Africa</p>	<p>We own and operate the smelter.</p> <p>We hold freehold title over the property, plant and equipment.</p> <p>We have long term leases over the harbour facilities.</p>	<p>The Bayside smelter currently uses Alusuisse pre-bake technology to produce primary aluminium. Potlines B and C were closed on 15 May 2008 which used Soderberg self-bake technology. Bayside uses its own aluminium and liquid aluminium acquired from Hillside to also produce a range of value added products, such as, rod, slab and extrusion.</p>	<p>The nominal potline production capacity is 0.095 mtpa of primary aluminium on the remaining Potline A.</p> <p>The plant's power requirements are sourced from the national power supplier Eskom, under a long-term contract with prices linked to the LME price for aluminium.</p>
<p><b>Mozal aluminium smelter</b></p> <p>17 kilometres from Maputo, Mozambique</p>	<p>We hold a 47.1% interest in the Mozal joint venture and operate the smelter. The other 52.9% is owned by Mitsubishi (25%), Industrial Development Corporation of South Africa Limited (24%), and the Government of Mozambique (3.9%).</p> <p>The joint venture has a 50-year right to use the land, renewable for another 50 years under a government concession.</p>	<p>The Mozal aluminium smelter uses the Aluminium Pechiney AP35 technology to produce standard aluminium ingots.</p>	<p>The nominal production capacity of the smelter is 0.563 mtpa.</p> <p>The plant's power requirements are purchased from Motraco, under an agreement that provides for a fixed tariff for the majority of electricity through to 2012 and LME-linked pricing thereafter.</p>
<p><b>Worsley alumina refinery</b></p> <p>Approximately 55 kilometres northeast of Bunbury, Western Australia, Australia</p>	<p>We own 86% of this asset through the Worsley joint venture. The other 14% is owned by Sojitz Alumina Pty Ltd (4%), and Japan Alumina Associates (Australia) Pty Ltd (10%).</p> <p>Worsley Alumina Pty Ltd is the manager of the joint venture on behalf of the participants. Worsley Alumina Pty Ltd has the same</p>	<p>The Worsley alumina refinery uses the Bayer process to produce metallurgical grade alumina, which is used as feedstock for aluminium smelting.</p>	<p>The nominal production capacity is 3.5 mtpa.</p> <p>Power and steam needed for the refinery are provided by a joint venture-owned on-site coal power station and a non-joint venture-owned on-site gas fired steam power generation plant.</p>

ownership structure as the Worsley joint venture.

We hold a 2,480 hectare refinery lease from the Western Australian Government. In 2004, we renewed the lease for a second 21-year term. A further 21-year renewal is available.

<b>Paranam refinery</b>	We own 45% of the Paranam joint venture. The other 55% of the joint venture is owned by Suralco.	The Paranam alumina refinery utilises the Bayer process to produce metallurgical grade alumina, which is used as feedstock for aluminium smelting.	Capacity is 2.2 mtpa. The Paranam refinery generates its own power.
Paranam, Suriname	Suralco manages the alumina refinery.		
	The joint venture holds freehold title to the property, plant and equipment, in a 45-55% split between the two joint venture partners.		

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<b>Operation and location</b>	<b>Ownership, operation and title</b>	<b>Plant type/product</b>	<b>Capacity</b>
<b>Alumar</b>  São Luís, Maranhão, Brazil	<p>The Alumar Consortium is an unincorporated joint venture that holds the smelter, refinery, ingot plant and support facilities.</p> <p>We own 40% of the aluminium smelter. The other 60% is owned by Alcoa Aluminio SA (Alcoa).</p> <p>We own 36% of the alumina refinery. The other 64% is owned by Alcoa and its affiliate Abalco SA (35.1% and 18.9% respectively) and Rio Tinto (10%).</p> <p>Alcoa operates both facilities.</p> <p>The consortium comprises an integrated port, an alumina refinery and an aluminium smelter together with areas for the production of anodes and aluminium ingots.</p> <p>All the above are freehold interests of the joint venture participants.</p>	The alumina refinery and aluminium smelter use Alcoa technology to produce alumina and aluminium ingots.	<p>The refinery complex was last expanded in June 2005, achieving annual capacity of 1.5 mtpa.</p> <p>The smelter has a nominal capacity of approximately 0.45 mtpa of primary aluminium.</p> <p>The electricity requirements are supplied by Brazilian public power generation concessionaire Electronorte, pursuant to a 20-year contract.</p>

**Development projects***Alumar refinery expansion*

A project is underway to expand the production capacity of the Alumar refinery by 2 mtpa to 3.5 mtpa (100 per cent capacity) at a cost of US\$725 million (our share). The completion schedule and budget are currently under review following advice from the operator.

*Worsley Efficiency and Growth Project*

In May 2008, we announced approval for an expansion project to lift capacity of the Worsley refinery from 3.5 mtpa of alumina to 4.6 mtpa (100 per cent capacity) of alumina through expanded mining operations at Boddington, additional refinery capacity and upgraded port facilities. The project is budgeted to cost US\$1.9 billion (our share) and be completed in the first half of calendar 2011.

*Guinea Alumina*

We have a one-third interest in a joint venture that is currently undertaking a feasibility study into the construction of a 10 mtpa bauxite mine, a 3.3 mtpa alumina refinery and associated infrastructure approximately 110 kilometres from the port of Kamsar in Guinea.

*Bakhuis*

We are undertaking a feasibility study into a new bauxite mine in the Bakhuis region of western Suriname and are in negotiations with the Government of Suriname in order to obtain the exploitation rights for the Bakhuis area.

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**2.2.4 Base Metals Customer Sector Group**

Our Base Metals CSG is one of the world's top producers of copper, silver, lead and uranium, and a leading producer of zinc. Our portfolio of large, low-cost mining operations includes the Escondida mine in Chile, which is the world's largest single producer of copper, and Olympic Dam in South Australia, which is already a major producer of copper and uranium and has the potential to be significantly expanded.

In recent years, we have commissioned the Spence copper mine and the Escondida Sulphide Leach projects, and restarted operations at Pinto Valley as we have sought to maximise production during a period of high copper prices. Our total copper production in FY2008 was a record 1.3755 million tonnes, compared to 1.2501 million tonnes in FY2007, and a 58% increase over our production five years ago.

In addition to conventional mine development, we are also pursuing advanced treatment technologies, such as the leaching of low-grade chalcopyrite ores, which we believe has the potential to recover copper from ores which were previously uneconomic to treat.

We market five primary products:

copper concentrates

copper cathodes

uranium oxide

lead concentrates and

zinc concentrates

We sell most of our copper, lead and zinc concentrates to smelters under long-term volume contracts with prices based on the LME price for the contained metal three or four months after shipment, less treatment charges and refining charges (collectively referred to as TCRCs) that we negotiate with the smelters on an annual or bi-annual basis. Some of the ores we mine contain quantities of silver and gold, which remain in the base metal concentrates we sell. We receive payment credits for the silver and gold recovered by our customers in the smelting and refining process.

We sell most of our copper cathode production to rod and brass mills and casting plants around the world under annual contracts with premiums to LME prices. We sell uranium oxide to electricity generating utilities, principally in Western Europe, North America and North Asia. Traditionally, uranium sales have been under long-term fixed price contracts and the majority of our current production is committed under these contracts. Sales commitments under long term price contracts reduce over time and going forward we expect to see an increasing proportion of sales made with flexible pricing terms; for example, with a price linked to a spot index.

We have seven production assets:

**Escondida**

Our 57.5% owned and operated Escondida mine is the largest and one of the lowest-cost copper producers in the world. In FY2008, our share of Escondida's production was 679,500 tonnes of copper in concentrate and 131,600 tonnes of copper cathode. FY2008 saw the continued ramp-up of production from the sulphide leach plant, which was commissioned in July 2006. Current reserves will support mining for a further 24 years at current production rates. We have been working to address two potential

limitations on future production at Escondida: power and water. Together with our Cerro Colorado and Spence operations, Escondida draws its power from the northern Chilean grid. Restrictions in the supply of gas from Argentina have resulted in higher costs and power supply fluctuations. To ensure security of supply and competitive power costs in the long term we are supporting the construction of an LNG facility to supply gas to the northern grid system, which is scheduled for completion in 2010, and have signed off-take agreements underwriting the construction of a 460MW coal-fired power station, which is scheduled for completion in 2011. To address limitations on the availability of water, we carefully manage our use and re-use of available water, explore for alternative sources, and have built a desalination plant that currently provides water only to the sulphide leach plant but which could be expanded, if necessary. We believe that there is substantial scope for further expansion at Escondida (see Development projects below).

### **Olympic Dam**

While it is already a significant producer of copper cathode and uranium oxide, and a refiner of smaller amounts of gold and silver bullion, we are currently exploring a series of staged development options that would make our wholly-owned Olympic Dam operation one of the world's largest producers of copper, the largest producer of uranium, and a significant producer of gold (see Development projects below). In FY2008, Olympic Dam produced 169,900 tonnes of copper cathode, 4,144 tonnes of uranium oxide, 80,517 ounces of gold and 780,000 ounces of silver.



**Table of Contents****Antamina**

We own 33.75% of Antamina, a large, low-cost, long-life copper/zinc mine in Peru. Opened in 2001, its reserves will support mining at current rates for a further 12 years. Our share of Antamina's FY2008 production was 111,700 tonnes of copper in concentrate, and 83,521 tonnes of zinc in concentrate. In addition to its primary copper and zinc concentrate products, Antamina also produces smaller amounts of molybdenum and lead/bismuth concentrate.

**Spence**

We completed our wholly-owned greenfield Spence copper mine development in Chile and began ramping up cathode production in December 2006. During FY2008, we produced 142,700 tonnes of copper as we continue to ramp up to the nominal capacity of 200,000 tpa.

**Cerro Colorado**

Our wholly-owned Cerro Colorado mine in Chile remains a significant producer of copper cathode, although production levels have declined in recent years as grades have declined. Production in FY2008 was 106,400 tonnes of copper cathode. Production has been adversely affected by the high clay content of the ores currently being mined. Our current mine plan sees production continuing until 2016, although we are currently evaluating the extent of hypogene mineralisation that may support extension options.

**Cannington**

Our wholly-owned Cannington mine in northwest Queensland has grown to become the world's largest and, we believe, one of the lowest cost producers of silver and lead. During FY2006 and FY2007, we undertook an extensive program of decline and stope access rehabilitation to improve safety conditions, which has positioned the mine to maintain production, offsetting natural grade decline over its remaining eight-year reserve life. In FY2008, Cannington produced concentrates containing 251,548 tonnes of lead, 60,969 tonnes of zinc, and approximately 35 million ounces of silver.

**Pinto Valley**

In addition to these assets and in response to high copper prices as a result of strong demand, during FY2008 we resumed sulphide mining, milling and concentrating operations at our previously idled Pinto Valley mine and began producing copper concentrate. In addition, we continue to produce copper cathode at the Pinto Valley site and the neighbouring Miami Unit from our ongoing Solvent Extraction Electrowinning (SXEW) operations. Current reserves will support mining for a further four years.

**Information on the Base Metals CSG's mining operations**

The following table contains additional details of our mining operations. This table should be read in conjunction with the production and reserve tables.

<b>Name, location, type of mine and access</b>	<b>Ownership, operation and title/lease</b>	<b>History</b>	<b>Facilities and power source</b>
<b>Copper</b>			
<b>Escondida</b>	The mine is owned and operated by Minera Escondida Limitada.	Original construction of the operation was completed in 1990. The project has since undergone various	Escondida has two processing streams: two concentrator plants in which high-quality copper concentrate

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<p>Atacama Desert, at an altitude of approximately 3,100 metres and 170 kilometres southeast of Antofagasta, Chile</p>	<p>We own 57.5% of Minera Escondida. The other 42.5% is owned by affiliates of Rio Tinto (30%), the JECO Corporation (10%), a consortium represented by Mitsubishi Corporation (7%), Mitsubishi Materials Corporation (1%), Nippon Mining and Metals (2%) and the International Finance Corporation (2.5%).</p>	<p>expansion projects at an additional cost of US\$2,571 million (100% terms) plus US\$451 million (100% terms) for the construction of an oxide plant.</p>	<p>is extracted from sulphide ore through a flotation extraction process; and two solvent extraction plants in which leaching, solvent extraction and electrowinning are used to produce copper cathode.</p>
<p>Two open-cut pits</p>	<p>In June 2006, the Escondida Sulphide Leach copper project achieved first production. Excluding the exchange impact of a stronger Chilean peso, the cost of the project was US\$914 million (100% terms), compared to a budget of US\$870 million. The final cost was US\$1,017 million including the impact of foreign exchange.</p>	<p>Nominal production capacity is 3.2 mtpa of copper concentrate and 330,000 tonnes per annum of copper cathode.</p>	
<p>The mine is accessible by public road.</p>			<p>Separate transmission circuits provide power for the Escondida mine facilities. These transmission</p>
<p>Copper cathode is transported by privately-owned rail line to the Antofagasta port (government-operated) or Mejillones port (privately operated).</p>	<p>Minera Escondida Limitada holds a mining concession from the Chilean state that remains valid indefinitely (subject to payment of annual fees).</p>		

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Name, location, type of mine and access	Ownership, operation and title/lease	History	Facilities and power source
Copper concentrate is transported by Company-owned pipeline to its Coloso port facilities.			lines, which are connected to Chile's northern power grid, are Company-owned. Electricity is purchased under contracts with local generating companies.
<p><b>Spence</b></p> <p>Atacama Desert,</p> <p>150 kilometres northeast of Antofagasta, Chile</p>	<p>We own and operate the mine (100%).</p> <p>We hold a mining concession from the Chilean state that remains valid indefinitely (subject to payment of annual fees).</p>	<p>Spence received Board approval for execution in October 2004. The project was completed within the US\$990 million budget excluding foreign exchange impacts of a stronger Chilean peso. The cost including the impact of foreign exchange was US\$1.1 billion.</p>	<p>Spence has operations facilities to support the open-cut mining operations and ore processing/crushing operations.</p> <p>The crushed oxide and sulphide ores are leached on separate dynamic (on-off) leach pads. Chemical (acid) leaching is applied to oxide ores and bio-leaching is applied to supergene sulphide ores. Solvent extraction consists of four trains in a series-parallel configuration, with extraction stages for both oxide and sulphide Pregnant Leach Solution. A single electrowinning (EW) plant produces the copper cathode. We have an additional run of mine (ROM) heap leach to further recover copper from low-grade ores.</p> <p>Nominal capacity is 200,000 tonnes of copper cathode.</p>
<p>Open-cut mine</p> <p>The mine is accessible by public road and privately-owned rail access.</p>		<p>First ore was crushed in September 2006 with first copper produced in December 2006.</p>	<p>Electrical power is supplied to the operation via a 70 kilometre high-voltage transmission line connected to Chile's northern power grid. This transmission line is Company-owned, and electricity is purchased under contracts from a local generating company.</p>
<p>Copper cathode produced is transported by rail line to Mejillones port (privately operated) and to Antofagasta port on an exceptional basis.</p>			
<p><b>Cerro Colorado</b></p> <p>Atacama Desert at an altitude of 2,600 metres, 120 kilometres east of</p>	<p>We own and operate the mine.</p>	<p>Commercial production at Cerro Colorado commenced in June 1994.</p>	<p>Cerro Colorado's facilities for this process include two primary, secondary and tertiary crushers, leaching pads and solvent extraction and electrowinning plants.</p>

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Iquique, Chile	We hold a mining concession from the Chilean state that remains valid indefinitely (subject to payment of annual fees).	Expansions took place in 1995 and 1998 to increase the mine's crushing capacity, leach pad area and mine fleet. With these expansions, production was increased to 100,000 tonnes per annum. Production was then increased to the nameplate capacity of 120,000 tonnes per annum with optimisation and efficiency improvements.	Electricity is supplied under long-term contracts to the facilities through the northern Chile power grid.
Open-cut copper mine			
The mine is accessible by public road.			
Copper cathode production is trucked to the port at Iquique, which is privately operated.			
		Due to lower copper grades of the ore the production is now approximately 105,000 tonnes per annum.	

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<b>Name, location, type of mine and access</b>	<b>Ownership, operation and title/lease</b>	<b>History</b>	<b>Facilities and power source</b>
<p><b>Pinto Valley</b></p> <p>Located in the USA approximately 125 kilometres east of Phoenix, Arizona.</p> <p>The mine is accessible by public road. Cathode production is trucked to domestic customers in the United States and Concentrate production is trucked to San Manuel, Arizona where it is loaded on rail and transported to the Port of Guaymas in Mexico.</p>	<p>We own and operate 100% of Pinto Valley and we hold title to the land. Mining operations are contracted to The Washington Group, a subsidiary of URS.</p>	<p>Pinto Valley was acquired through the acquisition of Magma Copper Company in 1996. The sulphide mining operations were discontinued in 1998. During closure, the operation continued to produce small amounts of copper cathode through residual dump leaching SXEW operations.</p> <p>A Feasibility Study on a re-start of the sulphide mining operations was conducted in 2006. In January 2007, the Re-Start Project was approved.</p> <p>First concentrate production was achieved in October 2007.</p>	<p>Pinto Valley facilities include two SXEW operations at the Pinto Valley and Miami sites. Concentrate production facilities include a primary crusher, secondary and tertiary crushers, six ball mills and copper concentrate and molybdenum flotation circuits.</p> <p>Power is supplied to the site by the Salt River Project.</p>
<b>Copper uranium</b>			
<p><b>Olympic Dam</b></p> <p>560 kilometres northwest of Adelaide, South Australia, Australia</p> <p>Underground mine</p>	<p>We own and operate Olympic Dam.</p> <p>The mining lease was granted by the Government of South Australia by an Act of Parliament for the period of 50 years from 1986, with a right of extension for a further period of 50 years in accordance with the Roxby</p>	<p>Production of copper began in 1988. Between 1989 and 1995, the production rate was increased, ultimately raising the ore mining capacity to approximately 3 mtpa.</p>	<p>The underground mine extracts copper uranium ore and hauls the ore by an automated train and trucking network feeding underground crushing, storage and ore hoisting facilities.</p> <p>The processing plant consists of two grinding circuits in which high-quality copper concentrate is extracted from sulphide ore through a flotation extraction process. The concentrate is fed into an Outokumpu flash furnace having a nominal concentrate smelting capacity of 450 ktpa to</p>

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<p>The mine is accessible by public road. Copper cathode and electrowon copper is transported by public road to public ports. Uranium oxide is transported by public road and rail to public ports.</p>	<p>Downs (Indenture Ratification) Act 1982.</p>	<p>During 1997 through 1999 a major expansion was conducted to raise throughput from 3 mtpa to 9 mtpa.</p>	<p>produce copper anodes, then into an ISA electro-refinery to produce copper cathodes and slimes treated to recover gold and silver. The flotation tailings are further processed to produce electrowon cathode and high grade uranium oxide concentrates.</p>
		<p>In 2002, Olympic Dam completed an optimisation project. A new copper solvent extraction plant was commissioned in the first quarter of 2004.</p>	<p>Power for the Olympic Dam operations is supplied via a 275 kV powerline from Port Augusta, transmitted by ElectraNet.</p>
		<p>We acquired Olympic Dam as part of our acquisition of WMC in 2005.</p>	

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Name, location, type of mine and access	Ownership, operation and title/lease	History	Facilities and power source
<b>Copper zinc</b>			
<p><b>Antamina</b></p> <p>270 kilometres north of Lima at an altitude of 4,300 metres, Peru</p>	<p>Antamina is owned by Compañía Minera Antamina SA, in which we hold a 33.75% interest. The remaining interests are held by Xstrata (33.75%), Teck Cominco (22.5%) and Mitsubishi (10%).</p>	<p>The Antamina project achieved commercial production in October 2001.</p>	<p>The principal project facilities include a primary crusher, a nominal 70,000 tonnes per day concentrator, copper and zinc flotation circuits and a bismuth/ moly cleaning circuit, a 300 kilometre concentrate pipeline with single-stage pumping, and port facilities at Huarmey. The pipeline design throughput is 2.3 dry mtpa.</p>
<p>Open-cut mine</p> <p>The mine is accessible by a Company-maintained 115 kilometre access road.</p> <p>A 300 kilometre pipeline transports the copper and zinc concentrates to the port of Huarmey.</p>	<p>Antamina is the operator of the mine.</p> <p>Antamina holds mining rights from the Peruvian state over its mine and operations. These rights can be held indefinitely, contingent upon the annual payment of licence fees and the supply of information on investment and production.</p>		<p>Power to the mine site is being supplied under long-term contracts with individual power producers through a 58 kilometre 220 kV transmission line, which is connected to Peru's national energy grid.</p>
<p>The molybdenum and lead/bismuth concentrates are transported by truck to different locations for shipment.</p>			
<b>Silver, lead and zinc</b>			
<p><b>Cannington</b></p>	<p>We own and operate Cannington.</p>	<p>The deposit was discovered in 1990. Concentrate</p>	<p>The beneficiation plant consists of a primary grinding circuit (AG mill), secondary grinding circuit (tower mill), pre-flotation circuit, fine lead</p>

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300 kilometres southeast of Mt Isa, Queensland, Australia

The Cannington deposit is contained within mining leases granted by the State of Queensland in 1994 and which expire in 2029.

Underground mine

The mine is accessible by public road and a Company-owned airstrip.

production commenced in 1997.

In February 2003, the Cannington Growth Project commenced to improve mill throughput and metal recovery. The project was completed during FY2005.

flotation circuit, coarse lead flotation circuit, zinc flotation circuit, concentrate and tailings thickening, lead and zinc concentrate leaching circuits, lead and zinc concentrate filtration circuit and a paste plant.

Nominal capacity is 3.1 mtpa.

A power station, consisting of a combination of gas-fired and diesel-fired engines, located at Cannington, is operated under contract to supply power solely to Cannington.

Product is transported 187 kilometres by road to Yurbi, a Company-owned loading facility, where it is loaded on public rail and transported to a public port at which we lease a berth.



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### **Development projects**

#### **Olympic Dam**

The pre-feasibility study into expansion options at Olympic Dam is currently being undertaken and is addressing production capacities, mining methods, processing (including smelting) options and supporting infrastructure requirements. The expansion is likely to convert Olympic Dam from an underground to an open cut mine. Our conceptual studies have indicated the potential for production capacity by the end of the last stage of development of approximately 730,000 tpa of copper, 19,000 tpa of uranium oxide and 800,000 ounces per year of gold. Olympic Dam is a relatively complex orebody, so there remains uncertainty about the size, cost, timing and eventual configuration of the expansion project. The project is still in pre-feasibility and development options are still being evaluated, and ultimately, the expansion project will depend upon Board approval of the final investment case and a range of regulatory and governmental approvals and agreements.

#### **Escondida**

Escondida is currently undertaking a pre-feasibility study into building a third concentrator plant. It has also been undertaking extensive exploration of the Escondida lease, and early drilling results suggest that there is extensive additional mineralisation in close proximity to existing infrastructure and processing facilities, including a new prospect known as Pampa Escondida. Further study will be required before we establish whether it can be economically extracted. Escondida is planning to invest an estimated US\$327 million (US\$188 million our share) in drilling, assaying and metallurgical test work across the mining lease over the next five years.

#### **Resolution Copper**

We hold a 45 per cent interest in the Resolution Copper project in Arizona, which is operated by our partner, Rio Tinto, which owns the other 55 per cent. Resolution Copper is currently undertaking a pre-feasibility study into a substantial underground copper mine and processing facility.

### **2.2.5 Diamonds and Specialty Products Customer Sector Group**

Our Diamonds and Specialty Products CSG operates our diamonds and titanium minerals businesses, and is managing the development of a potentially substantial potash business.

#### **Diamonds**

The cornerstone of our diamonds business is the EKATI diamond mine in the Northwest Territories of Canada, of which we own 80 per cent. EKATI has produced an average of 3.0 million carats per year of rough diamonds over the last three years. However, the grade of ore we process fluctuates from year to year, resulting in variations in carats produced. In addition, the proportion of our production consisting of high-value carats (larger and/or higher-quality stones) and low-value carats (smaller and/or lower-quality stones) will fluctuate from year to year. Production at EKATI continues to transition from predominantly open-pit to a mix of open-pit and underground mining. During FY2008, we completed the Koala underground mine ahead of schedule and under budget. EKATI has a number of development options for future open-pit and underground mines to extend the life of the operation. The mine life based on current reserves and rate of production is 11 years.

Annual sales from EKATI (100 per cent terms) represent around 2.7 per cent of current world rough diamond supply by weight and 5.3 per cent by value. We sell most of our rough diamonds to international diamond buyers through our Antwerp sales office. We also sell a smaller amount of our diamond production to two Canadian manufacturers based in the Northwest Territories. We also sell polished diamonds, manufactured through contract polishing arrangements, through our CanadaMark and AURIAS brands.

We are also actively exploring for diamonds in a number of areas, particularly in Angola where we hold substantial exploration acreage. We believe there is significant potential in the diamonds business because of the increasing demand for diamond jewellery and the lack of significant new diamond discoveries. We believe that our experience operating EKATI provides us with a solid base for future operations.

#### **Titanium minerals**

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Our interest in titanium minerals consists of our 50 per cent effective interest in Richards Bay Minerals (RBM) in South Africa and our 90 per cent interest in the Corridor Sands mineral sands project in Mozambique (see Development projects below).

RBM is one of the largest and lowest-cost producers of titania slag, high-purity pig iron, rutile and zircon from mineral sands. Approximately 90 per cent of the titanium dioxide slag produced by RBM is suitable for the chloride process of titanium dioxide pigment manufacture and is sold internationally under a variety of short, medium and long-term contracts. The other 50 per cent of RBM is owned by Rio Tinto.

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In July 2008, RBM announced the signing of a Memorandum of Understanding for a 26 per cent broad-based black economic empowerment transaction. A consortium including investors, local communities and employees has been identified. Negotiations with the selected parties to agree the terms of the transaction are ongoing.

### Potash

We believe that sound industry fundamentals, driven by rising demand for fertilisers, together with the resource attributes and capital-intensive nature of greenfield potash developments, make potash a suitable commodity for our portfolio. We have acquired substantial exploration acreage in the province of Saskatchewan, Canada, home to the largest and most productive potash basin in the world. We are currently studying development alternatives (see Development projects below).

### Information on Diamonds and Specialty Products mining operations

The following table contains additional details of our mining operations. This table should be read in conjunction with the production and reserve tables.

Name, location, type of mine and access	Ownership, operation and title/lease	History	Facilities and power source
<b>Diamonds</b>			
EKATI Diamond Mine  310 kilometres northeast of Yellowknife, Northwest Territories, Canada	We own an 80% interest in the Core Zone joint venture, which includes the existing operations. The remaining 20% interest is held by two individuals.	Construction began in 1997 and production from the first open-cut was initiated in 1997. The mine and processing plant began operation in mid 1998.	The processing plant consists of crushers, washers/scrubber and grinder and heavy media separator. The diamond recovery process makes use of magnetics and X-ray sorters. Nameplate capacity is 9,000 tonnes of ore per day.
Beartooth and Fox are open-cut mines and Panda and Koala are underground mines.  The mines are accessible year round by contracted aircraft.  Road access is available for approximately 10	We also own a 58.8% interest in the Buffer Zone joint venture, made up predominantly of exploration targets.  We are the operators of the mines.  Tenure is secured through ownership of mining leases granted by the Government of Canada. Mining leases have been granted for reserves until 2017.	In October 2001, we acquired Dia Met Minerals Ltd, bringing our interest in the Core Zone and Buffer Zone joint ventures up to 80% and 58.8% respectively.  Current active mines include two open-cut (Beartooth and Fox) and two underground mines (Panda and Koala).	All the electric power is generated by our Company-owned and operated diesel power station. In addition, there is storage for approximately 90 million litres of diesel fuel on-site.

weeks per year via an  
ice road.

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Name, location, type of mine and access	Ownership, operation and title/lease	History	Facilities and power source
<b>Titanium Minerals</b>			
<p><b>Richards Bay Minerals</b></p> <p>Four beach sand dredge mines 10 to 50 kilometres north of Richards Bay, KwaZulu-Natal, South Africa</p> <p>The mine is accessible via public rail, road and port.</p> <p>The rail between the mine site, harbour and shipping facilities are owned by Spoornet and Portnet (both government business enterprises supplying services on behalf of the state). The roads accessing the smelter are government-owned.</p>	<p>RBM comprises two legal entities, Tisand (Pty) Ltd and Richards Bay Iron and Titanium (Pty) Ltd. Our share is 51% and 49.45% respectively. The remaining 49% and 50.55% are held by Rio Tinto. The overall net income is shared equally.</p> <p>RBM management independently operates the joint venture on behalf of the shareholders.</p> <p>RBM holds long-term renewable leases from the state of South Africa.</p> <p>These leases are subject to the South African Mining Charter and must be lodged for a conversion to a New Order Mining Right by no later than 30 April 2009 (refer to section 2.8 Government regulations ).</p>	<p>Richards Bay Minerals was formed in 1976 to mine and beneficiate the sands in the coastal dunes.</p> <p>The mining operations were expanded to five, with the last mine added in 2000. In 2006, this was reduced to four, with the closure of one mining pond.</p>	<p>Mining is conducted largely by sand dredge mining, with minor supplementary dry mining. Gravity separation is then utilised to produce a heavy mineral concentrate. This concentrate is then trucked to a central processing plant to produce the finished products, being rutile and zircon and the ilmenite for smelter feed.</p> <p>The smelter processes the ilmenite to produce titanium dioxide slag, with a titanium dioxide of approximately 85% and high-purity iron.</p> <p>The nominal titanium slag capacity is 1.06 mtpa.</p> <p>The power for the operation is purchased from the South African grid.</p>

**Development projects***Corridor Sands*

We are working on a pre-feasibility study for the Corridor Sands titanium minerals project in the Gaza province of southern Mozambique, which we acquired in the WMC transaction.

*Potash*

We are working on a pre-feasibility study for the Jansen project, a potentially substantial greenfield potash mine in the province of Saskatchewan, Canada. The Jansen project envisages the development of an underground mining operation, processing plant and associated infrastructure. While we are conducting the Jansen pre-feasibility study, we plan to pursue other potash projects in the

region.

*EKATI expansions*

We are working on pre-feasibility and concept studies for developments at EKATI. Because of the nature of the kimberlite pipes in which diamonds are found, individual pipes are relatively short-lived, so we are continually working on options to bring new pipes on-stream.

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### **2.2.6 Stainless Steel Materials Customer Sector Group**

Our Stainless Steel Materials business is primarily a supplier of nickel to the stainless steel industry. Nickel is an important component of the most commonly used types of stainless steel. In addition, we supply nickel and cobalt to other markets including the specialty alloy, foundry, chemicals, and refractory material industries. We are the world's third-largest producer of nickel. Our nickel business has expanded rapidly with the acquisition of the former WMC nickel assets in 2005 and the development of Ravensthorpe and the Yabulu expansion. We have a number of options to continue expanding to meet the anticipated growth in stainless steel demand. We sell our nickel products under a mix of long-term, medium-term and spot contracts, with prices linked to the LME nickel price.

Our nickel business comprises three sets of assets:

#### *Nickel West*

Nickel West is the name for our wholly-owned Western Australian nickel assets, which consist of an integrated system of mines, concentrators, a smelter and refinery, together with our new Ravensthorpe nickel operation. We mine nickel bearing sulphide ore at our Mt Keith, Leinster and Cliffs operations north of Kalgoorlie, Western Australia. We operate concentrator plants at Leinster, which also concentrates ore from Cliffs, and at Mt Keith. Although its ore is relatively low grade, Mt Keith is a large open-cut nickel mine and the concentrator processes approximately 11.5 mtpa of ore. Leinster and Mt Keith have reserve lives of seven and 14 years, respectively at current rates of production, and both have options for further expansion. Cliffs is a new high grade underground mine with an expected reserve life of five years with extraction of ore commencing in FY2008.

We also operate the Kambalda concentrator south of Kalgoorlie, which processes material purchased from third parties.

We transport concentrate from Leinster, Mt Keith and Kambalda to our Kalgoorlie smelter, which processes it into nickel matte, containing approximately 68 per cent nickel. In FY2008, we exported approximately 31 per cent of our nickel matte production. We processed the remaining nickel matte at our Kwinana nickel refinery, which produces nickel metal in the form of LME grade briquettes and nickel powder, together with a range of saleable by-products. In June 2008, we announced that we brought forward a planned furnace rebuild at the Kalgoorlie smelter and that, as a consequence, both the smelter and the Kwinana nickel refinery were shut down. The smelter furnace rebuild was completed after approximately three months, with the refinery scheduled to resume production by the end of September 2008.

Our Ravensthorpe nickel operation was commissioned during FY2008 and is in the process of ramping-up to full capacity. Ravensthorpe comprises a large open-cut laterite nickel mine and an enhanced pressure acid leach concentrator plant. We will ship the plant's production, a mixed hydroxide precipitate (MHP) containing approximately 40 per cent nickel, to the expanded Yabulu refinery (see below) for refining into nickel metal. Ravensthorpe has a reserve life of 21 years based on the expected rate of production when the ramp-up is complete.

#### *Yabulu*

This wholly-owned nickel refinery in Queensland, Australia began operations in 1974 to service the nearby nickel laterite Greenvale mine, which closed in 1993. Since then, it has continued to process laterite ores purchased from third party mines in New Caledonia, Indonesia and the Philippines. In FY2008, we completed a significant expansion of the refinery to give it the capacity to process MHP from Ravensthorpe. The expansion more than doubled the nickel production capacity of the plant to an estimated 76,000 tpa of contained nickel.

#### *Cerro Matoso*

Cerro Matoso, our 99.94 per cent owned nickel operation in Colombia, combines a lateritic nickel ore deposit with a low-cost ferronickel smelter. Cerro Matoso is the world's second-largest producer of ferronickel and one of the lowest-cost producers of ferronickel. The smelter produces high-purity, low-carbon ferronickel granules. Production in FY2008 was 41,800 tonnes of contained nickel, approximately 9,000 tonnes lower than FY2007's production principally due to an industrial stoppage during FY2008. Cerro Matoso has an estimated reserve life of 42 years, based on current production levels. We are considering options that would expand processing capacity significantly (see Development projects below).





**Table of Contents****Information on Stainless Steel Materials mining operations**

The following table contains additional details of our mining operations. This table should be read in conjunction with the production and reserve tables.

<b>Name, location, type of mine and access</b>	<b>Ownership, operation and title/lease</b>	<b>History</b>	<b>Facilities and power source</b>
<b>Nickel</b>			
<b>Leinster</b>	We own and operate the mines at Leinster.	Production commenced in 1967.	Concentration plant with an operating capacity of 3 mtpa of ore.
375 kilometres north of Kalgoorlie in Western Australia, Australia	We hold 21-year leases over the land from the Western Australian Government. The leases have expiry dates between 2009 and 2029. Further renewals are at the Government's discretion.	WMC purchased the Leinster nickel operations in 1988 from Mt Isa Mines and Western Selcast.	Power at the Kambalda, Mt Keith, Leinster and Cliffs nickel operations and at the Kalgoorlie nickel smelter is primarily derived from on-site third party gas-fired turbines. Gas for these turbines is sourced by us from the North West Shelf gas fields. The existing gas supply contract terminates in October 2013.
Open-cut and underground mines		In June 2005, we gained control of Nickel West (Leinster, Mt Keith and Cliffs) as part of the acquisition of WMC.	
The mine is accessible by government-owned road and rail.			The gas is transported through the Goldfields Gas Pipeline, pursuant to an agreement with Southern Cross Energy that expires in January 2014.
Nickel concentrate is shipped by rail to the Kalgoorlie smelter.			
<b>Cliffs</b>	We own and operate the mine at Cliffs.	Production commenced in 2008.	Power is currently sourced by diesel fuelled generators.
430 kilometres north of Kalgoorlie in Western Australia, Australia	We hold 21-year leases over the land from the Western Australian Government. The leases have expiry dates between 2025 and 2028.	In June 2005, we gained control of Nickel West (Leinster, Mt Keith and Cliffs) as part of the acquisition of WMC.	

Further renewals are at the Government's discretion.

Underground mine

The mine is accessible by government-owned road.

Nickel ore is transported by road to the Leinster nickel operations for further processing.

**Mt Keith**

We own and operate the mine at Mt Keith.

The Mt Keith mine was officially commissioned in January 1995 by WMC.

Concentration plant with a capacity of 11.5 mtpa of ore.

460 kilometres north of Kalgoorlie, Western Australia, Australia

We hold 21-year leases over the land from the Western Australian Government. The leases have expiry dates between 2009 and 2029. Further renewals are at the Government's discretion.

In June 2005, we gained control of Nickel West (Leinster, Mt Keith and Cliffs) as part of the acquisition of WMC.

Power is sourced from the same supplier under the same conditions as the Leinster mine.

Open-cut mine

The mine is accessible by private road.

Nickel concentrate is transported by road to Leinster nickel operations from where it is transported by public rail to Kalgoorlie smelter.

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Name, location, type of mine and access	Ownership, operation and title/lease	History	Facilities and power source
<b>Ravensthorpe</b>			
155 kilometres west of Esperance, Western Australia, Australia	We own and operate the mine at Ravensthorpe.	BHP Billiton announced approval of the Ravensthorpe Nickel Development Project in March 2004.	Ravensthorpe's processing plant has a capacity of up to 50,000 tpa of contained nickel and 1,400 tpa of cobalt.
Open-cut mine	We hold 21-year leases over the land from the Western Australian Government. Expiry dates of the leases range between 2019 and 2028. Further renewals are at the Government's discretion.	Ravensthorpe was officially opened in May 2008.	Ravensthorpe is a fully integrated operation, providing its own power.
The mine is accessible by government-owned road.		Total project cost was \$2,086 million.	Ravensthorpe Nickel Operation uses the Enhanced Pressure Acid Leach (EPAL) process, which combines pressure acid leaching and atmospheric leaching to recover nickel and cobalt from laterite ores, producing a mixed hydroxide precipitate.
Mixed hydroxide precipitate is transported by road to the deepwater Port of Esperance, where it is then shipped by sea to BHP Billiton's Yabulu Refinery.			
<b>Cerro Matoso</b>			
Montelibano, Córdoba, Colombia	We own 99.94% of CMSA. 0.06% is held by employees.	Mining commenced in 1980 and nickel production started in 1982 under Colombian Government, BHP Billiton and Hanna Mining ownership.	The ferronickel smelter and refinery are integrated with the mine.
Open-cut mine	Existing mining concession rights are renewable in 2012 with a 30-year extension period until 2042. Further extension is possible at that time.	In 1989, we increased our ownership to 53%, in 1997 to 99.8% and in 2007 to 99.94%.	Beneficiation plant for the mine consists of a primary and secondary crusher, which is sent to a stacker for ore stockpiling and blending.
The mine is accessible by public highway.			Process design capacity is 50,000 tpa. Actual capacity depends on nickel

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Land on which reserves are located is owned.

In 1999, an expansion project to double installed capacity was started, and in January 2001 the first metal was tapped from this second line.

grade from the mine.

Electricity is supplied from the national grid based on supply contracts negotiated for 5-year periods. The existing electricity supply contract terminates in December 2010.

A pipeline supplies domestic natural gas for drier and kiln operation. The existing gas supply contract terminates in November 2008.

**Table of Contents****Information on Stainless Steel Materials smelters, refineries and processing plants**

<b>Operation and location</b>	<b>Ownership, operation and title</b>	<b>Plant type/product</b>	<b>Capacity and power source</b>
<p><b>Kambalda</b></p> <p>56 kilometres south of Kalgoorlie, Western Australia, Australia</p>	<p>We own and operate the Kambalda nickel concentrator.</p> <p>Ore is sourced through tolling and concentrate purchase arrangements with third parties in the Kambalda region.</p> <p>We hold 21-year leases over the land from the Western Australian Government. The lease expiry dates range between 2010 and 2029. Further renewals are at the government's discretion.</p>	<p>Mill and concentrator plant producing concentrate containing approximately 13% nickel.</p>	<p>The Kambalda concentrator has a capacity of approximately 1.6 mtpa of ore. Power arrangements are the same as for the Leinster mine (see above).</p>
<p><b>Kalgoorlie nickel smelter</b></p> <p>Kalgoorlie, Western Australia, Australia</p>	<p>We own and operate the Kalgoorlie nickel smelter operation and hold freehold title over the property.</p>	<p>The flash smelting process produces matte containing approximately 68% nickel.</p>	<p>The Kalgoorlie smelter has a capacity of 110,000 tpa of nickel matte.</p> <p>Power arrangements are the same as for the Leinster mine (see above).</p>
<p><b>Kwinana nickel refinery</b></p>	<p>We own and operate the Kwinana nickel refinery operation and hold freehold title over the property.</p>	<p>The refinery uses the Sherritt-Gordon ammonia leach process to convert nickel matte from the Kalgoorlie nickel smelter into LME-grade nickel briquettes and nickel powder.</p>	<p>The Kwinana nickel refinery has a capacity of approximately 65,000 tpa of nickel metal.</p>

30 kilometres south of Perth, Western Australia, Australia

The refinery also produces a number of intermediate products, including copper sulphide, cobalt-nickel sulphide and ammonium sulphate.

Power generated by Southern Cross Energy in the goldfields is distributed across Western Power's network for use at the Kwinana nickel refinery. We purchase delivered gas for use at the Kwinana nickel refinery. This gas is sourced from North West Shelf gas fields and is transported by the Dampier to Bunbury natural gas pipeline and the Parmelia pipeline.

The existing gas supply contract terminates in October 2013

**Yabulu**

We own and operate Yabulu and hold freehold title over the refinery property.

Yabulu consists of a laterite nickel refinery and cobalt refinery.

The Yabulu refinery has an annual production capacity of approximately 76,000 tonnes of nickel and 3,200 tonnes of cobalt.

25 kilometres northwest of Townsville, Queensland, Australia

The berth, ore handling facilities and fuel oil facilities at the Townsville port are situated on long-term leasehold land

The Yabulu refinery has two major sections. We process nickel ore at the front end section using a reduction roast. The reduced nickel ore is put through an ammonia-ammonium carbonate leaching process before being combined with MHP at the back end section. The mixture

Currently, we source power and steam from a combination of on-site coal-fired and oil-fired boilers, electrical power from

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Operation and location	Ownership, operation and title	Plant type/product	Capacity and power source
		goes through a solvent extraction process that was developed and patented at the refinery. The metal refining separates the nickel and cobalt. Our cobalt purification plant produces a high-purity cobalt oxide hydroxide product.	Ergon Energy and coal seam gas from AGL Energy / Arrow Energy (50% owners).  The existing gas supply contract terminates in May 2020.  The existing coal supply contract terminates in March 2011, but can be extended.

**Development projects***Perseverance Deeps*

We are undertaking a feasibility study into extending the life of the existing high-grade sulphide Perseverance mine located at Leinster in Western Australia, by implementing a block cave mining method below 1.1 kilometres depth. If approved, the mine would deliver ore into the existing Nickel West infrastructure.

*Cerro Matoso expansion options*

We have undertaken conceptual studies on options for expanding production at Cerro Matoso, including building a third and fourth processing line and a heap leaching operation. If we successfully complete feasibility studies and BHP Billiton Board approval is given, these projects could result in Cerro Matoso's capacity more than doubling within 10 years.

**2.2.7 Iron Ore Customer Sector Group**

Our iron ore CSG consists of our Western Australia Iron Ore business (WAIO) and a 50 per cent interest in the Samarco joint venture in Brazil.

**Western Australia Iron Ore**

WAIO's operations involve a complex integrated system of seven mines, more than 1,000 kilometres of rail and port facilities, located in the Pilbara region of northern Western Australia.

In response to surging demand for iron ore, we have been rapidly expanding our WAIO operations. Since 2001, we have completed five expansion projects to increase our system production capacity from 69 mtpa to 129 mtpa (100 per cent basis). All of these projects have been completed on time and on budget. We now have a project underway to further increase system capacity to 155 mtpa by the end of FY2010. Additional projects now undergoing feasibility or pre-feasibility studies would, if approved and completed on schedule, increase system capacity to 300 mtpa by 2015. Our share of FY2008 production was approximately 103.8 million tonnes of ore.

Our Pilbara reserve base is relatively concentrated, allowing us to plan our development around a series of integrated mining hubs joined to the ore bodies by conveyor or spur line. The mining hub approach enables us to maximise the value of installed infrastructure by using the same processing plant and rail infrastructure for a number of ore bodies. Blending ore at the hub gives us greater flexibility to responding to changing customer requirements and changing properties in the ore being mined, as well as reducing the risk of port bottlenecks. In recent years, we have also driven operational efficiency by a number of business

improvement initiatives, such as our proprietary BLASOR development planning optimisation software, increased mining and processing automation, and using technology to increase the length and frequency of trains.

In conjunction with our capacity expansion, we have substantially expanded our reserve evaluation capability to improve our reserve knowledge and extend the life of our Pilbara reserves. In June 2008, we announced a 23 per cent increase in our ore reserve for our



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WAIO operations and we estimate that we have significant additional mineralisation. Our proven ore reserves are high grade, with average iron content ranging from 57.4 per cent at Yandi to 63.2 per cent at Mt Newman. The reserve lives of our mines at current production levels range from 12 years at Mt Goldsworthy (Northern) to 61 years at Jimblebar.

Most of our sales take place under long-term volume contracts with steel producers in North Asia. Prices are generally set through annual negotiations. In the longer term, we are promoting a shift away from annually negotiated prices to a system based on index prices.

Fortescue Metals Group has applied to the Australian National Competition Council for access to our rail infrastructure in the Pilbara. See Section 8 Legal Proceedings - Mt Newman and Goldsworthy railway lines. If FMG is successful in its application, its use of our railways may have a material adverse impact on our expected production from WAIO.

### **Samarco**

We are a 50-50 joint venture partner with Vale at the Samarco operations in Brazil. During the 2008 fiscal year, Samarco completed an expansion project consisting of a third pellet plant, a mine expansion, a new concentrator, port enhancements and a second slurry pipeline. Our share of production in FY2008 was approximately 8.5 million tonnes of ore. Samarco has a reserve life of 21 years at current production rates.

### **Information on Iron Ore mining operations**

The following table contains additional details of our mining operations. This table should be read in conjunction with the production and reserve tables.

<b>Name, location, type of mine and access</b>	<b>Ownership, operation and title/lease</b>	<b>History</b>	<b>Facilities and power source</b>
<p><b>Mt Newman joint venture</b></p> <p>Pilbara region, Western Australia, Australia</p> <p>Open-cut mine</p> <p>The mine is accessible by public road and Company-owned rail to the joint venture's Nelson Point shipping facility at Port Hedland.</p>	<p>We hold an 85% interest in the Mt Newman joint venture. The other 15% is held by Mitsui ITOCHU Iron (10%), ITOCHU Minerals and Energy of Australia (5%).</p> <p>We are the operators.</p> <p>Mining lease under the Iron Ore (Mt Newman) Agreement Act 1964, this expires in 2009 with the right to successive renewals of 21 years.</p>	<p>Production began at the Mt Whaleback orebody in 1969.</p> <p>Production continues to be sourced from the major Mt Whaleback orebody, complemented by production from orebodies 18, 23, 25, 29 and 30.</p>	<p>At Mt Whaleback, primary and secondary crushing plants (capacity of 35 mtpa); a heavy media beneficiation plant (capacity of 8 mtpa) and a train-loading facility.</p> <p>At orebody 25, an additional primary and secondary crushing plant (capacity of 8 mtpa).</p> <p>A crusher and train-loading facility at orebody 18.</p> <p>Power comes from Alinta Dewap's Newman gas-fired power station via Company-owned powerlines</p>

under long-term contracts.

<p><b>Yandi joint venture</b></p> <p>Pilbara region, Western Australia, Australia</p>	<p>We hold an 85% interest in the Yandi joint venture. The other 15% is held by Mitsui Iron Ore Corporation (7%), ITOCHU Minerals and Energy of Australia (8%).</p>	<p>We began development of the orebody in 1991. The first shipment occurred in 1992.</p>	<p>Two processing plants and a primary crusher and overland conveyor are used to crush and screen ore and deliver it to one of two train-loading facilities.</p>
<p>Open-cut mine</p> <p>The mine is accessible by public road and Company-owned rail to the Nelson Point shipping facility at Port Hedland.</p>	<p>An independent contract mining company is the operator of the mine.</p>	<p>Capacity was progressively expanded between 1994 and 2003 and is currently in excess of 42 mtpa.</p>	<p>Power comes from Alinta Dewap s Newman gas-fired power station via Company-owned powerlines under long-term contracts.</p>
<p><b>Jimblebar</b></p> <p>Pilbara region, Western Australia, Australia</p> <p>Open-cut mine</p>	<p>We own 100% of the Jimblebar lease. We have a sublease agreement over the Wheelara deposit with ITOCHU Minerals and Energy of Australia, Mitsui Iron Ore and four separate subsidiaries of Chinese</p>	<p>Production at Jimblebar began in March 1989.</p> <p>The ore currently being produced is blended with ore produced from Mt Whaleback and satellite orebodies 18, 23, 25, 29 and 30 to create the Mt Newman blend.</p>	<p>Primary and secondary crushing plant (capacity of 8 mtpa).</p> <p>Power comes from Alinta Dewap s Newman gas-fired power station via Company-owned powerlines under long-term contracts.</p>

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<b>Name, location type of mine and access</b>	<b>Ownership, operation and title/lease</b>	<b>History</b>	<b>Facilities and power source</b>
<p>The mine is accessible by public road and Company-owned rail to Port Hedland via a 30 kilometre spur line linking with the main Newman to Port Hedland railway.</p>	<p>steelmakers. As a consequence of this arrangement, we are entitled to 85% of production from the Wheelara sublease.</p> <p>An independent contract mining company is the operator of the mine.</p> <p>Mining lease under the Iron Ore (McCamey's Monster) Agreement Authorisation Act 1972 expires in 2009 with the rights to successive renewals of 21 years.</p>		
<p><b>Mt Goldsworthy joint venture</b></p> <p>Pilbara region, Western Australia, Australia</p> <p>Open-cut mine includes Area C, Yarrie and Nimingarra.</p>	<p>We hold an 85% interest in the Mt Goldsworthy joint venture. The other 15% is held by Mitsui Iron Ore Corporation (7%) and ITOCHU Minerals and Energy of Australia (8%).</p> <p>An independent contract mining company is the operator of the mine.</p>	<p>Operations originally commenced at the Mt Goldsworthy project in 1966 and the Shay Gap mine in 1973. The original mine closed in 1982 and the associated Shay Gap mine closed in 1993. Since then, mining has continued from the adjacent Nimingarra and Yarrie areas.</p>	<p>The primary crushers at Yarrie and Nimingarra, with a combined capacity of 8 mtpa, have been placed into care and maintenance. Yarrie is currently using mobile in-pit crushing plant at a rate of 2 mtpa.</p> <p>An ore processing plant, primary crusher and overland conveyor are located at Area C with capacity of 42 mtpa.</p>
<p>The mine is accessible by public road and Company-owned rail to the joint venture's Finucane Island shipping facilities and the Nelson Point shipping facilities, both located at Port Hedland.</p> <p>Our railway spur links Area C mine to the Newman main line.</p>	<p>Four mineral leases under the Iron Ore (Mt Goldsworthy) Agreement Act 1964 and the Iron Ore (Goldsworthy Nimingarra) Agreement Act 1972, which have expiry dates between 2008 and 2028 with rights to successive renewals of 21 years.</p>	<p>We opened Area C mine in 2003.</p>	<p>Power for Yarrie and Nimingarra is sourced via overhead powerlines from the Port Hedland gas-fired powered station operated by Alinta Dewap under long term contracts.</p>

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A number of smaller mining leases granted under the Mining Act 1978 in 2005.

Area C sources its power from the Newman gas-fired power station also operated by Alinta Dewap under long-term contracts.

**Samarco**

Southeast Brazil

We own 50% of Samarco. The other 50% is owned by Vale. Samarco is operated as an independent business with its own management team.

Production began at the Germano mine in 1977 and at the Alegria complex in 1992. The Alegria complex has now replaced the depleted Germano mine.

There are two 396 kilometre iron ore slurry pipelines integrating the mining complex to pellet plants.

Open-cut mine

The Brazilian Government has granted mining concessions to Samarco as long as it mines the Alegria complex according to an agreed plan.

An expansion occurred in 1997 when a second pellet plant was built. In 2005, an optimisation project increased pellet feed and pellet production.

With the addition of the third pellet plant expansion,

The mine is accessible by public road. Conveyor belts transport iron ore to the beneficiation plant and a 396 kilometre slurry pipeline transports pellet feed to the pellet plants on the coast.

Samarco has the capacity to process and pump a total of 24 million tonnes of ore concentrate a year and produce and ship approximately 21.6 million tonnes of pellets.

Iron pellets are exported via private port facilities.

The most recent expansion occurred in 2008 when a third pellet plant was built as well as a second pipeline.

Samarco holds interests in two hydroelectric power plants. These plants furnish approximately 19.2% of Samarco's electricity requirements.

Samarco has signed two agreements expiring in 2014 to purchase remaining power needs from two local concessionaires that operate other hydro-electric power plants.

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### **Development projects**

#### *Western Australia Iron Ore*

During FY2008 the Rapid Growth Project (RGP) 3 was completed and has delivered an additional 20 mtpa of capacity, bringing the total installed capacity in the business to 129 mtpa (100 per cent share). This has seen the delivery of additional mining and processing facilities at the Area C mine, together with expansions to the rail and port infrastructure, including the rebuilding of the C Berth at Finucane Island.

The Board approved project expenditure of US\$1,850 million in March of 2007 for RGP 4. The focus of this expansion project is within the Newman area and is expected to increase installed capacity to 155 mtpa (100 per cent share) by early 2010.

A variety of feasibility studies are being undertaken as part of the plan to grow business capability to 300 mtpa by 2015, and of these, RGP5 is the most advanced. In January, the Board approved our share of pre-expenditure of US\$1,100 million (US\$930 million our share) to progress the project while the feasibility study is being completed.

#### *Samarco*

In October 2005, the Board approved construction of a third pellet plant at Ponta Ubu, together with a mine expansion, a new concentrator at Germano, port enhancements and a second slurry pipeline. The project has increased iron ore pellet capacity by 7.6 mtpa at a cost of US\$1,480 million (US\$740 million our share). Production commenced during in March 2008.

#### *Guinea*

We are currently carrying out concept studies in Guinea (West Africa) at our Nimba deposit to determine the economic viability, sustainability impacts and management implications of operations in this area.

### **2.2.8 Manganese Customer Sector Group**

Our Manganese CSG operations produce a combination of ores, alloys and metal from sites in South Africa and Australia. We are the world's largest producer of seaborne manganese ore and in the top three global producers of manganese alloy.

Manganese alloy is a key input into the steel making process, and demand for manganese has reflected the growth in global steel production. Our high-grade ore is particularly valuable to alloy producers because of the value in use differential over low-grade ore, which is the degree to which high grade ore is proportionately more efficient in the alloy process than the difference in grade.

Although our corporate strategy is to focus on upstream resources businesses, our low-cost alloy smelters have been significant contributors to our profit in recent years. In addition, they add value to the overall manganese business because they enable us to access markets with an optimal mix of ore and alloy, optimise production to best suit market conditions and give us insights into the performance of our ores in smelters that assist our ore marketing efforts.

In recent years, we have sold approximately 80 per cent of our ore production and used the remainder as feedstock in our alloy smelters. More than 90 per cent of our ore sales are priced quarterly or, occasionally, on a spot basis while the rest are priced annually.

We own all of our manganese mining assets and alloy plants through 60-40 joint ventures with Anglo-American known as Samancor Manganese. We are the operator of the assets in this joint venture. The Samancor Manganese joint venture also owns 51 per cent of the Manganese Metal Company, which operates a manganese metal plant in South Africa. Our manganese metal and alloy sales are principally to steelmakers, generally under long-term contracts that typically provide for quarterly price adjustments, either by negotiation or by reference to published market prices.

We have two mines at Hotazel in the Northern Cape province of South Africa and the GEMCO mine on Groote Eylandt in the Gulf of Carpentaria off northern Australia.

**Hotazel**

The Samancor Manganese joint venture owns the Mamatwan open-cut mine and the Wessels underground mine. These assets produced a record three million tonnes of ore during FY2008 and we have opportunities for further expansion. At current production rates, Mamatwan and Wessels have reserve lives of 14 and 20 years.

**Table of Contents****GEMCO**

As a result of its location near our own port facilities and its simple, open-cut mining operation, GEMCO is one of the lowest-cost manganese ore producers in the world. This, and its high-grade of ore and relative proximity to Asian export markets make it unique among the world's manganese mines. GEMCO produced over 3.5 million tonnes of ore in FY2008. At current production rates, it has a reserve life of 17 years. GEMCO currently has an expansion project underway and is studying another (see Development projects below).

We have alloy plants in Gauteng, South Africa (Metalloys/Advalloy) and Tasmania, Australia (TEMCO).

**Metalloys/Advalloy**

Samancor Manganese's Metalloys alloy plant, which includes the former Advalloy joint venture operation, is one of the largest manganese alloy producers in the world. Due to its size and access to high-quality feedstock from our Hotazel operations, it is also one of the lowest-cost alloy producers. Metalloys produces high and medium-carbon ferromanganese and silicomanganese.

**TEMCO**

TEMCO produces high-carbon ferromanganese, silicomanganese and sinter from ore shipped from GEMCO, primarily using hydro-electric power.

During FY2008, our South African mines and plants were affected by a mandatory 10 per cent reduction in electricity consumption as a result of generation constraints at the national power utility, Eskom. We have supplemented our power supply with additional diesel generation capacity and adjusted our product mix towards more energy efficient products. We expect to maintain overall production levels, although our costs will increase marginally.

**Information on Manganese mining operations**

The following table contains additional details of our mining operations. These tables should be read in conjunction with the production and reserve tables below.

<b>Name, location, type of mine and access</b>	<b>Ownership, operation and title/lease</b>	<b>History</b>	<b>Facilities and power source</b>
Hotazel Manganese Mines  Kalahari Basin, South Africa  Mamatwan is an open-cut mine.	Hotazel Manganese Mines, a division of Samancor Manganese, is the operator of Mamatwan and Wessels.  To comply with the South African Mining Charter and scorecard, Samancor Manganese should obtain 15% Black Economic Empowerment (BEE) ownership of its Hotazel Manganese Mines by April 2009. Hotazel has reached agreement to pool its mineral	Mamatwan was commissioned in 1964.  Wessels was commissioned in 1973.	Mamatwan's capacity is currently 2.8 mtpa of ore and sinter based on the current product mix at the mine. The beneficiation plant consists of primary, secondary and tertiary crushing with associated screening plants. There is a dense medium separator and a sinter plant with a capacity of 0.9 mtpa of sinter.

Wessels is an underground mine.

The mines are accessible by rail and public road. Most ore and sinter products are transported by government-owned rail. Approximately one third of the ore produced is beneficiated locally with the balance exported via Port Elizabeth and Durban.

rights in a new vehicle that will have a 9% BEE shareholding. The transaction is pending government approval. Negotiations are underway with possible BEE partners for the balance of the 15% target.

Wessels has two loaders and four haulers with an annual capacity of approximately 0.9 mtpa of ore. The processing is a simple crushing and screening circuit consisting of primary and secondary crushing circuits with associated screening capacity.

The power source is the national utility company Eskom. We have supplemented our power supply with additional back-up diesel generation capacity.



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<b>Name, location, type of mine and access</b>	<b>Ownership, operation and title/lease</b>	<b>History</b>	<b>Facilities and power source</b>
<b>Groote Eylandt Mining Company Pty Ltd (GEMCO)</b>	We own 60% of GEMCO, which owns and operates the mine. The remaining 40% is owned by Anglo American.	The mine was first commissioned in 1965.	The beneficiation process consists of crushing, screening and dense media separation with lump and fines products being produced. The existing capacity is 3.4 mtpa.
Groote Eylandt, Northern Territory, Australia	All leases situated on Aboriginal land held under the Aboriginal Land Rights (Northern Territory) Act 1976. Leases have been renewed for a period of 25 years from 2006.		
Open-cut mine			GEMCO owns and operates its own on-site diesel power generation facility.
Ore is transported from the concentrator by road train directly to our shipping facilities at the port at Milner Bay.			

**Information on Manganese smelters, refineries and processing plants**

<b>Operation and location</b>	<b>Ownership, operation and title</b>	<b>Plant type/product</b>	<b>Capacity and power source</b>
<b>Advalloy (Pty) Ltd</b>	Samancor Manganese owns 100% of Advalloy. Samancor Manganese holds freehold title over the property, plant and equipment.	Manganese alloy plant uses an oxygen blast converter process producing refined manganese alloy from molten metal from the adjacent Metalloys smelter.	Advalloy has a capacity of 82,000 tonnes per annum of medium-carbon ferromanganese in various fractions.
Meyerton, South Africa			The power source is from Eskom.
<b>Manganese Metal Company (Pty) Ltd</b>	Samancor Manganese owns 51% of Manganese Metal Company. Delta Plc indirectly owns the remaining 49%.	A manganese production plant at Nelspruit processing and electrowinning of manganese ore into electrolytic manganese metal (via a selenium-free hydrometallurgical electroplating extraction process).	Manganese Metal Company has a capacity to produce 27,000 tonnes per annum of electrolytic manganese metal.
Nelspruit, South Africa	Manganese Metal Company holds freehold title over the property, plant and equipment. Metalloys is a division of Samancor Manganese.	Manganese alloy plant uses eight electric arc furnaces to	The power source is from Eskom.
			370,000 tonnes of high-carbon ferromanganese

**Metalloids**

Meyerton, South Africa

Samancor Manganese holds freehold title over the property, plant and equipment.

produce manganese alloys such as high-carbon ferromanganese and silicomanganese.

(including hot metal) and 120,000 tonnes of silicomanganese in various fractions per annum.

The power source is the national utility company Eskom plus 30 mw of internal power generation from waste gases.

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<b>Operation and location</b>	<b>Ownership, operation and title</b>	<b>Plant type/product</b>	<b>Capacity and power source</b>
<b>Tasmanian Electro Metallurgical Company Pty Ltd (TEMCO)</b>  Bell Bay, Tasmania, Australia	We own 60% of TEMCO. Anglo American owns the remaining 40%. Samancor Manganese manages the operations.  TEMCO holds freehold title over the property, plant and equipment.	Four electric arc furnaces and a sinter plant produce ferroalloys, including high-carbon ferromanganese, silicomanganese and sinter.	Nominal capacity based on the 2007 product mix is 128,000 tonnes of high-carbon ferromanganese, 126,000 tonnes of silicomanganese and 336,000 tonnes of sinter per annum.  TEMCO sources its electrical power from Aurora Energy, the state-owned power distribution and retailing company. Power in Tasmania is principally generated from hydro stations, but supplemented with a 240 mw gas generation station. TEMCO also self-generates 11mw for internal use from an on-site energy recovery unit.

**Development projects***GEMCO expansion*

We are currently expanding the capacity of GEMCO's processing plant by an estimated 1.0 mtpa at a cost of US\$110 million (our share). We are undertaking a pre-feasibility study into further expansion options. The commissioning phase is due to start 30 April 2009 and the ramp-up is estimated to take two months from this date.

*Hotazel Manganese Mines*

Two expansion projects in South Africa are expected to add 1.0 mtpa of capacity (100 per cent, or about 0.6 mtpa BHP Billiton share) for less than US\$50 million capital expenditure (BHP Billiton share).

**2.2.9 Metallurgical Coal Customer Sector Group**

Our Metallurgical Coal CSG is the world's largest supplier of seaborne metallurgical coal. Along with iron ore and manganese, metallurgical coal is a key input in the blast furnace production of steel, and, as a result, demand for metallurgical coal is exposed to the booming Chinese steel industry and the fast-growing Indian steel industry.

We have production assets in two major resource basins, the Bowen Basin in Central Queensland, Australia and the Illawarra region of New South Wales, Australia. We will shortly begin Stage 1 development in a third significant basin at Maruwai on the Indonesian island of Kalimantan.

**Bowen Basin**

Compared to competitive coal producing regions, the Bowen Basin is extremely well positioned to supply the seaborne market because of:

its high-quality metallurgical coals, which are more efficient in blast furnace use

the relatively low cost of production because of its extensive near-surface deposits

its geographical proximity to Asian customers

We enjoy access to key infrastructure, including a modern, integrated electric rail network and our own coal loading terminal at Hay Point, Mackay. This infrastructure enables us to maximise throughput and blending products from multiple mines to optimise the value of our production and satisfy customers.

Our Bowen Basin mines are owned through a series of joint ventures. We share 50-50 ownership with Mitsubishi Development Pty Ltd of the Goonyella Riverside, Peak Downs, Saraji, Norwich Park, Blackwater and Gregory Crinum mines, together with the Hay Point terminal. We own 80 per cent of the South Walker Creek and Poitrel mines, with Mitsui and Co. owning the other 20 per cent. All of these operations are managed by a BHP Billiton-Mitsubishi joint venture company known as BMA.

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We export Bowen Basin metallurgical coal, under long-term or annual volume contracts with prices negotiated yearly. Our customers are steel producers around the world, particularly in north Asia and India.

During the third quarter of FY2008, north Queensland was affected by two episodes of unusually heavy rain and flooding. As a result, mining operations were temporarily suspended, and we were forced to declare force majeure on our sales contracts from late January until early June 2008. Production has recovered strongly and operations are now almost back to full capacity. Total attributable production in FY2008 was approximately 27.9 million tonnes, compared with 31.5 million tonnes in FY2007. As a result of the delayed deliveries, we will be delivering approximately 1.4 million tonnes of coal during the first quarter of FY2009 at the substantially lower Japanese fiscal year 2007 prices.

### **Illawarra**

We own and operate three underground coal mines in the Illawarra region of New South Wales, which primarily supply metallurgical coal to the nearby BlueScope Port Kembla steelworks under long-term volume contracts with annually negotiated prices. Total production in FY2008 was approximately 7.3 million tonnes.

Production figures for both the Bowen Basin and Illawarra include some energy coal (less than 7 per cent and 12 per cent, respectively).

### **Information on Metallurgical Coal mining operations**

The following table contains additional details of our mining operations. The tables should be read in conjunction with the production and reserves tables.

<b>Name, location, type of mine and access</b>	<b>Ownership, operation and title/lease</b>	<b>History</b>	<b>Facilities and power source</b>
<b>Central Queensland Coal Associates joint venture</b>	We own 50% of the CQCA joint venture. Mitsubishi owns the other 50%.	Goonyella mine, which commenced in 1971, merged with the adjoining Riverside mine in 1989 and is operated as the Goonyella Riverside mine. Reserves at the Riverside mine were depleted in 2005.	All coal is beneficiated at on-site processing facilities, which have a combined capacity in excess of 51.5 mtpa.
Bowen Basin, Queensland, Australia	BMA operates the mines.		Power is sourced from the State of Queensland's electricity grid.
Goonyella Riverside, Peak Downs, Saraji, Norwich Park and Blackwater are open-cut mines.	Leases for the CQCA mines have expiry dates between 2008 and 2037 and are renewable for such further periods as the Queensland Government allows.	Peak Downs commenced production in 1972. Saraji mine commenced production in 1974. Norwich Park commenced production in 1979.	
Broadmeadow is a longwall underground mine.	The joint venture holds additional undeveloped leases in the Bowen Basin.	Blackwater mine commenced production in	

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The mines are accessible by public road. All coal is transported on government-owned railways to the port of Hay Point near Mackay (incorporating CQCA's Hay Point Coal Terminal and the Dalrymple Bay Coal Terminal) and the port of Gladstone.

1967. South Blackwater and Blackwater mines were integrated from late 2000.

Broadmeadow, an underground mine developed on the Goonyella mining lease, commenced longwall operations in August 2005.

**Gregory joint venture**

We own 50% of the Gregory joint venture. Mitsubishi Development Pty Ltd owns the other 50%.

The Gregory mine became operational in 1979.

All coal is beneficiated at on-site processing facilities, which have a combined capacity in excess of 5 mtpa.

Bowen Basin, Queensland, Australia

BMA operates the mines.

Crinum mine commenced longwall production in 1997.

Gregory is an open-cut mine.

Power is sourced from the State of Queensland's electricity grid.

Crinum is a longwall underground mine.

Leases have expiry dates between 2013 and 2027, and are renewable for such further periods as the Queensland Government allows.

The mines are accessible by public

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Name, location, type of mine and access	Ownership, operation and title/lease	History	Facilities and power source
road. All coal is transported on government-owned railways to the port of Hay Point near Mackay (incorporating CQCA's Hay Point Coal Terminal and the Dalrymple Bay Coal Terminal) and the port of Gladstone.			
<b>BHP Mitsui Coal joint venture</b>  Bowen Basin, Queensland, Australia	We own 80% of the BHP Mitsui Coal joint venture. Mitsui and Co owns the other 20%.	The joint venture commissioned Riverside, an open-cut mine, in 1983. Reserves were depleted in 2005.	South Walker Creek coal is beneficiated at on-site processing facilities with a capacity to produce 3.8 mtpa of coal.
South Walker Creek and Poitrel are open-cut mines.	BMA manages the mines, which are operated through independent contractors.	South Walker Creek became operational in 1996, producing pulverised coal injection (PCI) product and minor quantities of by-product energy coal.	Poitrel mine has entered into a joint venture agreement with the adjacent Millennium Coal mine to share coal processing and rail loading facilities. Poitrel has access to 3.0 mtpa capacity from the processing facilities.
The mines are accessible by public road. All coal is transported on government-owned railways to the port of Hay Point near Mackay (incorporating CQCA's Hay Point Coal Terminal and the Dalrymple Bay Coal Terminal).	Leases have expiry dates between 2008 and 2020, and are renewable for such further periods as the Queensland Government allows.	Construction for the Poitrel mine commenced in early 2006 and first coal was produced in October 2006. The mine has a production capacity of 3.0 mtpa of metallurgical and PCI coals.	Power is sourced from the State of Queensland's electricity grid.
<b>Illawarra Coal</b>  Illawarra, New South Wales, Australia	The joint venture holds additional undeveloped leases in the Bowen Basin. We are owner and operator of the Illawarra Coal mines.	Appin commenced in 1962 with longwall mining starting in 1969.	Coal is beneficiated at two processing facilities with a capacity to produce approximately 8.0 mtpa.
Underground mines	Leases have expiry dates between 2010 and 2026, with renewal rights under the NSW Mining Act 1992 for periods of 21 years.	West Cliff was commissioned in 1976.	Power is sourced from the State of New South Wales electricity grid.
All the mines are accessible by public road. All coal is transported by road or on government-owned railways to our major customer,		Elouera opened in 1993. Reserves were nearly depleted in 2005. In December 2007, the mine was sold to Gujarat NRE FCGL Pty Ltd.	

BlueScope Steel's Port Kembla steelworks or to Port Kembla for shipping.

Dendrobium Mine opened in FY 2005.

**Development projects**

*Maruwai (Lampunut)*

Maruwai is a large, high-quality, metallurgical coal deposit in Central and East Kalimantan provinces of Indonesia. Investment approval has been given for the Stage 1 development of the Maruwai metallurgical coal basin for a capital investment of approximately US\$100 million.

The initial development project is the Haju open-cut mine and associated river port. The Haju mine is a small, discrete coal deposit that is expected to initially produce 1 mtpa of metallurgical coal, with expansion potential to 2 mtpa. First production is expected mid-2009. A feasibility study is currently underway for development of a 3-5 mtpa coal mine at the larger Lampunut deposit at Maruwai.



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### *Bowen Basin Expansions*

BMA is investigating a number of brownfield and greenfield expansion options in the Bowen Basin. The most advanced of these are Daunia, which is in feasibility and Caval Ridge, in pre-feasibility. Daunia would produce 3 mtpa and is located to the east of the Poitrel mine, and Caval Ridge would be a 5.5 mtpa mine to the north of the Peak Downs mine. Both developments would include coal handling preparation plants. BMA is also considering the expansion of existing operations to add 2.5 mtpa to Peak Downs and up to 9 mtpa at Goonyella Riverside.

In addition, BMA has finalised an agreement to acquire the New Saraji exploration project from New Hope for approximately US\$1 billion (BHP Billiton share). The agreement is subject to regulatory and third party approval. New Saraji is located to the east of the Saraji mine. The deal includes a 10 mtpa entitlement at Abbott Point port expansion.

### **2.2.10 Energy Coal Customer Sector Group**

Our Energy Coal CSG is one of the world's largest producers and marketers of export energy coal (also known as thermal or steaming coal) and is also a significant domestic supplier to the electricity generation industry in Australia, South Africa and the United States. Our global portfolio of energy coal assets, our insights into the broader energy market through our sales of other fuels such as gas, uranium and oil, and our control of options for bulk freight provide our business with key advantages as a supplier. Like our other businesses, our Energy Coal CSG owns large, long-life assets with substantial options for expansion.

We generally make our domestic sales under long-term fixed-price contracts with power stations that are located in close proximity to the mine. We make export sales to power generators and some industrial users in Asia, Europe and the United States, usually under contracts for delivery of a fixed volume of coal. Pricing is either index-linked, or fixed, in which case we use financial instruments to swap our fixed-price exposure for exposure to the index.

We recognise that the need to control carbon dioxide emissions has substantial implications for the use of thermal coal as an energy source. Our Company has committed to invest US\$300 million over the five years from June 2007 to support the research, development and demonstration of low-emissions technologies, including clean coal and carbon sequestration technologies. We have also developed the capacity to offer our export customers emissions credits in conjunction with their coal purchases.

We operate three sets of assets: a group of mines and associated infrastructure collectively known as BHP Billiton Energy Coal South Africa (BECSA) our New Mexico Coal operations in the United States; and our Hunter Valley Energy Coal operations in New South Wales, Australia. We also own a one-third share of the Cerrejón Coal Company, which operates a coal mine in Colombia.

#### **BHP Billiton Energy Coal South Africa**

BECSA operates three coal mines in the Witbank region of Mpumalanga province of South Africa, which produced a total of approximately 45 million tonnes in FY2008. We have two major mine expansion projects underway in South Africa (see Development projects below). In FY2008, BECSA sold approximately 64 per cent of its production to Eskom, the government-owned electricity utility in South Africa, and exported the rest via the Richards Bay Coal Terminal, in which we own a 24 per cent share. The reserve lives of the BECSA mines at current production rates range from 12 to 27 years.

In May 2008, we announced an agreement to sell our previously wholly-owned Optimum colliery, together with 6.5 mtpa of Richards Bay Coal Terminal entitlement, to an entity controlled by a broad-based black economic empowerment consortium. The sale was completed in June 2008, however the economic impact of the agreement was as if it were concluded on 1 July 2007. In July 2007, we sold our previously wholly-owned Koornfontein mine to a broad-based black economic empowerment consortium. We continue to market the export production from both mines.

#### **New Mexico Coal**

We own and operate the Navajo mine, located on Navajo land in New Mexico, and the nearby San Juan mine. Each of these mines transports its production directly to a nearby power station. The reserve lives of Navajo and San Juan at current production rates are 25 and 12 years, respectively. We are considering expansion options at Navajo (see Development projects below).

#### **Hunter Valley Energy Coal**

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Our Hunter Valley operating asset is the Mt Arthur open-cut coal mine, which produced approximately 11.8 million tonnes in FY2008 and has a reserve life at current production rates of 14 years. We also have a number of projects in feasibility or pre-feasibility that, if completed, will form part of the Hunter Valley Energy Coal portfolio, including an open-cut expansion of the existing operation and an underground expansion of Mt Arthur (see Development projects below). We deliver approximately one-third of Mt Arthur's production to local power stations and export the rest via the port of Newcastle.

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**Table of Contents****Cerrejón Coal Company**

Cerrejón Coal Company owns and operates the largest open-cut export coal mine in the world in La Guajira province of Columbia, together with integrated rail and port facilities through which the majority of production is exported. In FY2008, Cerrejón completed an expansion that increased capacity to 32 mtpa (100 per cent terms). At that rate of production, Cerrejón has a reserve life of 25 years.

**Information on Energy Coal mining operations**

The following table contains additional details of our mining operations. The tables should be read in conjunction with the production and reserves tables.

<b>Name, location, type of mine and access</b>	<b>Ownership, operation and title/lease</b>	<b>History</b>	<b>Facilities and power source</b>
<b>South Africa</b>			
<b>Khutala</b>	We own and operate the mine at Khutala.	Khutala was commissioned in 1984.	Beneficiation facilities consist of a crushing plant, for the energy coal with a nominal capacity of 18 mtpa. A separate smaller crusher and wash plant with a nominal capacity of 0.6 mtpa is used to beneficiate the metallurgical coal supplied from the opencast operation.
100 kilometres east of Johannesburg, Gauteng Province, South Africa	BECSA is the holder of an Old Order Mining Right.	Open-cut operations began in 1996.	
Combination of open-cut and underground mines	An application for conversion to a New Order Mining Right, submitted in 2004, is still being processed (refer to section 2.8 Government regulations).	The mining of a thermal/metallurgical coal deposit for a domestic market commenced in 2003.	Power is supplied by Eskom under long term contracts.
The mine is accessible by public roads.			
Domestic coal is transported via overland conveyor to the Kendal Power Station.			
<b>Douglas/Middelburg</b>	We own 84% of the Middelburg mine in a joint venture. The remaining 16% is owned by Xstrata Plc through Tavistock Collieries Plc.	Middelburg mine was commissioned in 1982. Middelburg Mine Services (MMS) and Duvha Opencast became one operation in FY1996.	Beneficiation facilities consist of the following: tips and crushing plants, two export wash plants, a middlings wash plant and a de-stone plant. The overall capacity is 30 mtpa.
20 kilometres southeast of Witbank, Mpumalanga Province, South Africa			
			Power is supplied by Eskom under long term contracts.

Open-cut mine

We are the operator of the mine.

The mine is accessible by public roads.

BECSA and Tavistock Collieries are the holders of three Old Order Mining Rights (in respect of the Middelburg, Douglas and Kleinkopje Sections) in the joint venture ratio of 84:16. BECSA is the sole holder of an Old Order Mining Right in respect of the Albion Section. These Old Order Mining Rights must be lodged for a conversion to New Order Mining Rights by no later than 30 April 2009 (refer to section 2.8 Government regulations).

Export coal is transported to RBCT by rail, while the domestic coal is transported via conveyor belt to the nearby Duvha Power Station.

On 29 February 2008, we announced approval of the Douglas-Middelburg Optimisation (DMO) Project, with an expected capital investment of US\$975 million.

To facilitate the DMO project, which is to be developed and owned solely by BHP Billiton, the

**Table of Contents**

Name, location, type of mine and access	Ownership, operation and title/lease	History	Facilities and power source
	Douglas Tavistock Joint Venture (DTJV) will be restructured with each of the joint venture partners being allocated coal resources according to their ownership share.		
<p><b>Optimum</b></p> <p>200 kilometres east of Johannesburg in Mpumalanga Province, South Africa</p> <p>Open-cut mine</p> <p>Access to the mine is via public roads.</p> <p>Export coal is transported to RBCT by rail, while the domestic coal is transported via conveyor belt to the nearby Hendrina Power Station.</p>	<p>A number of regulatory approvals are being sought to give effect to this restructure.</p> <p>We owned and operated the mine at Optimum. On 14 May 2008 we announced that we reached agreement to sell Optimum. The fulfilment of certain regulatory requirements including the conversion and transfer of Optimum's mining rights in terms of the Minerals and Petroleum Resources Development Act 2002 and the approval of the South African Competition Commission has enabled the conclusion of the sale, effective 30 June 2008.</p>	<p>Optimum was commissioned in 1970.</p>	<p>Beneficiation facilities include tips and crushing plants, an export washing plant and a de-stone plant. The overall capacity is 17 mtpa.</p> <p>Power is supplied by Eskom under long term contracts.</p>
<p><b>Klipspruit</b></p> <p>30 kilometres west of Witbank, Mpumalanga Province, South Africa</p>	<p>We own and operate the mine at Klipspruit.</p> <p>BECSA is the holder of an Old Order Mining Right. An application for conversion to a New Order Mining Right was submitted in 2004 and is still being processed (refer</p>	<p>The project was approved by the Mpumalanga Department of Agriculture, Conservation and Environment in 2003. An initial mini-pit was started in August 2003 as a truck and shovel contractor operation.</p>	<p>Current beneficiation facilities consist of a tip and crushing plant, as well as an export wash plant 32 kilometres from the mine. The overall capacity is 4.8 mtpa. Power is supplied by Eskom under long-term contracts.</p>
<p>Open-cut mine</p>			

to section 2.8 Government regulations).

Access to the mine is via public roads.

Export coal is transported to RBCT via Spoornet (a government business enterprise) railway.

**Australia**

**Mt Arthur Coal**

We own and operate the mine at Mt Arthur.

Coal production from the Mt Arthur area commenced in 2002

Main beneficiation facilities include coal handling, preparation and washing plants with a total capacity of 9.8 mtpa. Washery by-pass coal is also sold.

Approximately 125 kilometres from Newcastle, New South Wales, Australia

We hold various mining leases that expire between October 2010 and 2028.

Power is supplied by local energy providers, from the eastern Australia power grid.

Open-cut mine

The mine is accessible by public road.

Domestic coal is transported by an overland conveyor to Bayswater Power Station.

Export coal is transported by a combination of private and public rail, approximately 125 kilometres to the port of Newcastle.

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Name, location, type of mine and access	Ownership, operation and title/lease	History	Facilities and power source
<b>America</b>			
<b>BHP Navajo Coal Company</b> 30 kilometres south west of Farmington, New Mexico, US	We own and operate the mine.	The mine has been in operation since 1963, and the contracts continue to 2016.	The mine has the capacity to produce and process 7.7 mtpa. Mined coal is sized and blended to contract specifications using stackers and reclaimers with no further beneficiation.
Open-cut mine	The mine is subject to a long-term lease from the Navajo Nation. The lease continues for as long as coal can be economically produced and sold in paying quantities.		Power is supplied from FCPP.
Navajo mine is accessible by public roads located on the Navajo Nation Indian Reservation. We transport all coal 25 kilometres from the production areas via our dedicated railroad to the Four Corners Power Plant (FCPP).			
<b>San Juan/La Plata Mines</b> 25 kilometres west of Farmington, New Mexico, US	We own and operate the mines.	The San Juan mine began operating in 1974 as a surface mine. In October 2000, we approved the development of the San Juan underground mine to replace production from the existing San Juan and La Plata surface mines.	The mine has the capacity to produce 6.4 mtpa of coal. Mined coal is sized and blended to contract specifications using stockpiles with no further beneficiation.
The San Juan mine is accessible by public roads.	We hold mining leases from federal and state governments. The leases have five-year terms that are automatically extendable upon meeting minimum production criteria.		The La Plata Mine is undergoing final closure, which is expected to be complete by late 2008.
Transport of coal to the San Juan Generating Station is by truck and conveyer belt.			
<b>Colombia</b>			
<b>Cerrejón Coal Company</b> Maicao, La Guajira province, Colombia	We own 33.33% of the Cerrejón Coal Company in a joint venture. The remaining 66.67% interest is owned by Anglo American Plc (33.33%) and Xstrata Plc (33.33%).	The original mine began as a joint venture between Exxon's Intercor and the Colombian Government entity Carbocol in 1976. Over time, the partners have changed, nearby	Beneficiation facilities include a crushing plant with a capacity of 32 mtpa and a washing plant.  Electricity is supplied through the local Colombian power system.

Open-cut mine

Mining leases expire in 2034.

operations have been merged and progressive expansion resulted in the current 32 mtpa operation.

The export facility is 150 kilometres northeast of the mine on the Caribbean coast at Puerto Bolivar and is connected to the mine by a single-track railway. Access to the mine is via public roads and by charter aircraft to the mine's airstrip.

**Development projects**

*Klipspruit*

We are expanding the production capacity of BECSA's Klipspruit mine by approximately 3.2 mtpa to 8 mtpa. The project also involves the construction of a 16 mtpa coal processing plant on Klipspruit land as a 50-50 joint venture with Anglo Coal, which is constructing the plant. We expect to produce first coal in the second half of calendar 2009, and estimate our share of the cost of the project at US\$450 million. We expect the expanded mine to have a reserve life of approximately 20 years.



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*Douglas-Middelburg Optimisation Project*

This project involves works to optimise the development of existing reserves across the Douglas and Middelburg collieries, the development of additional mining areas and the construction of a new 14 mtpa coal processing plant, which will replace the less efficient existing plant at Douglas. The work will enable us to maintain energy coal exports from the combined Douglas and Middelburg colliery at around current levels (approximately 10 mtpa) while also fulfilling our domestic contractual commitments. The expected capital investment is US\$975 million and the new plant is scheduled to receive its first coal in mid-calendar 2010.

*Navajo South*

We are undertaking a feasibility study on a project called the Desert Rock project, which would expand the Navajo mine to supply a proposed new power station to be built immediately adjacent to the mine with up to 5.7 mtpa. The project schedule is tied to the approval process for the power station. The proposed power plant was granted a final air permit by the United States Environmental Protection Agency on 31 July 2008.

*Mt Arthur open-cut expansion*

We are undertaking a feasibility study into an open-cut expansion of the existing operation that is expected to increase export coal production by approximately 3.7 mtpa with first coal expected in the second half of calendar year 2010.

*Mt Arthur underground*

We are undertaking a feasibility study into a new underground mine that will share much of the existing Mt Arthur mine s infrastructure, including the coal preparation plant and rail loading facility.

*Newcastle Third Export Coal Terminal*

We are a 35.5% shareholder in a joint venture company that is constructing a new 30 mtpa export coal loading facility to supplement existing public facilities in the port of Newcastle. Our share of the construction cost is estimated at US\$390 million. The first ship loading of coal is scheduled for late calendar year 2010.

**Table of Contents****2.3 Production****2.3.1 Petroleum**

The table below details our Petroleum CSG's historical net crude oil and condensate, natural gas and natural gas liquids production, primarily by asset, for each of the three years ended 30 June 2008, 2007 and 2006. We have shown volumes of marketable production after deduction of applicable royalties, fuel and flare. We have included in the table average production costs per unit of production and average sales prices for oil and condensate and natural gas for each of those periods.

	BHP Billiton Group share of production Year ended 30 June		
	2008	2007	2006
<b>Petroleum</b>			
<b>Crude oil and condensate</b>			
<b>( 000 of barrels)</b>			
Bass Strait	12,843	14,231	14,682
North West Shelf	9,090	10,765	9,119
Atlantis	7,406		
Shenzi	548		
Liverpool Bay & Bruce / Keith	3,640	4,656	5,699
ROD & Ohanet	6,722	7,591	7,446
Other Australia/Asia	8,777	1,365	1,600
Other Americas	8,417	6,560	7,327
Total crude oil and condensate	57,443	45,168	45,873
<b>Natural gas (billion cubic feet)</b>			
Bass Strait <sup>(1)</sup>	123.93	114.50	109.74
North West Shelf <sup>(1)</sup>	108.49	105.49	104.16
Atlantis	3.73		
Shenzi	0.14		
Liverpool Bay & Bruce / Keith	45.21	53.27	60.82
Other Australia/Asia	78.44	74.83	77.68
Other Americas	8.07	8.73	8.04
Total natural gas	368.01	356.82	360.44
<b>Natural Gas Liquids ( 000 of barrels)<sup>(1)</sup></b>			
Bass Strait	7,755	7,756	7,740
North West Shelf	1,498	1,689	1,684
Liverpool Bay & Bruce / Keith	426	563	488
ROD & Ohanet	1,045	1,514	1,516
Total NGL	10,724	11,522	11,428
<b>Total petroleum products production</b>			
(million barrels of oil equivalent) <sup>(2)</sup>	129.50	116.19	117.36
<b>Average sales price</b>			
Oil and condensate (US\$ per barrel)	96.27	63.87	61.90
Natural gas (US\$ per thousand cubic feet)	3.87	3.19	3.33
<b>Average production cost <sup>(3)</sup></b>			
US\$ per barrel of oil equivalent (including indirect taxes)	7.30	7.16	6.40
US\$ per barrel of oil equivalent (excluding indirect taxes)	5.40	5.50	5.01

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- (1) In FY2007 we began reporting LPG and Ethane Natural Gas Liquids (NGL), consistent with petroleum industry practice. Product-specific conversions are made and NGL are reported in barrels of oil equivalent. The 2006 comparatives have been restated.
- (2) Total barrels of oil equivalent (boe) conversions based on the following: 6,000 scf of natural gas equals 1 boe.
- (3) Average production costs include direct and indirect production costs relating to the production and transportation of hydrocarbons to the point of sale. This includes shipping where applicable. Average production costs have been shown excluding resource tax and including and excluding other indirect taxes and duties, and including the foreign exchange effect of translating local currency denominated costs and indirect taxes into US dollar.

**Table of Contents****2.3.2 Minerals**

The table below details our mineral and derivative product production for all CSGs except Petroleum for the three years ended 30 June 2008, 2007 and 2006. Production shows our share unless otherwise stated.

By CSG by mineral	BHP Billiton interest %	BHP Billiton Group share of production Year ended 30 June		
		2008	2007	2006
<b>Aluminium CSG</b>				
<b>Alumina</b>				
<b>Production ( 000 tonnes)</b>				
Worsley, Australia	86	3,035	2,956	2,763
Alumar, Brazil	36	536	526	503
Paranam, Suriname	45	983	978	921
<b>Total alumina</b>		<b>4,554</b>	4,460	4,187
<b>Aluminium</b>				
<b>Production ( 000 tonnes)</b>				
Hillside, RSA	100	695	704	700
Bayside, RSA	100	168	194	179
Mozal, Mozambique	47.1	257	265	262
Alumar, Brazil	40	178	177	178
Valesul, Brazil <sup>(1)</sup>	-	-	-	43
<b>Total aluminium</b>		<b>1,298</b>	1,340	1,362
<b>Base Metals <sup>(2)</sup></b>				
<b>Copper</b>				
<b>Payable metal in concentrate ( 000 tonnes)</b>				
Escondida, Chile	57.5	679.5	638.9	671.0
Antamina, Peru	33.75	111.7	113.7	124.2
Pinto Valley, US	100	26.8	-	-
Tintaya, Peru <sup>(3)</sup>	-	-	-	64.5
<b>Total copper concentrate</b>		<b>818.0</b>	752.6	859.7
<b>Cathode ( 000 tonnes)</b>				
Escondida, Chile	57.5	131.6	126.1	66.7
Cerro Colorado, Chile <sup>(4)</sup>	100	106.4	105.8	94.1
Pinto Valley, US	100	6.9	7.6	8.2
Olympic Dam, Australia	100	169.9	182.5	204.3
Spence, Chile <sup>(5)</sup>	100	142.7	75.5	-
Tintaya, Peru <sup>(3)</sup>	-	-	-	34.8
<b>Total copper cathode</b>		<b>557.5</b>	497.5	408.1
<b>Total copper</b>		<b>1,375.5</b>	1,250.1	1,267.8
<b>Uranium oxide</b>				
<b>Payable metal in concentrate (tonnes)</b>				
Olympic Dam, Australia	100	4,144	3,486	3,936
<b>Total uranium oxide</b>		<b>4,144</b>	3,486	3,936
<b>Zinc</b>				
<b>Payable metal in concentrate ( 000 tonnes)</b>				
Antamina, Peru	33.75	83.5	73.0	40.3
Cannington, Australia	100	61.0	45.7	68.8
<b>Total zinc</b>		<b>144.5</b>	118.7	109.1
<b>Silver</b>				
<b>Payable metal in concentrate ( 000 ounces)</b>				
Escondida, Chile	57.5	3,604	3,514	3,379
Olympic Dam, Australia (refined silver)	100	780	814	884
Antamina, Peru	33.75	3,505	3,132	3,174
Cannington, Australia	100	35,485	29,105	38,447

Pinto Valley, US <sup>(6)</sup>

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By CSG by mineral	BHP Billiton interest %	BHP Billiton Group share of production Year ended 30 June		
		2008	2007	2006
Tintaya, Peru <sup>(3)</sup>	-	-	-	592
<b>Total silver</b>		<b>43,487</b>	36,565	46,476
<b>Lead</b>				
<b>Payable metal in concentrate ( 000 tonnes)</b>				
Antamina, Peru	33.75	1.6	1.5	-
Cannington, Australia	100	251.5	210.8	266.3
<b>Total lead</b>		<b>253.1</b>	212.3	266.3
<b>Gold</b>				
<b>Payable metal in concentrate ( 000 ounces)</b>				
Escondida, Chile	57.5	79.7	84.4	79.8
Olympic Dam, Australia (refined gold)	100	80.5	91.7	107.5
Pinto Valley, US	100	1.7	-	-
Tintaya, Peru <sup>(3)</sup>	-	-	-	29.2
<b>Total gold</b>		<b>161.9</b>	176.1	216.5
<b>Molybdenum</b>				
<b>Payable metal in concentrate (tonnes)</b>				
Antamina, Peru	33.75	2,542	2,268	2,515
<b>Total molybdenum</b>		<b>2,542</b>	2,268	2,515
<b>Diamonds and Specialty Products</b>				
<b>Production ( 000 carats)</b>				
EKATI, Canada	80	3,349	3,224	2,561
<b>Total diamonds</b>		<b>3,349</b>	3,224	2,561
<b>Titanium minerals <sup>(7) (8)</sup></b>				
<b>Titanium slag <sup>(8)</sup></b>				
<b>Production ( 000 tonnes)</b>				
Richards Bay Minerals, RSA	50	480	465	435
<b>Rutile <sup>(8)</sup></b>				
<b>Production ( 000 tonnes)</b>				
Richards Bay Minerals, RSA	50	43	35	36
<b>Zircon <sup>(8)</sup></b>				
<b>Production ( 000 tonnes)</b>				
Richards Bay Minerals, RSA	50	120	120	118
<b>Phosphates</b>				
<b>Production ( 000 tonnes)</b>				
Southern Cross Fertiliser (formerly Queensland Fertilizer) <sup>(7)(9)(10)</sup>	100	-	84.3	861.3
<b>Total phosphates</b>		-	84.3	861.3
<b>Stainless Steel Materials</b>				
<b>Nickel</b>				
<b>Production ( 000 tonnes)</b>				
Cerro Matoso, Colombia	99.94	41.8	51.0	51.5
Nickel West, Australia	100	98.1	104.1	101.4
Yabulu, Australia	100	28.0	32.1	23.3
<b>Total nickel</b>		<b>167.9</b>	187.2	176.2
<b>Cobalt</b>				
<b>Production ( 000 tonnes)</b>				
Yabulu, Australia	100	1.7	1.7	1.0
<b>Iron ore <sup>(11)</sup></b>				
<b>Production ( 000 tonnes)</b>				
Mt Newman, Australia	85	30,330	29,306	24,774
Jimblebar, Australia <sup>(12)</sup>	85	5,119	5,457	6,370
Mt Goldsworthy, Australia	85	941	1,227	6,241
Mt Goldsworthy, Area C joint venture, Australia <sup>(13)(14)</sup>	85	27,130	20,086	17,988
Yandi, Australia <sup>(15)</sup>	85	40,276	35,548	34,196

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By CSG by mineral	BHP Billiton Group share of production Year ended 30 June			
	BHP Billiton interest %	2008	2007	2006
Samarco, Brazil	50	8,464	7,800	7,503
<b>Total iron ore</b>		<b>112,260</b>	99,424	97,072
<b>Manganese</b>				
<b>Manganese ores</b>				
<b>Saleable production ( 000 tonnes)</b>				
Hotazel, South Africa <sup>(16)</sup>	60	3,040	2,570	2,300
GEMCO, Australia <sup>(16)</sup>	60	3,535	3,439	2,980
<b>Total manganese ores</b>		<b>6,575</b>	6,009	5,280
<b>Manganese alloys</b>				
<b>Saleable production ( 000 tonnes)</b>				
South Africa <sup>(16)(17)(18)</sup>	60	513	493	434
Australia <sup>(16)</sup>	60	262	239	218
<b>Total manganese alloys</b>		<b>775</b>	732	652
<b>Metallurgical coal <sup>(19)</sup></b>				
<b>Production ( 000 tonnes)</b>				
Goonyella		6,036	7,352	7,267
Peak Downs		4,094	4,484	4,389
Saraji		2,896	3,397	2,634
Norwich Park		2,026	2,850	2,662
Blackwater		5,632	6,138	6,018
Gregory Joint Venture		2,110	2,462	2,610
Total BMA, Australia	50	22,794	26,683	25,580
Riverside		-	-	-
South Walker Creek		2,862	3,422	3,049
Poitrel		2,270	1,438	-
Total BHP Mitsui Coal, Australia <sup>(20)</sup>	80	5,132	4,860	3,049
Illawarra, Australia	100	7,265	6,886	7,014
<b>Total metallurgical coal</b>		<b>35,191</b>	38,429	35,643
<b>Energy Coal</b>				
<b>Production ( 000 tonnes)</b>				
Navajo	100	7,533	8,174	8,266
San Juan	100	6,119	6,906	7,080
New Mexico, US	100	13,652	15,080	15,346
Optimum	100	11,302	11,304	11,805
Middelburg	84	12,113	13,513	13,705
Douglas	84	4,890	5,218	5,123
Koornfontein	-	-	4,858	4,809
Khutala	100	13,327	13,526	13,625
Klipspruit	100	3,440	3,223	2,632
Zululand Anthracite Collieries	-	-	-	249
Total BECSA <sup>(21)</sup>	100	45,072	51,642	51,948
Mt Arthur Coal, Australia	100	11,776	10,897	9,146
Cerrejón Coal Company, Colombia	33.3	10,368	9,406	9,316
<b>Total energy coal</b>		<b>80,868</b>	87,025	85,756

- (1) We completed the sale of Valesul in August 2006 with a 1 July 2006 effective date.
- (2) Metal production is reported on the basis of payable metal.
- (3) BHP Billiton sold Tintaya effective from 1 June 2006.
- (4) Production at Cerro Colorado was temporarily suspended on 14 June 2005 following an earthquake. Production commenced at half capacity on 30 June 2005 and ramped up to pre-earthquake levels in February 2006.

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- (5) Spence operations were commissioned during the December 2006 quarter
- (6) Pinto Valley resumed concentrate operations during the December 2007 quarter.
- (7) Amounts represent production for the preceding year ended 31 December.
- (8) Data was sourced from the TZ Minerals International Pty Ltd Mineral Sands Annual Review 2008.
- (9) We sold Southern Cross Fertiliser (formerly Queensland Fertilizer) in 2006.
- (10) Includes di-ammonium phosphate and mono-ammonium phosphate.
- (11) Iron ore production is reported on a wet tonnes basis with the exception of Samarco.
- (12) The Jimblebar reserves listed include the Wheelarra Hill 3,4,5,6 and Hashimoto 1 and 2 deposits at Jimblebar, in which the Wheelarra joint venture participants (BHP Iron Ore (Jimblebar) (51%), ITOCHU Minerals and Energy (4.8%), Mitsui Iron Ore (4.2%) and subsidiaries from Chinese steelmakers Magang, Shagang, Tanggang and Wugang (10% each)) have a legal interest. At the commencement of the Wheelarra joint venture on 1 October 2005, the Wheelarra joint venture participants had a legal interest in 175 million dry metric tonnes of Jimblebar reserves (Wheelarra joint venture tonnes). The effect of the sales contracts entered into between the Wheelarra joint venture participants and the Mt Newman joint venture participants and other associated agreements is that BHP Billiton (as a Mt Newman joint venture participant) has an entitlement to 85% of these Wheelarra joint venture tonnes. This disclosure and the financial statements are prepared on this basis.
- (13) The Mt Goldsworthy Area C reserves listed include C deposit within Area C in which the POSMAC joint venture participants (BHP Billiton Minerals Pty Ltd (65%), ITOCHU Minerals and Energy of Australia Pty Ltd (8%), Mitsui Iron Ore Corporation Pty Ltd (7%) and a subsidiary of POSCO (a Korean steelmaker) (20%)) have a legal interest. The effect of the sales contracts entered into between the POSMAC joint venture participants and the Mt Goldsworthy joint venture participants and other associated agreements is that BHP Billiton (as a Mt Goldsworthy joint venture participant) has an entitlement to 85% of the reserves in C deposit. This disclosure and the financial statements are prepared on this basis.
- (14) Production statistics relate to pellet production and concentrate and screens product.
- (15) The Yandi reserves listed include the Western 4 deposit in which the JFE Western 4 Joint Venture (JW4 JV) participants (BHP Billiton Minerals Pty Ltd (65%), ITOCHU Minerals and Energy of Australia Pty Ltd (8%), Mitsui Iron Ore Corporation Pty Ltd (7%) and a subsidiary of JFE Steel Corporation (a Japanese steelmaker) (20%)) have a legal interest. The effect of the sales contracts entered into between the JW4 joint venture participants and the Yandi joint venture participants and other associated agreements is that BHP Billiton (as a Yandi joint venture participant) has an entitlement to 85% of the reserves in the Western 4 deposit. This disclosure and the financial statements are prepared on this basis.
- (16) Shown on 100% basis. BHP Billiton interest in saleable production is 60%.
- (17) We purchased Mitsui's 50% shareholding in Advalloy (Pty) Ltd, making Samancor Manganese the 100% owner of Advalloy in July 2006. Following this change in ownership, we report the MCFeMn production of Advalloy in the above table for FY2007. Prior to us holding 100% of Advalloy, we reported FeMn production transferred to Advalloy. If prior year production was restated to reflect the same basis, total manganese alloys production would have shown 632,000 tonnes in 2006.
- (18) Production includes Medium Carbon Ferro Manganese.
- (19) Metallurgical coal production is reported on the basis of saleable product. Production figures include some thermal coal.
- (20) Shown on 100% basis. BHP Billiton interest in saleable production is 80%.
- (21) Including 11.3 million tonnes of production from our South African Optimum operation (3.96 million tonnes export and 7.3 million tonnes domestic.) Earnings on these tonnes will be excluded as the entitlement to those earnings vested with the intended purchaser effective from 1 July 2007.

**2.4 Marketing**

Our customer-centric marketing activities are centralised in Singapore, The Hague and Antwerp. The focus of the Singapore office is on the Asian energy market, base metals, stainless steel materials and on carbon steelmaking raw materials. The emphasis in The Hague office is on aluminium, petroleum, energy marketing and freight. Our Antwerp office serves our diamonds customers around the world.

These three marketing offices incorporate all the functions required to manage product marketing and distribution from point of production to final customer delivery. In addition, specialised marketers are located in 21 regional offices around the globe. Our product offering is enhanced by our freight capability and expertise in trading and transaction structuring.

**Energy Marketing**

Energy Marketing has the responsibility of coordinating our marketing activities in the energy commodity markets, namely energy coal, European gas, emissions credits and electricity. This group is based in The Hague and is part of our marketing function.



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Energy Marketing is currently active in purchasing and selling third party gas and small amounts of electricity in the UK and emissions credits in Europe. Where required, Energy Marketing also buys or sells pipeline capacity to transport gas onto the UK gas grid. Most products are transacted over the counter and are principal-to-principal transactions in the wholesale market.

### ***Freight***

We have a centralised ocean freight business that manages our in-house freight requirements. The primary purpose of the freight business is to create competitive advantages for internal shipments through the procurement and operation of quality, cost-effective shipping and to contribute to our profitability by trading freight and carrying complementary external cargoes.

The freight business participates primarily in the dry bulk sector aligned with our major trades, and it handles approximately 120 million tonnes of cargo per year making the Group one of the world's largest users of dry bulk shipping. At any one time, we have approximately 120 ships employed. The majority of vessels are chartered under commercial terms and we hold equity interests in a small number of vessels. External freight revenue was US\$1.4 billion for FY2008.

In addition to its freight management and trading activities, the freight business incorporates a skill base to manage its marine risk and provide technical support. It holds a number of marine-related investments, including a shareholding in shipping risk manager Rightships of Melbourne.

## **2.5 Minerals exploration**

Our exploration program is integral to our growth strategy and is focused on identifying and capturing new world-class projects for future development, or projects that add significant value to existing operations. Targets for exploration are generally large low-cost mining projects in a range of minerals, including diamonds, copper, nickel, bauxite, iron ore, manganese, coal and potash. The process of discovery runs from early-stage mapping through to drilling and evaluation. The program is global and prioritises targets based on our assessment of the relative attractiveness of each mineral.

We continue to pursue opportunities and build our position in prospective countries, including exploring for diamonds in Angola and copper in the Democratic Republic of Congo (DRC), Zambia, Kazakhstan, Chile and Australia. In nickel, we have a major brownfield exploration program focused on finding new nickel sulphide deposits to sustain and grow our existing operations in Western Australia. We are also actively exploring for nickel in Southeast Asia, Russia, China and East Africa. In the bulk commodities, activities are focused on a smaller number of highly prospective terrains in Australia, Southeast Asia, Russia, West and Central Africa and South America.

Our exploration activities are organised from six principal offices in Singapore, Perth (Australia), Johannesburg (South Africa), Moscow (Russia), Rio de Janeiro (Brazil) and Vancouver (Canada).

In addition to our activities focused on finding new world-class deposits, several of our CSGs undertake exploration, principally aimed at delineating and categorising mineral deposits near existing operations, and advancing projects through the development pipeline.

In FY2008, we spent US\$658 million on minerals exploration. Of this, US\$212 million was spent on greenfield exploration, US\$258 million was spent on brownfield exploration (including US\$90 million for Olympic Dam expansion) and US\$188 million was spent on more advanced projects.

## **2.6 Global Technology**

Global Technology activities cover the full spectrum of our value chain from exploration tools, mining and processing technologies and environmental solutions through to ensuring our customers have the technical support available in the use of our products.

Global Technology activities cover the following areas:

exploration, mining and mine optimisation

leaching and remediation

minerals separation and hydrometallurgy

process engineering

technical marketing

intellectual property

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In partnership with our businesses we aim to understand future trends and develop both existing and new technologies that can identify, evaluate and maximise the value of deposits.

Technical innovation is becoming increasingly important to support our low-cost production strategy. To maintain our reserves, we are currently developing technologies to treat complex lower-grade ores, technologies that will enable us to mine minerals at deeper levels, and tools to improve our mine planning capabilities. We also apply our knowledge and fundamental understanding of our products and how they perform in the customers' processes to best serve our chosen markets and provide innovative customer solutions. In FY2008 activities were mainly focused on executing R&D projects for the businesses to support their expansion and growth strategies.

Global Technology has research and development centres in Australia (Newcastle and Perth) and South Africa (Johannesburg).

In FY2009 responsibility for Global Technology activities will transfer to CSGs and Group-wide Functions.

### **2.7 Resource and Business Optimisation**

Resource and Business Optimisation (RBO) is a group of approximately 40 professionals that is responsible for leading a range of internal processes that are designed to promote Group-wide excellence in developing, managing and optimising our mineral resources. The group's professionals include experts in geology and mineral evaluation, mining and process engineering, project management and research & development. RBO's functions encompass the business improvement processes that we previously referred to under the Business Excellence banner.

Our Group-wide procedures provide for RBO involvement at significant stages of the asset development and asset acquisition processes, including resource evaluation and mine planning. Our procedures also embed RBO's involvement in reviewing business processes and management frameworks and implementing Group standards to drive operational and management excellence at our operating assets.

RBO also contains our reserve governance function, which is responsible for our internal and external ore reserve reporting processes.

### **2.8 Government regulations**

Government regulations touch all aspects of our operations. However, because of the geographical diversity of our operations, no one set of government regulations is likely to have a material effect on our business, taken as a whole.

The ability to extract minerals, oil and natural gas is fundamental to our business. In most jurisdictions, the rights to undeveloped mineral or petroleum deposits are owned by the state. Accordingly, we rely upon the rights granted to us by the government that owns the mineral, oil or natural gas. These rights usually take the form of a lease or licence, which gives us the right to access the land and extract the product. The terms of the lease or licence, including the time period for which it is effective, are specific to the laws of the relevant government. Generally, we own the product we extract and royalties or similar taxes are payable to the government. Some of our operations, such as our oil and gas operations in Trinidad and Tobago and Algeria, are subject to production sharing contracts under which both we as the contractor and the government are entitled to a share of the production. Under such production sharing contracts, the contractor is entitled to recover its exploration and production costs from the government's share of production.

Related to the ability to extract is the ability to process the minerals, oil or natural gas. Again, we rely upon the relevant government to grant the rights necessary to transport and treat the extracted material in order to ready it for sale.

Underlying our business of extracting and processing natural resources is the ability to explore for those orebodies. The rights to explore for minerals, oil and natural gas are granted to us by the government that owns those natural resources that we wish to explore. Usually, the right to explore carries with it the obligation to spend a defined amount of money on the exploration or to undertake particular exploration activities.

Governments also impose obligations on us in respect of environmental protection, land rehabilitation, occupational health and safety, and native land title with which we must comply in order to continue to enjoy the right to conduct our operations within that

jurisdiction. These obligations often require us to make substantial expenditures to minimise or remediate the environmental impact of our operations, to ensure the safety of our employees and contractors and the like. For further information on these types of obligations, refer to section 2.9 and 2.10 of this Report.

Of particular note are the following regulatory regimes:

### **2.8.1 South African Mining Charter and Black Economic Empowerment**

In 2003 the government released a strategy for broad-based black economic empowerment (BBBEE) that defined empowerment as an integrated and coherent socio-economic process that directly contributes to the economic transformation of South Africa and brings

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significant increases in the numbers of black people who manage, own and control the country's economy, as well as significant decreases in income inequalities. This strategy laid the foundation for the Black Economic Empowerment Act of 2003, which granted government the power to legislate how it wanted black economic empowerment (BEE) to be implemented in South Africa.

As outlined in section 1.5 of this Report, on 1 May 2004 the Mineral and Petroleum Resources Development Act 2002 (MPRDA) took effect, providing for state custodianship of all mineral deposits and abolishing the prior system of privately held mineral rights. It is administered by the Department of Minerals and Energy of South Africa. In February 2007, the codes of good practice were gazetted, further crystallising government's BEE strategy into a single binding document. The codes make provision for businesses to measure their success in contributing to the economic transformation and empowerment of historically disadvantaged South Africans (HDSAs) in the local economy and a scorecard comprising seven metrics was also developed to assist businesses in achieving this success.

In terms of the MPRDA, holders of mining rights granted under the previous system, known as Old Order Rights, must apply to convert their rights to New Order Rights prior to 30 April 2009. In order for the conversions to be effected, applicants are required to comply with the terms of the Black Economic Empowerment Act of 2003 and the Mining Charter, which has been published under the MPRDA. The Mining Charter requires holders of mining rights to achieve 26 per cent ownership participation by historically disadvantaged South Africans in their mining operations by 30 April 2014, of which 15 per cent needs to be achieved by 30 April 2009.

BHP Billiton supports broad-based black economic empowerment in South Africa. We believe it is imperative to both the growth and stability of the South African economy and the company's strategic objectives and long-term sustainability in that country.

The principles of transformation and empowerment are in line with the BHP Billiton Charter, which underscores the organisation's Courage to Lead Change.

We have established a transformation and empowerment technical committee comprising senior managers with diverse skills to ensure our transformation and empowerment agenda is coordinated and comprehensive.

### **2.8.2 Uranium production in Australia**

To mine, process, transport and sell uranium from within Australia, we are required to hold possession and export permissions, which are also subject to regulation by the Australian Government or bodies that report to the Australian Government.

To possess nuclear material, such as uranium, in Australia, a Permit to Possess Nuclear Materials (Possession Permit) must be held pursuant to the Nuclear Non-Proliferation (Safeguards) Act 1987 (Cth) (Non-Proliferation Act). A Possession Permit is issued by the Australian Safeguards and Non-Proliferation Office, an office established under the Non-Proliferation Act, which administers Australia's domestic nuclear safeguards requirements and reports to the Australian Government.

To export uranium from Australia, a Permit to Export Natural Uranium (Export Permit) must be held pursuant to the Customs (Prohibited Exports) Regulations 1958 (Cth). The Export Permit is issued by the Minister for Industry, Tourism and Resources.

A special transport permit will be required under the Non-Proliferation Act by a party that transports nuclear material from one specified location to another specified location. As we engage service providers to transport uranium, those service providers are required to hold a special transport permit.

### **2.8.3 Exchange controls and shareholding limits**

#### **BHP Billiton Plc**

There are no laws or regulations currently in force in the UK that restrict the export or import of capital or the remittance of dividends to non-resident holders of BHP Billiton Plc's shares. However, there are certain sanctions adopted by the UK Government which implement resolutions of the Security Council of the United Nations and sanctions imposed by the European Union against certain countries, entities and individuals. Such sanctions may be in force from time to time and include those against: (i) certain entities and/or individuals associated with the Burmese regime, Cote d'Ivoire, The Democratic People's Republic of Korea (North Korea), the Democratic Republic of Congo, Lebanon, Liberia, Iran, Sudan and the previous regimes of Iraq and Yugoslavia; (ii) officials of Belarus and Zimbabwe; (iii) individuals indicted by the International Criminal Tribunal for the former Yugoslavia; and

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(iv) entities and individuals linked with the Taliban, Al-Qaeda and other terrorist organisations.

There are no restrictions under BHP Billiton Plc's Articles of Association or (subject to the effect of any sanctions) under English law that limit the right of non-resident or foreign owners to hold or vote BHP Billiton Plc's shares.

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There are certain restrictions on shareholding levels under BHP Billiton Plc's Articles of Association described under the heading BHP Billiton Limited below.

### **BHP Billiton Limited**

The *Banking (Foreign Exchange) Regulations 1959* (Cth) may impose restrictions on certain financial transactions and require the consent of the Reserve Bank of Australia for the movement funds into and out of Australia. Based on our searches, restrictions currently apply if funds are to be paid to or received from specified supporters of the former government of the Federal Republic of Yugoslavia, specified ministers and senior officials of the Government of Zimbabwe, certain specified entities associated with the Democratic People's Republic of Korea (North Korea) and specified individuals associated with the Burmese regime. In addition, legislation and regulations are in place restricting transactions with certain individuals or entities linked with the Taliban, Al-Qaeda and other terrorist organisations, senior officials of the previous Government of Iraq and their immediate families, and certain entities and individuals associated with the Democratic Republic of Congo, Cote d'Ivoire, Iran, Lebanon, Liberia and Sudan. The controls impose certain approval and reporting requirements on transactions involving such countries, entities and individuals and/or assets controlled or owned by them. Transfers into or out of Australia of amounts greater than A\$10,000 in any currency are also subject to reporting requirements.

Remittances of any dividends, interest or other payments by BHP Billiton Limited to non-resident holders of BHP Billiton Limited's securities are not restricted by exchange controls or other limitations, save that in certain circumstances, BHP Billiton may be required to withhold Australian taxes.

There are no limitations, either under the laws of Australia or under the Constitution of BHP Billiton Limited, to the right of non-residents to hold or vote BHP Billiton Limited ordinary shares other than as set out below.

The Foreign Acquisitions and Takeovers Act 1975 (Cth) (the FATA) restricts certain acquisitions of interests in shares in BHP Billiton. Generally, under the FATA, the prior approval of the Australian Treasurer must be obtained for proposals by a foreign person (either alone or together with associates) to acquire control of 15 per cent or more of the voting power or issued shares in BHP Billiton Limited.

The FATA also empowers the Treasurer to make certain orders prohibiting acquisitions by foreign persons in BHP Billiton Limited (and requiring divestiture if the acquisition has occurred) where he considers the acquisition to be contrary to the national interest and the 15 per cent threshold referred to above would be exceeded as a result. Such orders may also be made in respect of acquisitions by foreign persons where two or more foreign persons (and their associates) in aggregate already control 40 per cent or more of the issued shares or voting power in BHP Billiton Limited.

There are certain other statutory restrictions, and restrictions under BHP Billiton Limited's Constitution and BHP Billiton Plc's Articles of Association, that apply generally to acquisitions of shares in BHP Billiton (i.e., the restrictions are not targeted at foreign persons only). These include restrictions on a person (and associates) breaching a voting power threshold of:

20 per cent in relation to BHP Billiton Limited on a stand alone basis, i.e., calculated as if there were no special voting share and only counting BHP Billiton Limited's ordinary shares;

30 per cent of BHP Billiton Plc. This is the threshold for a mandatory offer under Rule 9 of the UK takeover code and this threshold applies to all voting rights of BHP Billiton Plc (therefore including voting rights attached to the BHP Billiton Plc Special Voting Share);

30 per cent in relation to BHP Billiton Plc on a stand alone basis, i.e., calculated as if there were no special voting share and only counting BHP Billiton Plc's ordinary shares; and

20 per cent in relation to BHP Billiton, calculated having regard to all the voting power on a joint electorate basis, i.e., calculated on the aggregate of BHP Billiton Limited's and BHP Billiton Plc's ordinary shares. Under BHP Billiton Limited's Constitution and BHP Billiton Plc's Articles of Association, sanctions for breach of any of these thresholds, other than by means of certain permitted acquisitions, include withholding of dividends, voting restrictions and compulsory divestment of shares to the extent a shareholder and its associates exceed the relevant threshold.

## **2.9 Sustainable Development - Health, Safety, Environment and Community**

One of our strategic drivers Licence to operate, recognises the intrinsic link between sound sustainability performance and long-term business viability. We aspire to Zero Harm for our people, our host communities and the environment and strive to achieve leading industry practice. Sound principles to govern safety, business conduct, social, environmental and economic activities are integral to the way we do business. As a global company, operating in many different countries, we are subject to extensive regulation surrounding health and safety of our people and the environment. We make every effort to comply with the regulations and, where less stringent than our standards, exceed applicable legal and other



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requirements. We have a number of systems and supporting documents to implement our commitment to sustainable development. The Sustainability Committee of the Board continues to oversee the Group's sustainability strategy, policy, initiatives and activities. Management holds responsibility for our Health, Safety, Environment and Community performance and for driving our commitment to Zero Harm.

Our Charter highlights that we care as much about how results are obtained as we do about delivering good results. Our Health, Safety, Environment and Community Management Standards provide the basis for developing and applying management systems at all levels of our Company and are a driver of our contribution to sustainable development.

The Standards highlight four key components of sustainable development:

Health promoting and improving the health of our people and host communities

Safety providing a workplace where people can work without being injured

Environment promoting efficient resource use, reducing and preventing pollution and enhancing biodiversity protection

Community engaging with employees and contractors and with those affected by our operations, including host communities; and understanding, promoting and upholding fundamental human rights within our sphere of influence

### **Health**

The health of our people is central to our business success. Our major challenge centres on reducing or eliminating occupational health exposures to airborne contaminants and noise. Such exposures currently necessitate the strict use of personal protective equipment to avoid adverse health effects. Malaria and HIV/AIDs remain a significant health issue for many of our operations, including those in South Africa, southern Mozambique and Pakistan, and areas where we have development activities such as Guinea and Angola. We continue to work to find the most effective ways to help address them, including offering voluntary HIV/AIDs testing and counselling and continuing to support a mosquito spraying program in southern Africa.

### **Safety**

We experienced 11 fatalities in seven separate incidents during the year to 30 June 2008. We remain determined to do all in our power to eliminate fatalities from our operations. Our Fatal Risk Control Protocols continue to direct attention to identified risk areas and risk mitigation activities. While low injury frequency rates do not mean low fatality rates, we are pleased to report that, during FY2008, we improved our injury performance rate. Our Total Recordable Injury Frequency rate per one million hours worked decreased by 20 per cent, from 7.4 for FY2008 to 5.9. Our injury severity rate also reduced by some 20 per cent in FY2008 when compared to FY2007.

### **Environment**

Mining, by its nature impacts the environment. Our operations are subject to various national and regional laws and regulations governing environmental protection, rehabilitation and closure. In line with our aspirational Zero Harm goal we run programs to improve our performance, set specific targets, such as for water consumption, land rehabilitation, energy use and air emissions, and track our progress against our targets. We believe that the risks of climate change associated with increasing greenhouse gas concentrations in the atmosphere need to be addressed through accelerated action. Behavioural change, innovation and technological progress are necessary to achieve stabilisation in a manner consistent with meeting natural resource and energy needs. We are working within our businesses and with governments, industry and other stakeholders to address this global challenge and find lasting solutions that are consistent with our goal of Zero Harm.

There were no reported significant environmental incidents in FY2008 as defined in the BHP Billiton HSEC consequence severity matrix.

**Community**

Our social licence to operate depends on our ability to operate all aspects of our business responsibly, including our ability to work effectively with our host communities. Regular, open and honest dialogue is the key to building strong relationships. Our community relations professionals are charged with developing and nurturing relationships with people impacted by, and interested in, our operations so we can understand their concerns, hopes and aspirations.

While our businesses tailor their community relations programs to suit the local context, our Health, Safety, Environment and Community Management Standards provide direction as to the critical activities that must be implemented by all our operations. For example, our sites are required to have community relations plans in place and to regularly review the effectiveness of communication, consultation and participation processes in collaboration with stakeholders.

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### **The Australian Energy Efficiency Opportunities (EEO) Program**

The Australian government passed the EEO Act in 2006 to improve the identification and evaluation of energy efficiency opportunities by large energy using businesses and to encourage implementation of cost-effective energy efficiency opportunities.

During the past year, our Australian assets covered under the EEO program rigorously reviewed their energy consumption data and fully evaluated their opportunities for energy savings projects. More than 400 opportunities have been identified, with some 30 per cent either identified for implementation or being implemented. The remainder of opportunities are under investigation. The nature of opportunities for energy savings range from purchasing and installing new, more efficient equipment to improving maintenance and engineering processes.

Opportunities for working with local communities to raise awareness on how residents and businesses can use less energy have also been considered. The results of this program will be available publicly on the BHP Billiton website in December 2008. It is expected that applying what we have learned from the Australian EEO sites will contribute to our strategy for meeting our energy intensity target on a global basis.

### **2.10 Closure and rehabilitation**

Comprehensive closure planning integrated into the business contributes to our vision of sustainable development and Zero Harm. Each of our controlled assets is responsible for developing closure plans that comply with legislative requirements, limit adverse environmental impacts, and consider stakeholders' needs and aspirations, particularly with respect to end land use.

The BHP Billiton Closure Standard was rolled out to all our controlled assets two years ago. Our sites report against this standard, documenting the current status of closure plans, in annual closure summary reports.

In the interest of continual improvement, during the reporting period, we conducted a review of the Closure Standard. Representatives of the multi-functional teams involved in preparing our closure plans and estimating associated closure costs determined there was an opportunity to better integrate closure planning through our Life of Asset planning process.

Life of Asset planning is a disciplined procedure that occurs annually across the Company. Incorporating the Closure Standard requirements with Life of Asset planning procedures will assist closure planning considerations being incorporated in the Life of Asset plan.

A detailed protocol for auditing compliance with Closure Standard requirements was developed during the reporting period and trialled at our Queensland Coal group. The audit protocol will be implemented by our Group Audit Services function, further integrating closure planning as a way we do business.

BHP Billiton is responsible for a number of legacy sites that are in various stages of decommissioning, rehabilitation or post-closure care and maintenance. These sites are managed by our Customer Sector Groups, where closure is treated as a project.

Closure plans provide the basis for estimating the financial costs of closure. Information on our 2008 closure provisions can be found in notes 1 and 20 of the financial statements (section 9 of this Report).

### **2.11 Employees**

In order to deliver on our aspiration to be the world's leading natural resources company, we need to act in a manner consistent with our Charter values, our clear strategic intent and our defined operating model. Under strong leadership, these elements constitute our way of doing things, The BHP Billiton Way.

Our operating model is designed to clearly define the respective accountabilities of the various segments of the Company. Specifically, it articulates the relationship between, and responsibilities of, the Group Functions, Minerals Exploration, our Customer Sector Groups and Marketing.

Strong leadership is a cornerstone of the success for any organisation. The BHP Billiton Leadership Model is designed to foster behaviours that lead to superior performance and allow each of our employees to start the day with a sense of purpose and end it

with a sense of accomplishment.

We are committed to ensuring our people reach their full potential, achieve job satisfaction and maximise their contribution. During the year, we consolidated our approach to talent management to further strengthen our talent pipeline.

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In order to be successful we continue to strive to identify, recruit, train, develop and retain a talented, diverse, mobile and motivated workforce. Recently, we have revised our employment recruitment branding, our performance review and enhancement processes, and also made changes to our remuneration structures.

We are committed to open, honest and productive relationships with our employees, based on the values of the BHP Billiton Charter. For further information on Employee policies and involvement refer to section 7.8 of this report.

During FY2008 we had an average of 41,732 employees working in over 25 countries and in more than 100 operations worldwide. We also have an estimated 61,000 contractors worldwide. Our workforce is made up of a wide variety of nationalities and cultures.

The table below provides a breakdown of our average number of employees, in accordance with our IFRS reporting requirements, which includes our proportionate share of jointly controlled entities employees and includes executive Directors, by CSG for each of the past three financial years.

CSG	2008	2007	2006
Petroleum	2,143	2,299	2,182
Aluminium	5,145	4,903	5,838
Base Metals	7,443	6,545	6,521
Diamonds and Specialty Products	2,043	1,853	2,064
Stainless Steel Materials	4,223	3,626	2,927
Iron Ore	3,105	2,809	2,705
Manganese	2,142	2,076	2,223
Metallurgical Coal	3,680	3,564	3,534
Energy Coal	9,183	9,595	9,327
Group and unallocated	2,625	2,677	2,681
Total <sup>(a)</sup>	41,732	39,947	40,002

(a) Average employee numbers include executive directors, 100 per cent of employees of subsidiary companies, and our share of proportionally consolidated entities and operations. Part time employees are included on a full-time equivalent basis. Employees of businesses acquired or disposed of during the year are included for the period of ownership. People employed by contractors are not included.

The table below provides a breakdown of our average number of employees by geographic location for each of the past three financial years.

	2008	2007	2006
Australia	15,426	14,897	14,036
Southern Africa	10,860	11,414	10,793
South America	9,342	8,455	10,293
North America	2,994	2,898	2,567
Europe	606	586	589
Rest of World	2,504	1,697	1,724
Total	41,732	39,947	40,002

Approximately 47 per cent of our labour force is covered by collective agreements and we believe that our relations with our employees are generally positive. In the current year, we have had one significant strike, at the Colombian Cerro Matoso operation in February 2008 relating to the renewal of the collective agreement.

**2.12 Organisational structure**

**2.12.1 General**

The BHP Billiton Group consists of the BHP Billiton Limited Group and the BHP Billiton Plc Group as a combined enterprise, following the completion of the Dual Listed Companies (DLC) merger in June 2001. Refer to note 37 "Subsidiaries" in the financial statements for a list of BHP Billiton Limited and BHP Billiton Plc significant subsidiaries.

The BHP Billiton DLC merger was designed to place shareholders of both companies in a position where they effectively have an interest in a single group that combines the assets and are subject to the liabilities of both companies. BHP Billiton Limited and BHP Billiton Plc have each retained their separate corporate identities and maintained separate stock exchange listings, but they are operated and managed as if they are a single unified economic entity, with their boards and senior executive management comprising the same people.

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### **2.12.2 DLC structure**

The principles of the BHP Billiton DLC are reflected in the BHP Billiton Sharing Agreement and include the following:

the two companies are to operate as if they are a single unified economic entity, through Boards of Directors that comprise the same individuals and a unified senior executive management, and

the Directors of both companies will, in addition to their duties to the company concerned, have regard to the interests of BHP Billiton Limited Shareholders and BHP Billiton Plc Shareholders as if the two companies are a single unified economic entity and, for that purpose, the Directors of each company take into account in the exercise of their powers the interests of the shareholders of the other, and

certain DLC equalisation principles must be observed. These are designed to ensure that for so long as the equalisation ratios between a BHP Billiton Limited share and a BHP Billiton Plc share is 1:1, then the economic and voting interests in the combined BHP Billiton Group resulting from the holding of one BHP Billiton Limited share are equivalent to that resulting from one BHP Billiton Plc share. Further details are set out in the sub-section Equalisation of economic and voting rights below. Additional documents which effect the DLC, include:

BHP Billiton Limited Constitution

BHP Billiton Plc Memorandum and Articles of Association

BHP Billiton Special Voting Shares Deed

BHP Billiton Limited Deed Poll Guarantee

BHP Billiton Plc Deed Poll Guarantee.

#### **Australian Foreign Investment Review Board (FIRB) conditions**

The Treasurer of Australia approved the DLC merger subject to certain conditions, the effect of which was to require that, among other things, BHP Billiton Limited continues to:

be an Australian company, which is managed from Australia, and

ultimately manage and control the companies conducting the business that was conducted by it at the time of the merger, for as long as those businesses form part of the BHP Billiton Group.

The conditions have effect indefinitely, subject to amendment of the Australian Foreign Acquisitions Takeover Act 1975 or any revocation or amendment by the Treasurer of Australia. If BHP Billiton Limited no longer wishes to comply with these conditions, it must obtain the prior approval of the Treasurer. Failure to comply with the conditions attracts substantial penalties under the Act.

### **Equalisation of economic and voting rights**

BHP Billiton Limited shareholders and BHP Billiton Plc shareholders have economic and voting interests in the combined BHP Billiton Group. The economic and voting interests represented by a share in one Company relative to the economic and voting interests of a share in the other Company is determined by reference to a ratio known as the Equalisation Ratio. Presently, the economic and voting interests attached to each BHP Billiton Limited share and each BHP Billiton Plc share are the same, since the Equalisation Ratio is 1:1. The Equalisation Ratio would change if either BHP Billiton Limited or BHP Billiton Plc returned value to only its shareholders and no matching action was taken.

This means that the amount of any cash dividend paid by BHP Billiton Limited in respect of each BHP Billiton Limited share is normally matched by an equivalent cash dividend by BHP Billiton Plc in respect of each BHP Billiton Plc share, and vice versa. If one Company has insufficient profits or is otherwise unable to pay the agreed dividend, BHP Billiton Limited and BHP Billiton Plc will, as far as practicable, enter into such transactions as are necessary so as to enable both Companies to pay the amount of pre-tax dividends per share.

#### *Joint Electorate Actions*

Under the terms of the DLC agreements, the BHP Billiton Limited Constitution and the BHP Billiton Plc Articles of Association special voting arrangements have been implemented so that the shareholders of both Companies vote together as a single decision-making body on matters affecting the shareholders of each Company in similar ways (such matters are referred to as Joint Electorate Actions). For so long as the Equalisation Ratio remains 1:1, each BHP Billiton Limited share will effectively have the same voting rights as each BHP Billiton Plc share on Joint Electorate Actions.

A Joint Electorate Action requires approval by ordinary resolution (or special resolution if required by statute, regulation, applicable listing rules or other applicable requirements) of BHP Billiton Limited, with both the BHP Billiton Limited



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ordinary shareholders and the holder of the BHP Billiton Limited Special Voting Share voting as a single class and also of BHP Billiton Plc, with the BHP Billiton Plc ordinary shareholders and the holder of the BHP Billiton Plc Special Voting Share voting as a single class.

### *Class Rights Actions*

In the case of certain actions in relation to which the two bodies of shareholders may have divergent interests (referred to as Class Rights Actions), the Company wishing to carry out the Class Rights Action requires the prior approval of the shareholders in the other Company voting separately and, where appropriate, the approval of its own shareholders voting separately. Depending on the type of Class Rights Action undertaken, the approval required is either an ordinary or special resolution of the relevant Company.

These voting arrangements are secured through the constitutional documents of the two Companies, the BHP Billiton Sharing Agreement, the Special Voting Shares Deed and rights attaching to a specially created Special Voting Share issued by each Company and held in each case by a Special Voting Company. The shares in the Special Voting Companies are held legally and beneficially by Law Debenture Trust Corporation Plc.

### **Cross guarantees**

BHP Billiton Limited and BHP Billiton Plc have each executed a Deed Poll Guarantee, pursuant to which creditors entitled to the benefit of the BHP Billiton Limited Deed Poll Guarantee and the BHP Billiton Plc Deed Poll Guarantee will, to the extent possible, be placed in the same position as if the relevant debts were owed by both BHP Billiton Limited and BHP Billiton Plc combined.

### **Restrictions on takeovers of one Company only**

The BHP Billiton Limited Constitution and the BHP Billiton Plc Articles of Association have been drafted to ensure that, except with the consent of the Board, a person cannot gain control of one Company without having made an equivalent offer to the shareholders of both Companies on equivalent terms. Sanctions for breach of these provisions would include withholding of dividends, voting restrictions and the compulsory divestment of shares to the extent a shareholder and its associates exceed the relevant threshold.

## **2.13 Material contracts**

### ***DLC agreements***

On 29 June 2001, BHP Billiton Limited (then known as BHP Limited) and BHP Billiton Plc (then known as Billiton Plc) merged by way of a DLC structure. To effect the DLC, BHP Limited and Billiton Plc (as they were then known) entered into the following agreements designed to place the shareholders of both companies in a position where they effectively have an interest in a single group that combines the assets, and is subject to all the liabilities, of both companies:

BHP Billiton Sharing Agreement

BHP Billiton Special Voting Shares Deed

BHP Billiton Limited Deed Poll Guarantee

BHP Billiton Plc Deed Poll Guarantee.

The effect of each of these agreements and the manner in which they operate are described in section 2.12 of this Report. It is expected that these agreements will remain in effect until such time as a change in control of the BHP Billiton Group may occur.

**Credit facility**

On 5 February 2008, we entered into a multicurrency term and revolving facility and subscription agreement with Barclays Capital, BNP Paribas, Citibank Global Markets Limited, Goldman Sachs, HSBC Bank plc, Banco Santander, S.A., London Branch and UBS Limited to, among other things, meet potential funding requirements in relation to our offer to acquire Rio Tinto. The facility agreement provides for four debt facilities in an aggregate amount of US\$55 billion as follows:

a US\$20 billion term loan facility with a term of 364 days, which may be extended (at our election) for a further 12 months and thereafter up to US\$10 billion may be extended for a further six months (at our election) subject to payment of an extension fee;

a US\$15 billion term loan facility with a term of three years;

a US\$12.5 billion term loan facility with a term of five years; and

a US\$7.5 billion revolving facility with a term of five years incorporating Euro and US dollar swingline facilities.

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The proceeds of loans drawn under the facilities may be used for the following purposes:

refinancing Rio Tinto's existing US\$40 billion facility or any refinancing of such facility;

financing any return of cash to our shareholders by way of a share buyback or otherwise;

financing any cash consideration that may be offered to Rio Tinto shareholders pursuant to the acquisition;

the payment of costs in connection with the acquisition; and

in the case of the revolving facility, for the general corporate purposes of the BHP Billiton Group.  
Loans drawn under the facilities bear interest at a margin over LIBOR.

The facility agreement contains customary representations and warranties, affirmative and negative covenants (including, among others, compliance with a leverage ratio, negative pledge and certain restrictions on disposals and subsidiary indebtedness), indemnities and events of default, each with appropriate carve-outs and materiality thresholds.

The facility agreement contains a requirement to prepay the US\$20 billion term loan facility from proceeds of certain disposals and borrowings, subject to certain exceptions and thresholds.

### **2.14 Constitution**

The following text summarises the Constitution of BHP Billiton Limited and the Articles of Association of BHP Billiton Plc. The effect of the Constitution of BHP Billiton Limited and the Articles of Association of BHP Billiton Plc is, so far as possible, identical. Where the term "BHP Billiton" is used in this description of the Constitution and Articles of Association, it can be read to mean either BHP Billiton Limited or BHP Billiton Plc.

Certain provisions of the Constitution of BHP Billiton Limited and the Articles of Association of BHP Billiton Plc can only be amended where such amendment is approved by special resolution either:

by approval as a Class Rights Action, where the amendment results in a change to an "Entrenched Provision"; or

otherwise, as a Joint Electorate Action.

A description of Joint Electorate Actions and Class Rights Actions is contained under the heading "Equalisation of economic and voting rights" in section 2.12.2 of this Report.

#### **2.14.1 Directors**

The management and control of the business and affairs of BHP Billiton are vested in the Board of Directors which may exercise all powers and do everything that is within the power of BHP Billiton, other than what is required to be exercised or done by BHP Billiton in a general meeting.

#### **2.14.2 Power to issue securities**

BHP Billiton may, pursuant to the Constitution and Articles of Association, issue any shares or other securities with preferred, deferred or other special rights, obligations or restrictions as and when the Directors may determine and on any other terms the Directors consider appropriate, provided that any such issue:

does not affect any special rights conferred on the holders of any shares; and

is subject to the provisions regarding shareholder approval in the Constitution and Articles of Association. The rights attaching to a class other than ordinary shares are expressed at the date of issue.

### **2.14.3 Restrictions on voting by Directors**

A Director may not vote in respect of any contract or arrangement or any other proposal in which he or she has a material personal interest. A Director shall not be counted in the quorum at a meeting in relation to any resolution on which he or she is not entitled to vote.

Subject to applicable laws, a Director is entitled to vote, and be counted in the quorum, in respect of any resolution concerning any of the following matters, namely where the material personal interest:

arises because the Director is a shareholder of BHP Billiton and is held in common with the other shareholders of BHP Billiton

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arises in relation to the Director's remuneration as a Director of BHP Billiton

relates to a contract BHP Billiton is proposing to enter into that is subject to approval by the shareholders and will not impose any obligation on BHP Billiton if it is not approved by the shareholders

arises merely because the Director is a guarantor or has given an indemnity or security for all or part of a loan, or proposed loan, to BHP Billiton

arises merely because the Director has a right of subrogation in relation to a guarantee or indemnity referred to above

relates to a contract that insures, or would insure, the Director against liabilities the Director incurs as an officer of BHP Billiton, but only if the contract does not make BHP Billiton or a related body corporate the insurer

relates to any payment by BHP Billiton or a related body corporate in respect of an indemnity permitted by law, or any contract relating to such an indemnity; or

is in a contract, or proposed contract with, or for the benefit of, or on behalf of, a related body corporate and arises merely because the Director is a director of a related body corporate.

We are, however, seeking shareholder approval at our 2008 Annual General Meetings to amend the Articles of BHP Billiton Plc to take account of changes to Directors' interests rules introduced by the new UK Companies Act 2006. From 1 October 2008, the Companies Act 2006 will impose a duty on a Director of a company to which the Companies Act applies to avoid a situation in which he or she has, or can have, a direct or indirect interest that conflicts, or possibly may conflict, with the interests of the company. This duty is not infringed if either the situation cannot reasonably be regarded as likely to give rise to a conflict of interest or if the matter has been authorised by the Directors. The Companies Act 2006 allows directors of public companies to authorise conflicts and potential conflicts where the company's articles contain such an enabling provision. The proposed amendment to the Articles of BHP Billiton Plc give the Directors authority to approve such situations and the ability to make regulations governing the way in which required disclosures and any following authorisation will be made to and by the Directors, giving greater flexibility and ensuring that the highest standard of corporate governance/best practice may be adhered to. Further details are set out in the Notices of Meeting for the 2008 Annual General Meetings.

### **2.14.4 Loans by Directors**

Any Director may lend money to BHP Billiton at interest with or without security or may, for a commission or profit, guarantee the repayment of any money borrowed by BHP Billiton and underwrite or guarantee the subscription of shares or securities of BHP Billiton or of any corporation in which BHP Billiton may be interested without being disqualified as a Director and without being liable to account for BHP Billiton for any commission or profit.

### **2.14.5 Retirement of Directors**

At every annual general meeting one-third of the Directors or, if their number is not a multiple of three, then the number nearest to but not less than one-third, must retire from office. The Directors to retire are those longest in office since last being elected. As between Directors who were elected on the same day, the Directors to retire are determined by lot (in default of agreement between them). Further, a Director must retire from office at the conclusion of the third Annual General Meeting after which the Director was elected or re-elected. A retiring director is eligible for re-election.

The Board continues to have a policy that requires a non-executive Director who has served on the Board for nine years from the date of their first election to stand for annual re-election from the first Annual General Meeting after the expiration of their current term.

## Edgar Filing: BHP BILLITON LTD - Form 20-F

We are seeking shareholder approval at our 2008 Annual General Meetings to amend the Constitution of BHP Billiton Limited and the Articles of BHP Billiton Plc so that the cut-off date for Director nominations is measured from the earlier of the BHP Billiton Limited and the BHP Billiton Plc general meetings which is appropriate given the Dual Listed Company structure. Currently, the wording of the Constitution means that BHP Billiton Limited uses the nominations cut-off period contained in the ASX Listing Rules (i.e. 35 business days before the date of the BHP Billiton Limited meeting) which typically falls after the deadline for nominations as a director of BHP Billiton Plc. BHP Billiton Limited has in the past needed to seek ASX regulatory relief to avoid a situation in which a candidate could be eligible for election as a Director of BHP Billiton Limited but not as a Director of BHP Billiton Plc. If the proposed amendments are adopted, the cut-off date for both BHP Billiton Limited and BHP Billiton Plc will be 40 business days before the earlier of the BHP Billiton Limited and BHP Billiton Plc general meetings. Further details are set out in the Notices of Meeting for the 2008 Annual General Meetings.

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### **2.14.6 Rights attaching to shares**

#### **Dividend rights**

By law, dividends on shares may only be paid out of profits available for distribution. The Constitution and Articles of Association provide that payment of any dividend may be made in any manner, by any means and in any currency determined by the Board.

All unclaimed dividends may be invested or otherwise used by the Board for the benefit of whichever of BHP Billiton Limited or BHP Billiton Plc declared that dividend, until claimed or, in the case of BHP Billiton Limited, otherwise disposed of according to law. In the case of BHP Billiton Plc, any dividend unclaimed after a period of 12 years from the date on which such dividend was declared or became due for payment shall be forfeited and shall revert to BHP Billiton Plc.

#### **Voting rights**

Voting at any general meeting of BHP Billiton Limited shareholders is in the first instance to be conducted by a show of hands unless a poll is demanded by any of the following (except in relation to the election of a chairman of a meeting or, unless the Chairman otherwise determines, the adjournment of a meeting):

the Chairman

any shareholder under the law; or

the holder of the BHP Billiton Limited Special Voting Share.

Voting at any general meeting of BHP Billiton Plc is in the first instance to be conducted by a show of hands unless a poll is demanded by any of the following:

the Chairman

not less than five members present in person or by proxy and entitled to vote

a member or members present in person or by proxy and representing not less than five per cent of the total voting rights of all the members having the right to vote at the meeting; or

the holder of the Billiton Special Voting Share.

As described under the heading *Equalisation of economic and voting rights* in section 2.12.2 of this Report, certain matters may be decided as Joint Electorate Actions or Class Rights Actions.

In addition, at any general meeting a resolution, other than a procedural resolution, put to the vote of the meeting on which the holder of the relevant BHP Billiton Special Voting Share is entitled to vote shall be decided on a poll.

On a show of hands, every holder of a fully paid ordinary share present in person or by proxy, attorney or representative has one vote. Where a shareholder has appointed more than one person as representative, proxy or attorney for that shareholder, none of the representatives, proxies or attorneys are entitled to vote on a show of hands (see below). On a poll, however, votes may be given either personally or by proxy.

## Edgar Filing: BHP BILLITON LTD - Form 20-F

We are seeking shareholder approval at our 2008 Annual General Meetings to amend the Constitution of BHP Billiton Limited and the Articles of BHP Billiton Plc to bring the Constitution and the Articles in line with the new UK Companies Act 2006 by ensuring that where a shareholder appoints more than one proxy, the multiple proxies taken together have at least the same number of votes on a show of hands as the member who appointed them would have if he or she were present at the meeting. The proposed amendments are not considered to be of practical consequence given BHP Billiton's practice is to proceed directly to a poll on all items of business at general meetings. Further details are set out in the Notices of Meeting for the 2008 Annual General Meetings.

### **Rights to share in BHP Billiton Limited's profits**

The rights attached to the shares of BHP Billiton Limited, as regards the participation in the profits available for distribution, are as follows:

The holders of any preference shares shall be entitled, in priority to any payment of dividend to the holders of any other class of shares, to a preferred right to participate as regards dividends up to but not beyond a specified amount in distribution.



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Subject to the special rights attaching to any preference shares, but in priority to any payment of dividends on all other classes of shares, the holder of the Equalisation Share (if any) shall be entitled to be paid such dividends as are declared.

Any surplus remaining after payment of the distributions above shall be payable to the holders of BHP Billiton Limited ordinary shares and the BHP Billiton Limited Special Voting Share in equal amounts per share.

### **Rights to share in BHP Billiton Plc s profits**

The rights attached to the shares of BHP Billiton Plc, in relation to the participation in the profits available for distribution, are as follows:

The holders of the cumulative preference shares shall be entitled, in priority to any payment of dividend to the holders of any other class of shares, to be paid a fixed cumulative preferential dividend (Preferential Dividend) at a rate of 5.5 per cent per annum, to be paid annually in arrears on 31 July in each year or, if any such date shall be a Saturday, Sunday or public holiday in England, on the first business day following such date in each year. Payments of Preferential Dividends shall be made to holders on the register at any date selected by the Directors up to 42 days prior to the relevant fixed dividend date.

Subject to the rights attaching to the cumulative preference shares, but in priority to any payment of dividends on all other classes of shares, the holder of the BHP Billiton Plc Special Voting Share shall be entitled to be paid a fixed dividend of US\$0.01 per annum, payable annually in arrears on 31 July.

Subject to the rights attaching to the cumulative preference shares and the BHP Billiton Plc Special Voting Share, but in priority to any payment of dividends on all other classes of shares, the holder of the Equalisation Share shall be entitled to be paid such dividends as the Board may decide to pay thereupon.

Any surplus remaining after payment of the distributions above shall be payable to the holders of the BHP Billiton Plc ordinary shares in equal amounts per BHP Billiton Plc ordinary share.

### **2.14.7 Right on a return of assets on liquidation**

On a return of assets on liquidation of BHP Billiton Limited, subject to the payment of all prior ranking amounts owed to all creditors of BHP Billiton Limited and preference shareholders, the assets of BHP Billiton Limited remaining available for distribution among shareholders, after giving effect to the payment of all prior ranking amounts owed to all creditors and holders of preference shares, shall be applied in paying to the holders of the BHP Billiton Limited Special Voting Share and the Equalisation Share (if any) an amount of up to A\$2.00 on each such share, on an equal priority with any amount paid to the holders of BHP Billiton Limited ordinary shares, and any surplus remaining shall be applied in making payments solely to the holders of BHP Billiton Limited ordinary shares in accordance with their entitlements.

On a return of assets on liquidation of BHP Billiton Plc, subject to the payment of all prior ranking amounts owed to the creditors of BHP Billiton Plc and prior ranking statutory entitlements, the assets of BHP Billiton Plc to be distributed on a winding-up shall be distributed to the holders of shares in the following order of priority:

to the holders of the cumulative preference shares, the repayment of a sum equal to the nominal capital paid up or credited as paid up on the cumulative preference shares held by them and accrual, if any, of the Preferential Dividend whether such dividend has been earned or declared or not, calculated up to the date of commencement of the winding-up

to the holders of the BHP Billiton Plc ordinary shares and to the holders of the BHP Billiton Plc Special Voting Share and the Equalisation Share (if any), the payment out of surplus, if any, remaining after the distribution above of an equal amount for each BHP Billiton Plc ordinary share, the BHP Billiton Plc Special Voting Share and the Equalisation Share, if issued, subject to a maximum in the case of the BHP Billiton Plc Special Voting Share and the Equalisation Share of the nominal capital paid up on such shares.

**2.14.8 Redemption of preference shares**

If BHP Billiton Limited at any time proposes to create and issue any preference shares, the preference shares may be issued on the terms that they are to be redeemed or, at the option of either or both BHP Billiton Limited and the holder, are liable to be redeemed, whether out of share capital, profits or otherwise.

The preference shares confer on the holders the right to convert the preference shares into ordinary shares if, and on the basis, the Board determines at the time of issue of the preference shares.

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The preference shares are to confer on the holders:

the right (on redemption and on a winding up) to payment in cash in priority to any other class of shares of (i) the amount paid or agreed to be considered as paid on each of the preference shares; (ii) the amount, if any, equal to the aggregate of any dividends accrued but unpaid and of any arrears of dividends; and

the right, in priority to any payment of dividend on any other class of shares, to the preferential dividend. There is no equivalent provision in the Articles of Association of BHP Billiton Plc.

### **2.14.9 Capital calls**

Subject to the terms on which any shares may have been issued, the Board may make calls on the shareholders in respect of all monies unpaid on their shares. BHP Billiton has a lien on every partly paid share for all amounts payable in respect of that share. Each shareholder is liable to pay the amount of each call in the manner, at the time and at the place specified by the Board (subject to receiving at least 14 days notice specifying the time and place for payment). A call is considered to have been made at the time when the resolution of the Board authorising the call was passed.

### **2.14.10 Borrowing powers**

Subject to relevant law, the Directors may exercise all powers of BHP Billiton to borrow money, and to mortgage or charge its undertaking, property, assets (both present and future) and all uncalled capital or any part or parts thereof and to issue debentures and other securities, whether outright or as collateral security for any debt, liability or obligation of BHP Billiton or of any third party.

### **2.14.11 Changes to rights of shareholders**

Rights attached to any class of shares issued by either BHP Billiton Limited or BHP Billiton Plc can only be varied (whether as a Joint Electorate Action or a Class Rights Action) where such variation is approved both:

by the Company that issued the relevant shares, as a special resolution; and

by the holders of the issued shares of the affected class, either at a special meeting by resolution passed by not less than three-quarters of the holders present at the meeting and by voting, or in writing signed by the holders of at least three-quarters of the issued shares of that class.

However, we are seeking shareholder approval at our 2008 Annual General Meetings to amend the Constitution of BHP Billiton Limited and the Articles of BHP Billiton Plc to bring the above procedure in line with section 334 of the new UK Companies Act 2006 by requiring the proposed variation be approved by both the relevant Company and by a special resolution passed at a separate meeting of the holders of the issued shares of the class affected or with the written consent of members with at least 75 per cent of the votes in the class affected. Further details are set out in the Notices of Meeting for the 2008 Annual General Meetings.

### **2.14.12 Conditions governing general meetings**

All provisions relating to general meetings apply with any necessary modifications to any special meeting of any class of shareholders that may be held. Therefore, the following information relates equally to general meetings and any special meeting of any class of shareholders.

The Board may and shall on requisition in accordance with applicable laws call a general meeting of the shareholders at the time and place or places and in the manner determined by the Board. No shareholder may convene a general meeting of BHP Billiton

except where entitled under law to do so. Any Director may convene a general meeting whenever the Director thinks fit. General meetings can also be cancelled, postponed or adjourned. Notice of a general meeting must be given to each shareholder entitled to vote at the meeting and such notice of meeting must be given in the form and manner in which the Board thinks fit. Five shareholders of the relevant Company present in person or by proxy constitute a quorum for a meeting. A shareholder who is entitled to attend and cast a vote at a general meeting of BHP Billiton Limited may appoint a person as a proxy to attend and vote for the shareholder in accordance with the law.

#### **2.14.13 Limitations on rights to own securities**

Neither the Constitution nor the Articles of Association impose any limitations on the rights to own securities other than restrictions that reflect the takeovers codes under relevant Australian and UK law. In addition, the Australian Foreign Acquisitions and Takeovers Act 1975 imposes a number of conditions that restrict foreign ownership of Australian-based companies.

Share control limits imposed by the Constitution of BHP Billiton Limited and the Articles of Association of BHP Billiton Plc, as well as relevant laws, are described in section 2.8 and 2.12.2 of this Report.

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### **2.14.14 Documents on display**

You can consult reports and other information about BHP Billiton Limited that it has filed pursuant to the rules of the ASX at [www.asx.com.au](http://www.asx.com.au). You can consult reports and other information filed for publication by BHP Billiton Plc pursuant to the rules of the UK Listing Authority at the Authority's document viewing facility. Information filed on the ASX, or pursuant to the rules of the UK Listing Authority is not incorporated by reference into this Annual Report. The documents referred to in this Annual Report as being available on our website, [www.bhpbilliton.com](http://www.bhpbilliton.com), are not incorporated by reference and do not form part of this Annual Report.

BHP Billiton Limited and BHP Billiton Plc both file annual and special reports and other information with the SEC. You may read and copy any document that either BHP Billiton Limited or BHP Billiton Plc files at the SEC's public reference room located at 100 F Street, NE, Room 1,580, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 or access the SEC website at [www.sec.gov](http://www.sec.gov) for further information on the public reference room. The SEC filings of BHP Billiton Limited since November 2002, and those of BHP Billiton Plc since April 2003, are also available on the SEC website. American Depositary Shares representing ordinary shares of BHP Billiton Limited are listed on the NYSE, and its ordinary shares are listed on the ASX. American Depositary Shares representing ordinary shares of BHP Billiton Plc are also listed on the NYSE and its ordinary shares are admitted to the Official List of the UK Listing Authority (being the Financial Services Authority acting in its capacity as the competent authority for the purposes of Part VI of the Financial Services and Markets Act 2000), and to trading on the London Stock Exchange's market for listed securities.

## **2.15 Reserves**

### **2.15.1 Petroleum reserves**

#### **Reserves and production**

Proved oil and gas reserves are the estimated quantities of crude oil, natural gas and natural gas liquids (NGL) that geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions, i.e. prices and costs as of the date the estimate is made. Proved developed oil and gas reserves are reserves that can be expected to be recovered through existing wells with existing equipment and operating methods.

Estimates of oil and gas reserves are inherently imprecise, require the application of judgement and are subject to future revision. Accordingly, financial and accounting measures (such as the standardised measure of discounted cash flows, depreciation, depletion and amortisation charges, the assessment of impairments and the assessment of valuation allowances against deferred tax assets) that are based on reserve estimates are also subject to change.

Proved reserves are estimated by reference to available seismic, well and reservoir information, including production and pressure trends for producing reservoirs and, in some cases, to similar data from other producing reservoirs in the immediate area. Proved reserves estimates are attributed to future development projects only where there is a significant commitment to project funding and execution, and for which applicable governmental and regulatory approvals have been secured or are reasonably certain to be secured. Furthermore, estimates of proved reserves only include volumes for which access to market is assured with reasonable certainty. All proved reserve estimates are subject to revision, either upward or downward, based on new information, such as from development drilling and production activities or from changes in economic factors, including product prices, contract terms or development plans.

The tables below detail estimated oil, condensate, NGL and gas reserves at 30 June 2008, 30 June 2007 and 30 June 2006, with a reconciliation of the changes in each year. Reserves have been calculated using the economic interest method and represent net interest volumes after deduction of applicable royalty, fuel and flare volumes. Reserves include quantities of oil, condensate, NGL and gas that will be produced under several production and risk sharing arrangements that involve the BHP Billiton Group in upstream risks and rewards without transfer of ownership of the products. At 30 June 2008, approximately 6 per cent (2007: 9 per cent; 2006: 11 per cent) of proved developed and undeveloped oil, condensate and NGL reserves and 5 per cent (2007: 6 per cent; 2006: nil) of natural gas reserves are attributable to those arrangements. Reserves also include volumes calculated by probabilistic aggregation of certain fields that share common infrastructure. These aggregation procedures result in enterprise-wide proved reserves volumes which may not be realised upon divestment on an individual property basis.



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Millions of barrels	Australia/Asia	Americas	UK/Middle East	Total
<b>Proved developed and undeveloped oil, condensate and NGL reserves <sup>(a)</sup></b>				
<b>Reserves at 30 June 2005</b>	<b>284.7</b>	<b>183.0</b>	<b>74.9</b>	<b>542.6</b>
Improved recovery	-	11.5	-	11.5
Revisions of previous estimates	52.4	0.6	(2.6)	50.4
Extensions and discoveries	-	2.6	-	2.6
Purchase/sales of reserves	-	(0.3)	-	(0.3)
Production <sup>(b)</sup>	(33.2)	(7.3)	(15.3)	(55.8)
Total changes	19.2	7.1	(17.9)	8.4
<b>Reserves at 30 June 2006</b>	<b>303.9</b>	<b>190.1</b>	<b>57.0</b>	<b>551.0</b>
Improved recovery	-	-	-	-
Revisions of previous estimates	13.6	(0.9)	5.6	18.3
Extensions and discoveries	50.9	1.7	-	52.6
Purchase/sales of reserves	-	(0.1)	-	(0.1)
Production <sup>(b)</sup>	(35.8)	(6.6)	(14.3)	(56.7)
Total changes	28.7	(5.9)	(8.7)	14.1
<b>Reserves at 30 June 2007 <sup>(c)</sup></b>	<b>332.6</b>	<b>184.2</b>	<b>48.3</b>	<b>565.1</b>
Improved recovery	17.6	-	-	17.6
Revisions of previous estimates	20.0	16.2	(2.2)	34.0
Extensions and discoveries	26.6	23.4	-	50.0
Purchase/sales of reserves	-	-	-	-
Production <sup>(b)</sup>	(40.0)	(16.3)	(11.8)	(68.1)
Total changes	24.2	23.3	(14.0)	33.5
<b>Reserves at 30 June 2008 <sup>(c)</sup></b>	<b>356.8</b>	<b>207.5</b>	<b>34.3</b>	<b>598.6</b>
<b>Proved developed oil, condensate and NGL reserves <sup>(a)</sup></b>				
Reserves at 30 June 2005	180.5	18.3	74.5	273.3
Reserves at 30 June 2006	199.3	21.5	54.6	275.4
Reserves at 30 June 2007	180.8	35.3	46.0	262.1
<b>Reserves at 30 June 2008</b>	<b>190.9</b>	<b>99.6</b>	<b>30.6</b>	<b>321.1</b>

(a) In Bass Strait, the North West Shelf, Ohanet and the North Sea, NGL is extracted separately from crude oil and natural gas.

(b) Production for reserves reconciliation differs slightly from marketable production due to timing of sales and corrections to previous estimates.

(c) Total proved oil, condensate and NGL reserves include 8.0 million barrels derived from probabilistic aggregation procedures.

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<b>Billions of cubic feet</b>	<b>Australia/Asia <sup>(a)</sup></b>	<b>Americas</b>	<b>UK/Middle East</b>	<b>Total</b>
<b>Proved developed and undeveloped natural gas reserves</b>				
<b>Reserves at 30 June 2005</b>	<b>4,820.7</b>	<b>116.9</b>	<b>244.5</b>	<b>5,182.1</b>
Improved recovery	-	-	-	-
Revisions of previous estimates	4.0	6.5	34.7	45.2
Extensions and discoveries	-	1.3	-	1.3
Purchases/sales of reserves	-	(0.2)	-	(0.2)
Production <sup>(b)</sup>	(292.0)	(8.0)	(61.1)	(361.1)
Total changes	(288.0)	(0.4)	(26.4)	(314.8)
<b>Reserves at 30 June 2006</b>	<b>4,532.7</b>	<b>116.5</b>	<b>218.1</b>	<b>4,867.3</b>
Improved recovery	-	-	-	-
Revisions of previous estimates	15.3	(0.4)	1.4	16.3
Extensions and discoveries	-	280.7	-	280.7
Purchases/sales of reserves	(76.5)	(3.6)	-	(80.1)
Production <sup>(b)</sup>	(295.0)	(8.7)	(53.3)	(357.0)
Total changes	(356.2)	268.0	(51.9)	(140.1)
<b>Reserves at 30 June 2007 <sup>(c)</sup></b>	<b>4,176.5</b>	<b>384.5</b>	<b>166.2</b>	<b>4,727.2</b>
Improved recovery	-	-	-	-
Revisions of previous estimates	22.7	(42.3)	62.2	42.6
Extensions and discoveries	239.8	17.1	-	256.9
Purchases/sales of reserves	-	-	-	-
Production <sup>(b)</sup>	(310.9)	(11.8)	(45.8)	(368.5)
Total changes	(48.4)	(37.0)	16.4	(69.0)
<b>Reserves at 30 June 2008 <sup>(c)</sup></b>	<b>4,128.1</b>	<b>347.5</b>	<b>182.6</b>	<b>4,658.2</b>
<b>Proved developed natural gas reserves</b>				
Reserves at 30 June 2005	2,621.4	15.1	239.3	2,875.8
Reserves at 30 June 2006	2,286.4	16.5	206.4	2,509.3
Reserves at 30 June 2007	2,137.4	15.9	162.4	2,315.7
<b>Reserves at 30 June 2008</b>	<b>2,148.6</b>	<b>46.4</b>	<b>175.1</b>	<b>2,370.1</b>

(a) Production for Australia includes gas sold as LNG.

(b) Production for reserves reconciliation differs slightly from marketable production due to timing of sales and corrections to previous estimates.

(c) Total proved natural gas reserves include 169.3 billion cubic feet derived from probabilistic aggregation procedures.



**Table of Contents****2.15.2 Ore reserves**

Ore Reserves are estimates of the amount of ore that can be economically and legally extracted and processed from our mining properties. In order to estimate reserves, assumptions are required about a range of geological, technical and economic factors, including quantities, grades, production techniques, recovery rates, production costs, transport costs, commodity demand, commodity prices and exchange rates. Estimating the quantity and/or grade of reserves requires the size, shape and depth of ore bodies to be determined by analysing geological data such as drilling samples. Because the economic assumptions used to estimate reserves change from period to period, and because additional geological and operational data is generated during the course of operations, estimates of reserves may change from period to period. All of the Ore Reserve figures presented are reported in 100 per cent terms and represent estimates at 30 June 2008 (unless otherwise stated). All tonnes and grade information has been rounded, hence small differences may be present in the totals. Mine life is calculated as Total Reserve divided by the current approved nominal production rate.

Our mineral leases are of sufficient duration (or convey a legal right to renew for sufficient duration) to enable all reserves on the leased properties to be mined in accordance with current production schedules. Our Ore Reserves may include areas where some additional approvals remain outstanding but where, based on the technical investigations we carry out as part of our mine planning process and our knowledge and experience of the approvals process, we expect that such approvals will be obtained as part of the normal course of business and within the timeframe required by the current life-of-mine schedule.

The reported reserves contained in this annual report do not exceed the quantities that we estimate could be extracted economically if future prices were at similar levels to the average historical prices for traded metals for the three years to 31 December 2007, or for bulk commodities long-term contracted prices. However, we do not use a bauxite, aluminium or alumina price to determine bauxite reserves. The primary criteria for determining bauxite reserves are the feed specifications required by the captive alumina refinery. In addition to these specifications a number of modifying factors are used to differentiate bauxite reserves from other mineralised material. For our Manganese assets, historical benchmark contract price is used to determine reserves at only one asset (GEMCO). Geological stratigraphic controls, cut-off grade and plant feed requirements are used to determine reserves at our other Manganese assets.

Current operating costs have been matched to the average of historical or long-term contract prices in our test for impairment in accordance with Industry Guide 7. The reported reserves may differ in some respects from the reserves we report in our home jurisdictions of Australia and the UK. Those jurisdictions require the use of the Australasian Code for reporting of Mineral Resources and Ore Reserves, December 2004 (the JORC Code), which contemplates the use of reasonable investment assumptions in calculating reserve estimates.

The three-year historical average prices used for each commodity to test for impairment of the reserves of traded metals contained in this annual report are as follows:

<b>Commodity Price</b>	<b>US\$</b>
Copper <sup>(1)</sup>	2.65/lb
Gold	582.11/oz
Nickel	11.52/lb
Silver	10.75/oz
Lead	0.73/lb
Zinc	1.19/lb
Uranium	58.16/lb

- (1) All our copper operations have used a copper price at or below the three-year historical average copper price to estimate, or test for impairment of, the copper reserves disclosed in this report. The price used by each operation is disclosed in the footnotes to the Base Metals Ore Reserves table.

**Table of Contents****Aluminium Customer Sector Group***Ore Reserves*

The table below details the total Ore Reserves for the Aluminium Customer Sector Group estimated as at 30 June 2008 in 100 per cent terms (unless otherwise stated).

As at 30 June 2007																	
Type	Proved Ore Reserve				Probable Ore Reserve				Total Ore Reserve				Mine life (years)	Total Ore Reserve			
	Millions of dry metric tonnes	% A.Al <sub>2</sub> O <sub>3</sub>	% R.SiO <sub>2</sub>	% Fe <sub>2</sub> O <sub>3</sub>	Millions of dry metric tonnes	% A.Al <sub>2</sub> O <sub>3</sub>	% R.SiO <sub>2</sub>	% Fe <sub>2</sub> O <sub>3</sub>	Millions of dry metric tonnes	% A.Al <sub>2</sub> O <sub>3</sub>	% R.SiO <sub>2</sub>	% Fe <sub>2</sub> O <sub>3</sub>		Millions of dry metric tonnes	% A.Al <sub>2</sub> O <sub>3</sub>	% R.SiO <sub>2</sub>	% Fe <sub>2</sub> O <sub>3</sub>
Perite	235	30.9	1.7	-	76	31.0	1.8	-	311	30.9	1.8	-	19	324	30.8	1.7	-
Washed	155	50.7	3.7	-	59	50.7	3.7	-	214	50.7	3.7	-	14	172	51.2	3.5	-
Perite	0.4	45.4	3.4	13.6	0.3	39.0	3.4	22	0.7	42.5	3.4	17.4	1	0.7	42.6	3.4	17.2
Perite	9.4	48.4	4.0	10.6	-	-	-	-	9.4	48.4	4.0	10.6	3	14	47.8	5.0	10.2

(1) Approximate drill hole spacings used to classify the reserves are:

Deposit	Proved Ore Reserves	Probable Ore Reserves
Worsley	Maximum 80m	Maximum 160m
MRN	A bauxite intersection grid of 200m. Mining and metallurgical characterisation (test pit/bulk sample) plus a reliable suite of chemical and size distribution data	Those areas with a bauxite intersection grid spacing of less than 400m and/ or a 400m spaced grid with a 200m offset fill in, plus a reliable suite of chemical and size distribution data.
Coermotibo	61m x 61m	122m x 122m
Onverdacht	61m x 61m	122m x 122m

(2) Metallurgical recoveries for the operations are:

**Estimated % metallurgical recovery of A.Al<sub>2</sub>O<sub>3</sub>****Deposit**

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Worsley (Worsley Refinery)	90%
MRN (Alumar refinery)	94%
Coermotibo (Paranam Refinery)	92.30%
Onverdacht (Paranam Refinery)	92.30%

(3)  $A.Al_2O_3$  is available alumina determined for expected refinery conditions.  $R.SiO_2$  is silica that is reactive in the refinery process.  $Fe_2O_3$  is iron oxide.

(4) For Worsley, MRN, Coermotibo and Onverdacht bauxite deposits the reserves are determined based on applicable  $A.Al_2O_3$ ,  $R.SiO_2$ . For one of the Onverdacht deposits an  $Fe_2O_3$  cut-off is also applied.

(5) Worsley The change in mine life is due to the approved production increase currently being installed and scheduled for operation in 2011. The Worsley Alumina Project expansion to 4.6 mtpa alumina (equivalent to 16.8 mtpa bauxite) was announced 1 May 2008.

(6) MRN The June 2008 increase in MRN Washed reserves largely reflects the promotion of the plateaux Arama, Greigh and part of Monte Branco to the reserve category following a 200m square grid drilling program. A small amount of the reserve increase is derived from Bela Cruz, Bacaba, Teofilo and Cipo plateaux following a review of the model. MRN Washed tonnes and grade represent expected product based on forecast beneficiated yield in the reserve area of 75%.

(7) The MRN reserves are located on mining leases that provide MRN the right to mine. In addition, MRN is required to obtain environmental approvals to allow infrastructure access and mining; these approvals are sought and approved on a staged basis as part of the normal course of business. Current mining areas have full environmental approval, MRN is progressing further approvals to cover the total reserve area within a timeframe required by the current life of mine schedule.

**Table of Contents****Base Metals Customer Sector Group***Ore Reserves*

The table below details the total Ore Reserves for the Base Metals Customer Sector Group estimated as a 30 June 2008 in 100 per cent terms (unless otherwise stated).

As at 30 June 2008																	
Commodity Deposit (1,2,3)	Ore Type	Proved Ore Reserve				Probable Ore Reserve				Total Ore Reserve				Mine life (years)			
		Millions of dry metric tonnes	% TCu	% SCu		Millions of dry metric tonnes	% TCu	% SCu		Millions of dry metric tonnes	% TCu	% SCu					
<b>Copper</b>																	
Escondida (4)	Oxide	95	0.86	-		49	1.07	-		144	0.93	-		24			
	Sulphide	770	1.16	-		962	1.05	-		1,731	1.10	-					
	Sulphide leach	692	0.55	-		1,568	0.55	-		2,260	0.55	-					
Cerro Colorado (5)	Oxide	47	0.61	0.45		58	0.68	0.5		105	0.65	0.48		8			
	Sulphide	28	0.74	0.14		20	0.66	0.16		48	0.71	0.15					
Spence (6)	Oxide	36	1.11	0.86		30	1.05	0.65		66	1.08	0.76		15			
	Sulphide	123	1.24	-		83	0.79	-		205	1.06	-					
Pinto Valley (7)	Low-grade leach	7.0	0.21	-		8.0	0.20	-		15	0.21	-		4			
	Sulphide	42	0.37	-		56	0.42	-		98	0.39	-					
	Sulphide stockpiles	446	0.11	-		-	-	-		446	0.11	-					
<b>Copper Uranium</b>																	
		Millions of dry metric tonnes	% Cu	kg/tonne U <sub>3</sub> O <sub>8</sub>	g/t Au	g/t Ag	Millions of dry metric tonnes	% Cu	kg/tonne U <sub>3</sub> O <sub>8</sub>	g/t Au	g/t Ag	Millions of dry metric tonnes	% Cu	kg/tonne U <sub>3</sub> O <sub>8</sub>	g/t Au	g/t Ag	
Olympic Dam (8)	Sulphide	221	1.97	0.59	0.73	3.99	253	1.77	0.61	0.79	3.91	473	1.86	0.60	0.76	3.95	43
<b>Copper Zinc</b>																	
		Millions of dry metric tonnes	% Cu	% Zn	g/t Ag	% Mo	Millions of dry metric tonnes	% Cu	% Zn	g/t Ag	% Mo	Millions of dry metric tonnes	% Cu	% Zn	g/t Ag	% Mo	
Antamina (9)	Sulphide Cu only	39	1.15	0.21	9.1	0.033	253	1.10	0.15	9.7	0.035	292	1.11	0.16	9.6	0.035	12
	Sulphide Cu-Zn	24	1.11	3.1	22.6	0.009	85	1.14	2.66	19.1	0.009	109	1.13	2.75	19.9	0.009	
<b>Silver Lead Zinc</b>																	
		Millions of dry metric tonnes	g/t Ag	% Pb	% Zn	Millions of dry metric tonnes	g/t Ag	% Pb	% Zn	Millions of dry metric tonnes	g/t Ag	% Pb	% Zn				
Cannington (10)	Sulphide	22	356	8.4	3.9	2.2	272	6.7	4.3	24	348	8.3	3.9	8			

As at 30 June 2008					As at 30 June 2007				
Commodity Deposit (1,2,3)	Ore Type	Total Ore Reserve			Mine life (years)	BHP Billiton Interest %			
		Millions of dry metric tonnes	% TCu	% SCu					
<b>Copper</b>									
Escondida (4)	Oxide	161	0.92	-	24	57.5			
	Sulphide	1,743	1.15	-					
		2,395	0.55	-					

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		Millions of dry metric tonnes	% Cu	kg/tonne U <sub>3</sub> O <sub>8</sub>	g/t Au	g/t Ag		
Cerro Colorado <sup>(5)</sup>	Sulphide leach	113	0.66	0.50			9	100
	Oxide	50	0.75	0.13				
Spence <sup>(6)</sup>	Sulphide	70	1.23	0.80			16	100
	Oxide	214	1.06	-				
Pinto Valley <sup>(7)</sup>	Low-grade leach	35	0.21	-			4	100
	Sulphide	87	0.41	-				
	Sulphide stockpiles	443	0.11	-				
<b>Copper Uranium</b>								
Olympic Dam <sup>(8)</sup>	Sulphide	399	1.87	0.58	0.68	4.0	36	100
<b>Copper Zinc</b>								
Antamina <sup>(9)</sup>	Sulphide							
	Cu only	303	1.14	0.16	9.6	0.04	13	33.75
	Sulphide Cu-Zn	118	1.12	2.84	20.2	0.01		
<b>Silver Lead Zinc</b>								
Cannington <sup>(10)</sup>	Sulphide	22	402	9.3	4.1		7	100

(1) %TCu per cent total copper, %SCu per cent soluble copper, %Cu per cent copper, kg/tonne U<sub>3</sub>O<sub>8</sub> kilograms per tonne uranium oxide, g/tAu grams per tonne gold, g/tAg grams per tonne silver, %Zn per cent zinc, %Pb per cent lead, %Mo per cent molybdenum

(2) Approximate drill hole spacings used to classify the reserves are:

	<b>Proved Ore Reserves</b>	<b>Probable Ore Reserves</b>
Escondida	Sulphide: 55m x 55m	Sulphide: 85m x 85m
	Sulphide leach: 60m x 60m	Sulphide leach: 95m x 95m
	Oxide: 45m x 45m	Oxide: 50m x 50m
Cerro Colorado	55m x 55m on first kriging pass	120m x 120m on second kriging pass
Spence	Oxides: less than approximately 50m continuous square grid Sulphides: less than approximately 75m continuous square grid	Oxides and Sulphides: less than approximately 100m continuous square grid, estimation on second kriging pass
Pinto Valley	60m x 120m rectangular grid	200m x 200m
Olympic Dam	Drilling grid of 20m to 30m	Drilling grid of 30m to 70m
Antamina	High-Grade Cu/Zn: 3 composites of the same grade zone and different holes within 30m, closest within 20m Low-Grade Cu/Zn: 3 composites of the same grade zone and different holes within 35m, closest within 25m.	3 composites of the same grade zone and different holes within 55m, closest within 40m, or 2 composites of the same grade zone and different holes within 65m, closest within 30m, or at least 50 composites within 75m with at least 90% in the same grade zone as the block.
Cannington	12.5m sectional x 15.0m vertical	25.0m sectional x 25.0m vertical

(3) Metallurgical recoveries for the operations are:

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	Cu	Ag	Pb	% Metallurgical Recovery		U <sub>3</sub> O <sub>8</sub>	Mo
				Zn	Au		
Escondida	Sulphide: 85% of TCu						
	Sulphide Leach: 33% of TCu Oxide: 68% of TCu						
Cerro Colorado Spence	74% of TCu Oxide: 82% of TCu						
Pinto Valley	Sulphide: 81% of TCu Low-grade leach: 25%						
	Sulphide: 86.4%						
	Sulphide stockpiles: 3%						
Olympic Dam	95%	67%			66%	70%	
Antamina	Sulphide Cu: 94.4%						
	Sulphide Cu-Zn: 30%	Sulphide Cu: 84% Sulphide Cu-Zn: 20%		Sulphide Cu: 0% Sulphide Cu-Zn: 87%			Sulphide Cu: 60% Sulphide Cu-Zn: 0%
Cannington		84%	87%	76%			

(4) Escondida Changes in the Escondida reserves are mainly due to changes in the geological and geometallurgical model and resulting optimisation of the mine plan using updated cost and price assumptions, including a variable cut-off grade for sulphide mill ore. Oxide reserves scheduled for mining after closure of the oxide leach plant are reported as Sulphide Leach due to process destination. Part of the Sulphide Leach mining stockpile has been removed from Ore Reserve classification due to uncertainty in tonnage, grade and metallurgical properties pending additional study. The Cu price used for testing impairment of the Escondida Ore Reserve was US\$2.65/lb.

(5) Cerro Colorado The Cu price used for testing impairment of the Cerro Colorado Ore Reserve was US\$2.65/lb.

(6) Spence The Cu price used for testing impairment of the Spence Ore Reserve was US\$2.65/lb.

(7) Pinto Valley Approval to re-open the Pinto Valley unit was given in December 2006 upon completion of a Feasibility Study of a mine and mill re-start. Mining activities were re-initiated in mid-June 2007, while milling started on schedule in October 2007. The changes in Ore Reserves are due to lowering the mill feed cut-off from 0.27%Cu in 2007 to 0.25%Cu, changed haulage ramp design and other mine parameters, and a revised deposit model, including revised classification. Mine life only considers the extraction of the intact sulphide ore. Copper recovery of the low-grade sulphide stockpiles is estimated from the expected leach production during mine life. The Cu price used for testing impairment of the Pinto Valley Ore Reserve was US\$2.65/lb.

(8) Olympic Dam The increase in overall Ore Reserves is due to additional mineralised material being available for conversion to Proven and Probable Reserves. In addition, mining parameters for stope design and grade factors have also been updated following review of the previous 2 years reconciliation data. The Cu price used for testing impairment of the Olympic Dam Ore Reserve was Cu = US\$2.65/lb.

(9) Antamina Reserves are reported on the basis of a reserve estimate completed in 2006, depleted by subsequent production. The Cu price used for testing impairment of the Antamina Ore Reserve was US\$1.32/lb.

(10) Cannington Updated metal price assumptions have resulted in a lower cut-off grade and associated increase in Ore Reserves.



**Table of Contents****Diamonds and Specialty Products Customer Sector Group***Ore Reserves*

The table below details the total Ore Reserves for the Diamonds and Specialty Products Customer Sector Group estimated as at 30 June 2008 in 100 per cent terms (unless otherwise stated).

As at 30 June 2008										As at 30 June 2007			BHP Billiton Interest %
Commodity	Ore Type <sup>(3)</sup>	Proved Ore Reserve		Probable Ore Reserve		Total Ore Reserve		Mine life (years)	Total Ore Reserve				
		Millions of dry metric tonnes	Carats per tonne	Millions of dry metric tonnes	Carats per tonne	Millions of dry metric tonnes	Carats per tonne		Millions of dry metric tonnes	Carats per tonne	Mine life (years)		
Deposit <sup>(1,2)</sup> Diamonds <sup>(4)</sup> EKATI Core Zone	OC	19.1	0.3	15.5	0.6	34.6	0.4	10	36.5	0.4	12	80	
	UG	3.9	0.9	5.2	0.9	9.1	0.9		10.5	0.9			