BHP BILLITON LTD Form 20-F September 25, 2014 Table of Contents

## **UNITED STATES**

## SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## **FORM 20-F**

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

OR

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

EOD THE EIGCAL WEAR ENDED 20 HINE 2014

FOR THE FISCAL YEAR ENDED 30 JUNE 2014

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

to

Date of event requiring this shell company report

For the transition period from

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)
171 COLLINS STREET, MELBOURNE,

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, LONDON

(Address of principal executive offices)

VICTORIA 3000 AUSTRALIA

UNITED KINGDOM (Address of principal executive offices)

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

Name of each exchange on			Name of each exchange or	
Title of each class	which registered	Title of each class	which registered	
American Depositary	New York Stock Exchange	American Depositary	New York Stock Exchange	
Shares*		Shares*		
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.

**BHP Billiton Limited BHP Billiton Plc** 3,211,691,105 2,136,185,454

Fully Paid Ordinary Shares

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

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 x

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

Indicate by check mark whether the 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 x No "

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes "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 x 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 x

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 x

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# Form 20-F Cross Reference Table

Item Number 1. 2.	Description Identity of directors, senior management and advisors Offer statistics and expected timetable	Report section reference Not applicable Not applicable
3.	Key Information	
A	Selected financial information	1.
В	Capitalisation and indebtedness	Not applicable
C	Reasons for the offer and use of proceeds	Not applicable
D	Risk factors	1.7
4.	Information on the company	
A	History and development of the company	1.12, 2.1, 2.2, and 9.3
В	Business overview	1.5 to 1.15, 2.1 to 2.5
C	Organisational structure	9.2 and Note 26 to the Financial
		Statements
D	Property, plant and equipment	1.12, 2.1 to 2.4
4A.	Unresolved staff comments	None
<b>5.</b>	Operating and financial review and prospects	
A	Operating results	1.10,1.11,1.15
В	Liquidity and capital resources	1.15.4, 1.15.5
C	Research and development, patents and licences etc	2.3, and 5.14
D	Trend information	1.15.1
Е	Off-balance sheet arrangements	1.15.6 and Notes 21 and 22 to the Financial Statements
F	Tabular disclosure of contractual obligations	1.15.6 and Notes 21 and 22 to the Financial Statements
6.	Directors, senior management and employees	
A	Directors and senior management	3.2
В	Compensation	4
C	Board practices	3.2, 3, 4.2
D	Employees	1.14 and 5.8
E	Share ownership	4, 5.8, 5.17 and 5.18
7.	Major shareholders and related party transactions	i, etc, ett, und ette
A	Major shareholders	9.6
В	Related party transactions	1.15.6 and Note 32 to the Financial
Б	reduced party transactions	Statements
С	Interests of experts and counsel	Not applicable
8.	Financial information	110t applicable
A	Consolidated statements and other financial information	7, 9.7 and the pages beginning on
7 1	Consolidated statements and other inflation	page F-1 in this Annual Report
В	Significant changes	1.15.6
9.	The offer and listing	1.13.0
A.	Offer and listing details	9.8
B	Plan of distribution	Not applicable
C C	Markets	9.2
D	Selling shareholders	Not applicable
D	Sening shareholders	Not applicable

E	Dilution	Not applicable
F	Expenses of the issue	Not applicable
10.	Additional Information	
A	Share capital	Not applicable
В	Memorandum and articles of association	9.5 and 9.11
C	Material contracts	9.4

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Item Number	Description	Report section reference
D D	Exchange controls	9.11.2
E	Taxation	9.10
F	Dividends and paying agents	Not applicable
G	Statement by experts	Not applicable
Н	Documents on display	9.5.14
I	Subsidiary information	1.15.6 and Note 26 to the Financial
1	Substitution	Statements
11.	Quantitative and qualitative disclosures about market	1.15.6 and Note 29 to the Financial
11.	risk	Statements
12.	Description of securities other than equity securities	Statements
A	Debt Securities  Debt Securities	Not applicable
B B	Warrants and Rights	Not applicable Not applicable
C C	Other Securities	
		Not applicable 9.9
D 12	American Depositary Shares	
13.	Defaults, dividend arrearages and delinquencies	There have been no defaults,
1.4	N. ( ) 1 100 () ( ) ( ) 1 1 1 0 ( ) ( ) 1 1 1 1	dividend arrearages or delinquencies
14.	Material modifications to the rights of security holders	There have been no material
	and use of proceeds	modifications to the rights of security
		holders and use of proceeds since our
15		last Annual Report
15.	Controls and procedures	3.14.1
16.	A 1'. C' 1	221 12141
A	Audit committee financial expert	3.2.1 and 3.14.1
В	Code of ethics	3.17
С	Principal accountant fees and services	3.14.1 and Note 35 to the Financial
ъ		Statements
D	Exemptions from the listing standards for audit committees	Not applicable
E	Purchases of equity securities by the issuer and affiliated purchasers	5.2
F	Change in Registrant s Certifying Accountant	3.14.1
G		3.23
	Corporate Governance  Mine Sofety and Health Administration (MSHA)	
H (proposed)	Mine Safety and Health Administration (MSHA)	The information concerning mine
	Disclosure	safety violations or other regulatory
		matters required by section 1503(a) of the Dodd-Frank Wall Street
		Reform and Consumer Protection
		Act. This item is included in Exhibit 95.1
17.	Financial statements	Not applicable as Item 18 complied
		with
18.	Financial statements	The pages beginning on page F-1 in
		this Annual Report, Exhibit 15.1
19.	Exhibits	10

## 1 Strategic Report

## 1.1 Our Company

### 1.1.1 Group overview

We are BHP Billiton, a leading global resources company. We are among the world s top producers of major commodities, including iron ore, metallurgical and energy coal, conventional and unconventional oil and gas, copper, aluminium, manganese, uranium, nickel and silver.

Our strategy is to own and operate large, long-life, low-cost, expandable, upstream assets diversified by commodity, geography and market. Our portfolio of high-quality growth opportunities positions BHP Billiton to continue to meet the changing needs of our customers and the resource demands of emerging and developed economies at every stage of their growth.

We extract and process minerals, oil and gas from our production operations located primarily in Australia, the Americas and southern Africa. We sell our products globally with sales and marketing taking place principally through Singapore and Houston, United States. In FY2014, our workforce consisted of approximately 123,800 employees and contractors at 130 locations in 21 countries.

The safety and health of our people and of the broader communities in which we operate are central to the success of our organisation. Regardless of where our people are located, the area of the organisation in which they work or the type of work they undertake, we strive to create an environment that is free from occupational illness or injury.

The long-term nature of our operations allows us to build collaborative community relationships. Our size and scope mean we can make a meaningful contribution to communities in which we operate, while we support the continued development of global economic growth.

We have strong governance processes in place, high standards of ethical and responsible behaviour, and we are an active contributor to societal development. We care as much about how results are achieved as we do about the results themselves. Our BHP Billiton *Code of Business Conduct* and specific internal policies prohibit bribery and corruption in all our business dealings regardless of the country or culture within which our people work.

## 1.1.2 Our structure

BHP Billiton operates under a Dual Listed Company (DLC) structure, with two parent companies BHP Billiton Limited and BHP Billiton Plc operated as a single economic entity, run by a unified Board and management team. Our headquarters are located in Melbourne, Australia.

BHP Billiton Limited has a primary listing on the Australian Securities Exchange (ASX) in Australia. BHP Billiton Plc has a premium listing on the UK Listing Authority s Official List and its ordinary shares are admitted to trading on the London Stock Exchange (LSE) in the United Kingdom and a secondary listing on the Johannesburg Stock Exchange (JSE) 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 United States.

Our Operating Model describes the way the Company is organised and sets out the relationship between the Businesses, Group Functions and Marketing. The Operating Model defines how we work, how we are organised and how we measure performance.

**Businesses**: Our assets, operations and interests are separated into five business units. These Businesses are: Petroleum and Potash; Copper; Iron Ore; Coal; and Aluminium, Manganese and Nickel. The Operating Model has been designed to ensure that decision-making remains as close to the Businesses as possible.

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**Group Functions**: Group Functions support the Businesses and operate under a defined set of accountabilities authorised by the Group Management Committee (GMC). Our Group Functions are primarily located in Melbourne, London and Singapore.

**Marketing**: Marketing is responsible for selling our products and for the purchase of all major raw materials; managing the supply chain from assets to markets and raw materials from suppliers to assets; achieving market clearing prices for the Group s products; managing price risk; and developing a single Company view of the markets.

The core principles of the Operating Model include mandatory performance requirements, common organisational design, common systems and processes, and common planning and reporting.

The Operating Model is designed to deliver a simple and scalable organisation to achieve a sustainable improvement in productivity by providing performance transparency, eliminating duplication of effort and enabling the more rapid identification and deployment of best practice.

## 1.1.3 Strategic context

The mineral and energy commodities we produce are crucial at all stages of economic development. Emerging economies require construction materials like steel as their populations expand and new cities and heavy industry develop. As economies grow and people become wealthier, a consumer economy emerges and steel intensity slows while demand increases for materials that are used in consumer goods, such as copper. Agricultural demand increases steadily with income.

Access to energy underpins economic development. The most rapid demand growth comes at the earliest stages when people first gain access to modern energy supplies. In the next 20 years, we expect 1.7 billion people to gain access to electricity for the first time. Reliable and affordable energy supports the development of industry and as incomes rise, more people can buy consumer goods, like cars and appliances, further increasing the demand for energy.

We are proud that the supply of our products supports global economic growth and development, with the associated reduction in poverty and improvement in living standards. Continued global development depends on access to affordable energy and other critical resources.

Demand for energy is widely expected to increase by more than 30 per cent in the next 20 years, with two thirds of new demand originating from Asia and half from China and India. Africa is expected to see the fastest growth, albeit from a lower base. The way these regions meet their energy needs will significantly influence commodity demand.

Every nation will choose a different mix of energy sources, which balances affordability and security of supply. The Intergovernmental Panel on Climate Change (IPCC), the International Energy Agency and others believe that over the next few decades fossil fuels will remain central to the energy mix as their affordability and the scale of existing infrastructure make them hard to practically replace, although their exact percentage varies across a range of scenarios.

Our strategy is tied to economic growth in both emerging and developed economies. Sustainable growth requires an effective response to climate change. BHP Billiton accepts the IPCC s assessment of climate change science, which has found that warming of the climate is unequivocal, the human influence is clear and physical impacts are unavoidable. We believe that the world must pursue the twin objectives of limiting climate change to the lower end of the IPCC emission scenarios in line with current international agreements, while providing access to the affordable

energy required to continue the economic growth essential for maintaining living standards and alleviating poverty.

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The global challenge of climate change remains a priority for us. Our approach to investment decision-making and portfolio management and the diversity of our overall portfolio positions us not only to manage and respond to changes, but also to capture opportunities to grow shareholder value over time. We are taking action by focusing on reducing our emissions, increasing our preparedness for physical climate impacts and working with others, including industry and governments, to support effective responses to climate change. We support development of a long-term policy framework that uses a portfolio of complementary measures, including a price on carbon that addresses competitiveness concerns, support for energy efficiency and low emissions technologies, and measures to build resilience. A price on carbon is an effective measure to drive greenhouse gas emission reductions and technological innovation. To effectively address the challenge of climate change, there must be a significant focus on developing and deploying low-emissions technologies. We will, through material investments in low-emissions technology, contribute to reducing emissions from fossil fuels.

## 1.1.4 FY2014 performance highlights

Not required for US reporting. Refer to sections 1.11 and 1.15.

## 1.1.5 About this Strategic Report

This Strategic Report meets the requirements of the Strategic Reporting required by the UK Companies Act and the Operating and Financial Review required by the Australian Corporations Act.

This Strategic Report provides insight into BHP Billiton s strategy, operating and business model and objectives. It describes the principal risks the Company faces and how these risks might affect our future prospects. It also gives our perspective on our recent operational and financial performance.

We intend this disclosure to assist shareholders and other stakeholders to understand and interpret the Consolidated Financial Statements prepared in accordance with International Financial Reporting Standards (IFRS) included in this Annual Report. The basis of preparation of the Consolidated Financial Statements is set out in note 1 Accounting policies to the Financial Statements. To obtain full details of the financial and operational performance of BHP Billiton this Strategic Report should be read in conjunction with the Consolidated Financial Statements and accompanying notes.

Section 1 of this Annual Report 2014 constitutes our Strategic Report 2014. References to sections beyond section 1 are references to sections in this Annual Report 2014. Shareholders may obtain a hard copy of the Annual Report free of charge by contacting our registrars, whose details are set out in our Corporate Directory at the end of this Annual Report.

All references to websites in this Annual Report are, unless expressly stated otherwise, intended to be inactive textual references for information only and any information contained in or accessible through any such website does not form a part of this Annual Report.

### 1.1.6 Forward looking statements

This Annual Report contains forward looking statements, including statements regarding trends in commodity prices and currency exchange rates; demand for commodities; production forecasts; plans, strategies and objectives of management; closure or divestment of certain operations or facilities (including associated costs); anticipated production or construction commencement dates; capital costs and scheduling; operating costs; anticipated productive lives of projects, mines and facilities; provisions and contingent liabilities; and tax and regulatory developments.

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 the expectations concerning the results of operations or financial condition, or provide other forward looking statements.

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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 products 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, the expansion of certain facilities or mines, or the continuation of existing operations.

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 the countries where we are exploring or developing projects, facilities or mines, including increases in taxes, changes in environmental and other regulations and political uncertainty; labour unrest; and other factors identified in the risk factors in section 1.7.2 of this Annual Report.

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

Past performance cannot be relied on as a guide to future performance.

#### 1.1.7 Proposed demerger of assets

On 19 August 2014, we announced plans to create an independent global metals and mining company based on a selection of BHP Billiton s high-quality aluminium, coal, manganese, nickel and silver assets. Separating these assets via a demerger has the potential to unlock shareholder value by significantly simplifying the BHP Billiton Group and creating a new company specifically designed to enhance the performance of its assets.

Once simplified, BHP Billiton will be almost exclusively focused on our large, long-life iron ore, copper, coal, petroleum and potash basins. With fewer assets and a greater upstream focus, we plan to reduce costs and improve the productivity of our largest Businesses more quickly. As a result, our portfolio is expected to generate growth in free cash flow and a superior return on investment.

A final Board decision on the proposed demerger will only be made once the necessary government, taxation, regulatory and other third party approvals are secured on satisfactory terms. Once the necessary approvals are in place, shareholders will have the opportunity to vote on the proposed demerger.

For additional information on the proposed demerger of assets, refer to section 1.6.4 of this Annual Report.

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# 1.2 BHP Billiton locations

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### 1.3 Chairman s Review

Dear Shareholder

I am pleased to report that your Company delivered strong performance this past financial year. BHP Billiton reported an Attributable profit of US\$13.8 billion and Net operating cash flow of US\$25.4 billion. These strong results were underpinned by increased production and productivity-led cost efficiencies.

Our balance sheet remains strong and we have maintained our solid A credit rating. The full-year progressive base dividend was increased by 4.3 per cent to 121 US cents per share. At the same time, the Company has continued to invest in high-return growth options within the existing portfolio.

Markets for our commodities have been affected by the mixed global economic environment, with solid but moderately slower Chinese growth, underlying momentum in the United States and some positive signs in Japan, while the European Union has remained weak. Overall, demand for our commodities continues to be strong, underpinning the long-term outlook for our portfolio of products.

We continuously review our strategy against changes in the external environment, including climate change. We consider various scenarios and the risks and opportunities facing the natural resources sector and seek to optimise the investments we make on behalf of shareholders.

Our position on climate change is clear. Sustainable growth requires an effective response to climate change. We accept the Intergovernmental Panel on Climate Change s assessment that warming of the climate is unequivocal, the human influence is clear and the physical impacts are unavoidable. We believe that the Board s approach to strategy, investment decision-making and portfolio management, as well as the diversity of our overall portfolio, positions us to manage and respond to changes and capture opportunities to grow shareholder value over time. We believe that the resilience of our portfolio under a range of climate change scenarios is underpinned by its diversity and by the relatively short pay-back periods for most of our present and future investments in fossil fuels production. BHP Billiton is committed to reducing greenhouse gas emissions in its own operations, to actively participating in the development and deployment of low-emissions technologies and to being a leader in our sector on climate change action and advocacy.

Next year marks the 130th anniversary of the founding and stock exchange listing of The Broken Hill Proprietary Company Limited. Over these years the Company has reshaped its business to maintain its industry leadership. We moved from mining silver, lead and zinc at Broken Hill, to producing steel, and then to petroleum in Bass Strait, iron ore in the Pilbara, metallurgical coal in the Bowen Basin and copper in the Andes.

For the past 10 years we have also been simplifying our portfolio and looking at ways to make your Company simpler and more productive. In the last two years alone we have sold US\$6.7 billion of assets at attractive prices. This year, we have proposed another step in our evolution with the demerger of selected aluminium, coal, manganese, nickel and silver assets. This proposed demerger will allow BHP Billiton to improve the productivity of our largest businesses more quickly and create a new global metals and mining company specifically designed to enhance the performance of the demerged assets. All BHP Billiton shareholders would retain their existing shares in BHP Billiton and receive shares in the new company pro rata with your BHP Billiton shareholding. Following the demerger, BHP Billiton would seek to steadily increase or at least maintain its dividend per share in US dollar terms—implying a higher payout ratio. Subject to final Board approval to proceed, shareholder approval and the receipt of satisfactory third party approvals, the demerger is expected to be completed in the first half of the 2015 calendar year.

Against the backdrop of external and organisational change, we continue to be guided by *Our BHP Billiton Charter*, which defines our values. Our first Charter value is Sustainability and we maintain a relentless focus on the health and safety of our people and the communities in which we operate. This year, we reported a record low total recordable injury frequency and no fatalities at our operated assets during the period. While this is an encouraging result, our efforts to protect the health and safety of our people will be unrelenting.

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We are committed to making a positive contribution to the communities where we live and conduct our business. This year, we contributed one per cent of pre-tax profit, investing US\$242 million across a wide range of programs and activities to support our communities. These funds support local programs, such as the LEAD project which seeks to improve the lives of smallholder farmers in the rural Maputo Province of Mozambique; an innovative education program in Pakistan that has seen 800 children graduate from the program with another 2,000 currently studying in 13 model schools; the ANDA project which addresses the needs of people displaced by conflict and vulnerable communities in the Cordoba District of Colombia to complement poverty reduction efforts by the national government; and Bush Blitz, a unique species discovery program in Australia.

Our community programs are in addition to the US\$9.9 billion in taxes and royalties we paid to governments and our broader economic contribution in terms of jobs, capital investment and support of local businesses.

I would like to take this opportunity to acknowledge David Crawford who will retire from the BHP Billiton Board in November 2014. David has served with distinction on the board of BHP and BHP Billiton for 20 years. In announcing our plans to create an independent global metals and mining company we said that David would become the new company s inaugural chairman. His skills and experience make David the right person to guide the new company through its entry into the global resources sector.

In line with our planned approach to Board succession, we have appointed Malcolm Brinded to the Board as a Non-executive Director and member of the Sustainability Committee. Malcolm s deep experience in energy, governance and sustainability will make a significant contribution to the Board.

In summary, a strong management team and over 123,000 talented employees and contractors in 21 countries have improved safety, increased production and delivered more value for shareholders and all our stakeholders. Your company does make a positive difference. BHP Billiton helps lift living standards for people around the world and we work hard to add value to the communities, regions and countries where we live and do business.

### Jac Nasser AO

Chairman

### 1.4 Chief Executive Officer s Report

I am pleased to report that BHP Billiton delivered a strong set of financial results in FY2014, with improvements in operating performance and safety supported by a continued focus on productivity. This performance was achieved against a background of improving economic conditions in the United States, Japan and the European Union, solid but slower Chinese economic growth and a decline in key commodity prices in a highly competitive global marketplace.

In a year of record production we had no fatalities at our operated assets and improved our total recordable injury frequency performance by nine per cent to 4.2 injuries per million hours worked. While we are encouraged to have recorded a year without fatalities, we must never rest on past performance. We will continue to relentlessly identify and manage material health and safety risks to protect our people and communities.

Annual production records were achieved at 12 of our operations and across four commodities. Western Australia Iron Ore and Queensland Coal both increased annual production volume by more than 20 per cent as we delivered more tonnes from existing infrastructure and growth projects ahead of schedule. These results were supported by our Onshore US petroleum asset delivering a 73 per cent increase in petroleum liquids production.

Our safety performance improves through our continued focus on accelerating sustainable improvements in productivity by finding more efficient and effective ways of performing day-to-day operations. We delivered more than US\$6.6 billion of sustainable productivity-led gains over the last two years. There are more achievements in productivity still to come as our teams continue to innovate and learn from each other, replicating best practice and operating on a common data platform across the organisation.

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We continue to invest selectively in those projects that meet our demanding criteria. In FY2014, we reduced our share of exploration and capital expenditure by 32 per cent to US\$15.2 billion and expect this to decline to US\$14.8 billion in FY2015. This approach has increased internal competition for capital, improved our capital efficiency and provides for long-term, sustainable shareholder value.

In August 2014, we announced a proposal to create an independent global metals and mining company based on a selection of BHP Billiton s high-quality aluminium, coal, manganese, nickel and silver assets. Separating these assets via a demerger has the potential to unlock shareholder value by significantly simplifying the BHP Billiton Group and creating two portfolios of complementary assets. Once simplified, BHP Billiton would be almost exclusively focused on our large, long-life iron ore, copper, coal, petroleum and potash basins. With fewer assets and a greater upstream focus, BHP Billiton would be able to reduce costs and improve the productivity of our largest businesses more quickly. The proposed demerger remains subject to the receipt of satisfactory third party approvals, final Board approval and shareholder vote.

In addition to our work to simplify BHP Billiton s portfolio, we continue to support the communities where we operate. We support local economies through employment, infrastructure development, taxes and royalties, as well as purchasing local goods and services. We are part of these communities and we strive to be a positive and active participant in community life. In FY2014, our voluntary community investment amounted to US\$242 million.

We are proud that the supply of our products supports global economic growth and development, with the associated reduction in poverty and improvement in living standards. Continued global development depends on access to affordable energy and other critical resources.

Sustainable growth requires an effective response to climate change. We accept the Intergovernmental Panel on Climate Change s assessment that warming of the climate is unequivocal, the human influence is clear, and physical impacts are unavoidable. We are taking action by focusing on reducing our emissions, increasing our preparedness for physical climate impacts and working with others, including industry and governments, to support effective responses to climate change. We will, through material investments in low-emissions technology, contribute to reducing emissions from fossil fuels. We view climate change as a critical element in our approach to risk management across our business.

In everything we do, we are guided by *Our BHP Billiton Charter* values of Sustainability, Integrity, Respect, Performance, Simplicity and Accountability. These are the foundation of who we are, and how we perform our role as an active and engaged corporate citizen. I am honoured to be part of a company where we live our values every day.

Finally, I would like to thank all our suppliers, customers, host communities and shareholders for their continued support over the past year as we strive to be a valued partner of choice. I would especially like to thank our employees and contractors whose commitment and contribution is the cornerstone of the success of this Company.

#### **Andrew Mackenzie**

Chief Executive Officer

- 1.5 Our strategy and business model
- 1.5.1 Our consistent strategy

# Our purpose

Our corporate purpose is to create long-term shareholder value through the discovery, acquisition, development and marketing of natural resources.

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## **Our strategy**

Our strategy is to own and operate large, long-life, low-cost, expandable, upstream assets diversified by commodity, geography and market.

Our unique position in the resources industry is due to our proven and consistent strategy. In line with our strategy, we pursue growth opportunities consistent with our core skills of:

evaluating, developing and extracting resources in our Businesses;

distributing and selling our products, and managing financial risk associated with our revenue through Marketing;

defining and governing world-class functional standards, which are implemented Group-wide through our Group Functions.

We operate in a dynamic external environment and this strategy has delivered strong company performance over time which, in turn, underpins the creation of long-term sustainable value for our shareholders, customers, employees and the communities in which we operate. We aim to deliver long-term sustainable value rather than focusing on short-term returns.

### Our values

In pursuing our strategy through all stages of the economic and commodity cycles, we are guided by *Our BHP Billiton Charter* values of Sustainability, Integrity, Respect, Performance, Simplicity and Accountability.

Our overriding commitment is to ensuring the safety of our people, and respecting our environment and the communities in which we work. This commitment informs everything we do and influences every aspect of our work.

Operational capability is fundamental to our strategy. It is reflected in *Our Charter*, in particular our values of Performance achieving superior business results by stretching our capabilities, and Simplicity focusing our efforts on the things that matter most.

### Our success factors

We are successful when:

our people start each day with a sense of purpose and end the day with a sense of accomplishment;

our communities, customers and suppliers value their relationships with us;

our asset portfolio is world-class and sustainably developed;

our operational discipline and financial strength enables our future growth; and

our shareholders receive a superior return on their investment.

Our key performance indicators presented in section 1.10 of this Annual Report enable our Group Management Committee (GMC) to measure our performance.

## 1.5.2 Our business model

# **Exploration and evaluation**

Discovery through brownfield and greenfield exploration.

Evaluating our portfolio.

Divestment and acquisition.

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Over the past six years, brownfield exploration has increased our reserve base around our portfolio of existing assets in large resource basins, which now provide us with significant growth opportunities. This has allowed us to reduce brownfield exploration expenditure and rationalise our greenfield exploration program to focus on copper in Chile and Peru and conventional oil and gas, predominantly offshore in the Gulf of Mexico and Western Australia.

We evaluate the results of our brownfield and greenfield exploration to identify future growth projects consistent with our strategy to own and operate large, long-life, low-cost, expandable, upstream assets. We also continually evaluate our portfolio and consider divestment and acquisition opportunities.

### **Development**

Evaluating and developing projects.

The evaluation and development of large-scale resource projects generates significant value for BHP Billiton. We have a number of high-quality growth projects currently under development. We also have a large number of growth opportunities in our project pipeline in varying stages of evaluation.

In our development process, these projects progress through feasibility to execution only after external approvals. Our rigorous internal review process requires projects to pass through various tollgates for internal approvals at each stage, including Board approval for major projects.

Potential expansion projects must compete for capital in BHP Billiton and are only approved if they meet our strict criteria for investment.

## Extraction, processing and transportation

Open-pit and underground mining.

Extracting conventional and unconventional oil and gas.

Processing and refining.

Across our global operations, the diversification of our portfolio of assets by commodity, geography and market continues to be one of our differentiating features. Our goal is to safely operate all our assets at capacity through mining, extracting, processing and transporting commodities.

We continue to set production records at a number of assets. Through the development and use of standard operating practices and technology, we are driving efficiencies through improved capital intensity, labour productivity and increased utilisation of plant and machinery.

Our extraction and processing activities are mindful of our ongoing sustainability obligations, including rehabilitation at the end of the asset life.

# Marketing and logistics

BHP Billiton s Marketing network manages the Group s revenue line and is responsible for:

Selling the Group s products and purchasing all major raw materials.

Supporting the Businesses to maximise the value of upstream resources.

Managing the supply chain to customers.

Achieving market clearing prices for the Group s products.

Developing the Group-wide view of the markets and future pricing.

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The primary hub for our marketing activities is Singapore, while our marketing of oil and gas is headquartered in Houston, United States. In addition, we have marketers located close to our customers in 14 cities around the world.

Marketing s responsibilities require an active presence in the various commodities markets, the global freight market and the crude and gas pipeline transportation market, through which we manage the supply chain for our products and develop strong integrated relationships between our Businesses and our customers.

Our market insight is strengthened by the multi-commodity nature of our organisation, our proximity to our customers and the flow of information in our centralised marketing structure.

A description of our risk factors, including those that impact our business model, and our approach to risk management are presented in section 1.7 of this Annual Report.

### 1.5.3 External factors and trends

### **Economic outlook**

The global economy grew at a moderate rate in FY2014. Momentum in the United States, Japan and the United Kingdom was underpinned by central bank monetary policy. Europe s economy improved marginally, although the recovery was constrained by high levels of unemployment. Emerging markets, including China, experienced a moderate slowdown.

In a relative sense, the Chinese economy continues to grow strongly with signs that it is rebalancing. Consumption continued to be supported by higher household incomes while fixed asset investment softened, led by the property sector, as the central bank restricted access to credit. Rapid credit growth in the non-bank financial sector remained an important concern for policy makers.

We remain confident in the short-term to medium-term outlook for the Chinese economy. Measured stimulus recently introduced by the government demonstrates their commitment to maintain economic growth above seven per cent. We believe consumption and services will continue to increase in importance, while the market s role in allocating capital will be enhanced. Greater transparency within the fiscal system is also expected to reshape the relationship between central and local government.

The underlying performance of the US economy continued to improve despite the significant disruption caused by severe weather in the March 2014 quarter. The curtailment of quantitative easing appears to have had a limited impact on sentiment as a solid increase in demand reflects a stronger labour market, rising disposable incomes, and higher equities and housing prices. Business investment has been a weak link in the recovery so far as companies have responded slowly to better economic conditions, despite higher levels of profitability. An increase in capital spending by the global business community will be required to sustain the recovery in the medium term.

The Japanese economy has responded strongly to expansionary monetary and fiscal policy over the past year. Investment spending and wages increased as corporate profits benefited from the depreciation of the Yen, while an increase in the national sales tax in April had a limited impact on consumption. These factors have increased the potential for faster growth in the short term, although a longer-term, sustainable recovery will be contingent on the scale and speed of structural reform.

With regard to the global economy, stronger US growth and an associated tightening of monetary policy could result in the rapid outflow of capital from emerging economies. However, developing nations with sound macroeconomic

fundamentals would be less likely to experience a severe impact from this transition.

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# Climate change

The physical impacts of climate change on our operations are uncertain and particular to geographic circumstances. In addition, a number of national governments have already introduced or are contemplating the introduction of regulatory responses to greenhouse gas emissions from the combustion of fossil fuels to address the impacts of climate change. These physical effects and regulatory responses may adversely impact the productivity and financial performance of our operations.

#### Other external factors and trends

A number of external factors and trends have had and may continue to have a material impact on our financial condition and results of operations, as described in section 1.15.1 of this Annual Report. These factors include commodity prices, exchange rates, changes in product demand and supply, and operating costs.

The chart below presents the movements in annual average prices in our core Business commodities over the past 10 years to 30 June 2014. Over most of this period we have benefited from generally rising commodity prices while our diversified portfolio provides resilience to decreases in the price of some commodities.

## Commodity prices 2005 2014

Commodity prices have generally declined over the past three fiscal years and this trend has continued post 30 June 2014. A summary of the pricing trends for our most significant commodities for FY2014 is presented in section 1.15.1 of this Annual Report, along with movements in the year end commodity price of 10 per cent or more subsequent to 30 June 2014 (as at 31 August 2014).

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## 1.5.4 Corporate planning

At BHP Billiton, we have a long-standing and robust corporate planning process, which is central to the effective development and delivery of our strategy.

Our planning process continuously reviews our strategy against a constantly changing external environment and the risks and opportunities this presents, to optimise both our returns to our shareholders, and our broader contribution to society.

## **Core principles**

The corporate planning process is designed with the following core principles:

Board and GMC ownership and regular review of strategy and strategic priorities.

Clear accountabilities regular engagement through Appraisals by the GMC with the Businesses, Marketing and Group Functions.

Alignment consistent and integrated Business, Marketing and Group Functions planning process with individual plans aggregated to form the overall corporate plan.

Long to short long-term strategic plans are followed by short-term delivery plans.

Robustness our plan should be resilient under both a range of long-term scenarios and short-term shock events. **Corporate planning framework** 

The flowchart below illustrates our corporate planning framework.

An annual Board Strategic Planning review is the start of each Corporate planning cycle, where the GMC and the Board actively discusses the Group s strategy. A key outcome is the CEO Message to all employees which sets the long-term direction of the Group and aligns expectations.

The Directional Planning (long-term strategic planning) phase begins with the CEO Message and the issuing of long-term scenarios. Businesses use the CEO Message and scenarios to prepare their Directional Plans, which include life of asset resource plans. Plans are discussed with the GMC at the Business Directional Appraisals.

We prepare a Group-wide 20-year Plan which includes input from the Businesses Directional Plans. A total annual capital allocation limit is set to maximise total shareholder returns, while ensuring financial risks are appropriately mitigated. Within this capital ceiling, major growth options are optimally sequenced over the 20-year Plan through our capital allocation process.

The capital allocation process includes analysis of net present value (NPV), internal rates of return (IRR), return on capital (ROC) and margin analysis to inform decision-making. This process is further described in section 1.6.3 of this Annual Report. All available growth options are assessed and prioritised to generate a high-value and capital-efficient portfolio which provides flexibility to return excess cash to shareholders. The increased competition for capital has improved our capital productivity.

The Delivery Planning (short-term to mid-term planning) phase begins with the CEO Letter of Intent which provides capital guidance and sets the context for the Business five-year plans and two-year budgets. Again, plans are discussed with the GMC, this time at the Business Delivery Appraisals.

We believe that the rigour of our corporate planning process, combined with the flexibility it provides the Group to quickly respond to an inherently dynamic external environment, is essential to maximise total shareholder returns.

#### **Scenarios**

The corporate planning process is underpinned by scenarios that encompass a wide spectrum of potential outcomes for key global uncertainties driven by factors external to BHP Billiton. Designed to interpret technical, economic, political and global governance trends facing the resources industry, the scenarios offer a means by which to explore potential portfolio discontinuities and opportunities, as well as to test the robustness of decisions.

It should be noted that the scenarios do not constitute preferred outcomes for BHP Billiton. The Company s approach to critical global challenges, such as the importance of addressing climate change, continues to be based on *Our Charter* values, including our value of Sustainability. Our position on climate change is discussed further in section 1.6.1.

The starting point of our scenario development is the construction of a Central Case, built through an in-depth, bottom up analysis using rigorous processes, benchmarked with external views, thoroughly reviewed and endorsed annually by the GMC and the Board. Currently our Central Case considers expected levels of US economic recovery, progressive development of China and India, integration of developing economies into a multi-polar economic environment, as well as action on climate change centred on national policies with short-term prioritisation to adaptation and a long-term shift to mitigation.

The scenarios are designed to be divergent, but also plausible and internally consistent, spanning different potential future business environments. A description of the key characteristics of each of our scenarios is summarised below:

Good global growth underpinned by significant technological breakthroughs. Climate change science and need to act is acknowledged globally, resulting in global cooperation to mitigate carbon emissions and consumer pull for

green products and services.

Strong global growth, liberal trade flows, significant investment in research and technology underpinned by high gross domestic product (GDP), and a coordinated response to addressing climate change.

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Solid economic growth, potential new supply from key resource basins failing to meet expectations, climate change remains a secondary issue with research focused on adaptive technology to address greater pollution, and renewable energy technologies progressing above expectations.

A future state enmeshed in stagnation and protectionism, regional conflicts abound, domestic resources are prioritised for consumption even if sub-economic, low investment in research and development, and climate change commitments are abandoned in favour of adaptation.

Alongside scenarios, associated signposts (trends) and triggers (events) allow early awareness for the potential advent of a scenario, offering a powerful decision-making tool. For example, rising GDP per capita in key commodity importing countries is a signpost to an earlier shift to consumption driven economies. Another example of a potential trigger is if an accord on climate change were to be ratified during the 2015 United Nations Framework Convention on Climate Change Conference of the Parties, and then enacted globally.

We believe that our uniquely diversified portfolio is robust, both across these scenarios, and also shorter-term shock events. As an example, in a severely carbon constrained world, we believe there is significant upside for our potash and uranium commodities, and also for our high-quality hard coking coal (lower smelting emissions) and iron ore lump product (direct blast furnace feed), while copper is resilient. In aggregate these mitigate potential negative impacts in other commodities, given the relatively short pay-back periods for most present and future investments in fossil fuel production. Conversely, our portfolio allows us to capture upsides in an environment where developing countries experience strong global growth.

## 1.6 Strategic priorities

Our Group Management Committee (GMC) maintains a strong focus on the following strategic priorities in order to execute the Company s strategy. A number of these priorities are monitored by the GMC using the key performance indicators as presented in section 1.10 of this Annual Report.

### 1.6.1 Continue to operate sustainably

We will continue to operate sustainably with our focus on the following areas:

## Protect our people and improve the health and safety of our operations

The health, safety and wellbeing of our people are central to the success of our organisation. Regardless of where our people are located or the type of work they undertake, we strive to create a working environment that is free from occupational illness or injury. Identifying and managing material risk is a critical component of our management approach. By understanding and managing our risks, we provide greater protection for our people, communities and assets.

## Support sustainable development of our host communities

We are a global company that values our host communities. We strive to be part of the communities in which we operate and through all our interactions seek to foster meaningful long-term relationships, which respect local cultures and create lasting benefits. Our contribution to our host communities is broad ranging. Through employment, taxes and royalties, we support local, regional and national economies. We purchase local goods and services and develop infrastructure that benefits entire communities.

We voluntarily invest one per cent of our pre-tax profit (calculated on the average of the previous three years profit) in community programs that aim to have a long-lasting, positive impact on people s quality of life. This includes implementing new and supporting existing community projects. During FY2014, our voluntary community investment totalled US\$241.7 million, comprising US\$141.7 million in cash, in-kind support and administrative costs, and a US\$100 million contribution to the BHP Billiton Foundation.

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## Strategic approach to climate change

As energy demand continues to increase, the global challenge of climate change remains a priority for our organisation. We are taking action by focusing on reducing our emissions, increasing our preparedness for physical climate impacts and working with others, including industry and governments, to support effective responses to climate change. Our approach to investment decision-making and portfolio management and the diversity of our overall portfolio positions us not only to manage and respond to change, but also to capture opportunities to grow shareholder value over time.

## Our position on climate change

We accept the Intergovernmental Panel on Climate Change s (IPCC) assessment of climate change science which has found that warming of the climate is unequivocal, the human influence is clear and physical impacts are unavoidable.

We believe that:

The world must pursue the twin objective of:

limiting climate change to the lower end of the IPCC emission scenarios in line with current international agreements; while

providing access to the affordable energy required to continue the economic growth essential for maintaining living standards and alleviating poverty.

Under all current plausible scenarios, fossil fuels will continue to be a significant part of the energy mix for decades.

There needs to be an acceleration of effort to drive energy efficiency, develop and deploy low-emissions technology and adapt to the impacts of climate change.

There should be a price on carbon, implemented in a way that addresses competitiveness concerns and achieves lowest cost emissions reductions.

We will:

continue to take action to reduce our emissions;

build resilience of our operations, investments, communities and ecosystems to climate change impacts;

recognising their role as policy makers, seek to enhance the global response by engaging with governments;

work in partnership with resource sector peers to improve sectoral performance and increase industry s influence in policy development to deliver effective long-term regulatory responses;

through material investments in low-emission technology, contribute to reducing emissions from the use of fossil fuels.

Further information on our sustainability commitments, standards and performance can be found in sections 1.14 of this Annual Report.

Additional information is also available in the Sustainability Report 2014, which can be found online at www.bhpbilliton.com.

## 1.6.2 Creating a more productive organisation

We are focused on achieving sustainable improvement in productivity across all aspects of our business. We believe our systems, structures, culture, people and portfolio should enable the creation of a competitive

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advantage by working smarter to safely deliver greater volume growth from existing plant and equipment at lower unit costs.

During the past year, we have continued to implement and embed our Operating Model, which guides how we work, defines how we are organised and enables the measurement of operational and financial performance across the Group. The Operating Model lays the foundation for sustainable productivity gains by supporting the building of capability, eliminating the duplication of effort and enabling the rapid identification and deployment of best practices.

Recognising that culture also drives performance, BHP Billiton is continuing to create an inclusive environment where every employee feels engaged. We want our people to feel listened to, be motivated to contribute to their potential and work together to unlock world-class productivity from the ground up. We support the development of our people and encourage our teams to learn from each other, identify more productive ways of working and achieve functional excellence across the Group.

Following the October 2013 completion of our deployment of 1SAP, our single Group-wide common enterprise resource planning system, we are now using common world-class business processes, standard metrics and reports that are supported by robust data. The implementation of 1SAP across the organisation supports our ability to pursue sustained improvement through the application of standard processes and performance transparency.

Our long-term commitment to improve productivity across the organisation has the potential to create significant value for shareholders and other stakeholders. Our focus on productivity has already resulted in significant improvement in operating performance at each of our major Businesses this year and record output at 12 operations.

## Case study: Cost and time reductions in Petroleum s Onshore US shale drilling and completions

Objective: To reduce the time and cost required to put each well online.

Approach: Opportunities were identified through statistical analysis and comparison against internal best practice and external benchmarks. Improvements in performance were sought in three areas: engineering (changes in the design of each well); operations (changes in how operations are conducted in the field); and supply (shifts in what and how goods and services are procured and delivered).

*Outcomes:* Rig mobilisation times have been cut by 12 per cent in FY2014 through the development and implementation of an optimised rig move procedure. The average drilling time for a shale gas well has declined in FY2014, while the productivity of hydraulic fracturing crews (stages completed per crew per month) has grown in FY2014.

Productivity results: Overall, total Onshore US shale drilling costs per well decreased by 15 per cent in FY2014.

## 1.6.3 Disciplined approach to capital management

Our priorities for capital management remain unchanged. The quality of our assets and adherence to our strategy has differentiated our performance and maximised shareholder returns by allocating capital in a disciplined manner.

Our diversified and high-margin portfolio delivers a higher return on capital with lower volatility, when compared with many peers. Over the last 10 years, we have returned US\$64 billion to shareholders in the form of dividends and buy-backs.

Many of the areas to which we direct our cash flow are interconnected. In order to make capital allocation decisions, we test each decision against a range of short-term and long-term criteria across several scenarios. We aim to optimise for net present value (NPV), return on capital (ROC), internal rate of return (IRR) and margin, while remaining mindful of portfolio construction and cash flow at risk. No single metric can dominate the process given the potential to create imbalances and all alternatives, including an investment in our own shares, actively compete.

Our portfolio remains a key point of difference. However, because it is opportunity-rich, capital discipline is more important. By reducing annual expenditure, we have created even more competition for capital and we have sharpened our focus on our core commodities and our high-margin major basins.

Given our portfolio of long-life orebodies, we also consider the value of future options as we must preserve their value at low cost.

The following factors are considered when making capital allocation decisions:

## A strong balance sheet

Our solid A credit rating provides flexibility and access to debt capital markets. The Group s balance sheet continued to strengthen during FY2014. As at 30 June 2014, net debt was US\$25.8 billion, a decrease of US\$1.7 billion compared to the net debt position at 30 June 2013. As at 30 June 2014, the Group s cash and cash equivalents on hand were US\$8.8 billion.

During FY2014, the Group issued a four tranche Global Bond totalling US\$5 billion comprising US\$500 million Senior Floating Notes due 2016 paying interest at three-month US dollar LIBOR plus 25 basis points, US\$500 million 2.050 per cent Senior Notes due 2018, US\$1.5 billion, 3.850 per cent Senior Notes due 2023, and US\$2.5 billion 5.000 per cent Senior Notes due 2043.

These funds and our balance sheet capacity were used to meet a series of financing commitments, including debt repayments of US\$7.2 billion and dividend payments of US\$6.4 billion.

## Progressive base dividend

BHP Billiton has a progressive dividend policy. The aim of this policy is to steadily increase or at least maintain our base dividend in US dollars at each half-yearly payment. Our progressive base dividend is the minimum annual distribution that a shareholder should expect and is expected to grow broadly in accordance with the growth of our business.

On 19 August 2014, the Board determined a final dividend for the year of 62 US cents per share. Together with the interim dividend of 59 US cents per share paid to shareholders on 26 March 2014, this brought the total dividend determined for the year to 121 US cents per share, a 4.3 per cent increase over the previous year s full-year dividend of 116 US cents per share.

Year ended 30 June	2014	2013	2012
Dividends determined in respect of the period (US cents per share)			
Interim dividend	59.0	57.0	55.0
Final dividend	62.0	59.0	57.0

**121.0** 116.0 112.0

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## Internal competition for capital investment

By reducing annual capital expenditure and increasing competition for capital within the Group, we have prioritised higher quality growth at a higher average rate of return on incremental investment. We continue to invest selectively in those projects that meet our criteria.

During FY2014, eight projects were completed, including:

Macedon (Petroleum), which delivered first petroleum production in the September 2013 quarter. Our share of development costs was approximately US\$1.2 billion.

North West Shelf North Rankin B Gas Compression (Petroleum), which delivered first gas production in the December 2013 quarter. Our share of development costs was approximately US\$721 million as of 30 June 2014.

Jimblebar mine expansion (Iron Ore), which delivered first iron ore production in the September 2013 quarter. Our share of development costs was approximately US\$3.4 billion.

Port blending facilities and rail yard (Iron Ore), which was completed in the December 2013 quarter. The project was delivered at a cost of US\$1.1 billion (BHP Billiton share US\$916 million).

Samarco fourth pellet plant (Iron Ore), which delivered first iron ore pellet production in the March 2014 quarter. The final spend of the project was US\$3.2 billion (BHP Billiton share US\$1.6 billion).

Caval Ridge (Coal), which delivered first metallurgical coal production in the June 2014 quarter. BHP Billiton s share of the project s cost was US\$1.9 billion.

Eight major projects were in execution at 30 June 2014. Seven of our development projects are brownfield in nature, which are inherently lower risk than new greenfield projects.

## Capital expenditure

Capital and exploration expenditure is disclosed for each Business in the table below.

Year ended 30 June	2014 US\$M	2013 US\$M	2012 US\$M
Capital and exploration expenditure (1)			
Petroleum and Potash	7,070	8,439	7,063
Copper	3,873	4,204	3,889
Iron Ore	3,118	6,196	4,745
Coal	2,379	3,665	3,277

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Aluminium, Manganese and Nickel	542	950	2,020
Group and unallocated items	21	140	136
BHP Billiton Group	17,003	23,594	21,130

Capital expenditure encompasses expenditure on major projects, as set out in section 2.4 of this Annual Report, and capital expenditure on sustaining and other items.

<sup>(1)</sup> Capital expenditure is presented on a cash basis and excludes capitalised interest, but includes capitalised exploration. Exploration expenditure is capitalised in accordance with our accounting policies, as set out in note 1 Accounting policies in the Financial Statements.

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Year ended 30 June	2014 US\$M	2013 US\$M	2012 US\$M
Capital expenditure	·	·	·
Growth	13,130	18,678	14,994
Sustaining and other	2,863	3,565	3,643
Total	15,993	22,243	18,637
Exploration expenditure			
Petroleum	600	675	1,355
Minerals	410	676	1,138
Total	1,010	1,351	2,493
Total capital and exploration expenditure (cash basis)	17,003	23,594	21,130
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Add: equity accounted investments	871	1,493	1,164
Less: capitalised deferred stripping	(1,421)	(1,650)	(1,531)
Less: non-controlling interests	(1,272)	(1,146)	(970)
Total capital and exploration expenditure (BHP Billiton share)	15,181	22,291	19,793

BHP Billiton s share of capital and exploration expenditure declined by 32 per cent during FY2014 to US\$15.2 billion. Our rate of investment is expected to decline further in FY2015 with planned capital and exploration expenditure of approximately US\$14.8 billion (BHP Billiton share).

A detailed discussion of our project pipeline (including projects approved after 30 June 2014) is located in section 2.4 of this Annual Report.

## **Returning excess capital to shareholders**

During the last 10 years, we supplemented our progressive base dividend by returning excess capital to shareholders and returned US\$23 billion in the form of buy-backs, which is almost 35 per cent of total capital returned.

We have now returned US\$64 billion in the form of dividends and buy-backs over the last 10 years, equivalent to an underlying payout ratio of approximately 50 per cent.

We continue to focus on the things we can control to maximise free cash flow, like productivity and the rate at which we invest. The pace at which our balance sheet strengthens, however, will also depend on external factors like prices and foreign exchange rates. We monitor this closely and seek to return excess cash consistently and predictably.

## 1.6.4 Active management of our portfolio

We are concentrating our efforts on those basins where we enjoy economies of scale and a competitive advantage. Our focus on four major Businesses of Iron Ore, Petroleum, Copper, and Coal, with Potash as a potential fifth, provides the benefits of diversification.

## Proposed demerger of assets

On 19 August 2014, we announced a plan to create an independent global metals and mining company based on a selection of our high-quality aluminium, coal, manganese, nickel and silver assets.

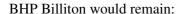
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As a result of the growth of our major Businesses and the Group substantial investment in recent years, BHP Billiton now has two great companies embedded within its portfolio. Separating these assets via a demerger has the potential to unlock shareholder value by significantly simplifying the Group.

## BHP Billiton s continued diversification

If the demerger is approved, we would focus almost exclusively on our large, long-life iron ore, copper, coal, petroleum and potash basins. By concentrating on the development and operation of these basins, BHP Billiton expects to reduce costs and improve productivity more quickly.

Following the demerger, BHP Billiton would have a simpler portfolio with fewer assets and a greater focus on upstream operations.



the largest exporter of metallurgical coal;

a global top three producer of iron ore;

a global top four exporter of copper concentrate;

the largest overseas investor in onshore US shale;

the developer of the world s best undeveloped potash resource in Saskatchewan, Canada. Consistent with our established strategy, our portfolio provides broad exposure to steelmaking raw materials, copper, energy and potentially agricultural markets and will remain diversified by commodity, geography and market.

*Our Charter* values and commitment to putting health and safety first, being environmentally responsible and supporting the communities in which we operate will remain unchanged.

We will continue to simplify our portfolio and as part of this process are reviewing our Nickel West, New Mexico Coal and smaller petroleum assets.

## A new global metals and mining company

The new company would have assets in five countries. Many of its operations are among the most competitive in their industries. Its assets would include:

BHP Billiton s integrated Aluminium business;

Cannington silver;
Energy Coal South Africa;
Illawarra metallurgical coal;
Cerro Matoso nickel;
Illawarra metallurgical coal;

BHP Billiton s Manganese business.

By tailoring its approach, and retaining some elements of BHP Billiton s common systems and processes, the new company would be designed to operate safely, reduce overheads and deliver improved performance.

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Management, board and listings

It is proposed that the Chairman of the new company would be David Crawford, who will retire from the BHP Billiton Board in November 2014. Graham Kerr, BHP Billiton s Chief Financial Officer, would assume the role of Chief Executive Officer of the new company, based in Perth. It is intended that Keith Rumble will become a Non-executive Director of the new company that BHP Billiton plans to form in the proposed demerger. Mr Rumble would retire from the BHP Billiton Board at the time the shareholders vote on this demerger proposal. The BHP Billiton Board also intends to nominate Xolani Mkhwanazi, currently BHP Billiton s Chairman South Africa, as a Non-executive Director of the new company.

The importance of South Africa to the new company would be reflected in the formation of its board and management team, as well as its commitment to the country s economic development and transformation objectives.

The new company is intended to be listed on the Australian Securities Exchange (ASX) with an inward secondary listing on the Johannesburg Stock Exchange (JSE).

A responsible operator

The new company would be committed to responsible environmental management, the safe operation of its assets and to making a positive contribution to its host communities and nations. BHP Billiton s existing community commitments will be fulfilled, while the new company would foster its own partnerships and establish its own community programs.

## BHP Billiton shareholders

BHP Billiton Limited and Plc shareholders would be entitled to 100 per cent of the shares in the new listed company through a pro-rata, in-specie distribution, as well as retaining their existing shares in the Group.

Subject to final Board approval to proceed, shareholder approval and the receipt of satisfactory third party approvals, the demerger is expected to be completed in the first half of the 2015 calendar year.

## **Targeted divestment program**

We also continue to execute a targeted divestment program, with major transactions totalling US\$6.7 billion completed since FY2013. The transactions completed during FY2014 included:

the sale of the Pinto Valley mining operation and the associated San Manuel Arizona Railroad Company to Capstone Mining Corp for an aggregate cash consideration of US\$653 million;

the sale of our interest in our Onshore US South Midland shale operation, located in the Permian Basin, to EP Energy for a cash consideration of US\$153 million;

the sale of Liverpool Bay, comprising a 46.1 per cent interest in five producing offshore oil and gas fields in the Irish Sea, United Kingdom and the Point of Ayr onshore processing plant in northern Wales and associated

infrastructure. The sale was completed on 31 March 2014 to ENI ULX Limited for a cash consideration of US\$29 million; and

the extension of our Western Australia Iron Ore long-term joint venture relationship with ITOCHU and Mitsui to include Jimblebar, following the issuing of equity on 10 July 2013 in a subsidiary company, for which BHP Billiton received a total consideration of US\$1.5 billion in shares and loans of the subsidiary.

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## 1.7 Our management of risk

## 1.7.1 Approach to risk management

We believe the identification and management of risk is central to achieving our corporate purpose of creating long-term shareholder value.

Risk can present itself in many forms, has the potential to impact our health and safety, environment, community, reputation, regulatory, market and financial performance and thereby the achievement of our corporate purpose.

By understanding and managing risk, we provide greater certainty and confidence for our shareholders, employees, customers, suppliers, and for the communities in which we operate. Successful risk management can be a source of competitive advantage.

Our risks are viewed and managed on a Group-wide basis. The natural diversification in our portfolio of commodities, geographies, currencies, assets and liabilities is a key element in our risk management approach.

Risk management is embedded in our critical business activities, functions and processes. Materiality and our tolerance for risk are key considerations in our decision-making.

Risk issues are identified, analysed and assessed in a consistent manner. Performance requirements exist for the identification, assessment, control and monitoring of material risk issues that could threaten our corporate purpose and business plans. These include:

The potential for impacts on the achievement of our corporate purpose and business plans is identified through risk assessments using approved materiality and tolerability criteria. The severity of any risk event is assessed according to a matrix that describes the degree of harm, injury or loss from the most severe impact associated with that risk event, assuming reasonable effectiveness of controls.

A risk assessment (risk identification, risk analysis, including likelihood and impact assessment and risk evaluation) is conducted for material risk issues.

Risk controls are designed, implemented, operated and assessed to produce a residual risk that is tolerable. Performance standards are established for critical controls over material risks with supporting verification processes.

We have established processes that apply when entering or commencing new activities in high-risk countries. Risk assessments and a supporting risk management plan are required to ensure that potential reputation, legal, business conduct and corruption-related exposures are managed and legislative compliance is maintained, including relevant anti-corruption legislation and the application of any sanctions or trade embargos.

Our risk management governance approach is described in sections 3.14.1 and 3.15 of this Annual Report.

#### 1.7.2 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 that may have an adverse effect on our results and operations. The following describes the material risks that could affect BHP Billiton.

## **External risks**

Fluctuations in commodity prices and impacts of ongoing global economic volatility may negatively affect our results, including cash flows and asset values

The prices we obtain for our oil, gas and minerals are determined by, or linked to, prices in world markets, which have historically been subject to substantial volatility. Our usual policy is to sell our products at the prevailing market prices. The diversity provided by our relatively broad portfolio of commodities does not insulate the effects of price changes. Fluctuations in commodity prices can occur due to price shifts reflecting underlying global economic and geopolitical factors, industry demand, increased supply due to the development of new productive resources, technological change, product substitution and national tariffs. We are particularly exposed to price movements in iron ore, coal, copper, and oil and gas. For example, a US\$1 per tonne decline in the average iron ore price and US\$1 per barrel decline in the average oil price would have an estimated impact on FY2014 profit after taxation of US\$112 million and US\$54 million, respectively. Volatility in global economic growth, particularly in the developing economies, has the potential to adversely impact future demand and prices for commodities. The impact of potential long-term sustained price shifts and short-term price volatility, including the effects of unwinding the sustained monetary stimulus in the United States, creates the risk that our financial and operating results including cash flows and asset values, will be materially and adversely affected by unforeseen declines in the prevailing prices of our products.

## Our financial results 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 some of the currencies influencing our operating costs. Over recent years, higher exchange rates (compared to the US dollar) of currencies in which the majority of our operating costs are incurred have and may continue to adversely impact our profit margins. Given the dominant role of the US currency in our affairs, the US dollar is the currency in which we present financial performance. We do not generally believe that active currency hedging provides long-term benefits to our shareholders. From time to time, we consider currency protection measures appropriate in specific commercial circumstances, subject to strict limits established by our Board.

## Reduction in Chinese demand may negatively impact our results

The Chinese market has been driving global materials demand and pricing over the past decade. Sales into China generated US\$23.3 billion (FY2013: US\$20.1 billion) or 34.7 per cent (FY2013: 30.4 per cent) of our revenue in FY2014. The FY2014 sales into China by Business included 64.9 per cent Iron Ore, 17.8 per cent Copper, 8.5 per cent Coal, 6.6 per cent Aluminium, Manganese and Nickel and 2.2 per cent Petroleum. A slowing in China s economic growth could result in lower prices and less demand for our products and negatively impact our results including cash flows.

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, 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 on the profitability of an operation. These risks could include terrorism, civil unrest, nationalisation, renegotiation or nullification of existing contracts, leases, permits or other agreements, restrictions on repatriation of earnings or capital and changes in laws and policy, as well as other unforeseeable risks. Risks relating to bribery and corruption, including possible delays or disruption resulting from a refusal to make so-called facilitation payments, may be prevalent in some of the countries in which we operate. If any of our major operations are affected by one or more of these risks, it could have a negative effect on our operations in those countries, as well as the Group's overall operating results and financial condition.

Our operations are based on material long-term investments that are dependent on long-term fiscal stability and could be adversely impacted by changes in fiscal legislation. The natural resources industry continues to be regarded as a source of tax revenue and can also be impacted by broader fiscal measures applying to business generally.

Our business could be adversely affected by new government regulations, such as controls on imports, exports, prices and greenhouse gas emissions. Increasing requirements relating to regulatory, environmental and social approvals can potentially result in significant delays in construction and may adversely affect 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 or subject to legislative change. These may adversely impact the efficient operations and expansion of our Businesses.

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.

These regulations are complex, difficult to predict and outside our control and could negatively affect our Company, future results and our financial condition.

## **Business risks**

Failure to discover or acquire new resources, maintain reserves or develop new operations could negatively affect our future results and financial condition

The demand for our products and production from our operations results in existing reserves being depleted over time. As our revenues and profits are derived from our oil and gas and minerals operations, our results and financial condition are directly related to the success of our exploration and acquisition efforts, and our ability to generate reserves to meet our production requirements. Exploration activity occurs adjacent to established operations and in new regions, in developed and less-developed countries. These activities may increase land tenure, infrastructure and related political risks. A failure in our ability to discover or acquire new resources, maintain 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.

Future deterioration in commodities pricing may make some existing reserves uneconomic. Our actual drilling activities and future drilling budget will depend on our mineral inventory size and quality, drilling results, commodity prices, drilling and production costs, availability of drilling services and equipment, lease expirations, transportation pipelines and other infrastructure constraints, regulatory approvals and other factors.

There are numerous uncertainties inherent in estimating mineral and oil and gas reserves. Geological assumptions about our mineralisation that are valid at the time of estimation may change significantly when new information becomes available. Estimates that the indicated amount of reserves will be recovered or that it will be recovered at the cost we anticipate are based on uncertain assumptions. The uncertain global financial outlook may affect economic assumptions related to reserve recovery and may require reserve restatements. Reserve restatements could negatively affect our results and prospects.

# Potential changes to our portfolio of assets through acquisitions and divestments may have a material adverse effect on our future results and financial condition

We regularly review the composition of our asset portfolio and from time to time may add assets to the portfolio or divest assets from the portfolio. There are a number of risks associated with such acquisitions or divestments. These include adverse market reaction to such changes or the timing or terms on which such changes are made, the imposition of adverse regulatory conditions and obligations, commercial objectives not being achieved as expected, unforeseen liabilities arising from such changes to the portfolio, sales revenues and operational performance not meeting our expectations, anticipated synergies or cost savings being delayed or not being achieved, inability to retain key staff and transaction-related costs being more than anticipated. These factors could negatively affect our reputation, future results and financial condition.

## Increased costs and schedule delays may adversely affect our development projects

Although we devote significant time and resources to our project planning, approval and review process, many of our development projects are highly complex and rely on factors that are outside our control, which may cause us to underestimate the cost or time required to complete a project. For instance, accidents during development projects may cause setbacks or cost overruns, required licences, permits or authorisations to build a project may be unobtainable at anticipated costs, or may be obtained only after significant delay and market conditions may change making a project less profitable than initially projected.

In addition, we may fail to manage projects as effectively as we anticipate and unforeseen challenges may emerge.

Any of these may result in increased capital costs and schedule delays at our development projects, adversely affecting our development projects and impacting anticipated financial returns.

## Financial risks

# If our liquidity and cash flow deteriorate significantly it could adversely affect our ability to fund our major capital programs

We seek to maintain a solid A credit rating as part of our strategy. However, fluctuations in commodity prices and the ongoing global economic volatility may adversely impact our future cash flows and ability to access capital from financial markets at acceptable pricing. If our key financial ratios and credit rating are not maintained, our liquidity and cash reserves, interest rate costs on borrowed debt, future access to financial capital markets and the ability to fund current and future major capital programs could be adversely affected.

## We may not recover our investments in mining, oil and gas assets, which may require financial write-downs

One or more of our assets 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 cause us to fail to recover all or a portion of our investment in mining and oil and gas assets and may require financial write-downs, including goodwill adversely impacting our financial results.

The commercial counterparties we transact with may not meet their obligations, which may negatively impact our results

We contract with a large number of commercial and financial counterparties, including end-customers, suppliers and financial institutions. Global economic volatility continues to strain global financial markets, with tighter liquidity in China and uncertain business conditions generally. We maintain a one book approach with commercial counterparties to ensure all credit exposures are quantified. Our existing counterparty credit controls may not prevent a material loss due to credit exposure to a major customer or financial counterparty. In addition,

customers, suppliers, contractors or joint venture partners may fail to perform against existing contracts and obligations. Non-supply of key inputs, such as tyres, mining and mobile equipment, diesel and other key consumables, may unfavourably impact costs and production at our operations. These factors could negatively affect our financial condition and results of operations.

## **Operational risks**

## Cost pressures and reduced productivity could negatively impact our operating margins and expansion plans

Cost pressures may continue to occur across the resources industry. As the prices for our products are determined by the global commodity markets in which we operate, we do not generally have the ability to offset these cost pressures through corresponding price increases, which can adversely affect our operating margins. Notwithstanding our efforts to reduce costs and a number of key cost inputs being commodity price-linked, the inability to reduce costs and a timing lag may adversely impact our operating margins for an extended period.

A number of our operations, such as aluminium and copper, 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 increases in costs, inadequate infrastructure capacity, interruptions in supply due to equipment failure or other causes and the inability to extend supply contracts on economic terms.

Our Australian-based operations may continue to be affected by the Australian Fair Work Act 2009 as labour agreements expire and businesses are required to collectively bargain with unions. In some instances, labour unions are pursuing wage claims in the bargaining process, and/or claims about union involvement in operational decision-making. Claims or labour disputes may adversely affect productivity and costs. Industrial action in pursuit of claims associated with the bargaining process has occurred or been threatened in some Businesses, and is likely to continue to occur as unions press claims as part of the collective bargaining process.

These factors could lead to increased operating costs at existing operations and could negatively impact our operating margins and expansion plans.

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

We operate extractive, processing and logistical operations in many geographic locations, both onshore and offshore. Our key port facilities are located at Port Hedland and Hay Point in Australia. We have 11 underground mines, including seven underground coal mines. Our operational processes may be subject to operational accidents, such as port and shipping incidents, underground mine and processing plant fire and explosion, open-cut pit wall failures, loss of power supply, railroad incidents, loss of well control, environmental pollution and mechanical critical equipment failures. Our operations may also be subject to unexpected natural catastrophes such as earthquakes, flood, hurricanes and tsunamis. Our northwest Western Australia iron ore, Queensland coal and Gulf of Mexico oil and gas operations are located in areas subject to cyclones or hurricanes. Our Chilean copper operations are located in a known earthquake and tsunami zone. Based on our risk management and concerns about the value of external insurance in the natural resource sector, our risk financing (insurance) approach is to minimise or not to purchase external insurance for certain risks, including property damage, business interruption, construction-related risk, marine cargo and primary liability risks. Existing business continuity plans may not provide protection for all of the costs that arise from such events. The impact of these events could lead to disruptions in production, increased costs and loss of facilities more than offsetting external premiums saved, which would adversely affect our financial results and prospects. Where external insurance is purchased, third party claims arising from these events may exceed the limit of liability of the

insurance policies we have in place.

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## Our non-operated assets may not comply with our standards

Some of our assets are operated and managed by joint venture partners or by other companies. Management of our non-operated assets may not comply with our management and operating standards, controls and procedures, including our health, safety, environment and community (HSEC) standards. 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.

## Breaches in our information technology security processes may adversely impact our business activities

We maintain global information technology (IT) systems, consisting of infrastructure, applications and communications networks to support our business activities. These systems could be subject to security breaches (e.g. cyber-crime) resulting in theft, disclosure or corruption of information, including information relating to acquisitions and divestments, strategic decision-making, non-public investment market communications or commercially sensitive information relating to major contracts. Security breaches could also result in misappropriation of funds or disruptions to our operations.

## Sustainability risks

Safety, health, environmental and community impacts, incidents or accidents and related regulations may adversely affect our people, operations and reputation or licence to operate

Safety

Potential safety events that may have a material adverse impact on our operations include fire, explosion or rock fall incidents in underground mining operations, personnel conveyance equipment failures in underground operations, aircraft incidents, incidents involving light vehicles and mining mobile equipment, ground control failures, well blowouts, explosions or gas leaks, and accidents involving inadequate isolation and working from heights or lifting operations.

## Health

Health risks faced include fatigue, musculoskeletal illnesses and occupational exposure to noise, silica, manganese, diesel exhaust particulate, fluorides, coal tar pitch, nickel and sulphuric acid mist. Longer-term health impacts may arise due to unanticipated workplace exposures or historical exposures of our workforce to hazardous substances. These effects may create future financial compensation obligations.

Infectious diseases such as malaria may have a material adverse impact upon our workers or on our communities, primarily in Africa. Because we operate globally, we may be affected by potential pandemic influenza outbreaks, such as A(H1N1) and avian flu, in any of the regions in which we operate.

## Environment

Environmental incidents have the potential to lead to material adverse impacts on our operations. These include uncontrolled tailings containment breaches, subsidence from mining activities, escape of polluting substances and uncontrolled releases of hydrocarbons.

Our operations by their nature have the potential to adversely impact biodiversity, water resources and related ecosystem services. Changes in scientific understanding of these impacts, regulatory requirements or stakeholder expectations may prevent or delay project approvals and result in increased costs for mitigation, offsets or compensatory actions.

We provide for operational closure and site rehabilitation. Our operating and closed facilities are required to have closure plans. Changes in regulatory or community expectations may result in the relevant plans not being adequate. This may increase financial provisioning and costs at the affected operations.

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## Community

Local communities may become dissatisfied with the impact of our operations or oppose our new development projects, including through litigation, potentially affecting costs and production, and in extreme cases viability. Community related risks may include community protests or civil unrest, and may cause delays to proposed developments. Our operations or activities also risk inadvertent breaches of human rights or other international laws or conventions.

## HSE legislation

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

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, rehabilitation expenses and operational costs could negatively affect our financial results.

## Hydraulic fracturing

Our Onshore US operations involve hydraulic fracturing, an essential and common practice in the oil and gas industry to stimulate production of natural gas and oil from dense subsurface rock formations. Hydraulic fracturing involves using water, sand and a small amount of chemicals to fracture the hydrocarbon-bearing rock formation, to allow flow of hydrocarbons into the wellbore. We routinely apply hydraulic fracturing techniques in our drilling and completion programs.

Attention given to the hydraulic fracturing process could lead to greater opposition to oil and gas production activities using hydraulic fracturing techniques. Increased regulation could impose more stringent permitting, public disclosure and well construction requirements on hydraulic fracturing operations. In the United States, the hydraulic fracturing process is typically regulated by relevant US state regulatory bodies. Some states are considering changes to regulations in relation to permitting, public disclosure, and/or well construction requirements on hydraulic fracturing and related operations, including the possibility of outright bans on the process. Arkansas, Louisiana and Texas (the states in which we currently operate) have adopted various laws, regulations or issued regulatory guidance concerning hydraulic fracturing.

Several US federal agencies are also reviewing or advancing regulatory proposals concerning hydraulic fracturing and related operations. The US Environmental Protection Agency (EPA) commenced a study of the potential impacts of hydraulic fracturing activities on drinking water resources and issued a non-determinative Progress Report in December 2012. A draft report, not including prospective case study work, is expected in late CY2014. The EPA is expected to issue a final report for peer review in CY2016. The EPA s Office of Inspector General is researching the EPA s and states ability to manage potential threats to water resources from hydraulic fracturing, with a possible longer-term study to follow. The US Bureau of Land Management (BLM) is planning to issue a revised proposed rule in CY2014 that would impose new requirements on hydraulic fracturing operations conducted on federal lands, including the disclosure of chemicals used, wellbore integrity, water use and disposal of flow back water. Activity at the federal level, including the ongoing EPA study, BLM rules and other analysis by federal and state agencies to assess the impacts of hydraulic fracturing could spur additional legislative or regulatory actions.

While we have not experienced a material delay or substantially higher operating costs as a result of current regulatory requirements in our Onshore US operations, we cannot predict whether additional federal, state or local laws or regulations will be enacted and what such actions would require or prohibit. Additional legislation or regulation could subject our operations to delays and increased costs, or prohibit certain activities, which could adversely affect the financial performance of our Onshore US operations.

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Due to the nature of our operations, HSEC incidents or accidents and related regulations may adversely affect our reputation or licence to operate.

## Climate change may impact the value of our Company, and our operations and markets

The physical impacts of climate change and various regulations that seek to address climate change may negatively affect our operations, productivity and the markets in which we sell our products. According to the Intergovernmental Panel on Climate Change (IPCC), fossil fuel-related emissions are a significant source of greenhouse gases contributing to climate change. We produce fossil fuels such as coal, oil and gas for sale to customers, and we use fossil fuels in our mining and processing operations either directly or through the purchase of fossil-fuel based electricity.

A number of national governments have already introduced or are contemplating the introduction of regulatory responses to greenhouse gas emissions from the combustion of fossil fuels to address the impacts of climate change. This includes countries where we have operations such as Australia, the United States, South Africa and Chile, as well as customer markets such as China, India and Europe. From a medium to long-term perspective, we are likely to see some adverse changes in the cost position of our greenhouse gas-intensive assets and energy-intensive assets as a result of regulatory impacts in the countries where we operate. These proposed regulatory mechanisms may impact our operations directly or indirectly through our suppliers and customers. 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. For example, the Australian Government repealed a carbon tax in 2014, the South African Government plans to introduce a carbon tax beginning in 2016 and carbon pricing is being discussed as part of a broader tax reform package in Chile.

There is a potential gap between the current valuation of fossil fuel reserves on the balance sheets of companies and in global equities markets and the reduced value that could result if a significant proportion of reserves were rendered incapable of extraction in an economically viable fashion due to regulatory or market responses to climate change. In such a scenario, reserve assets held on our balance sheet may need to be impaired or written off and our inability to make productive use of such assets may also negatively impact our financial condition and results.

Changing consumer demand towards alternative energy supply options could present a threat to existing fossil fuel markets.

The physical effects of climate change on our operations may include changes in rainfall patterns, water shortages, rising sea levels, increased storm intensities and higher temperatures. These effects may adversely impact the financial performance of our operations.

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

We operate in a global environment that encompasses multiple jurisdictions and complex regulatory frameworks. Our governance and compliance processes, which include the review of internal controls over financial reporting and specific internal controls in relation to offers of things of value to government officials and representatives of state-owned enterprises, may not prevent future potential breaches of law, accounting or governance practice. Our *Code of Business Conduct*, together with our mandatory policies, such as the anti-corruption, trade and financial sanctions and competition policies, may not prevent instances of fraudulent behaviour and dishonesty nor guarantee compliance with legal or regulatory requirements. This may lead to regulatory fines, disgorgement of profits, litigation, loss of operating licences or reputational damage.

## 1.7.3 Management of principal risks

The scope of our operations and the number of industries in which we operate and engage mean that a range of factors may impact our results. Material risks that could negatively affect our results and performance are described in section 1.7.2 of this Annual Report. Our approach to managing these risks is outlined below.

## Principal risk area External risks

Risks arise from falls in commodity prices and demand in major markets (such as China or Europe) or changes in currency exchange rates and actions by governments and political events that impact long-term fiscal stability.

#### **Business risks**

Risks include the inherent uncertainty of identifying and proving reserves, adding and divesting assets and managing our capital development projects.

## Risk management approach

The diversification of our portfolio of commodities, geographies and currencies is a key strategy for reducing the effects of volatility. Section 1.15.1 describes external factors and trends affecting our results and note 29 Financial risk management to the Financial Statements outlines the Group s financial risk management strategy, including market, commodity, and currency risk. The Financial Risk Management Committee oversees these risks as described in sections 3.15 and 3.16. We also engage with governments and other key stakeholders to ensure the potential adverse impacts of proposed fiscal, tax, resource investment, infrastructure access and regulatory changes are understood and where possible mitigated.

The Group Resource and Business Optimisation function provides governance and technical leadership for Mineral Resource development and Ore Reserves reporting as described in section 2.3.2. Our governance over reporting of Petroleum reserves is described in section 2.3.1.

We have established investment approval processes that apply to all major capital projects and asset divestment and acquisitions. The Investment Committee oversees these as described in sections 3.15 and 3.16. The Group Project Management function additionally seeks to ensure that projects are safe, predictable and competitive. We have established project hubs as operating centres for the study and execution of a pipeline of major capital projects using a program management approach.

## **Financial risks**

Continued volatility in global financial markets may adversely impact future cash flows, our ability to adequately We seek to maintain a solid A credit rating, supported by our portfolio risk management strategy. As part of

access and source capital from financial markets and our credit rating. Volatility may impact planned expenditures, as well as the ability to recover investments in mining and oil and gas projects. In addition, the commercial counterparties (customers, suppliers and financial institutions) we transact with may, due to adverse market conditions, fail to meet their contractual obligations.

this strategy, commodity prices and currency exchange rates are not hedged, and wherever possible we take the prevailing market price. We use Cash Flow at Risk analysis to monitor volatilities and key financial ratios. Credit limits and review processes are required to be established for all customers and financial counterparties. The Financial Risk Management Committee oversees these as described in sections 3.15 and 3.16. Note 29 Financial risk management to the Financial Statements outlines our financial risk management strategy.

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## Principal risk area Operational risks

Operating cost pressures and reduced productivity could negatively impact operating margins and expansion plans. Non-operated assets may not comply with our standards. Unexpected natural and operational catastrophes may adversely impact our operations. Breaches in IT security processes may adversely impact the conduct of our business activities.

## Risk management approach

We seek to ensure that adequate operating margins are maintained through our strategy to own and operate large, long-life, low-cost and expandable upstream assets.

The capability to sustain productivity improvements is being further enhanced through continued refinements to our Operating Model. The Operating Model is designed to deliver a simple and scalable organisation, providing a competitive advantage through defining work, organisation and performance measurements. Defined global business processes, including 1SAP, provide a standardised way of working across the organisation. Common processes generate useful data and improve operating discipline. Global sourcing arrangements have been established to ensure continuity of supply and competitive costs for key supply inputs. We seek to influence the application of our standards to non-operated assets.

Through the application of our risk management processes, we identify catastrophic operational risks and implement the critical controls and performance requirements to maintain control effectiveness. Business continuity plans are required to be established to mitigate consequences. Consistent with our portfolio risk management approach, we continue to be largely self-insured for losses arising from property damage, business interruption and construction.

IT security controls to protect IT infrastructure, applications and communication networks and respond to security incidents are in place and subject to regular monitoring and assessment. To maintain adequate levels of protection, we also continue to monitor the development of threats in the external environment and assess potential responses to those threats.

## Sustainability risks

HSEC incidents or accidents and related regulations may adversely affect our people, operations and reputation or licence to operate. The potential physical impacts and related responses to climate change may impact the value of our Company, and operations and markets. Given we operate in a challenging global environment straddling multiple jurisdictions, a breach of our governance processes may lead to regulatory penalties and loss of reputation.

Our approach to sustainability risks is reflected in *Our Charter* and described in section 1.14.

A comprehensive set of Group Level Documents (GLD) set out Group-wide HSEC-related performance requirements to ensure effective management control of these risks.

Our approach to corporate planning, investment decision-making and portfolio management provides a focus on the identification, assessment and management of climate change risks. We have been applying an internal price on carbon in our investment decisions for more than a decade. Through a comprehensive and strategic approach to corporate planning, we work with a

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## Principal risk area

## Risk management approach

broad range of scenarios to assess our portfolio, including consideration of a broad range of potential policy responses to and impacts from climate change. Our models suggest that BHP Billiton s portfolio diversification results in the resilience of our overall asset valuation through all these scenarios.

As with our other risks, for climate change risk our *Risk Management* GLD provides the framework for risk management. Internal audits are conducted to test compliance with GLD requirements and action plans are developed to address any gaps. Key findings are reported to senior management and reports are considered by relevant Board committees.

Our *Code of Business Conduct* sets out requirements related to working with integrity, including dealings with government officials and third parties. Processes and controls are in place for the internal control over financial reporting, including under Sarbanes-Oxley. We have established anti-corruption and antitrust related performance requirements, which are overseen by the Legal and Compliance function. Additionally, the Disclosure Committee oversees our compliance with securities dealing obligations and continuous and periodic disclosure obligations as described in section 3.15 and 3.16.

## 1.8 Our approach to corporate governance

At BHP Billiton, we have a governance framework that goes beyond an interest in governance for its own sake or the need to simply comply with regulatory requirements. Instead, we believe high-quality governance supports long-term value creation. Simply put, we think good governance is good business, and our approach is to adopt what we consider to be the better of the prevailing governance standards in Australia, the United Kingdom and the United States.

In the same spirit, we do not see governance as just a matter for the Board. Good governance is also the responsibility of senior management and is embedded throughout the organisation.

The diagram below describes the governance framework at BHP Billiton. It shows the interaction between the shareholders and the Board, demonstrates how the Board Committee structure facilitates the interaction between the Board and the CEO and illustrates the flow of delegation from shareholders. We have robust processes in place to ensure the delegation flows through the Board and its committees to the CEO and the GMC and into the organisation. At the same time, accountability flows back upwards from the Company to shareholders. This process helps to ensure

alignment with shareholders.

As part of our corporate planning cycle, we have embedded a range of scenarios that are reviewed annually and updated by the Group with the GMC s involvement. The scenarios, and the governance process supporting them, also form part of the Board agenda.

These scenarios provide a lens to assess the performance of our business portfolio. They include assumptions around carbon and commodity prices, currencies, costs and tax rates and ranges for a number of risks that face the Group, including climate change, global growth, levels of trade, geopolitical situation and technology focus. All of the scenarios are used to inform BHP Billiton s strategy and the resilience of our diversified asset portfolio over the short and long term.

As we set out in section 3 of this Annual Report, while the five committees have accountability for making recommendations to the Board on certain matters, such as remuneration and sustainability, we ensure all Board members have oversight and the opportunity for full discussion of those issues through the committee report-out process to the full Board.

*Our Charter* is core to the governance framework of BHP Billiton. It embodies our corporate purpose, strategy and values, and defines when we are successful. We foster a culture that values and rewards high ethical standards, personal and corporate integrity and respect for others.

We live the values enshrined in *Our Charter* and adhere to the standards of conduct required by our *Code of Business Conduct*.

### **BHP** Billiton governance structure

Part of the Board s commitment to high-quality governance is expressed through the approach BHP Billiton takes to engaging and communicating with shareholders. We encourage shareholders to make their views known to us.

Our shareholders are based across the globe. Outside of the Annual General Meetings (AGM), which are an important step in the governance and investor engagement process, the Board uses a range of formal and informal communication channels to understand shareholder views to ensure it can represent shareholders in governing BHP Billiton. Regular proactive engagement with institutional shareholders and investor representative organisations takes place in Australia, South Africa, the United Kingdom and the United States. The purpose of these meetings is to discuss the full range of governance issues, as well as the broad strategy of the Group. They offer an important opportunity to build relationships and to engage directly with governance managers, fund managers and governance advisers.

For more information on our corporate governance processes, refer to section 3 of this Annual Report.

## 1.9 Our approach to remuneration

Our Remuneration Committee recognises that remuneration has an important role to play in supporting the implementation and achievement of the Group s strategy and our ongoing performance, aligning the activities of management to the interests of shareholders, and in supporting *Our BHP Billiton Charter*. The remuneration

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policy is reviewed annually and, where appropriate, fine-tuned to ensure that it continues to be effective in achieving these goals.

### **Remuneration at BHP Billiton**

The key principles of our remuneration policy, which remain unchanged, are to:

support the execution of the Group s business strategy in accordance with a risk framework that is appropriate for the organisation;

provide competitive rewards to attract, motivate and retain highly skilled executives willing to work around the world;

apply demanding performance measures, including key financial and non-financial measures of performance;

link a significant component of pay to our performance and the creation of value for our shareholders from relative outperformance;

ensure remuneration arrangements are equitable and facilitate the deployment of people around the Group;

limit severance payments on termination to pre-established contractual arrangements (which do not commit us to making any unjustified payments).

### Link to strategy

Our Charter sets out our purpose, strategy, values and how we measure our success. In framing how we remunerate our executives, we are guided by the measures of success contained in Our Charter. They are designed to ensure that executives take a long-term approach to decision-making and to minimise activities that focus only on short-term results at the expense of longer-term business growth and success. The Committee has considered the ways in which risk management and the long-term horizon are reflected throughout BHP Billiton s remuneration arrangements for all executives, and is satisfied that our approach reinforces the desired behaviours.

This is largely achieved through the Group s approach to short-term and long-term incentive awards, which comprise a significant portion of total remuneration for our Chief Executive Officer, Andrew Mackenzie, and other members of the Group Management Committee (GMC). The equity component of the short-term incentive award is deferred for a two-year period, and performance under the long-term incentive plan is measured over a five-year period. The actual rewards received by Mr Mackenzie and other members of the GMC therefore reflect the Group s performance and share price over an extended period.

### Our approach

There have been no substantial changes to our underlying approach we ensure that remuneration outcomes reflect the performance of the Group, Businesses and individuals. This approach has enjoyed a strong level of support from shareholders, with a vote in favour for the Remuneration Report of 97 per cent at last year s Annual General Meetings.

Our approach to incentive structures has been in place for more than a decade and has served both shareholders and participants well, delivering remuneration outcomes to executives aligned to the performance of the Group and of individuals. BHP Billiton adopted the deferral of a substantial portion of short-term incentive awards in equity in 2003, and a five-year term for long-term incentive awards in 2004. These approaches, which were then market leading, have since become more prevalent and acknowledged as best practice.

Notwithstanding our stable approach, the Committee and the Board continue to pay close attention to shareholders views so they can be factored into the Group s future approach.

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### **Summary**

Our fundamental philosophies and approaches to remuneration have not changed we trust that you will agree that our long held, consistent approach to aligning remuneration to performance has served shareholders well.

For more information on our remuneration policies and the remuneration outcomes for members of the GMC and Non-executive Directors, refer to section 4 of this Annual Report.

### 1.10 Key performance indicators

Our key performance indicators (KPIs) enable us to measure our financial and sustainable development performance. Their relevance to our strategy and our performance against these measures in FY2014 are explained below.

These KPIs are used as measures, directly and indirectly, in the short-term and/or long-term incentive arrangements for remuneration of senior executives. Certain KPIs (denoted with this symbol ) are used directly to calculate incentive outcomes and others (denoted with this symbol ) are considered more broadly in determining final overall results.

Our Remuneration Report is contained in section 4 of this Annual Report and provides information on our overall approach to remuneration of executives, including remuneration policies and the remuneration outcomes for members of the GMC and Non-executive Directors.

### 1.10.1 Sustainability KPIs

### **TRIF**

### **Definition**

Total recordable injury frequency (TRIF) is an indicator in highlighting broad personal injury trends and is calculated based on the number of recordable injuries per million hours worked. This data only includes wholly owned and operated assets or assets operated in a joint venture operation from 1 July 2012 to 30 June 2014.

#### Link to strategy

Our overriding commitment is to ensuring the safety and health of our people and this is supported by *Our Charter* value of Sustainability.

## FY2014 performance

Our TRIF has improved by 21 per cent over the last five years. During FY2014, we improved our TRIF by nine per cent and had no fatalities at our operated assets.

For information on our approach to health and safety and our performance, refer to section 1.14 of this Annual Report.

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### **GHG** emissions

### **Definition**

Greenhouse gas (GHG) emissions are measured according to the World Resources Institute/World Business Council for Sustainable Development Greenhouse Gas Protocol. This data only includes wholly owned and operated assets or assets operated in a joint venture operation from 1 July 2012 to 30 June 2014.

### Link to strategy

The global challenge of climate change remains a priority for our organisation and is core to our strategic decision-making. Our GHG emissions are monitored and our performance is tracked against our target.

## FY2014 performance

The Group s GHG emissions declined by 1.7 Mt CQe to 45.0 Mt  $CO_2-e$ , which keeps our emissions in line to achieve our target.

For additional information on our GHG emissions, including a description of Scope 1 and Scope 2 GHG emissions, refer to section 1.14.4 of this Annual Report.

### **Community investment**

### **Definition**

Our voluntary community investment comprising cash, in-kind support, administrative costs and contributions to the BHP Billiton Foundation and BHP Billiton Sustainable Communities (our corporate charities). Includes BHP Billiton s equity share for both operated and non-operated joint venture operations.

## Link to strategy

We believe that in addition to operating a responsible and ethical company, we can make a broader contribution to the communities in which we operate and support *Our Charter* value of Sustainability.

## FY2014 performance

Our voluntary community investment totalled US\$241.7 million, comprising US\$141.7 million in cash, in-kind support and administrative costs, and a US\$100 million contribution to the BHP Billiton Foundation.

For additional information on our community investment, refer to section 1.14 of this Annual Report.

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## 1.10.2 Financial KPIs

# Attributable profit

### **Definition**

Attributable profit represents Profit after taxation attributable to members of BHP Billiton Group.

## Link to strategy

This is a key financial measure that provides insight on the amount of profit available to distribute to shareholders, which aligns to our purpose as presented in *Our Charter*.

### FY2014 performance

Attributable profit increased by 23 per cent to US\$13.8 billion, benefiting from a reduction in the Group s effective tax rate to 31.5 per cent.

For our Consolidated Financial Statements, refer to section 7 of this Annual Report.

(1) Restated in the Financial Statements to be disclosed on the same basis as FY2014. **Underlying EBIT** 

### **Definition**

Underlying EBIT is earnings before net finance costs, taxation and any exceptional items.

### Link to strategy

This is a key financial measure used across the Group. It gives insight to cost management, production growth and performance efficiency.

### FY2014 performance

Underlying EBIT was unchanged for the year at US\$22.9 billion as benefits attributable to productivity initiatives during the period and further volume increases from the successful commissioning and ramp-up of our low-risk, brownfield development projects were offset by the decrease in commodity prices, impact of inflation on costs and an increase in our depreciation and amortisation expense.

For a reconciliation of Underlying EBIT to Profit from operations, refer to section 1.11 of this Annual Report. For our Consolidated Financial Statements, refer to section 7 of this Annual Report.

(1) Restated in the Financial Statements to be disclosed on the same basis as FY2014.

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## Net operating cash flow

### **Definition**

Net operating cash flow represents the cash generated by the Group s consolidated operations, after dividends received, interest, taxation and royalty-related taxation. This figure excludes cash flows relating to investing and financing activities.

### Link to strategy

Net operating cash flow provides insight into how we are managing costs and increasing efficiency and productivity across the Company.

### FY2014 performance

Net operating cash flows after interest and tax increased by 26 per cent to US\$25.4 billion. A US\$2.6 billion increase in cash generated from operations (after changes in working capital balances) and a US\$2.1 billion decrease in net taxes paid were the major contributors to the strong increase.

For our Consolidated Financial Statements, refer to section 7 of this Annual Report.

(1) Restated in the Financial Statements to be disclosed on the same basis as FY2014.

### 1.10.3 Capital Management KPIs

Total Shareholder Return (TSR)

### **Definition**

TSR shows the total return to the shareholder during the year. It combines both movements in share prices and dividends paid (which are assumed to be reinvested).

## Link to strategy

TSR measures performance of the organisation in terms of shareholder wealth generation, which aligns to our purpose as presented in *Our Charter*, and enables the comparison of our performance with that of our peer companies.

## FY2014 performance

TSR grew 13 per cent as a result of increases in both the BHP Billiton share price and the dividends paid. BHP Billiton outperformed its peer companies by 17.8 per cent from 1 July 2009 to 30 June 2014.

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### Long-term credit rating

#### **Definition**

Credit ratings are forward-looking opinions about credit risk. Standard & Poor s and Moody s credit ratings express the opinion of each agency about the ability and willingness of BHP Billiton to meet its financial obligations in full and on time.

### Link to strategy

One of BHP Billiton s priorities for capital management is to maintain a solid A credit rating, which indicates the strength of our balance sheet.

### FY2014 performance

BHP Billiton has maintained a long-term credit rating of A+ from Standard & Poor s and A1 from Moody s over the last five years.

For additional information on our liquidity and capital resources, refer to section 1.15.5 of this Annual Report.

### 1.11 Summary of consolidated performance

#### 1.11.1 Selected financial information

Our selected financial information reflects the operations of the BHP Billiton Group, and should be read in conjunction with the FY2014 Financial Statements, together with the accompanying notes.

We prepare our consolidated 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 in this Annual Report. We publish our consolidated Financial Statements in US dollars.

Comparative financial information for FY2013 and FY2012 has been restated for the effects of new accounting standards and interpretations which are effective in the financial year commencing from 1 July 2013 relating to:

IFRS 10/AASB 10 Consolidated Financial Statements which is a replacement of IAS 27/AASB 127 Consolidated and Separate Financial Statements ;

IFRS 11/AASB 11 Joint Arrangements which is a replacement of IAS 31/AASB 131 Joint Ventures ;

IAS 28 Investments in Associates and Joint Ventures which is a replacement of IAS 28 Accounting for Investments in Associates;

IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine;

IFRS 13/AASB 13 Fair Value Measurement; and

Amendments to IAS 19/AASB 119 Employee Benefits .

The Group has also changed its Exploration and Evaluation Expenditure policy from 1 July 2013 such that all acquisitions of exploration leases are classified as intangible exploration assets or tangible exploration assets based on the nature of the assets acquired. For further detail of the nature and the impact of these changes, on comparative financial information, refer to note 37 Impact of new accounting standards and change in accounting policies to the Financial Statements.

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We use several financial measures to monitor the financial performance of our overall strategy. The two key measures are Profit after taxation attributable to members of the BHP Billiton Group (Attributable profit) and Underlying EBIT.

### Year ended 30 June

US\$M	2014	2013	2012	2011 (5)	2010 (5)
Consolidated Income Statement					
Revenue	67,206	65,953	70,477	71,739	52,798
Profit from operations	23,412	21,002	24,600	31,816	20,031
Profit attributable to members of BHP Billiton Group	13,832	11,223	15,473	23,648	12,722
Dividends per ordinary share paid during the period					
(US cents)	118.0	114.0	110.0	91.0	83.0
Dividends per ordinary share determined in respect of the					
period (US cents)	121.0	116.0	112.0	101.0	87.0
Earnings per ordinary share (basic) (US cents) (1)	260.0	210.9	290.7	429.1	228.6
Earnings per ordinary share (diluted) (US cents) (1)	259.1	210.2	289.4	426.9	227.8
Number of ordinary shares (millions)					
At period end	5,348	5,348	5,348	5,350	5,589
Weighted average	5,321	5,322	5,323	5,511	5,565
Diluted	5,338	5,340	5,346	5,540	5,595
Consolidated Balance Sheet					
Total assets	151,413	139,178	129,201	102,920	88,852
Share capital (including share premium)	2,773	2,773	2,773	2,771	2,861
Total equity attributable to members of BHP Billiton					
Group	79,143	70,667	65,526	56,762	48,525
Other financial information					
Underlying EBITDA (2)	32,359	30,308	34,617	37,093	24,513
Underlying EBIT (2)	22,861	22,930	28,086	31,980	19,719
Underlying attributable profit (2)	13,447	12,208	17,173	21,684	12,469
Underlying basic earnings per share (US cents)	252.7	229.4	322.6	393.5	224.1
Capital and exploration expenditure (BHP Billiton share)	15,181	22,291	19,793	12,387	10,656
Net operating cash flow <sup>(4)</sup>	25,364	20,154	25,259	30,080	16,890

<sup>(1)</sup> For more information on earnings per share refer to note 8 Earnings per share to the Financial Statements.

Underlying attributable profit, Underlying EBIT and Underlying EBITDA are used to reflect the underlying performance of BHP Billiton. Underlying attributable profit is Attributable profit excluding any exceptional items. Underlying EBIT is earnings before net finance costs, taxation and any exceptional items. Underlying EBITDA is Underlying EBIT before depreciation, impairments and amortisation. We believe that Underlying attributable profit, Underlying EBIT and Underlying EBITDA provide useful information, but should not be considered as an indication of, or as an alternative to, Attributable profit as an indicator of actual operating performance or as an alternative to cash flow as a measure of liquidity. Underlying EBIT and Underlying EBITDA are included in the FY2014 Consolidated Financial Statements as required by IFRS 8 Operating

Segments .

- (3) Represents the share of capital and exploration expenditure attributable to BHP Billiton shareholders on a cash basis. Includes BHP Billiton proportionate share of equity accounted investments; excludes capitalised deferred stripping and non-controlling interests. FY2011 and FY2010 data has not been restated and represents the capital and exploration expenditure of the Group on a cash basis, as published.
- (4) Net operating cash flows are after net interest and taxation. On 1 July 2010, the Group adopted the policy of classifying exploration cash flows which are not recognised as assets as Net operating cash flows.

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Previously such cash flows were classified as Net investing cash flows. The change in policy arose from amendments to IAS7/AASB7 Cash Flows . Comparative figures have been restated.

(5) FY2011 and FY2010 data has not been restated for the effects of new accounting standards and interpretations and other voluntary changes in accounting policy, which are effective in the financial year commencing from 1 July 2013.

### **Non-IFRS** measures

We use a number of non-IFRS measures to assess our performance. Non-IFRS measures include the following:

Underlying attributable profit comprises Profit after taxation attributable to members of BHP Billiton Group less exceptional items as described in note 3 Exceptional items to the Financial Statements.

Underlying basic earnings per share represents basic earnings per share excluding any exceptional items.

Underlying EBITDA interest coverage for the purpose of deriving interest coverage, net interest comprises Interest on bank loans and overdrafts, Interest on all other borrowings, Finance lease and hire purchase interest less Interest income.

Adjusted effective tax rate comprises Total taxation expense excluding remeasurement of deferred tax assets associated with the Minerals Resource Rent Tax (MRRT), exceptional items and exchange rate movements included in taxation expense divided by Profit before taxation and exceptional items.

Underlying EBIT margin comprises Underlying EBIT excluding third party product profit from operations, divided by revenue excluding third party product revenue.

Underlying EBITDA margin comprises Underlying EBITDA excluding third party product EBITDA, divided by revenue excluding third party product revenue.

Underlying return on capital represents net profit after tax, excluding exceptional items and net finance costs (after tax), divided by average capital employed. Capital employed is net assets before net debt.

Free cash flow comprises Net operating cash flows less Net investing cash flows.

Net debt comprises Interest bearing liabilities less Cash and cash equivalents.

Net operating assets represents operating assets net of operating liabilities including the carrying value of equity accounted investments and predominantly excludes cash balances, interest bearing liabilities and deferred tax balances. The carrying value of investments accounted for using the equity accounted method represents the balance of the Group s investment in equity accounted investments, with no adjustment for any cash balances, interest bearing liabilities and deferred tax balances of the associate.

In addition we analyse our change in revenue and costs using non-IFRS measures as noted in sections 1.15.3 and 2.5.

### Financial results for year ended 30 June 2014 compared with year ended 30 June 2013

Revenue in FY2014 was US\$67.2 billion, an increase of US\$1.2 billion, or 1.9 per cent, from US\$66.0 billion in the corresponding period. The revenue increase was primarily reflected in the Iron Ore and Petroleum and Potash Businesses, with increases of US\$2.8 billion and US\$1.6 billion, respectively. These increases were offset by decreases in our Copper Business of US\$669 million, in our Coal Business of US\$780 million, in our Aluminium, Manganese and Nickel Business of US\$867 million and by the loss of revenue of our disposed former Diamonds and Specialty Products Business of US\$325 million.

The increase in revenue in Iron Ore was primarily due to an increase in sales volumes of 17 per cent to 202 Mt, which contributed to an increase in revenue of US\$3.2 billion, partially offset by a six per cent decline in average

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realised price of iron ore to US\$103 per wet metric tonne (FOB), which reduced revenue by US\$522 million. The increase in revenue in Petroleum was primarily due to an increase in volume of four per cent in FY2014 to 246 MMboe, which contributed to an increase in revenue of US\$1.4 billion, and to higher realised prices, which contributed to an additional increase of US\$219 million. The decrease in other businesses mainly reflected lower realised prices in our Copper Business (US\$1.2 billion), Coal Business (US\$1.4 billion) and Aluminium, Manganese and Nickel Business (US\$394 million).

Overall, the US\$1.2 billion increase in revenue in FY2014 can be attributed to US\$5.5 billion related to increased volumes, which are within our control, offset primarily by US\$3.3 billion related to prices, which are uncontrollable, US\$494 million for ceased and sold operations, and US\$202 million for exchange rates.

Total expenses decreased from US\$50.0 billion in FY2013 to US\$46.5 billion in FY2014. Excluding exceptional items, the majority of which related to impairments in FY2013, total expenses have increased by US\$1.6 billion or 3.5 per cent during FY2014 from US\$45.0 billion to US\$46.5 billion.

Year ended 30 June	2014 US\$M	2013 US\$M	2012 US\$M
Raw materials and consumables used	8,842	8,926	8,128
Employee benefits expense	6,903	7,168	6,035
External services (including transportation) (1)	11,736	12,478	14,293
Third party commodity purchases	2,935	2,759	3,402
Net foreign exchange losses/(gains)	100	(284)	(571)
Fair value change on derivatives	(120)	79	(141)
Government royalties paid and payable	2,760	2,562	2,880
Depreciation and amortisation expense	8,701	7,031	6,431
Exploration and evaluation expenditure	716	1,047	1,644
Impairment of assets (2)	<b>797</b>	5,496	3,763
Operating lease rentals	759	776	658
Other operating expenses (3)	2,384	2,002	2,122
Total expenses	46,513	50,040	48,644
Less exceptional items		(5,087)	(3,786)
Total expenses excluding exceptional items	46,513	44,953	44,858

<sup>(1)</sup> Includes exceptional items of US\$ nil (2013: US\$96 million; 2012: US\$ nil).

<sup>(2)</sup> Includes exceptional items of US\$ nil (2013: US\$5,149 million; 2012: US\$3,663 million).

<sup>(3)</sup> Includes exceptional items of US\$ nil (2013: credit of US\$158 million; 2012: US\$ nil).

The majority of the increase relates to non-cash expenses for depreciation and amortisation (US\$1.7 billion), impairments not classified as exceptional items (US\$450 million) and changes to provisions for mine site rehabilitation (US\$300 million). Increases in other non-cash charges also included provisions for restructuring and a lower capitalisation rate for deferred stripping at Escondida and Pampa Norte. Increases in costs attributable to inflation were US\$805 million.

Higher expenses associated with increased production across our four major Businesses of US\$2.6 billion were more than offset by reduced operating costs. Our focus on reducing operating costs through productivity initiatives saw cost efficiencies in our Businesses, in particular our Coal Business.

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Reductions in expenses (excluding exceptional items) were evident in Employee benefit expense (US\$265 million), External services (US\$646 million), Exploration and evaluation expenditure (US\$331 million) and Raw materials and consumables (US\$84 million). In total operating costs were aided by favourable exchange rate impacts of US\$2.0 billion.

Other income decreased from US\$3.9 billion in FY2013 to US\$1.5 billion. Excluding exceptional items, the majority of which relates to gains on the sale of assets, other income increased from US\$788 million to US\$973 million.

Profit from operations increased by US\$2.4 billion, or 11 per cent, from US\$21.0 billion to US\$23.4 billion. Exceptional items during FY2014 comprised a gain on sale of our Pinto Valley mining operation of US\$551 million (before taxation), compared with net exceptional charges of US\$1.9 billion (before taxation) in FY2013. In that context, in FY2014 Profit from operations excluding exceptional items, which we refer to as Underlying EBIT, declined by 0.3 per cent, or US\$69 million, to US\$22.9 billion.

### **Underlying EBIT**

In discussing the operating results of the Group, we focus on a financial measure we refer to as Underlying EBIT. Underlying EBIT is the key measure that management uses internally to assess the performance of our Businesses, make decisions on the allocation of resources and assess operational management. Management uses this measure because financing structures and tax regimes differ across our assets and substantial components of our tax and interest charges are levied at a Group level rather than an operational level.

We exclude exceptional items from Underlying EBIT in order to enhance the comparability of the measure from period to period and provide clarity into the underlying performance of our operations. Our management monitors exceptional items separately.

The following table reconciles Underlying EBIT to Profit from operations.

Year ended 30 June	2014 US\$M	2013 US\$M	2012 US\$M
Underlying EBIT	22,861	22,930	28,086
Exceptional items (before taxation) refer section 1.15.3	551	(1,928)	(3,486)
Profit from operations (EBIT)	23,412	21,002	24,600

Attributable profit increased by 23 per cent to US\$13.8 billion due to a decrease of the Group s effective tax rate from 35.0 per cent to 31.5 per cent. Underlying attributable profit (comprising Profit after taxation attributable to members of BHP Billiton Group less exceptional items) of US\$13.4 billion increased due to a decrease in the Group s adjusted effective tax rate from 34.2 per cent to 32.5 per cent.

Net operating cash flows after interest and tax increased by 26 per cent to US\$25.4 billion in FY2014. A US\$2.6 billion increase in cash generated from operations (after changes in working capital balances) and a US\$2.1 billion decrease in net taxes paid were the major contributors to the strong increase. We delivered a substantial US\$8.1 billion increase in free cash flow, being Net operating cash flows less Net investing cash flows, despite weaker commodity prices. In this context, capital and exploration expenditure (BHP Billiton share) declined by 32 per cent to US\$15.2 billion in the period.

We finished the period with net debt of US\$25.8 billion (2013: US\$27.5 billion), which included finance leases of US\$1.3 billion (2013: US\$137 million), for a gearing ratio of 23 per cent (2013: 27 per cent).

Further analysis of Underlying EBIT for the Businesses is included in section 1.12 and for the Group in section 1.15.3 of this Annual Report.

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## 1.11.2 Production performance

A summary of our production volumes for FY2014 and the previous two financial years is shown below. Further details appear in section 2.2 of this Annual Report.

Year ended 30 June	2014	2013	2012
Total Petroleum production (MMboe)	246	236	222
Copper (kt)	1,727	1,689	1,468
Iron ore (kt)	203,564	169,856	159,478
Metallurgical coal (kt)	45,078	37,650	33,230
Energy coal (kt)	73,492	72,445	74,267
Alumina (kt)	5,178	4,880	4,152
Aluminium (kt)	1,174	1,179	1,153
Manganese ores (kt)	8,302	8,517	7,931
Manganese alloys (kt)	646	608	602
Nickel (kt)	143	154	158

### 1.11.3 Projects and pipeline

Our project pipeline focuses on commodities that are expected to be high-margin and create significant future value. During FY2014, eight projects were completed for a total capital expenditure (subject to finalisation) of US\$10.3 billion. At the end of FY2014, we had seven major projects under development in execution and one other project in pre-development phase with a combined budget of US\$14.1 billion. This budget does not include an additional US\$4.0 billion of capital expenditure that we expect to spend in FY2015 on development of our Onshore US Asset.

For more information on our major projects and pipeline refer to sections 1.12, 2.1 and 2.4 of this Annual Report.

#### 1.12 Our Businesses

The description of our Businesses and a discussion of their performance is set out below.

For further information on our assets, production, results and reserves refer to section 2 of this Annual Report. For further information on the financial results of our Businesses, refer to note 2 Segment reporting to the Financial Statements.

## 1.12.1 Revenue and Underlying EBIT performance by Business

The following tables provide a summary of Revenue and Underlying EBIT for FY2014 and the two prior corresponding periods of our Businesses and the Group. Our use of Underlying EBIT is explained in section 1.11.1.of this Annual Report.

Year ended 30 June	2014 US\$M	2013 US\$M	2012 US\$M
Revenue (1)			
Petroleum and Potash	14,833	13,224	12,933

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Copper	13,868	14,537	13,553
Iron Ore	21,356	18,593	20,605
Coal	9,115	9,895	12,512
Aluminium, Manganese and Nickel	8,411	9,278	9,911
Group and unallocated items (2)	(377)	426	963
BHP Billiton Group	67,206	65,953	70,477

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Year ended 30 June	2014 US\$M	2013 US\$M	2012 US\$M
Underlying EBIT			
Petroleum and Potash	5,287	5,636	6,033
Copper	5,080	5,639	5,313
Iron Ore	12,102	11,109	14,044
Coal	386	595	2,612
Aluminium, Manganese and Nickel	307	158	(24)
Group and unallocated items <sup>(2)</sup>	(301)	(207)	108
BHP Billiton Group	22,861	22,930	28,086

- (1) Includes the sale of third party products.
- (2) Includes the Group s diamonds business (divested effective 10 April 2013), interest in titanium minerals (divested effective 3 September 2012), non-Potash corporate costs incurred by the former Diamonds and Specialty Products Business, consolidation adjustments, unallocated items and external sales of freight and fuel via the Group s transport and logistics operations.

## Year ended 30 June 2014 compared with year ended 30 June 2013

Underlying EBIT for FY2014 was US\$22.9 billion, basically unchanged from FY2013.

A substantial reduction in commodity prices reduced Underlying EBIT by US\$3.4 billion. This was offset by cost improvements which underpinned a decrease in operating cash costs of US\$1.5 billion and a decrease in exploration and business development costs of US\$398 million. In addition, higher volumes attributed to our development projects coming on line and through productivity efficiencies at existing assets, primarily in Iron Ore and Petroleum, contributed an additional US\$2.9 billion to Underlying EBIT. This was offset by increased depreciation and amortisation which reduced Underlying EBIT by US\$1.7 billion.

The use of the term operating cash costs is described in section 1.15.3 of this Annual Report.

### 1.12.2 Petroleum and Potash Business

Our Petroleum and Potash Business headquartered in Houston, United States, comprises conventional and non-conventional operations located in six countries throughout the world and a potash project based in Saskatchewan, Canada.

Year ended 30 June	2014	2013	2012
	US\$M	US\$M	US\$M
Revenue	14,833	13,224	12,933
Underlying EBIT	5,287	5,636	6,033
Capital expenditure	6,423	7,675	5,488
Net operating assets	39,514	37,525	33,583

## Total petroleum production (MMboe)

246

236

222

Our Petroleum Business includes exploration, development, production and marketing activities. We have a high-quality resource base concentrated in the United States and Australia. Our core production operations are primarily located in the US Gulf of Mexico, Onshore US and in Australia. We also have operations in Trinidad and Tobago, Pakistan, Algeria and the United Kingdom. We produce crude oil and condensate, natural gas and natural gas liquids (NGLs). Our petroleum portfolio consisted of conventional oil and gas operations up until 2011, when we moved into the unconventional shale business. Our Onshore US operations evolved from the acquisition of the Fayetteville shale assets from Chesapeake Energy Corporation and the acquisition of Petrohawk Energy Corporation.

A summary of our Petroleum and Potash Business assets, capital projects and FY2014 performance is presented below.

## **Description of the Petroleum Business**

Our production operations include the following:

### **Gulf of Mexico (United States)**

We operate two fields in the Gulf of Mexico (Shenzi with a 44 per cent interest and Neptune with a 35 per cent interest) and hold non-operating interests in three other fields (Atlantis with a 44 per cent interest, Mad Dog with a 23.9 per cent interest, and Genesis with a 4.95 per cent interest). We have on-going infill drilling in our Gulf of Mexico fields. We completed water injection development projects at Shenzi and Atlantis in CY2013. All the fields are located between 155 and 210 kilometres offshore of the US state of Louisiana. 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. Production in FY2014 was 36.1 million barrels of oil equivalent (MMboe) up from 30.6 MMboe in FY2013.

### **Onshore US (United States)**

We produce oil, condensate, NGLs and natural gas in four shale areas: Eagle Ford, Permian, Haynesville and Fayetteville. The Eagle Ford area has two sections, Black Hawk and Hawkville. Much of the Eagle Ford and Permian areas are focused on hydrocarbon liquids. The Haynesville and Fayetteville areas are focused on natural gas. Our combined leasehold acreage onshore in the United States is approximately 1.2 million net acres. Our ownership interests in those leases range from less than one per cent to 100 per cent. At 30 June 2014, we held an interest in approximately 7,700 gross wells and approximately 2,600 net wells. We acted as joint venture operator for approximately 32 per cent of our gross wells. Production in FY2014 was 108.1 MMboe, up from 99.2 MMboe in FY2013.

Oil and gas production from our onshore shale areas is sold domestically in the United States, via connections to intrastate and interstate pipelines. Prices for oil, NGLs and natural gas are based on US regional price indices, including West Texas Intermediate prices for oil, Henry Hub prices for natural gas and Mont Belvieu prices for NGLs.

During FY2014, we sold our interest in our Onshore US South Midland shale operation, located in the Permian Basin, to EP Energy for a cash consideration of US\$153 million.

### Map of Onshore US and Gulf of Mexico

### Map of North West Shelf and Bass Strait

### **Bass Strait (Australia)**

Together with our 50-50 joint venture partner, Esso Australia (a subsidiary of ExxonMobil), through the Gippsland Basin Joint Venture, we participated in the original discovery of hydrocarbons in 1965 and we have been producing oil and gas from Bass Strait for more than 40 years. The Bass Strait operations are located between 25 and 80 kilometres off the southeastern coast of Australia.

We sell the majority of our Bass Strait crude oil and condensate production to refineries along the east coast of Australia under 12-month term contracts. The contract price is based on the average Dated Brent price. Gas is piped onshore to the joint venture s Longford processing facility, from which we sell our share of production to domestic distributors under contracts with periodic price reviews.

Production in FY2014 was 34.0 MMboe, down from 36.0 MMboe in FY2013.

#### **North West Shelf (Australia)**

We are a joint venture participant in the North West Shelf Project, located approximately 125 kilometres northwest of Dampier in Western Australia. The North West Shelf Project was developed in phases: the domestic gas phase supplies gas to the Western Australia domestic market, mainly under long-term contracts, and a series of liquefied natural gas (LNG) expansion phases supplying LNG to buyers in Japan, South Korea and China under a series of long-term contracts. Gas from North West Shelf is piped to the Karratha Gas Plant for processing. We are also a joint venture partner in four nearby oil fields. All North West Shelf gas and oil joint ventures are operated by Woodside. Production in FY2014 was 28.8 MMboe, down from 30.1 MMboe in FY2013.

## Pyrenees (Australia)

We operate six oil fields in Pyrenees, which are located offshore approximately 23 kilometres northwest of Northwest Cape, Western Australia. We had an effective 62 per cent interest in the fields as at 30 June 2014, based on inception to-date production from two permits in which we have interests of 71.43 per cent and 40 per cent, respectively. The project uses a floating, production, storage and off-take (FPSO) facility. The crude oil produced is sold internationally on the spot market. Production in FY2014 was 7.5 MMboe down from 8.5 MMboe in FY2013.

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### Macedon (Australia)

We are the operator of Macedon (71.43 per cent interest), an offshore gas field located approximately 75 kilometres west of Onslow, Western Australia, and a gas processing facility onshore approximately 17 kilometres southwest of Onslow. The operation achieved first gas in August 2013 and consists of four subsea wells, with gas piped onshore to the processing plant. After processing, the gas is delivered into a pipeline and sold domestically under long-term contracts. First year production was 5.5 MMboe.

### **Greater Angostura (Trinidad and Tobago)**

We operate the Greater Angostura field (45 per cent interest in the production sharing contract), an integrated oil and gas development, located offshore, 40 kilometres east of Trinidad. The crude oil is sold on a spot basis to international markets, while the gas is sold domestically under term contracts. Production in FY2014 was 7.5 MMboe, up from 7.4 MMboe in FY2013.

### Other

We are the operator at the following operations: Minerva (90 per cent interest), a gas field located 11 kilometres south-southwest of Port Campbell in western Victoria, the Zamzama gas project (38.5 per cent interest) in the Sindh province of Pakistan and the Keith oil and gas field (31.83 per cent interest) in the North Sea. We have non-operating interests in ROD Integrated Development (38 per cent interest), which consists of six satellite oil fields in Algeria, and in the Bruce oil and gas field (16 per cent interest) in the North Sea. Production in FY2014 was 17.3 MMboe, down from 22.3 MMboe in FY2013.

More information on our assets and operations is presented in section 2.1.1 of this Annual Report.

### **Completed development projects**

#### Macedon

Macedon is a domestic gas development that consists of a 200 million cubic feet per day (MMcf/d) standalone gas plant, four subsea production wells, a 90 kilometre 20-inch wet gas pipeline and a 67-kilometre 20-inch sales gas pipeline. The project was approved in August 2010. First gas occurred in August 2013.

### North West Shelf North Rankin gas compression

The North West Shelf gas compression project was approved by the Board in March 2008 to recover remaining lower pressure gas from the North Rankin and Perseus gas fields. The project consisted of a new gas compression platform, North Rankin B, capable of processing 2,500 MMcf/d of gas, which was constructed adjacent to the existing North Rankin A platform, 135 kilometres offshore from Karratha on the northwest coast of Western Australia. The two platforms are connected by a 100-metre long bridge and operate as a single facility. First gas production occurred in October 2013. This project is operated by Woodside, with an equally shared interest between Woodside, BHP Billiton, BP, Chevron, MIMI and Shell.

### Development projects in execution at year-end

### North West Shelf Greater Western Flank A

The North West Shelf Greater Western Flank A (GWF-A) gas project was approved by the Board in November 2011 to recover gas from the near field Goodwyn H and Tidepole fields. The project consists of a five well subsea tie-back of the Goodwyn H and Tidepole fields to the Goodwyn A platform. The Goodwyn A platform is located in 130 metres of water, approximately 130 kilometres offshore from Karratha on the northwest coast of Australia. First gas production is expected in CY2016. Woodside is the operator and we own a 16.67 per cent interest.

### **Bass Strait Longford Gas Conditioning**

The Longford Gas Conditioning Plant (LGCP) Project was approved by the Board in December 2012 to enable the production of Turrum reserves plus the production of Kipper and other undeveloped high carbon dioxide content hydrocarbons. The project scope includes a carbon dioxide extraction facility, brownfield tie-ins, an electrical upgrade and multiple supporting utilities. First gas production is expected in CY2016.

### **Onshore US Development**

Drilling and development investment for Onshore US in FY2014 was US\$4.2 billion, down from US\$4.7 billion in FY2013, with US\$3.6 billion (FY2013: US\$3.8 billion) spent in the liquids-focused areas of Eagle Ford and Permian, and US\$0.6 billion (FY2013: US\$0.9 billion) in the gas-focused areas of Haynesville and Fayetteville. The expenditure primarily related to drilling and completion activities at all four areas. Our onshore drilling activity in FY2014 resulted in 413 net development wells completed primarily in the Eagle Ford and Permian areas.

Of the US\$4.2 billion, approximately US\$400 million was invested in the installation of more than 200 kilometres of pipeline infrastructure and additional gas processing facilities, primarily in our Eagle Ford and Permian areas. The majority of drilling and completion activity in Onshore US was directed towards the liquids-focused Eagle Ford and Permian areas to capitalise on the stronger liquid prices as compared with natural gas prices. At the end of FY2014, more than 85 per cent of drilling activity was conducted in these areas.

More information on our development and capital projects is presented in section 2.4 of this Annual Report.

### **Exploration and evaluation**

Our exploration strategy is to focus on material opportunities, at high working interest, with a bias for liquids and operatorship. While the majority of our expenditure occurs in our two principal offshore areas of activity, the Gulf of Mexico and Western Australia, we also have exploration activities in Trinidad and Tobago, Brazil, South Africa, South East Asia and Onshore US.

We then perform development evaluation activities to determine the technical feasibility and commercial viability of prospective projects after exploration and appraisal.

More information on our development evaluation activities and exploration is presented in section 2.1.1 of this Annual Report.

### **Description of the Potash Business**

### **Jansen Potash Project**

Our Potash strategy is to build a material industry position over the long term.

We hold exploration permits and mining leases, issued by the Government of Saskatchewan, covering more than 14,000 square kilometres of mineral rights in the province of Saskatchewan in Canada. We have progressively explored our permit areas over the past seven years and continue to evaluate their economic development potential. We are converting our exploration permits to long-term leases as these permits mature in order to enable further evaluation. To date, we have secured 4,400 square kilometres under long-term mining leases.

We believe our Jansen Potash Project, a greenfield potash project in south-central Saskatchewan, is the world s best undeveloped potash resource and is likely to be a low-cost source of supply once fully developed. Investment in Jansen could underpin a potential fifth pillar of BHP Billiton, given the opportunity to develop a multi-decade, multi-mine basin in Saskatchewan.

On 20 August 2013, we announced an additional US\$2.6 billion investment for Jansen, bringing total approved spending to US\$3.8 billion. This investment is funding the excavation and lining of the Project s production and service shafts, and the installation of surface infrastructure and utilities. The level of expenditure on the Jansen Potash Project in FY2014 was US\$596 million.

With our investment premised on the attractive longer-term market fundamentals for potash, we will continue to modulate the pace of development as we seek to time our entrance to meet market demand. The introduction of one or more minority partners, consistent with our approach for certain of our other resource operations, will be considered at the appropriate time.

On the basis of our current projections and assuming Board approval, the Jansen mine is likely to ramp-up to its nameplate capacity of approximately 10 Mtpa of agricultural grade potassium chloride in the decade beyond 2020.

### **Performance**

Petroleum and Potash revenue increased by US\$1.6 billion to US\$14.8 billion, mainly due to Onshore US, which increased by 43 per cent to US\$4.3 billion, and Atlantis, which increased by 80 per cent to US\$1.5 billion.

The increase in revenue primarily resulted from an increase in volume of four per cent in FY2014 to 246 MMboe. A 16 MMboe increase in liquids production was underpinned by a 73 per cent increase in Onshore US liquids volumes and a near doubling of production at Atlantis. Natural gas volumes declined by four per cent as the delivery of first gas from Macedon partially offset lower demand at Bass Strait and natural field decline at Haynesville.

The average realised price of natural gas across our portfolio increased by 16 per cent to US\$4.35 per thousand standard cubic feet (Mscf). This included a 25 per cent increase in the average realised price of US natural gas to US\$4.10 per Mscf. This increase was partially offset by a four per cent decline in the average realised price of oil to US\$102 per bbl, a one per cent decline in the average realised price of LNG to US\$14.67 per Mscf and a seven per cent decline in the average realised price of natural gas liquids (NGL) to US\$42.28 per barrel.

Underlying EBIT for Petroleum decreased by US\$115 million to US\$5.9 billion in FY2014. Price-related increases, net of price-linked costs, contributed US\$113 million to Underlying EBIT and volumes contributed an additional US\$994 million, although this was partially offset by an increase in depreciation and amortisation expense at Onshore US that reflected the ramp-up of liquids production and the progressive development of our Permian acreage. In this regard, our position within our focus area in the Permian increased by 25 per cent in the period to 74 thousand net acres.

Additional charges were also recognised during the period, including: a US\$184 million impairment of minor Gulf of Mexico assets; a US\$143 million adjustment to the Browse divestment proceeds; and a US\$112 million UK pension plan expense. The Group also incurred a charge of US\$135 million for underutilised gas pipeline capacity, primarily in the Haynesville.

The Onshore US Underlying EBIT for FY2014 was a loss of US\$156 million compared with a loss in FY2013 of US\$287 million. The Onshore US Underlying EBITDA for FY2014 was US\$2.3 billion compared with US\$1.5 billion in FY2013. Second half June 2014 EBITDA increased by more than 60 per cent to US\$1.4 billion. As a result, Onshore US generated an Underlying EBIT of US\$142 million during the second half of FY2014. This included the aforementioned underutilised gas pipeline capacity charges.

In FY2014, approximately 75 per cent of Onshore US drilling and development expenditure of US\$4.2 billion was invested in the Eagle Ford, with the majority focused on our Black Hawk acreage. The repetitive, manufacturing-like nature of shale development is ideally suited to our productivity agenda. Drilling costs in the Black Hawk declined by 16 per cent to US\$4.2 million per well during the period while spud to sales timing improved by 21 per cent.

Of the 24 operated drilling rigs in action at the end of the period (30 June 2013: 40), 17 were in the Eagle Ford (30 June 2013: 31), four were in the Permian (30 June 2013: four), three were in the Haynesville (30 June 2013: four), while no rigs were in the Fayetteville (30 June 2013: one).

A total of 138 net wells were put online in our prolific Black Hawk acreage during FY2014 (FY2013: 66 net wells) with an average 30-day initial production rate of 1,140 boe per day. An average one-year cumulative production rate per well of 208 thousand barrels of oil equivalent (Mboe) for the wells put online in FY2013 reflected advances in completions optimisation and the benefit of restricting initial flow rates. At the end of the period we had 284 net producing wells in the Black Hawk with an average rate of 82.4 Mboe per day achieved in the June 2014 quarter (43.0 Mboe per day in the June 2013 quarter).

### **Onshore US overview**

		Liquids- focused areas (Eagle Ford and Permian)		Gas focused (Hayne and Fayette	areas sville d	Tota	ıl
Year ended 30 June		2014	2013	2014	2013	2014	2013
Capital expenditure	US\$ billion	3.6	3.8	0.6	0.9	4.2	4.7
Production	MMboe	51.9	33.4	56.2	65.8	108.1	99.2
Production mix	Natural gas	36%	42%	100%	100%	69%	80%
	Natural gas liquids	22%	23%			11%	8%
	Crude and condensate	42%	35%			20%	12%

Petroleum exploration expenditure for FY2014 was US\$600 million, of which US\$369 million was expensed. During the period, we signed a production sharing contract for Block 23b (60 per cent interest and operator) and farmed into Blocks 23a and 14 (70 per cent interest and operator) in Trinidad and Tobago.

During the period, we completed the divestment of our 46.1 per cent interest in Liverpool Bay and our South Midland acreage in the Permian basin, Onshore US. Combined proceeds of US\$182 million were realised (before customary adjustments) and a gain on sale of US\$116 million was recognised in Underlying EBIT.

Potash recorded an Underlying EBIT loss of US\$583 million. This included: a US\$68 million impairment associated with our decision to allow the exclusivity agreement for Terminal 5 at the Port of Vancouver (US) to lapse; and a US\$300 million charge related to the revision of mine site rehabilitation provisions for the Group s North American closed mines, which are managed by our Potash Business. In addition, exploration expense for Potash was US\$47 million, a US\$42 million reduction from FY2013.

The Jansen Potash Project was 30 per cent complete at the end of the period with significant progress made on surface infrastructure and shaft excavation continuing.

### **Outlook**

After adjusting for the sale of Liverpool Bay, Petroleum production is forecast to increase by five per cent in FY2015 to 255 MMboe with another 16 MMboe increase in total liquids production projected. Conventional volumes for FY2015 are forecast to remain broadly unchanged.

Petroleum capital expenditure of approximately US\$5.6 billion is planned in FY2015. In our Onshore US Asset we will continue to prioritise investment in the liquids-focused Eagle Ford and Permian with up to 120 net wells expected to be put online in the Black Hawk. In our conventional business, we will remain focused on high-return infill drilling opportunities in the Gulf of Mexico and life extension projects at Bass Strait and North West Shelf.

A US\$750 million exploration program, largely focused on the Gulf of Mexico, Western Australia and the collection of seismic data in Trinidad and Tobago is planned for FY2015.

## 1.12.3 Copper Business

Our Copper Business, headquartered in Santiago, Chile, is one of the world s premier producers of copper, silver, lead and uranium, and is a leading producer of zinc. We market five primary products: copper cathodes, copper, lead and zinc concentrates and uranium oxide.

Year ended 30 June	2014	2013	2012
	US\$M	US\$M	US\$M
Revenue	13,868	14,537	13,553
Underlying EBIT	5,080	5,639	5,313
Capital expenditure	3,757	3,930	3,518
Net operating assets	22,231	20,074	16,721
Production copper (kt)	1,727	1,689	1,468

A summary of our Copper Business assets and operations, development projects and FY2014 performance is presented below.

## **Description of the Copper Business**

Our assets consist of the following:

## Escondida (Chile)

Our 57.5 per cent owned and operated Escondida mine is the largest producer of copper in the world. Located in the Atacama Desert in northern Chile, Escondida employs approximately 14,000 operational employees and contractors and has the capacity to move in excess of 1.3 million tonnes (Mt) of material per day. Its two open-cut pits feed two concentrator plants, which use grinding and flotation technologies to produce copper concentrate, as well as two leaching operations (oxide and sulphide). In FY2014, our share of Escondida production was 485.7 kilotonnes (kt) of payable copper in concentrate and 177.1 kt of copper cathode. Escondida has a reserve life of 52 years.

## Pampa Norte (Chile)

Pampa Norte consists of two wholly owned operations in the Atacama Desert in northern Chile Spence and Cerro Colorado. During FY2014, Spence produced 152.8 kt of high-quality copper cathodes, using oxide and sulphide ore treatment through leaching, solvent extraction and electrowinning processes. Although production levels at Cerro Colorado have fallen in recent years as grades have declined, production in FY2014 reached 80.3 kt of copper cathode. Spence and Cerro Colorado have reserve lives of 10 and nine years, respectively.

A project, currently being studied, referred to as the Spence Growth Option (SGO), is being conducted to consider exploiting the hypogene sulphide resource with associated molybdenum sulphide by building a 95 kilotonnes per day (ktpd) concentrator at the Spence operation. SGO would extend the mine life by approximately 50 years following the current FY2025 closure date.

## Antamina (Peru)

We own 33.75 per cent of Antamina, a large, long-life, low-cost copper and zinc mine in north central Peru. Our share of Antamina s FY2014 production was 143.5 kt of copper in concentrate and 52.0 kt of zinc in concentrate. Antamina also produces molybdenum and lead/bismuth concentrate, as well as small amounts of silver in the form of by-products. Antamina has a reserve life of 13 years. In FY2014, Antamina commenced execution of a debottlenecking project, to increase milling capacity by 12 per cent to 145 ktpd.

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## **Cannington (Australia)**

Our wholly owned Cannington mine is one of the world s largest producers of silver and lead. Located in northwest Queensland, Australia, the underground mine feeds a beneficiation processing facility that extracts silver/lead and zinc concentrates from sulphide ore. In FY2014, Cannington produced concentrates containing 186.5 kt of lead, 57.9 kt of zinc and approximately 25.2 million ounces of silver. Cannington has a reserve life of nine years.

## Olympic Dam (Australia)

Our wholly owned Olympic Dam mine in South Australia is a producer of copper cathode and uranium oxide and a refiner of gold and silver bullion. The site includes an underground mine, where the primary method of ore extraction is long-hole open stoping with cemented aggregate fill, and an integrated metallurgical processing plant. In FY2014, Olympic Dam produced 184.4 kt of copper cathode, 4.0 kt of uranium oxide, 121.3 kilo-ounces (koz) of refined gold and 972 koz of refined silver. Olympic Dam has a reserve life of 47 years.

A pre-feasibility study is being conducted into the proposed expansion of Olympic Dam. The objective of the study is to identify the full range of development path alternatives for Olympic Dam by investigating all possible mining methods and less capital-intensive designs, including new technologies.

In July 2014, we lodged an application for assessment by the Australian and South Australian Governments to construct and operate a demonstration plant on the existing mining lease at Olympic Dam. This process would enable heap leaching trials to progress to the next phase as part of our efforts to identify an alternative, less capital-intensive process for extracting metals from ore mined underground. Should Government and Board approvals be granted, construction of the demonstration plant is expected to commence in the second half of CY2015. A trial period of 36 months is envisaged, commencing in late 2016.

### Divested asset Pinto Valley (United States)

In October 2013, we completed the sale of our Pinto Valley mining operation and the associated San Manuel Arizona Railroad Company to Capstone Mining Corp. for US\$653 million, after working capital adjustments.

More information on our assets and operations is presented in section 2.1.2 of this Annual Report.

## Development projects in execution at year-end

### **Escondida**

The Organic Growth Project 1 (OGP1) is the replacement for the Los Colorados concentrator with a new 152 ktpd plant. We expect this project to provide additional processing capacity and allows access to higher-grade ore. OGP1 was approved in February 2012 with budgeted expenditure of US\$3.8 billion (BHP Billiton share US\$2.2 billion). Project completion is targeted for the first half of CY2015. Work on OGP1 was 79 per cent complete at 30 June 2014.

We approved the Escondida Water Supply (EWS) project in July 2013, which consists of a new 2,500 litres per second sea water desalination facility. This project will provide an alternative water supply to Escondida, as water usage increases upon completion of the 152 ktpd OGP1 copper concentrator. Construction of the new desalination facility commenced in July 2013 and includes the development of two pipelines, four high-pressure pump stations, a reservoir at the mine site and high-voltage infrastructure to support the system. The new facility is expected to be commissioned in 2017 at a cost of US\$3.4 billion (BHP Billiton share US\$2.0 billion). Prior to completion of the

EWS project, water supply for OGP1 will continue to be sourced from existing aquifers and the 500 litres per second desalination plant.

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The Oxide Leach Area Project (OLAP), involves the creation of a new dynamic leaching pad and mineral handling system that will include several overland conveyors. The new pad is expected to maintain oxide leaching capacity at current levels following the exhaustion of the existing heap leach in CY2014. OLAP was approved in February 2012 with budgeted expenditure of US\$721 million (BHP Billiton share US\$414 million). A US\$212 million increase in the budget of OLAP to US\$933 million (BHP Billiton share US\$536 million) was approved in March 2014. Work on the project was 93 per cent complete at 30 June 2014, and is expected to be completed in the second half of CY2014.

More information on our development projects is presented in section 2.4 of this Annual Report.

## **Exploration activities**

Our greenfield copper exploration activities during FY2014 were focused on advancing targets within Chile and Peru. Greenfield activities include opportunity identification, application for and acquisition of mineral title, early reconnaissance operations and drilling programs.

### **Performance**

Total copper production in FY2014 increased by two per cent to 1.7 Mt. Escondida copper production increased by two per cent to 1.2 Mt as an improvement in mill throughput and concentrator utilisation offset a nine per cent decline in ore grades. Record mining rates at Olympic Dam underpinned an 11 per cent increase in copper production to 184 kt while Pampa Norte copper production of 233 kt was unchanged from the prior period. Antamina achieved record annual mill throughput and copper production in FY2014.

Copper Business revenue decreased by US\$669 million to US\$13.9 billion. Revenue for Escondida decreased by six per cent to US\$8.1 billion. The decrease in revenue primarily resulted from a five per cent decline in the average realised price of copper to US\$3.22 per pound.

Lower average realised prices reduced Underlying EBIT by US\$947 million, net of price-linked costs. In contrast, a stronger US dollar against the Chilean peso and Australian dollar increased Underlying EBIT by US\$359 million.

Underlying EBIT for FY2014 decreased by US\$559 million to US\$5.1 billion. Unit cash costs, which we calculate excluding revenue from by-products, at our operated copper assets declined by six per cent during FY2014 despite the impact of the nine per cent reduction in ore grades at Escondida. In this context, productivity cost efficiencies increased Underlying EBIT by US\$190 million and reflected insourcing initiatives and the broader optimisation of contractor activities across the business. A reduction in exploration and business development expenditure increased Underlying EBIT by a further US\$217 million as the Group sharpened its focus on greenfield copper porphyry targets in Chile and Peru. In contrast, an increase in non-cash charges reflected a lower capitalisation rate for deferred stripping at Escondida and Pampa Norte, and a general increase in depreciation and amortisation, and reduced Underlying EBIT by US\$337 million during the period.

Underlying EBIT of Olympic Dam for FY2014 increased by US\$38 million to US\$34 million, where costs efficiencies offset the decrease in commodities prices.

At 30 June 2014, the Group had 350 kt of outstanding copper sales that were revalued at a weighted average price of US\$3.19 per pound. The final price of these sales will be determined in FY2015. In addition, 386 kt of copper sales from FY2013 were subject to a finalisation adjustment in FY2014. These provisional pricing and finalisation adjustments increased Underlying EBIT by US\$73 million in FY2014 (FY2013: US\$303 million decrease).

A gain on the sale of the Pinto Valley mining operation and the associated San Manuel Arizona Railroad Company of US\$385 million (after tax) was recognised in FY2014 and was reported as an exceptional item.

### **Outlook**

Total copper production is forecast to increase by five per cent in FY2015 to 1.8 Mt. With further improvements in productivity anticipated, Escondida is on track to produce approximately 1.27 Mt of copper in the period. Copper volumes at Pampa Norte and Olympic Dam are expected to remain at a similar level to FY2014, while lower average copper grades are expected to lead to a reduction in copper production at Antamina in FY2015, consistent with the mine plan.

The commissioning of OGP1, which remains on schedule to commence in the June 2015 quarter, will create 152 ktpd of valuable copper concentrator capacity. The Escondida OLAP and OGP1 are expected to maintain Escondida s copper production.

### 1.12.4 Iron Ore Business

Our Iron Ore Business, headquartered in Perth, Australia, is one of the leading iron ore producers in the world. We sell lump and fines produced in Australia and pellets from our operations in Brazil.

Year ended 30 June	2014	2013	2012
	US\$M	US\$M	US\$M
Revenue	21,356	18,593	20,605
Underlying EBIT	12,102	11,109	14,044
Capital expenditure	2,949	5,979	4,458
Net operating assets	23,390	22,126	17,375
Production iron ore (Mt)	204	170	159

A summary of our Iron Ore Business assets, development projects and FY2014 performance is presented below.

### **Description of the Iron Ore Business**

Our assets consist of the following:

## Western Australia Iron Ore (Australia)

Operations at Western Australia Iron Ore (WAIO) involve an integrated system of mines and more than 1,000 kilometres of rail infrastructure and port facilities in the Pilbara region of northern Western Australia, with the headquarters located in Perth. Our focus is to safely maximise output through operating our mines and utilising available infrastructure at our disposal. This includes our plan to continue to grow production following the recent completion of a number of expansion projects and ongoing debottlenecking of the supply chain to underpin further potential growth in capacity to 290 million tonnes per annum (Mtpa).

We have expanded our WAIO operations in response to increasing demand for iron ore, particularly from China. Since 2001, we have completed eight expansion projects to increase our mine, rail and port capacity. Our share of FY2014 production was 193 Mt of ore, which is expected to increase in FY2015 to 211 Mtpa.

We have been transitioning to owner-operated mines since 2011. We completed this transition with the last contractor run site, Orebody 18, finalising its transition during FY2014.

Lump and fines products are sold to steel mills in China, South Korea, Japan, Singapore, Hong Kong, Taiwan, Switzerland and Australia, under long-term and short-term contracts. Contract prices are generally linked to market indices.

In order to establish a consistent, long-term, high-quality lump ore product having a stable grade, we recently transitioned to a blended lump product. The product is a blend of lump ores produced from the Newman, Area C and Jimblebar mining areas, known as Newman Blend lump. During FY2014, 23 per cent of sales were lump and 77 per cent were fines.

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Our WAIO operations consist of four main joint ventures: Mt Newman, Yandi, Mt Goldsworthy and Jimblebar. Our interest in the joint ventures is 85 per cent with Mitsui and ITOCHU owning the remaining 15 per cent. The joint ventures are unincorporated except Jimblebar, where we diluted our interest in a subsidiary company to 85 per cent in July 2013 for which BHP Billiton received total consideration of US\$1.5 billion.

The Mt Newman Joint Venture consists of a number of orebodies joined by conveyors and spur lines to a mining hub at Mt Whaleback. Ore is crushed, beneficiated (where necessary) and blended to create the Newman Blend for lump and fines. The ore is then transported to port using our rail facilities. The Yandi JV comprises the Yandi mine where ore is crushed and screened and then transported by rail on the Newman main line. The Mt Goldsworthy JV consists of the Area C mine in the central Pilbara and the Yarrie mine in northern Pilbara. Ore is crushed and screened at Area C and transported by rail to the hub at Mt Whaleback. Production at Yarrie was suspended on 25 February 2014. The Jimblebar operation was officially opened on 23 April 2014 and comprises the new Jimblebar mine located 40 kilometres east of Newman. Jimblebar delivered first production in the September 2013 quarter and produced 9 Mt during FY2014.

## Map of Western Australia Iron Ore

Our rail operations are controlled from Perth via our integrated remote operations centre which co-locates rail control, port production control, mine dispatch control and mine fixed plant control.

Our port facilities are located on both sides of the harbour at Port Hedland. These facilities consist of Nelson Point and Finucane Island. The port facilities include five ore car dumpers, three screening plants, nine stackers, five reclaimers, stock and blending yards, and eight ship loaders.

The reserve life of our Western Australian mines is 16 years.

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## Samarco (Brazil)

We are a 50 50 joint venture partner with Vale at the Samarco operation in Brazil. Samarco is currently comprised of a mine and two concentrators, located in the state of Minas Gerais, and three pellet plants and a port, located in Anchieta in the state of Espirito Santo. Three 396-kilometre pipelines connect the mine site to the pelletising facilities.

Samarco s main product is iron ore pellets. Extraction and beneficiation of iron ore is conducted at the Germano facilities in the municipalities of Mariana and Ouro Preto. Ore beneficiation occurs in concentrators after which concentrate is pumped through slurry pipelines to the pellet plant in Ubu, Anchieta. Pellets are independently marketed by Samarco and sold to steelmakers in 20 countries in the Americas, Asia, Africa, the Middle East and Europe, with prices generally linked to market indices. In FY2014, our share of production was 11 Mt of pellets. The reserve life of Samarco is 39 years.

More information on our assets and operations is presented in section 2.1.3 of this Annual Report.

## **Completed development projects**

## Western Australia Iron Ore

WAIO has been executing a number of expansion projects in recent years. These projects, approved in March 2011 for a total of US\$7.4 billion (BHP Billiton share US\$6.6 billion) plus pre-commitment funding of US\$2.3 billion (BHP Billiton share US\$2.1 billion) were designed to deliver an integrated operation with a minimum capacity of 220 Mtpa (100 per cent basis).

These projects included:

Jimblebar Mine Expansion project to develop the Jimblebar mine and rail links, and procure mining equipment and rolling stock to deliver a capacity of 35 Mtpa. The project costs as at 30 June 2014 amounted to US\$3.4 billion (BHP Billiton share); final costs are expected to be delivered below the revised budget of US\$3.6 billion;

further development of Port Hedland, including two additional berths and ship loaders, a car dumper, connecting conveyor routes, and associated rail works and rolling stock. The project costs as at 30 June 2014 amounted to US\$1.7 billion (BHP Billiton share); final costs are expected to be delivered below the revised budget of US\$1.9 billion;

port blending facilities and rail yards to enable ore blending, expand resource life and prepare for the anticipated growth of the business beyond the inner harbour. The project costs as at 30 June 2014 amounted to US\$0.9 billion (BHP Billiton share); final costs are expected to be delivered below the revised budget of US\$1.0 billion.

## Western Australia Iron Ore Orebody 24 mine

In FY2014, WAIO completed execution of its development of the Orebody 24 mine, located approximately 10 kilometres northeast of Newman. Orebody 24 is a sustaining mine to maintain iron ore production output from the Mt Newman JV operations. The project was approved in November 2011 and included the construction of an ore crushing plant, train loadout facility, rail spur and other associated support facilities. The project was delivered at a

cost of US\$0.5 billion (BHP Billiton share), subject to finalisation, in the September 2014 quarter versus a budget of US\$0.7 billion.

## Samarco

During FY2011, Samarco shareholders approved a US\$3.5 billion (BHP Billiton share US\$1.75 billion) expansion project, consisting of a fourth pellet plant, a new concentrator and a third slurry pipeline. The project

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is complete, with its first pellet production in March 2014. This has expanded Samarco s iron ore pellet production capacity from 22.3 Mtpa to 30.5 Mtpa. The final cost of the project was US\$3.2 billion (BHP Billiton share US\$1.6 billion).

More information on our development projects is presented in section 2.4 of this Annual Report.

## **Exploration activities**

### Western Australia

WAIO has a substantial existing reserve base supported by considerable additional mineralisation all within a 250-kilometre radius of our existing infrastructure. This concentration of orebodies also gives WAIO the flexibility to add growth tonnes to existing hub infrastructure and link brownfield developments to our existing mainline rail and port facilities. The total area covered by exploration and mining tenure amounts to 6,500 square kilometres.

Total exploration expenditure in FY2014 amounted to US\$166 million.

## **Guinea Iron Ore**

On 29 July 2014 we signed an agreement with ArcelorMittal for the sale of our 41.3 per cent interest in a joint venture that holds the Nimba Mining Concession and four iron ore prospecting permits in southeast Guinea. Completion of the transaction is subject to the receipt of regulatory approval and other customary closing conditions.

### Liberia Iron Ore

We have a 100 per cent interest in a Mineral Development Agreement with the Government of Liberia. This enables the further exploration and development of our Liberian iron ore mineral leases.

#### **Performance**

Iron Ore revenue increased by US\$2.8 billion to US\$21.4 billion. Revenue for WAIO increased by US\$2.6 billion, an increase of 13.9 per cent. An 18 per cent increase in WAIO sales volumes was the major contributor, which was partially offset by a six per cent decline in average realised price of iron ore to US\$103 per wet metric tonne (FOB).

Iron ore production increased by 20 per cent in FY2014 to a record 204 Mt, exceeding initial full-year guidance by more than eight per cent. WAIO production of 225 Mt (100 per cent basis) represents a fourteenth consecutive annual record and was underpinned by the early commissioning of Jimblebar and our productivity agenda, which raised the capacity of our integrated supply chain.

Underlying EBIT for FY2014 increased by US\$993 million to US\$12.1 billion. The fall in the average realised price of iron ore reduced Underlying EBIT by US\$864 million, net of price-linked costs, although this was partially offset by a weaker Australian dollar which increased Underlying EBIT by US\$383 million. Iron ore sales, on average, were linked to the index price for the month of shipment, with price differentials reflecting product quality and the increase in WAIO sales volumes, adding US\$1.8 billion to Underlying EBIT. Conversely, the progressive ramp-up of several major projects resulted in a US\$425 million increase in depreciation and amortisation expense during the period. Having redirected the WAIO supply-chain bottleneck away from the mines and back to the port, WAIO unit costs decreased by six per cent in FY2014 to US\$27.53 per tonne. A 12 per cent reduction in unit costs to US\$25.89 per tonne was achieved in the June 2014 half year.

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WAIO unit costs	FY2014 US\$M	FY2013 US\$M	H1 FY2014 US\$M	H2 FY2014 US\$M
Revenue	21,013	18,452	10,849	10,164
Underlying EBITDA	12,988	11,668	6,801	6,187
Cash costs (gross)	8,025	6,784	4,048	3,977
Less: freight	1,274	856	625	649
Less: royalties	1,497	1,192	744	753
Cash costs (net)	5,254	4,736	2,679	2,575
Sales (kt, BHP Billiton share)	190,843	160,955	91,327	99,516
Cash cost per tonne (US\$)	27.53	29.42	29.33	25.89
Outlook				

In FY2015, WAIO production is expected to increase by a further 20 Mt to approximately 245 Mt (100 per cent basis). We expect additional productivity gains to support another year of record performance despite the planned tie-in of ship loaders 1 and 2 during the December 2014 half year. Total iron ore production is forecast to increase by 11 per cent in FY2015 to 225 Mt (BHP Billiton share).

Our strategy includes expanding Jimblebar to 55 Mtpa (100 per cent basis) as well as a broader debottlenecking of the supply chain, which is expected to underpin further growth in WAIO supply-chain capacity to 290 Mtpa (100 per cent basis).

### 1.12.5 Coal Business

Our Coal Business, headquartered in Brisbane, Australia, is the world s largest supplier of seaborne metallurgical coal, one of the world s largest suppliers of seaborne energy coal and a significant domestic energy coal supplier in the countries where our mines are located.

Year ended 30 June	2014 US\$M	2013 US\$M	2012 US\$M
Revenue	9,115	9,895	12,512
Underlying EBIT	386	595	2,612
Capital expenditure	2,345	3,626	3,103
Net operating assets	14,300	13,225	10,663
Production metallurgical coal (Mt)	45	38	33
Production energy coal (Mt)	73	72	74

A summary of our Coal Business assets, development projects and FY2014 performance is presented below.

## **Description of the Coal Business**

Our assets comprise the following:

## **Queensland Coal (Australia)**

Queensland Coal comprises the BHP Billiton Mitsubishi Alliance (BMA) and BHP Billiton Mitsui Coal (BMC) Assets in the Bowen Basin in Central Queensland, Australia.

The Bowen Basin is well positioned to supply the seaborne market because of its high-quality metallurgical coals, which are ideally suited to efficient blast furnace operations, and its geographical proximity to Asian customers. We have access to key infrastructure in the Bowen Basin, including a modern, multi-user rail

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network, and our own coal loading terminal at Hay Point, located near the city of Mackay. We also have contracted capacity at three other multi-user port facilities including the Port of Gladstone (RG Tanna Coal Terminal), Dalrymple Bay Coal Terminal and Abbot Point Coal Terminal.

## **Map of Queensland Coal**

**BHP Billiton Mitsubishi Alliance** BMA owns and operates open-cut and underground metallurgical coal mines in the Bowen Basin, and also owns and operates the Hay Point Coal Terminal. We share 50 50 ownership with Mitsubishi Development. BMA operates the Goonyella Riverside, Broadmeadow, Daunia, Caval Ridge, Peak Downs, Saraji, Gregory Crinum and Blackwater mines. First production commenced at Caval Ridge in the June 2014 quarter. Our share of total production in FY2014 was 29.3 Mt. The reserve lives of our mines range from 2.8 years at Gregory Crinum to 37 years at Saraji.

**BHP Billiton Mitsui Coal** BMC is a subsidiary company owned by BHP Billiton (80 per cent) and Mitsui and Co (20 per cent). BMC owns and operates South Walker Creek and Poitrel open-cut metallurgical coal mines. Total production in FY2014 was 8.3 Mt. The reserve lives of our mines are 15 years at Poitrel and 11 years at South Walker Creek.

## Illawarra Coal (Australia)

Our wholly owned Illawarra Coal Asset owns and operates three underground coal mines Appin, West Cliff and Dendrobium, in the Illawarra region of New South Wales, Australia. The mines supply metallurgical coal to the nearby BlueScope Port Kembla steelworks and to other domestic and export markets. The Appin mine is currently being developed to sustain Illawarra Coal s production following the end of the mine life at West Cliff.

Coal is exported via the Port Kembla Coal Terminal, in which we own a 16.67 per cent interest. Total production in FY2014 was 7.5 Mt. The reserve lives of our mines range from 2.0 years at West Cliff to 25 years at Appin.

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## **Energy Coal South Africa (South Africa)**

Energy Coal South Africa (known as BECSA) operates four energy coal mines Khutala, Klipspruit, Middelburg and Wolvekrans, in the Witbank region in the province of Mpumalanga, South Africa.

BECSA is 90 per cent owned by BHP Billiton, two per cent owned by its employees through an Employee Share Ownership Plan and eight per cent owned by a Broad-Based Black Economic Empowerment (B-BBEE) consortium led by Pembani Group Proprietary Limited.

Production in FY2014 was 30.4 Mt. The reserve lives of our mines range from 5.8 years at Khutala to 23 years at Middelburg.

## **New Mexico Coal (United States)**

We own and operate the San Juan energy coal mine located in the US state of New Mexico. The mine transports its production directly to the nearby San Juan Generating Station. The San Juan mine has a reserve life of 3.5 years, which is the life of the current customer contract. Production for FY2014 was 5.7 Mt.

We also operate the nearby Navajo mine, located on Navajo Nation land in New Mexico. Full ownership of the Navajo Coal Company transferred to the Navajo Transitional Energy Company (NTEC), an entity of the Navajo Nation, effective 30 December 2013. New Mexico Coal and NTEC have entered into a Mine Management Agreement where New Mexico Coal will continue as mine operator until 31 December 2016.

### **New South Wales Energy Coal (Australia)**

Our wholly owned New South Wales Energy Coal Asset owns and operates the Mt Arthur Coal open-cut energy coal mine in the Hunter Valley region of New South Wales, Australia.

New South Wales Energy Coal produced 20 Mt in FY2014 and has a reserve life of 33 years.

## Cerrejón (Colombia)

We have a one-third interest in Cerrejón Coal Company, which owns and operates one of the world s largest open-cut export energy coal mines, located in the La Guajira province of Colombia.

In FY2014, our share of Cerrejón production was approximately 12.3 Mt. Cerrejón has a reserve life of 17 years.

More information on our assets and operations is presented in section 2.1.4 of this Annual Report.

## **Completed development projects**

### **BMA Expansions**

In November 2011, we approved the development of the Caval Ridge mine project, with a revised investment of US\$1.9 billion (BHP Billiton share). The Caval Ridge mine is an open-cut dragline and truck and shovel operation, with coal railed to the Hay Point Coal Terminal. First coal at the Caval Ridge mine occurred in the June 2014 quarter and the mine was 100 per cent completed at 30 June 2014.

## Cerrejón P40 Project

In August 2011, we announced a US\$437 million (BHP Billiton share) investment in the expansion of Cerrejón, known as the P40 Project, which is expected to enable Cerrejón s thermal coal production to increase by 8 Mtpa to approximately 40 Mtpa. The project scope includes a second berth and dual quadrant ship loader at Cerrejón s 100 per cent owned and operated Puerto Bolivar, along with necessary mine, rail and associated supply chain

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infrastructure. Construction commenced in CY2011 and the project handled its first coal in the December 2013 quarter. The port expansion associated with the Cerrejón P40 project is currently being commissioned, although operational issues are expected to constrain capacity to approximately 35 Mtpa (100 per cent basis) in the medium term. At 30 June 2014, the project was 94 per cent complete.

## **Newcastle Port Third Phase Expansion**

In August 2011, we announced a US\$367 million (BHP Billiton share) investment in the third stage development of the Newcastle Coal Infrastructure Group s coal handling facility in Newcastle. The port expansion project is expected to increase total capacity at the coal terminal from 53 Mtpa to 66 Mtpa. This is expected to increase New South Wales Energy Coal s allocation by 4.6 Mtpa to 19.2 Mtpa. First coal on ship, being the first ship loading through the new facility, was achieved in June 2013, ahead of schedule. At 30 June 2014, the project was 86 per cent complete.

## **Development projects in execution**

## **BMA Expansions**

In March 2011, we approved the expansion of the Hay Point Coal Terminal. The expansion of the terminal will deliver an additional 11 Mt of annual port capacity (100 per cent basis). Following a review of the project during FY2013, first shipment is expected in CY2015 with a revised budget of US\$1.5 billion (BHP Billiton share). The project was 87 per cent complete at 30 June 2014.

## **Appin Area 9 Project**

In June 2012, approval was given to invest US\$845 million to sustain operations at Illawarra Coal by establishing a replacement mining area at Appin mine. The replacement area will have a production capacity of 3.5 Mtpa and will sustain Illawarra Coal s production capacity at 9 Mtpa. The Appin Area 9 project was 67 per cent complete at 30 June 2014 and is expected to be operational in CY2016, whereupon it will replace production at the West Cliff mine. The project includes roadway development, new ventilation infrastructure, new and reconfigured conveyors and other mine services.

More information on our development projects is presented in section 2.4 of this Annual Report.

## **Performance**

Metallurgical coal production increased by 20 per cent in FY2014 to a record 45 Mt (BHP Billiton share). Record production and sales volumes at Queensland Coal reflected strong performance across all operations. This included first production from Caval Ridge, the successful ramp-up of Daunia and record production at Peak Downs, Saraji, South Walker Creek and Poitrel. Illawarra Coal production declined by five per cent as an extended outage at the Dendrobium mine impacted performance in the first half of FY2014.

Energy coal production of 73 Mt for FY2014 was broadly unchanged from the prior period. Another year of robust performance was underpinned by a fifth consecutive annual production record at New South Wales Energy Coal and record volumes at Cerrejón. Extended outages at both a local utility and the Richards Bay Coal Terminal led to lower production at Energy Coal South Africa, while Navajo Coal production declined following the permanent closure of three of the five power units at the Four Corners Power Plant.

Coal revenue for FY2014 decreased by US\$780 million to US\$9.1 billion. Revenue for Illawarra decreased by 31 per cent to US\$886 million and revenues for New South Wales Energy Coal and Energy Coal South Africa also decreased; this was partially offset by an increase in revenues for Queensland Coal of five per cent to US\$4.7 billion. The decrease in revenues was driven by a 20 per cent reduction in the average price for hard coking coal and 14 per cent reduction in the average price received for both weak coking coal and thermal coal.

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Underlying EBIT for FY2014 declined by US\$209 million to US\$386 million despite productivity volume and cost efficiencies of US\$1.3 billion being embedded during the period.

A stronger US dollar against both the Australian dollar and South African rand increased Underlying EBIT by US\$543 million. This was more than offset by the reduction in the average price, which in total, reduced Underlying EBIT by US\$1.4 billion, net of price-linked costs.

A sustainable increase in truck and wash plant utilisation rates underpinned the improvement in productivity while a reduction in labour, contractor and maintenance costs was also achieved. In this context, redundancies totalling US\$40 million were recognised in FY2014 while an increase in non-cash charges reduced Underlying EBIT by a further US\$497 million. The latter included a US\$292 million impairment charge at Energy Coal South Africa. A US\$84 million gain on the sale of the Energy Coal South Africa Optimum Coal purchase agreement was also recognised during the period.

### Outlook

Metallurgical coal production for FY2015 is expected to increase by four per cent to approximately 47 Mt as the ramp-up of Caval Ridge is completed. Energy coal production for FY2015 is expected to remain broadly unchanged at 73 Mt.

As we will retain control of the Navajo mine until full consideration is received from NTEC, production and financial results for the Navajo mine will continue to be reported by the Group.

### 1.12.6 Aluminium, Manganese and Nickel Business

Our Aluminium, Manganese and Nickel Business, headquartered in Perth, Australia, is one of the world s largest integrated producers of aluminium, nickel and manganese ore and alloy.

Year ended 30 June	2014	2013	2012
	US\$M	US\$M	US\$M
Revenue	8,411	9,278	9,911
Underlying EBIT	307	158	(24)
Capital expenditure	498	893	1,941
Net operating assets	9,322	8,809	13,127
Production alumina (kt)	5,178	4,880	4,152
Production aluminium (kt)	1,174	1,179	1,153
Production manganese ores (kt)	8,302	8,517	7,931
Production manganese alloys (kt)	646	608	602
Production nickel (kt)	143	154	158

A summary of our Aluminium, Manganese and Nickel Business assets, development projects and FY2014 performance is presented below.

## Description of the Aluminium, Manganese and Nickel Business

Our assets include the following:

# **Boddington/Worsley (Australia)**

Boddington/Worsley is an integrated bauxite mining/alumina refining operation located in Western Australia. The Boddington bauxite mine supplies bauxite ore to the Worsley alumina refinery via a 51-kilometre long

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conveying system. We own 86 per cent of the mine and the refinery. Our share of Worsley s FY2014 production was 3.9 Mt of alumina. Boddington has a reserve life of 17 years.

## Hillside and Bayside (South Africa)

Our wholly owned Hillside and Bayside aluminium smelters are located at Richards Bay in South Africa. Hillside is the largest aluminium smelter in the southern hemisphere. In June 2014, Bayside completed the ramp-down of its remaining smelting capacity of 97 ktpa. The Bayside Casthouse continues to operate and began processing liquid metal transfers from Hillside in June 2014. Production in FY2014 for Hillside was 715 kt and Bayside was 89 kt.

## Mozal (Mozambique)

We own 47.1 per cent of and operate the Mozal aluminium smelter located near Maputo, Mozambique. Mozal sources power generated by Hydro Cahora Basa via Motraco, a transmission joint venture between Eskom and the national electricity utilities of Mozambique and Swaziland. Our share of Mozal s FY2014 production was 266 kt.

#### Alumar (Brazil)

Alumar is an integrated alumina refinery/aluminium smelter. 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 São Luís in the Maranhão province of Brazil.

The Alumar smelter has currently suspended production from pot lines 2 and 3 reducing overall annual capacity to 124 kilotonnes per annum (ktpa), from 447 ktpa (100 per cent), due to challenging global market conditions in primary aluminium and increased costs. Our share of Alumar s FY2014 saleable production was 1.3 Mt of alumina and 104 kt of aluminium.

### **HMM (South Africa)**

We own a 44.4 per cent interest in Hotazel Manganese Mines (HMM), which owns the Mamatwan open-cut mine and the Wessels underground mine. In FY2014, the total manganese ore production was 3,526 kt. Wessels has a reserve life of 46 years and Mamatwan has a reserve life of 18 years.

## **GEMCO** (Australia)

Our 60 per cent owned and operated GEMCO operation is an open-cut mining operation, located 16 kilometres from our port facilities at Milner Bay, Northern Territory. These operations, consisting of crushing, screening, washing and dense media separation, combined with its high-grade ore are in relative close proximity to the Asian export markets. FY2014 production of manganese ore was 4,776 kt. GEMCO has a reserve life of 11 years.

## **Metalloys (South Africa)**

Our 60 per cent owned and operated Samancor Manganese Metalloys alloy plant, located in Meyerton, is one of the largest manganese alloy producers in the world. Metalloys produces high- and medium-carbon ferromanganese. Production of manganese alloy in FY2014 was 377 kt.

## **TEMCO** (Australia)

Our 60 per cent owned and operated TEMCO operation, located in Tasmania, is a medium-sized producer of high-carbon ferromanganese, silicomanganese and sinter using ore shipped from GEMCO, primarily using hydroelectric power. Production of manganese alloy in FY2014 was 269 kt.

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## **Nickel West (Australia)**

Our wholly owned Nickel West Asset in Western Australia consists of an integrated system of mines, concentrators, a smelter and a refinery. Nickel West production in FY2014 was 98.9 kt of contained nickel. On 31 October 2013, production at the Nickel West Leinster Perseverance underground mine was suspended following a significant seismic event. A subsequent review of the incident determined it was unsafe to resume operations.

### Cerro Matoso (Colombia)

Our 99.98 per cent owned Cerro Matoso Asset in Colombia combines a lateritic nickel ore deposit with a ferronickel smelter. The smelter produces high-purity, low-carbon ferronickel granules. Cerro Matoso has an estimated reserve life of 15 years. Production in FY2014 was 44.3 kt of nickel in ferronickel form.

More information on our assets and operations is presented in section 2.1.5 of this Annual Report.

## **Development projects**

## **GEMCO** expansion

The US\$279 million GEMCO Expansion Project (GEEP2) (BHP Billiton share US\$167 million), approved in July 2011, was delivered on time and on budget in the December 2013 quarter. GEEP2 increased GEMCO s capacity from 4.2 Mtpa to 4.8 Mtpa through the introduction of a dense media circuit by-pass facility. The expansion has also addressed key infrastructure constraints by increasing road and port capacity to 5.9 Mtpa, creating 1.1 Mtpa of additional capacity for future expansions.

More information on our development projects is presented in section 2.4 of this Annual Report.

#### **Performance**

Aluminium, Manganese and Nickel revenues decreased by US\$867 million to US\$8.4 billion. Revenue for Cerro Matoso decreased by 25.9 per cent to US\$595 million, driven by a decline in nickel prices by seven per cent and lower production. Production at Cerro Matoso was affected by kiln and furnace outages, and lower nickel grades. Aluminium revenues decreased by 8.5 per cent to US\$2.4 billion primarily due to lower average realised prices which declined by six per cent.

Alumina production increased by six per cent in FY2014 to a record 5.2 Mt. The Efficiency and Growth project at Worsley reached nameplate capacity during the year and annual production records were achieved at both the Worsley and Alumar refineries. Aluminium production of 1.2 Mt was unchanged from FY2013 with production records at both Hillside and Mozal offset by lower volumes at Alumar following the phased suspension of 103 kt (BHP Billiton share) of annualised capacity.

Manganese ore production declined by three per cent in FY2014 to 8.3 Mt as GEMCO was affected by higher than usual rainfall during the wet season. Manganese alloy production increased by six per cent in FY2014 compared to FY2013, which was affected by the temporary suspension of operations at TEMCO.

Nickel production declined by seven per cent in FY2014 to 143 kt. Production at Cerro Matoso was affected by kiln and furnace outages, and lower nickel grades. Nickel West production declined by four per cent following the closure of the Perseverance underground mine in November 2013.

Notwithstanding a rebound in nickel and aluminium prices in the second half, lower average realised prices reduced Underlying EBIT by US\$409 million during FY2014, net of price-linked costs. More specifically, lower average realised prices for aluminium (down six per cent to US\$2,022 per tonne), manganese ore (down four per

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cent to US\$4.64 per dry metric tonne unit), manganese alloy (down six per cent to US\$980 per tonne) and nickel (down seven per cent to US\$14,925 per tonne) were only partially offset by an increase in the average realised price of alumina (up two per cent to US\$307 per tonne).

Underlying EBIT for FY2014 increased by US\$149 million to US\$307 million. A reduction in headcount and consumable costs, as well as equipment debottlenecking at most assets, contributed to the US\$335 million of productivity cost efficiencies embedded during the period. A stronger US dollar against both the Australian dollar and South African rand increased Underlying EBIT by a further US\$469 million. In contrast, the cessation of aluminium smelting activities at Bayside (US\$167 million) and costs associated with the closure of the Perseverance underground mine at Nickel West (US\$174 million) contributed to a decrease in Underlying EBIT of US\$341 million.

In May 2014, the Group announced a review of the Nickel West business, comprising the Mt Keith, Cliffs and Leinster mines, its concentrators, the Kalgoorlie smelter and the Kwinana refinery. The review is considering all options for the long-term future of Nickel West, including the potential sale of all or part of the business.

## Outlook

Saleable nickel production at Nickel West is expected to decline by four per cent in FY2015 to 95 kt with approximately 55 per cent to be sourced from third party feed. Ferro-nickel production at Cerro Matoso is expected to decline by three per cent to 43 kt as a result of lower grades.

In contemplation of the proposed demerger, BHP Billiton and Anglo American have agreed to make certain changes to the agreement which governs their interests in the Manganese business. BHP Billiton manages and owns 60 per cent of the Manganese business with Anglo American owning the remaining 40 per cent.

Subject to obtaining the required approvals for the agreement, the changes will result in BHP Billiton and Anglo American agreeing to share joint control of the Manganese business. As a result, we will discontinue consolidation of the Manganese business and account for our 60 per cent interest as an equity accounted joint venture. We will therefore derecognise the existing carrying amounts of all assets, liabilities and the non-controlling interest in the Manganese business attributed to Anglo American and initially record our retained 60 per cent interest at fair value. The remeasurement at fair value will give rise to an estimated gain of approximately US\$2 billion in the first half of FY2015.

## 1.13 Our people

People are the foundation of our organisation and underpin our success. We value our people and encourage the development of talented and motivated employees to support the continued performance and growth of our diverse operations. We strive to build a sense of purpose and achievement among all our people in the work we do.

# 1.13.1 Employees and contractors

By working to *Our Charter* we align our people around our common purpose and values. *Our Charter* provides a vital reference point for how we do business, wherever we are in the world, and whatever work we do.

The table below provides the average number of employees and contractors over the last three financial years.

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Year ended 30 June	2014	2013	2012
Employees	47,044	46,892	43,238
Contractors	76,759	79,330	78,813
Total	123,803	126,222	122,051

The table below shows the gender composition of our workforce, senior leaders and Board over the last three financial years.

Year ended 30 June	2014	2013	2012
Male employees	39,517	38,920	35,888
Female employees	7,527	7,972	7,350
Female employees (per cent)	16	17	17
Male senior leaders (a)	317	326	365
Female senior leaders (a)	55	40	41
Female senior leaders (per cent)	15	11	10
Male Board members	12	11	11
Female Board members	2	2	2
Female Board members (per cent)	14	15	15

(a) For UK law purposes, we are required to show information for senior managers which is defined to include both senior leaders and any persons who are directors of any subsidiary company even if they are not senior leaders. In FY2014, senior leaders comprise the top 372 people in the organisation. There are 33 directors of subsidiary companies who are not senior leaders, comprising 23 males and 10 females. Therefore, for UK law purposes, the total number of senior managers is 340 males and 65 females (16 per cent female).

The tables below provide a breakdown of the weighted average number of employees across the Group, in accordance with our reporting requirements under the UK Companies Act 2006. The calculation includes the Executive Director, 100 per cent of employees of subsidiary companies, and our share of joint operations, for each of the past three financial years. Employees of equity accounted entities are not included. Part-time employees are included on a full-time equivalent basis. Employees of businesses acquired or disposed of during a particular year are included for the period of ownership. Contractors are not included.

On 1 July 2013 the Group adopted IFRS 10 and IFRS 11. This led to the full consolidation of Escondida employees (previously proportionately consolidated) and the exclusion of certain equity accounted entities including Samarco, Antamina and Cerrejón. The comparative periods have been restated on this basis.

The table below provides a breakdown of our average number of employees by Business for each of the last three financial years.

Year ended 30 June	2014	2013	2012
Petroleum and Potash	4,207	4,449	4,067
Copper	10,070	10,435	9,445
Iron Ore	8,035	6,883	4,711
Coal	12,318	12,240	11,679
Aluminium, Manganese and Nickel	10,775	11,115	11,388
Group Functions, Marketing and unallocated	1,639	1,770	1,948
Total	47,044	46,892	43,238

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

Year ended 30 June	2014	2013	2012
Africa	9,035	9,121	9,358
Asia	1,105	1,183	1,114
Australasia	23,048	21,977	19,305
Europe	146	231	532
North America	4,373	5,116	4,117
South America	9,337	9,264	8,812
Total	47,044	46,892	43,238

The increase in Australasian headcount during FY2014 is primarily due to the increase in the Iron Ore Business as a result of the expansion of the Jimblebar operations and additional support required in non-process infrastructure and port and rail operations. The Coal Business also experienced an increase as a result of the addition of the Daunia and Caval Ridge workforce. The decreased headcount in Europe occurred with the closure of offices in The Hague and Antwerp, and in North America with the sale of the diamonds business and sale of the Pinto Valley mining operation. For further information regarding these sales, refer to sections 1.15.3 and 2.1.2 of this Annual Report.

## 1.13.2 Employee policies and engagement

We are committed to open, honest and productive relationships with our employees. At BHP Billiton, we recognise the most important ingredient for success is our talented and motivated workforce, whose members demonstrate behaviours that are aligned to *Our BHP Billiton Charter* values.

We have an integrated people strategy to effectively attract, retain and develop talented people. Our approach is outlined in *Our Charter*, the BHP Billiton *Code of Business Conduct* and the Group Level Documents (GLDs) that prescribe what we will do and how we will do it. All of these documents are published and accessible to employees.

Effective communication and employee engagement is critical for maintaining open and productive relationships between leaders and employees. Employees receive communication on BHP Billiton goals and performance, as well as on other important issues such as health and safety and the environment and the *Code of Business Conduct*. Our *Code of Business Conduct* is founded on *Our Charter* values, which make an unqualified commitment to working with integrity. Communication is undertaken through a variety of channels, including the internet, intranet, email, newsletters and other means designed to cater for the local environment. Our employees can access our Annual Reports either via the internet or hard copy. Communications tools are also used to facilitate employee feedback, as are a variety of consultative processes. Dispute and grievance handling processes are also in place to assist in equitably addressing workplace issues across the organisation. A business conduct advisory service, EthicsPoint, operates worldwide to allow concerns to be raised about conduct that is out of step with *Our Charter* values, our policies and procedures or legislation.

Our all-employee share purchase plan, Shareplus, is available to all permanent full-time and part-time employees, and those on fixed-term contracts, except where local regulations limit operation of the scheme. In these instances, alternative arrangements are in place. As at 30 June 2014, 27,401 employees, or approximately 53.1 per cent of those eligible for the April 2014 offer, were participants in Shareplus. The Shareplus employee plan is described in section

4.4.26 of this Annual Report. Short-term and long-term incentive schemes also operate across the Group. Rewards for eligible individuals are predicated on the need to meet targets relating to the Group s performance in areas such as health, safety and achievement of financial measures and on the personal performance of each employee.

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Our performance management process aligns individual performance and behaviour to *Our Charter* and our strategic and operational priorities as well as working to ensure individual and team performance is recognised. Our leaders are accountable for providing feedback and coaching and identifying development needs to help our employees maximise their performance and realise their full potential. In FY2014, 74 per cent of employees participated in a formal performance review process. Due to industrial agreements, not all employees are able to participate in individual performance or reward programs. The importance we place on employee development and training is demonstrated by the significant amount of training our employees undertake.

BHP Billiton is committed to building and maintaining a diverse workforce and providing a work environment in which every employee is treated fairly and with respect. We work actively to avoid discrimination on any basis, including disability. Where an employee suffers some disability while they are employed, we work to identify roles that meet their skill, experience and capability, and in some cases offer retraining. We also offer flexible work practices, where this is possible, taking into account the needs of the employee and those of the particular workplace. The employment packages under our remuneration policy, which must comply with local regulations, are aligned to our business requirements and are designed to be sufficiently attractive to recruit and retain the best people.

## 1.13.3 Diversity and inclusion at BHP Billiton

Our Charter and GLDs guide all aspects of our management, including diversity and inclusion.

Our GLDs are underpinned by principles that guide our approach to diversity and inclusion. Our GMC and the Board believe that a diverse workforce and inclusive work environment where the unique skills, experiences and perspectives of our people are embraced is pivotal to sustaining performance and increasing productivity. The Board approves the Group s diversity and inclusion measurable objectives for each financial year and monitors its progress. In relation to gender, they have set a goal of increasing the number of women on the Board. Further details are set out below.

Principles that underpin our approach to diversity and inclusion:

a diverse workforce and an inclusive environment are necessary to the delivery of our strategy that is predicated on diversification by commodity, geography and market;

we aspire to have a workforce that best represents the communities in which our assets are located and our employees live;

actions that support our diversity and inclusion objectives should be consistent with our established approach to talent, performance and reward;

achieving an appropriate level of diversity will require structured programs to support employees from an early career stage in developing the necessary skills and experiences for leadership roles;

creating an inclusive work environment will require every employee and leader to embrace diversity and act in a way that is consistent with Our Charter;

measurable objectives in support of diversity and inclusion will be transparent, fit for purpose and focus on (i) engaging, enabling and developing our workforce and (ii) establishing appropriate representation goals.

# Progress against measurable objectives

Progress against our FY2014 commitments is set out below.

Each Business, Group Function and Marketing will be evaluated on progress in executing the measurable objectives that form part of its multi-year diversity plan.

The performance of each Business, Group Function and Marketing was evaluated as part of the Group s internal compliance requirements. Results were taken into account in determining variable remuneration.

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2. Execute the diversity and inclusion strategy and actions approved by the GMC.

Our CEO and management teams reinforced our commitment to diversity and inclusion through internal and external communication channels including town hall meetings, surveys and participation in industry events.

Senior leaders mentored and held talent development conversations with high potential females, females in our graduate program and ethnically diverse talent. Specific actions were captured as part of their development plans.

Employees perceived level of inclusion in their teams was measured as part of the employee survey. Results, together with tools to assist action planning were cascaded to business leaders and line managers.

Actions to increase representation of Indigenous people in our workforce included targeted resourcing strategies, training programs and integration initiatives to broaden employment opportunities.

Female representation increased (i) seven percentage points in senior leadership roles to 15 per cent and (ii) one percentage point in our overall workforce representation to 16 per cent from our baseline in 2010. We remain committed to increasing overall female representation, with a specific focus on operational areas.

3. Increase female representation by one in each asset and operations leadership team by end of FY2015 (where the business leadership team comprises less than 50 per cent females).

Female representation increased nine percentage points in operational leadership teams from last year.

4. Develop recommendations for providing childcare options and flexible work arrangements.

Flexible work recommendations are being piloted in different locations. Childcare options remain a focus for FY2015.

5. Increase the proportion of female and Indigenous graduates hired and retained year on year.

Representation of females in our graduate intake increased three percentage points at a global level and six percentage points in Australia from last year. Indigenous Australian representation increased three percentage points. Retention of female graduates that have commenced since 2011 remains stable at 93 per cent.

6. Maintain at least a 30 per cent female participation in our Accelerated Leadership Development Program (ALDP).

Female representation in our ALDP cohort remains at 41 per cent.

## **Continuous improvement**

In FY2015, we will continue focusing on creating work environments of greater inclusion and enhancing our gender and diversity profile. We will take the following steps to deliver against this commitment:

- 1. Demonstrate progress against our diversity and inclusion plan to improve our gender and ethnicity profile and increase female representation year on year;
- 2. Demonstrate improvement in creating a work environment of inclusion, as measured by our employee survey. Each Business, Group Function and Marketing will continue to be evaluated on progress against their multi-year diversity and inclusion plan. Successful completion will be taken into account in determining bonus remuneration and tracked as part of the Group s internal compliance requirements.

## 1.14 Sustainability

Our Charter value of Sustainability is core to our strategy and we integrate health, safety, environmental, social and economic factors into our decision-making. Maintaining our licence to operate as a global company is

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dependent upon gaining access to natural resources and ensuring we earn the trust of our shareholders, employees, contractors, communities, customers and suppliers.

Our approach to sustainability reflects our priority to put health and safety first, be environmentally responsible and provide support to our host communities. In reporting our sustainability performance, we include our impact on the environment and approach to climate change, water stewardship, resource conservation and biodiversity; and our efforts to ensure the broader economic contributions of our operations benefit the regions in which we operate.

The information contained in this section, unless otherwise stated, covers assets that have been wholly owned and operated by BHP Billiton or that have been operated by BHP Billiton in a joint venture operation (operated assets) for FY2014.

## 1.14.1 Identifying our sustainability issues

To deliver successfully on our strategy we must identify and respond to the sustainability issues that have a direct or indirect impact on our business, to our stakeholders and society at large. Using a materiality assessment process, we identified and prioritised material sustainability issues included in this Annual Report and the Sustainability Report 2014. The following issues are discussed in this Annual Report:

Governance Governance and sustainability	Health and safety Keeping our people and operations safe	Environment Energy and greenhouse gas management	Society Supporting and engaging with our communities
Identifying and managing our material risks	Focusing on the health of our people	Biodiversity and land management	Free, prior informed consent
Operating with integrity and conducting business transparently		Water stewardship	Respecting human rights
Addressing climate change		Responsibly managing hydraulic fracturing	Making a positive contribution to society

Additional information relating to our sustainability performance for FY2014 is available in our Sustainability Report 2014 and can be found online at *www.bhpbilliton.com*.

### 1.14.2 Governance

## Governance and sustainability

Our Board governs the Group in a manner consistent with *Our Charter* values, our strategy and our commitment to a transparent and high-quality governance system. The Board has established a number of committees to assist it in exercising its authority and to monitor the performance of the Group. The Sustainability Committee assists the Board in oversight of health, safety, environment, community and climate change matters. This includes overseeing areas relating to risk control, compliance with applicable legal and regulatory requirements and overall health, safety, environment and community (HSEC) performance of the Group.

The Board delegates authority to the CEO to manage the Group in its pursuit of creating long-term shareholder value through the discovery, acquisition, development and marketing of natural resources. Established by the CEO, the GMC is the Group s most senior executive body. The GMC s purpose is to provide leadership to the Group, determining its priorities and the way it is to operate, thereby assisting the CEO in pursuing the corporate

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purpose. The GMC is a forum to debate high-level matters important to the Group and to ensure consistent development of the Group s strategy.

To link HSEC matters to remuneration, 20 per cent of the FY2014 short-term incentive opportunity for GMC members was based on HSEC performance. This was an increase from 15 per cent in FY2013, reflecting the importance the Board and GMC place on sustainability. The Sustainability Committee assists the Remuneration Committee in determining appropriate HSEC metrics to be included in GMC scorecards and in assessing performance against those measures. The Board also has discretion over both the short-term and long-term incentive opportunities for GMC members and takes into consideration HSEC performance.

## Identifying and managing our material risks

In addition to the legal requirements of the countries in which we operate, our approach to sustainability risks is defined by our HSEC-related Group Level Documents (GLDs). These clearly describe our mandatory minimum performance requirements and accountabilities across the Group and are the foundation for developing and implementing management systems at our operations.

Our HSEC-related GLDs outline our approach to the Group s material sustainability risks and highlight a commitment to international policies, standards and management practices. These include the principles and mandatory requirements of the position statements of the International Council on Mining and Metals (ICMM) Sustainable Development Framework, the United Nations (UN) Global Compact, the UN Declaration of Human Rights and the Voluntary Principles on Security and Human Rights.

We seek to ensure our customers, suppliers, agents, service providers and contractors maintain business practices and workplaces that are aligned with our GLDs. We also provide GLD performance requirements to our non-operated assets and seek to influence the asset to follow these requirements.

Our *Risk Management* GLD provides the framework for embedding risk identification and management into our business activities, functions and processes. This is the basis of an active and consistent risk-based approach to sustainability. We identify risks we consider material to our organisation and take into consideration the potential health, safety, environmental, community, reputational, legal and financial impacts. The severity of any particular risk is assessed according to the most severe impact associated with a specific risk. The objectives of the risk management process are to understand the nature and residual impact of the material risks for the Group and to ensure they are managed through the verification and effectiveness testing of critical controls. Information relating to the material risks for the Group, including sustainability risks, is available in section 1.7 of this Annual Report.

## Operating with integrity and conducting business transparently

To maintain our position as one of the world s leading companies, we are committed to ethical business practices and high levels of governance in all our dealings. Regardless of the country or culture within which our people work, our *Anti-corruption* GLD and *Code of Business Conduct* prohibit bribery and corruption in all our business dealings. Particulars in relation to the *Code of Business Conduct* and anti-corruption are referred to in section 3.17 in this Annual Report. Specific discussion on legal proceedings is available in section 6 of this Annual Report.

### Transparently reporting our payments to governments

We believe that transparency of government revenue from the extraction of natural resources is an important element in the fight against corruption. BHP Billiton has been a supporter of the Extractive Industries Transparency Initiative

(EITI) since its inception in 2002 and we continue to engage actively with EITI processes in countries where we operate. In line with our support for the EITI, we have reported in the Sustainability

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Report 2014, payments of taxes and royalties derived from resource developments on a country-by-country basis. Our payments to governments in FY2014 included US\$9.9 billion in company taxes, royalties and certain indirect taxes and approximately US\$1.5 billion in taxes collected on behalf of employees. More than 99 per cent of our payments were made to 14 countries. Of these, our largest payments are made in Australia, where we have the majority of our assets.

### Sustainability in our supply chain

As a global organisation, we understand our responsibility to ensure we only engage with suppliers who have responsible and ethical business practices. Relationships with our partner suppliers are managed in accordance with relevant contractual arrangements, *Our Charter*, our *Code of Business Conduct*, our *Anti-corruption* GLD and relevant HSEC GLDs.

To identify sustainability risks across our supply chain, we use a risk-based approach within our *Supply Source to Contract* GLD to support our suppliers alignment with our HSEC and business conduct requirements. These requirements include zero tolerance of a number of human rights infringements including child labour, inhumane treatment of employees and forced or compulsory labour. Our suppliers are also required to adopt an open attitude towards legitimate activities of trade unions.

Contracted suppliers are assessed on a matrix for commercial dependency versus supplier risk and assigned a tiered segmentation. A procedure to engage with each supplier is developed appropriate to the level of risk.

## Closure planning

Closure planning is a key consideration in the planning and development of our projects and operations. We recognise the significant risks associated with poorly managed closure activities and seek to minimise these throughout the life cycle of our operations. In line with our *Corporation Alignment Planning* GLD, our operations are required to develop and maintain closure plans that address the details of rehabilitation activities for disturbed land, remediation requirements for contaminated land, and end uses for land and infrastructure. Closure plans are also required to include community livelihood opportunities post-closure, design and engineering specifications for structures remaining at closure and human resource strategies addressing retention and transition opportunities for employees. In addition, we require closure plans to be developed as part of our major capital investments to ensure we understand potential closure liabilities and have the opportunity to reduce them during the design stage. The closure plans provide the basis for estimating the closure costs and the associated accounting for closure and rehabilitation obligations. Information on these provisions can be found in note 18 Provisions to the Financial Statements in our Annual Report 2014.

An ongoing internal closure planning audit program, established in FY2011, tests the effectiveness of the controls detailed in our *Corporation Alignment Planning* GLD. Findings from these audits are reported to the relevant Business Presidents, while summary reports are considered by the Sustainability Committee of the Board. During FY2014, 10 audits were conducted and, where required, improvements to the closure plan or provisions were implemented.

### Addressing climate change

Addressing climate change is a Board governance and strategic issue. Successful implementation of our strategy requires us to sustainably develop our asset portfolio to deliver superior long-term shareholder returns.

## Climate change governance

We recognise our responsibility to take action by focusing on reducing our emissions, increasing our preparedness for physical climate impacts, and working with others, including our industry and governments, to enhance the global response to climate change. To effectively address the challenge of climate change, there

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must be a significant focus on developing and deploying low-emissions technologies. We will, through material investments in low-emissions technology, contribute to reducing emissions from fossil fuels.

There is uncertainty around the physical impacts of climate change and how the world will respond to these impacts or seek to mitigate climate change. In light of this, our investment decisions are informed by a comprehensive understanding of a range of possible climate change outcomes and the associated risks and opportunities to delivering shareholder value. We use a broad range of scenarios that consider critical global uncertainties (e.g. macroeconomic and geopolitical) and their impacts on supply and demand assumptions to test our portfolio and investment decision-making.

Our approach to addressing climate change is to identify emerging trends, develop strategies, coordinate activity across the businesses and report our performance externally. Our GMC has primary responsibility for the design and implementation of an effective position and response to climate change, and accountability for performance against our climate change metrics. We also seek input and insight from external experts, such as the Forum on Corporate Responsibility.

To reflect updates in scientific knowledge and global regulatory and political responses, we regularly review our position on climate change. We incorporate climate change considerations into our Group scenarios to understand potential impacts on our portfolio. We also conduct annual reviews of performance against Business greenhouse gas (GHG) targets to ensure we are on track to achieve our company target. The Sustainability Committee has considered a range of climate change scenarios and continues to monitor the actions being taken to manage a range of climate change impacts and policy responses.

### Our perspective on climate change

We accept the Intergovernmental Panel on Climate Change s (IPCC) assessment of climate change science, which has found that warming of the climate is unequivocal, the human influence is clear and physical impacts are unavoidable. We believe the world must pursue the twin objectives of limiting climate change to the lower end of the IPCC emission scenarios in line with current international agreements, while providing access to the affordable energy required to continue the economic growth essential for maintaining living standards and alleviating poverty.

We use the IPCC s findings to build our understanding of the impacts climate change will have on our business and to inform our decision-making. Limiting climate change will require substantial and sustained reductions of GHG emissions. Our view is that an effective, long-term climate change policy framework should use a portfolio of complementary measures to reduce emissions and build resilience. This should include a price on carbon that addresses competitiveness concerns, support for energy-efficiency improvements, and the development and deployment of low-emissions technologies, together with measures to respond to the physical impacts of climate change.

We will continue to take action to reduce our emissions and build the resilience of our operations, investments, communities and ecosystems to the impacts of climate change. Recognising their role as policy makers, we engage with governments to enhance the global response. We work in partnership with resource sector peers to improve sectoral performance and increase industry s influence in policy development to deliver effective long-term regulatory responses.

### The global challenge

Our diverse portfolio is important in meeting global demand for energy. We will continue to adjust the shape of our portfolio to match energy and commodity demand and meet society s expectations while maximising shareholder returns.

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Our approach to investment decision-making and portfolio management ensures that climate change risks are identified, assessed and appropriately addressed. We have been applying an internal price on carbon in our investment decisions and portfolio evaluation for more than a decade and were early adopters of this approach. We maintain a view on carbon pricing using a carbon price protocol which we update regularly. Our carbon price protocol tracks the progress of national commitments to tackle climate change throughout the world, including our major operating regions and customer demand centres, and considers various potential scenarios for how global emissions and policy will evolve over time. We look at the potential for reductions in emissions and the cost associated with those reductions to determine an appropriate price level for each relevant country or region. In doing so, we consider the effectiveness of different policies, political situations required to pass legislation, timing to implement reductions and the interaction between policy mechanisms.

Through a comprehensive and strategic approach to corporate planning, we work with a broad range of scenarios to assess our portfolio, including consideration of a range of policy responses to and impacts from climate change. Our work suggests that BHP Billiton s portfolio diversification provides resilience to our overall asset valuation. The diversity of our overall portfolio, which includes energy (oil, coal and uranium) and minerals (including copper, premium quality iron ore and potash), uniquely positions us to manage and respond to changes and capture opportunities to grow shareholder value over time.

### Stranded assets and the carbon bubble

The potential gap between the current valuation of fossil fuel reserves on the balance sheets of companies and in global equities markets and the reduced value that could result if a significant proportion of reserves were rendered incapable of extraction in an economically viable fashion due to responses to climate change, is known as the carbon bubble. Although this concept has been discussed by non-government organisations and academics for several years, there has recently been renewed interest in this topic, particularly from ratings agencies and investment analysts. There is, however, little consensus on what specific carbon prices, fossil fuel demand or market prices might trigger this devaluation.

Providing access to the affordable energy required to continue the economic growth is essential for maintaining living standards and alleviating poverty. Under all current plausible scenarios, fossil fuels will continue to be a significant part of the energy mix for decades.

BHP Billiton uses a scenario framework, including for forecasting commodity prices that considers critical global uncertainties (e.g. macroeconomic and geopolitical) and their impacts on supply and demand assumptions. Using a range of carbon prices and commodity demand and pricing assumptions across a variety of internally consistent scenarios, we have determined that BHP Billiton s overall asset valuation is not at material risk, the pay-back periods for most present and future investments in fossil fuels production are relatively short and the portfolio remains robust.

### **Mitigation**

We have been setting GHG targets for our Businesses since 1996 and have a goal to limit our overall emissions to below our FY2006 baseline by FY2017. Meeting an absolute target is not easy. Growth across our Businesses will increase emissions and we must continually look for opportunities to improve our energy efficiency and implement GHG reduction projects to mitigate this increase. All our Businesses are required to minimise their emissions to reduce our contribution to climate change. They must identify, evaluate and implement all suitable projects that prevent or minimise GHG emissions including in project design and equipment selection. For further information on our GHG emissions reduction projects, please refer to the Sustainability Report 2014.

# Adaptation

We recognise that we must ensure our business is resilient and can adapt to physical climate change impacts that will occur. Our assets are long-lived so we take a robust, risk-based approach to managing these impacts. Our

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assessment of the regional impacts on our Businesses shows that they are already exposed to risks as a result of climate change, including increasing storm intensities, greater water supply variability and an increasing number of high-temperature days. These impacts can affect health and safety, productivity and financial performance. Testing the resilience of our operations to these impacts has already changed the way we work. For example, the identification and assessment of increasing storm intensity and storm surge levels has resulted in raising the height of the trestle at our Hay Point coal port facility in Australia as part of our expansion plans.

We continue to look for enhancements to the Company-wide integrated planning framework to allow better assessment of the physical risks associated with climate change and to ensure resilience is embedded into our business plans and investment decisions. We will also look for opportunities to work in partnership to improve community and ecosystem resilience to the impacts of climate change.

## Investing in technology and innovation

To effectively address the challenge of climate change, there must be a significant focus on developing and deploying low-emissions technologies over the next few decades. The rate of technology improvement and subsequent adoption must be faster than the usual commercial timeframes if these technologies are to be available at scale and at acceptable cost to meet the global challenge. Industry and government will need to work together in collaborative partnerships to facilitate this step-change.

We are a foundation member of the Cooperative Research Centre for Greenhouse Gas Technologies, one of the world s leading collaborative research organisations focused on carbon capture and storage (CCS). We contribute a voluntary levy to the Australian Coal Association Low Emissions Technologies to facilitate the development of low-emissions technologies from coal use, including CCS. We are a member of the Global Carbon Capture and Storage Institute which aims to accelerate the development, demonstration and deployment of CCS globally through knowledge sharing, fact-based advice and advocacy and work to create favourable conditions to implement CCS.

We are developing a more integrated approach to low-emissions technology to provide a roadmap for our investments. We will investigate opportunities for investment across a range of technologies that have the potential to lead to material emission reductions in our operations and across our supply chains. To accelerate deployment of any prospective technologies, we will seek opportunities to partner with governments, industry leaders and key researchers.

Further information on our approach to climate change is available online at www.bhpbilliton.com.

## 1.14.3 Health and safety

## Keeping our people and operations safe

We recognise that the health and safety of our people comes first. This is core to *Our Charter* and to every aspect of our business. Our people are key to our long-term success and central to improving our HSEC performance.

To understand, manage and, where possible, eliminate the risks in our business, we have appropriate controls in place and provide our people with appropriate training. While eliminating hazards through engineering or physical controls has a strong place in safety management, we understand it is only part of the solution.

Our operations are required to have systems in place to identify and effectively manage foreseeable crises and emergencies. This ensures our operations can deal with potential causalities, to limit harm and to safely return to full

function as soon as possible.

Across our business, we undertake annual assessments to verify that critical controls are effective in managing each material risk. During FY2014, we maintained this focus, which included assessing whether the critical controls were being deployed as designed and to the standard required.

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In FY2014, there were no fatalities reported at our operated assets. Our total recordable injury frequency (TRIF) performance of 4.2 injuries per million hours worked improved by nine per cent compared with FY2013.

## Total recordable injury frequency (per million hours worked)

Year ended 30 June	2014	2013	2012
Total recordable injury frequency (TRIF)	4.2	4.6	4.7

### Focusing on the health of our people

To prevent occupational illness and injury, we are focused on ensuring the work our people are required to do does not impact their health and that they are fit for work. This means identifying and assessing risks and managing and minimising their impact.

Since FY2012, we have seen an increase in the reporting of musculoskeletal illnesses and in FY2014 we have also seen an increase in noise induced hearing loss case reporting. These changes in reported cases have been driven by the adoption of comprehensive musculoskeletal illness classification processes and the introduction of programs for the early detection of hearing loss at some of our Australian operations. This has resulted in more focus on both of these illnesses.

In FY2014, the incidence of employee occupational illness was 2.84 per million hours worked, an increase of 19 per cent compared with FY2013.

## Employee occupational illness incidence (per million hours worked)

Year ended 30 June	2014	2013	2012
Noise induced hearing loss	0.68	0.51	0.97
Musculoskeletal	1.61	1.24	1.04
Other illnesses	0.55	0.64	0.35
Total	2.84	2.39	2.36

Our priority is to control occupational exposures at their source. We are focused on continuously improving our occupational exposure controls. In situations where we cannot control the source, we employ a range of measures, including the provision of personal protective equipment to safeguard our people.

Operations are required to identify and control health risks and to establish an exposure risk profile to harmful agents for employees and for contractors and to review the profile to validate exposure levels and to account for process changes. The implementation of exposure controls is required where exposure potentially exceeds or is anticipated to exceed occupational exposure limits (OELs). We establish our own OELs when we believe local regulatory limits do not provide adequate protection for our workers. If a potential exposure to harmful agents exceeds 50 per cent of the OEL, periodic medical surveillance is required.

In FY2012, we established a health target baseline and committed to reduce potential occupational exposure to carcinogens and airborne contaminants by 10 per cent by FY2017. In FY2014, we recorded a 22 per cent decrease in the number of potential exposures to carcinogens and airborne contaminants, if not for the use of personal protective equipment, compared with our FY2012 baseline. We have therefore currently exceeded our target; however, exposure control remains an area of focus to ensure our reductions are maintained.

## 1.14.4 Environment

We demonstrate environmental responsibility by minimising our environmental impacts and contributing to enduring benefits to biodiversity, ecosystems and other environmental resources. We classify environmental

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incidents based on our Risk Severity table. We determine a significant environmental incident as one that causes one or more major impacts to land, biodiversity, ecosystem services, water resources or air, with effects lasting greater than one year. Incidents that may impact any of the environmental attributes listed previously are investigated and remediated according to internal or external requirements. In FY2014 there were no significant environmental incidents reported at our operated assets.

### Energy and greenhouse gas management

We strive to continually improve energy and GHG management. Consistent with our *Environment* GLD, our Businesses are required to identify, evaluate and implement suitable projects that prevent or minimise GHG emissions. We also evaluate and implement GHG emission reduction opportunities in capital project design.

In FY2013, we set a target to maintain our FY2017 GHG emissions below our FY2006 baseline levels, while continuing to grow our business. In FY2014, the Group s total GHG emissions were 45.0 million tonnes (Mt) of carbon dioxide equivalent (CO2-e), a reduction of 1.7 Mt CO2-e compared to FY2013 (46.7 Mt CO2-e). This keeps us in line to achieve our GHG target. We will continue to focus on the implementation of abatement opportunities within our Businesses to further reduce our GHG emissions.

## GHG Scope 1 and 2 (millions of tonnes CO<sub>2</sub>-e)

Year ended 30 June	2014	2013	2012
Scope 1 (a)	22.7	22.0	20.2
Scope 2 (b)	22.3	24.7	20.0
Total GHG millions of tonnes CO <sub>2</sub> -e	45.0	46.7	40.2

- (a) Scope 1 refers to direct GHG emissions from our operated assets.
- (b) Scope 2 refers to indirect GHG emissions from the generation of purchased electricity and steam that is consumed by our operated assets.

In FY2014, our total energy consumption across the Group increased by six per cent, compared to FY2013, to 343 petajoules. This increase was related to new projects coming online including our Jimblebar iron ore mine in Western Australia and our Daunia coal mine in Queensland, Australia. To further improve energy consumption and GHG emissions we have implemented projects across our Businesses.

In line with requirements of the UK Companies Act 2006, our reported FY2014 GHG intensity was 4.9 tonnes of CO2-e per tonne of copper equivalent production. We believe that attempting to benchmark energy use and/or greenhouse gas emissions on an intensity basis does not meaningfully contribute to an understanding of our performance, given the diverse range of products across our portfolio, fundamental differences in the grade, geology, accessibility and technological processes and changes in output levels that routinely occur in different directions in response to changing market conditions and other factors. Rather than use an intensity metric, we have set ourselves a more challenging goal to limit our overall emissions by setting an absolute target, keeping our FY2017 GHG emissions below our FY2006 baseline while we continue to grow our business.

## Biodiversity and land management

Improving our management of land and enhancing biodiversity are essential to operating in a responsible and sustainable manner. We continue to demonstrate environmental responsibility by minimising our environmental impacts and seeking opportunities to contribute to enduring benefits to biodiversity, ecosystems and other environmental resources.

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Our approach to land access is undertaken on a case-by-case basis and considers the potential environmental, societal, economic or cultural impacts. We consider what land we need for our activities and seek to identify the uses of the land and the stakeholders who may be affected by our activities. We then look at our possible short-term and long-term impacts on that land, including the effects that our use may have on biodiversity, water resources, air and communities.

In FY2013, we established a target to develop and maintain land and biodiversity management plans that include controls to avoid, minimise, rehabilitate and apply compensatory actions as appropriate, to manage the biodiversity and ecosystem impacts of our operations. This target is supported by the requirements of our *Environment GLD*. In FY2014, all our operations developed land and biodiversity management plans, consistent with our target.

We also have explicit requirements in our *Environment* GLD to avoid environmental impacts to protect our local and global environment. We continue to monitor the operational effectiveness of our controls. Where actual or reasonably foreseeable residual impacts remain to important biodiversity and ecosystems impacted by our activities, we look to undertake compensatory actions.

In addition to the environmental management actions of our Businesses, we have voluntarily committed to finance the conservation and ongoing management of areas of high biodiversity and ecosystem value that are of national or international conservation significance. We established an alliance with Conservation International to support the delivery of this target and improve our approach to biodiversity management more broadly. As a result, we will improve our environmental performance and broaden our contributions to lasting environmental benefits beyond what could be achieved by our operations alone. As of FY2014, we have committed more than US\$30 million to conservation, in addition to the environmental management activities at our operations.

A central part of our approach to managing our impacts on land and biodiversity is the rehabilitation of land no longer required for our activities. Our Businesses are required to maintain rehabilitation plans that support life of asset and closure plans, and to rehabilitate disturbed areas no longer required for operational purposes, consistent with the pre-disturbance land use or alternate land use, taking into account regulatory requirements and stakeholder expectations.

## Water stewardship

We recognise the role we have as responsible stewards of the water resources we share with our host communities and the environment. The sustainability of our operations relies on our ability to obtain an appropriate quality and quantity of water, use it responsibly and manage it appropriately, including taking account of natural supply variations.

Across our Businesses, water risks are required to be assessed and managed on a regional basis. In some locations, we operate in arid environments where water scarcity is an ongoing challenge while in other locations, we contend with water excess, water quality or water discharge issues. We anticipate climate change is likely to make the patterns and cycles of water flow less predictable and so we require our operations to implement adaptive responses. Managing our shared water resources is therefore a complex task for our Business.

In line with our *Environment GLD*, our operations are required to assess direct, indirect and cumulative impacts and risks to water resources as a result of understanding social, cultural, ecological and economic values of these resources at a catchment level within our area of influence. Based on these risks and impacts, controls demonstrating application of the mitigation hierarchy (avoid, minimise and rehabilitate environmental impacts prior to applying compensatory actions) are required to be implemented and monitored for effectiveness. Target environmental outcomes for impacts to water resources consistent with the level of risk are also required. Compensatory actions are applied where residual

impacts remain to important water-related biodiversity and ecosystems impacted by our activities to meet our target environmental outcomes and contribute to long-term environmental benefits.

Recognising the regional nature of our water risks, we introduced a target in FY2013 requiring our Businesses with water-related material risks, to implement projects to improve the management of water resources. The target allows our Businesses to focus on the water challenges specific to the regions in which they operate. In FY2014, all our operations that identified water-related material risks, implemented at least one project to improve the management of associated water resources.

Being a responsible water steward requires transparent and consistent reporting of water use and impacts. We have played a key role in the development and implementation of the Minerals Council of Australia s Water Accounting Framework (WAF). The WAF aims to improve data integrity and comparability across the sector to allow a more meaningful analysis on which to base policy making and deliver improved outcomes. Our water reporting is consistent with the WAF approach, and we are working with the ICMM to support broader adoption across industry.

Under the WAF, water is categorised as Type 1 (close to drinking water standards), Type 2 (suitable for some purposes), and Type 3 (unsuitable for most purposes). In FY2014, our total water input (water intended for use) was 347,700 megalitres across the Group, with 84 per cent defined as Type 2 or Type 3. Our use of Type 2 and Type 3 water demonstrates our approach to utilising lower-quality water wherever feasible.

## Responsibly managing hydraulic fracturing

The nature of our hydraulic fracturing operations at our North American Eagle Ford, Permian, Haynesville and Fayetteville shale areas means at times we work in close proximity to our host communities. We actively engage with local stakeholders to address public concerns about hydraulic fracturing fluids, groundwater contamination, land and water resources, GHG emissions, increased vehicular traffic and worker exposure to respirable crystalline silica. We continue to investigate ways to reduce or eliminate any potential impacts associated with our activities.

To protect and manage the land and water resources, we conduct environmental assessments prior to the execution of hydraulic fracturing work to minimise the impacts of our operations. In FY2014, we completed a water balance showing inputs, uses, losses, reuse and recycle, and disposal amounts of fresh water for each operation to identify opportunities to reduce water consumption in our hydraulic fracturing operations. We are pursuing non-potable water options, including the use of brackish water, recycled municipal effluents and recycled water from our production wells.

A number of controls are used to manage, minimise and recycle drilling residuals. We use closed loop systems that allows drilling muds to be recycled and lower the potential for contact with the environment. As part of our commitment to transparency, we publicly report the ingredients of the fracturing fluids for each well completion in the hydraulic fracturing chemical disclosure registry, FracFocus. For a high percentage of our wells, we fully disclose all of the ingredients and additives by name (and Chemical Abstracts Service Number) and provide the maximum percentage of each ingredient present in the fracturing fluid mixture. In a few cases, the service providers who supply the ingredients and conduct our well completions elect to designate a small number of proprietary ingredients as confidential business information. In the Permian area, we pump a blend of produced water and fresh water treated with an advanced oxidation process which utilises ozone, a highly reactive oxidant that kills most bacteria. This process eliminates the need for clay stabiliser and biocide, thereby reducing the number of additives in the fracturing fluid mixture. Every well we drill is checked against our critical controls to ensure well integrity and the safety of our operations.

The majority of our air emissions relate to GHG emissions from fuel combustion and flaring or venting during well construction and production. We are working to reduce emissions by capturing and selling produced natural gas that may otherwise have been vented or flared.

## **1.14.5** Society

## Supporting and engaging with our communities

We are a global company that values our host communities. We strive to be part of the communities in which we operate and through all our interactions seek to foster meaningful long-term relationships, which respect local cultures and create lasting benefits. Our contribution to our host communities is broad ranging. Through employment, taxes and royalties, we support local, regional and national economies. We purchase local goods and services and develop infrastructure that benefits entire communities.

From the earliest possible stage of a project s life, we seek to build trust with our stakeholders. By defining the boundaries of our host communities, we assess the social, economic, political, security and environmental aspects and develop a social baseline, which is required to be updated every five years with changes tracked over time. Stakeholder engagement plans, which identify the interests and relationships of our stakeholders and contain a range of culturally and socially inclusive engagement activities to encourage open communication, are reviewed and updated annually. To ensure our engagement and community development activities are effective and to inform planning activities, our operations are required to complete a community perception survey every three years.

## Free prior and informed consent

As one of the 22 member companies of the ICMM, we have worked to develop a progressive position statement on Indigenous Peoples and Mining. This statement, which comes into effect in May 2015, specifically addresses the issue of Free Prior and Informed Consent (FPIC).

FPIC is a concept based on good faith negotiation through which Indigenous peoples can give or withhold their consent using processes consistent with their traditional decision-making practices. Supporting commitments address understanding their rights and interests, building cross-cultural understanding, and agreeing on appropriate engagement processes and participation in decision-making. A number of related commitments address how ICMM members should engage where government is responsible for managing Indigenous peoples interests and how to move forward when differences of opinion arise. The ICMM s position statement recognises the right of governments to ultimately make decisions on development of resources and that, in most countries, neither Indigenous peoples nor other groups have a right to veto projects. Where consent cannot be reached, a host government may decide to proceed with a project after balancing the rights and interests of Indigenous peoples with the wider population. In these circumstances, it will be up to ICMM member companies to determine whether they remain involved with the project.

Through our *Community* GLD, we require our Businesses to prepare, design and implement Indigenous engagement programs that are consistent with the new ICMM Position Statement on Indigenous Peoples and Mining for new operations or major capital projects that are located on lands traditionally owned by or under customary use of Indigenous peoples and are likely to have significant adverse impacts on Indigenous peoples.

## Respecting customary rights

At a very early stage in a project, we seek to identify landowners, occupiers and users who may be affected by our activities. Knowing who is connected to and uses the land is critical to establishing an effective community consultation and engagement program. This helps to ensure people potentially affected by our operations are fully aware of our activities and have an opportunity to express their concerns and aspirations. Arising from this engagement, the operational work plan may be amended to reduce potential impacts on landowners and users.

Surveys are commissioned to identify the customary owners and how the land is being used to ensure these uses are taken into account in our development plans. In instances where land may be used for customary purposes and no formal land title has been issued, information is requested from relevant organisations, including

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government authorities with responsibilities for customary land uses and Indigenous peoples representative organisations, such as land and tribal councils. Further enquiries are also made directly with the people in the area to help identify those with connections to the land.

## Respecting and including Indigenous communities

We recognise the traditional rights and values of Indigenous peoples, respect their cultural heritage and provide opportunities for inclusion and advancement. Many of our operations are located on or near Indigenous lands. We support our workers by providing cultural awareness and competency training for employees and contractors who engage with Indigenous peoples from our host communities. Training is developed and delivered in consultation with traditional owners. We also identify who is connected to and uses the land to ensure we establish effective community consultation and engagement programs.

## Respecting human rights

We acknowledge our activities have the potential to impact human rights and we address these through our core business practices. We are committed to operating in accordance with the United Nations (UN) Universal Declaration of Human Rights, UN Guiding Principles on Business and Human Rights and the UN Global Compact Principles. We support these commitments through *Our Charter* and *Code of Business Conduct* and the performance requirements detailed in our GLDs.

In line with our *Community* GLD, our human rights due diligence process requires our operations to identify and document key potential human rights risks by completing a human rights impact assessment (HRIA). This includes assessing performance against the articles of the UN Universal Declaration of Human Rights, the UN Global Compact principles and host country legislation governing human rights issues. We require each HRIA to be reviewed on an annual basis. Every three years, each HRIA is required to be verified through an engagement process with stakeholders, and, in medium and high-risk jurisdictions, by a qualified human rights specialist. Where a HRIA identifies a material risk, a human rights management plan is required to be implemented and reviewed annually. Selected employees and contractors receive training on how to comply with our human rights commitments.

Through our commitment to the Voluntary Principles on Security and Human Rights (VPs), we seek to protect people and property from material risks presented by security threats. Performance requirements related to the VPs are implemented through our *Security and Emergency Management* GLD. Our operations are required to identify security-related material risks to people and property and engage relevant stakeholders to develop and manage security programs that respect human rights and fundamental freedoms.

In addition, we require our operations to conduct a gap analysis annually using the VP s Implementation Guidance Tool and to implement an improvement plan to close identified gaps. The process also provides an opportunity to further build awareness and understanding of the VPs across the Company.

## Making a positive contribution to society

Creating lasting economic and social benefit for our communities is fundamental to our business. This helps create a diversified local economy and ensures our investment continues to benefit the community beyond the life of our operations. We are an active participant in industry and sustainable development forums, such as the ICMM. We seek to understand our socio-economic impact on local communities and host regions through our participation in the ICMM s Mining: Partnerships for Development initiative. This global initiative builds on the ICMM s Resource Endowment initiative and seeks to enhance mining s contribution to development and poverty reduction through

multi-stakeholder partnerships.

Wherever we operate, we contribute taxes and royalties to governments which, in turn are used to provide important public services and amenities to their communities. At many of our locations, we also develop

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infrastructure to support our operations including roads, aerodromes, emergency response facilities, housing, public amenities, community facilities which can be accessed and utilised by local communities and businesses.

We are focused on providing training and employment opportunities to our local communities. Given the nature of the work we do, our ability to employ locally can be limited by the availability of industry and technical skills and experience at the local level. Our broader contribution to local economies can be realised through indirect employment and our support of local businesses that provide a range of services and products, which enable our operations to function effectively.

## Improving the quality of life in our host communities

A focus on sustainability underpins all our investments in community economic development. This means we are committed to addressing the needs and priorities of the communities in which we operate and seek to invest in projects that will continue to promote benefits to the community after the funding is completed. We work with our host communities to identify the major social issues and development priorities. Using data from a social baseline study and social impact and opportunity assessment, we develop a community development management plan. Community development projects and donations are required to be aligned to the overall community development management plan, implemented in consultation with local stakeholders, and meet our due diligence and anti-corruption requirements.

We voluntarily invest one per cent of our pre-tax profit, calculated on the average of the previous three years pre-tax profit, in community programs that aim to have a long-lasting positive impact on people s quality of life, including implementing new and supporting existing community projects. With a focus on improving quality of life, our community development programs are developed by working openly with governments and the communities in which we operate, and focusing on the needs and resources of our key stakeholders. This is how we are contributing to economic and social development.

During FY2014, our voluntary community investment totalled US\$241.7 million, comprising US\$141.7 million of cash, in-kind support and administrative costs, and a US\$100 million contribution to the BHP Billiton Foundation. The BHP Billiton Foundation was established in FY2013 to identify and support large sustainable development projects in countries and regions of interest to BHP Billiton to complement the local programs managed by our assets. This builds on contributions that have previously been paid to the BHP Billiton Sustainable Communities charitable organisation. At the end of FY2014, BHP Billiton Sustainable Communities had a total of US\$70.4 million and the BHP Billiton Foundation had a total of US\$179 million in funds available for future sustainable development projects.

### Community investment

Year ended 30 June	2014 US\$M	2013 US\$M	2012 US\$M
Expenditure (including in-kind support and administrative costs) (1)	141.7	139.8	149.1
Contribution into BHP Billiton Sustainable Communities and BHP Billiton Foundation		106.0	65.0
Total Community investment	241.7	245.8	214.1

(1) Represents BHP Billiton s equity share for both operated and non-operated joint venture operations. In FY2014, of the US\$141.7 million cash expenditure, 46 per cent was invested in local communities; 44 per cent was invested regionally and 10 per cent was invested in national or international programs in countries where we operate.

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### Ok Tedi

BHP Billiton exited from Ok Tedi Mining Limited (OTML) in February 2002. The exit arrangements included the transfer of BHP Billiton s shares in OTML to PNG Sustainable Development Program Limited (PNGSDP) and a statutory undertaking protecting BHP Billiton from environmental claims by the PNG Government.

In September 2013, the Papua New Guinea (PNG) Parliament passed laws which compulsorily acquired PNGSDP s shares in OTML and changed other aspects of the exit arrangements, including the repeal of the protection from environmental claims by the PNG Government. BHP Billiton retains an indemnity from PNGSDP in respect of environmental claims by the PNG Government and certain environmental claims by third parties. This indemnity is secured against the assets of PNGSDP.

Following the passing of the new laws, PNGSDP has commenced legal proceedings and an International Centre for Settlement of Investment Disputes (ICSID) arbitration process against the State of PNG and others.

## 1.15 Additional information

### 1.15.1 External factors and trends

The following section describes some of the external factors and trends that have had a material impact on our financial condition and results of operations. We operate our business in a dynamic and changing environment and with information that is rarely complete and exact. We primarily manage the risks discussed in this section under our portfolio risk management approach, which relies on the effects of diversification, rather than individual risk management programs. Details of our risk factors can be found in section 1.7.2 of this Annual Report. Details of our financial risk management strategies and financial instruments outstanding at 30 June 2014 can be found in section 1.7.3 and in note 29 Financial risk management to the Financial Statements.

Management monitors particular trends arising from external factors with a view to managing the potential impact on our future financial condition and results of operations. The following external factors could have a material adverse effect on our business and areas where we make decisions on the basis of information that is incomplete or uncertain.

## **Commodity prices**

The prices we obtain for our products represent a key driver of our business, and fluctuations in these commodity prices affect our results, including cash flows and asset values. The estimated impact on FY2014 profit after taxation of changes of commodity prices is set out below.

US\$M
54
30
24
112
28
25
36
26

US\$1/t on manganese alloy price	1
US¢1/lb on nickel price	2
During FY2014, commodity markets saw some support from a modest improvement in global economic activity,	
though growth was uneven across different regions. The United States and Japan saw underlying momentum	

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increase, but emerging economies, notably China, saw growth slow. For steelmaking raw materials, supply growth exceeded that of demand resulting in a decrease in prices. Metal commodity prices were relatively stable with the exception of nickel, which experienced a price increase primarily as a result of the Indonesian ore export ban. For energy commodities, US natural gas prices benefited from strong winter demand, while solid demand growth combined with supply disruptions and geopolitical tensions have provided price support for crude oil.

The following table shows prices of our most significant commodities for the years ended 30 June 2014, 2013 and 2012. These prices represent selected quoted prices from the relevant sources as indicated. These prices will differ from the realised prices on the sale of the Group s production due to differences in quotation periods, quality of products, delivery terms and the range of quoted prices that are used for contracting sales in different markets.

	2014	2013	2012	2014	2013	2012
Year ended 30 June	Closing	Closing	Closing	Average	Average	Average
Aluminium (LME cash) (US\$/t)	1,851	1,731	1,835	1,764	1,938	2,168
Alumina (1) (US\$/t)	312	318	305	321	327	334
Copper (LME cash) (US\$/lb)	3.15	3.06	3.45	3.18	3.48	3.71
Crude oil (Brent) (2) (US\$/bbl)	111.02	102.46	94.50	109.36	108.64	112.49
Energy coal (3) (US\$/t)	70.89	78.89	89.22	78.38	89.10	111.95
Natural gas Henry Hub (4) (US\$/MMBtu)	4.39	3.73	2.81	4.25	3.44	3.05
Natural gas Asian Spot LNG (5) (US\$/MMBtu)	11.28	15.40	14.95	16.38	15.14	16.25
Iron ore (6) (US\$/dmt)	93.25	116.25	135.25	122.70	127.23	151.17
Manganese Alloys (7) (US\$/t)	999	1,038	1,160	1,020	1,106	1,177
Manganese Ores (8) (US\$/dmtu)	4.20	5.54	5.06	4.95	5.29	4.90
Metallurgical coal (9) (US\$/t)	110.50	130.00	221.50	128.40	159.13	239.18
Nickel (LME cash) (US\$/lb)	8.49	6.21	7.47	6.88	7.43	8.77
Ethane (10) (US\$/bbl)	12.02	9.92	12.29	11.92	12.15	27.31
Propane (11) (US\$/bbl)	44.47	35.52	34.44	48.05	37.31	54.72
Butane (12) (US\$/bbl)	54.39	49.51	51.29	56.70	61.74	76.72

- (1) Platts PAX Free on Board (FOB) Australia market price assessment of calcined Metallurgical/ Smelter Grade Alumina.
- (2) Platts Dated Brent is a benchmark price assessment of the spot market value of physical cargoes of North Sea light sweet crude oil.
- (3) GlobalCoal FOB Newcastle 6,000kcal/kg NCV typically applies to coal sales in the Asia Pacific market.
- (4) Platts Gas based on Henry Hub typically applies to gas sales in the US gas market.
- (5) Platts Liquefied Natural Gas Delivery Ex-Ship (DES) Japan/Korea Marker typically applies to Asian LNG spot sales.

- (6) Platts 62 per cent Fe Cost and Freight (CFR) China used for fines.
- (7) Bulk FerroAlloy high-carbon ferromanganese (HCFeMn) Western Europe DDP.
- (8) 2014 and 2013 Metal Bulletin manganese ore 44 per cent Mn Cost Insurance Freight (CIF), 2012 CRU CIF China import 43 per cent contained manganese.
- (9) Platts Low-Vol hard coking coal Index FOB Australia representative of high-quality hard coking coals.
- (10) OPIS Mont Belvieu non-Tet Ethane typically applies to ethane sales in the US Gulf Coast market.
- (11) OPIS Mont Belvieu non-Tet Propane typically applies to propane sales in the US Gulf Coast market.
- (12) OPIS Mont Belvieu non-Tet Normal Butane typically applies to butane sales in the US Gulf Coast market.

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The following summarises the pricing trends of our most significant commodities for FY2014.

**Aluminium:** The London Metals Exchange (LME) aluminium average cash settlement price decreased by nine per cent during FY2014. Demand continued to increase, but new supply offset the curtailment of high cost capacity. Delays in implementing changes to LME warehouse rules contributed to record high regional premiums ex-China as inventories were constrained by warehouse queues. Since 30 June 2014, the aluminium cash settlement price increased to US\$2,114/t on 31 August 2014.

**Alumina:** The Platts FOB Australia average price decreased by two per cent during FY2014. Although demand grew, driven by the commissioning of new smelters in China, increasing supply outpaced the growth in demand.

**Copper:** The LME copper average cash settlement price decreased by nine per cent in FY2014. A shortage of copper scrap and growth in Chinese demand supported prices in the first half of the financial year, however, the price decreased in March amid concerns over the liquidation of Chinese stocks. Although seasonal demand strength helped regain some lost ground, strong growth of refined copper production limited price upside.

**Crude oil:** The Platts Dated Brent crude average price increased by one per cent during FY2014. Prices were supported by increased global demand, constrained Libyan supply, tensions in the Ukraine and a surge of unrest in Iraq in the latter part of the year. Moderating price drivers included slower growth in the Chinese economy during the December quarter of FY2014, combined with some progress towards resolving the deadlock over Iran s nuclear program.

**Energy coal:** The Global Coal Newcastle FOB average price decreased by 12 per cent during FY2014. The decrease was driven by weaker import demand growth from India and China, coupled with supply growth from Australia, Russia and Indonesia.

**Natural gas Henry Hub:** The Platts US Henry Hub natural gas average price increased by 24 per cent during FY2014. The increase was driven by early winter heating demand in the residential and commercial sectors, depleting inventory levels significantly below the five-year average. Storage inventories in June closed 31 per cent below the five-year average at 1,829 billion cubic feet.

Natural gas Asian Spot LNG: The Asian liquefied natural gas average spot price increased by eight per cent during FY2014. The price rise was primarily caused by strong north Asian winter heating demand, combined with the closure of Japanese and South Korean nuclear reactors increasing the need for gas fired power generation in the first half of the year. Supply remained tight throughout the period, as Egypt, Nigeria and Angola experienced supply disruptions. The year-end price decrease of 31 per cent versus the average price for the year was principally due to low North Asian summer demand and new supply coming to market from Papua New Guinea in the second half of the year. Since 30 June 2014, the Asian liquefied natural gas spot price increased to US\$12.45/MMBtu on 31 August 2014.

**Iron ore:** The Platts 62 per cent iron ore CFR China average price declined by four per cent during FY2014. The decrease was driven by seaborne iron ore supply growth which outpaced demand. The price fluctuated between US\$89.00/dmt and US\$142.50/dmt as large changes occurred in iron ore inventories. Global demand increased in the first half of the year, primarily driven by China s record pig iron production; however the second half of the year saw demand growth decrease due to flat Chinese growth. Seaborne imports to China increased, primarily driven by supply from Australia and the year-end price decreased 24 per cent versus the average price for the year. Since 30 June 2014, the Platts 62 per cent iron ore CFR China price decreased to US\$88/dmt on 31 August 2014.

**Manganese:** The Metal Bulletin manganese ore China CIF average price decreased by six per cent during FY2014. Demand growth slowed, while South African supply increased amid higher Chinese inventory levels. The year-end price also decreased 15 per cent versus the average price for the year. The Western Europe spot

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high carbon ferromanganese average price decreased by eight per cent during FY2014. Weaker alloy prices led to decreased production in South Korea and the United States.

**Metallurgical coal:** The average Platts Low-Vol Hard Coking Coal Index decreased by 19 per cent during FY2014. While demand from traditional markets recovered steadily, the price decrease was mainly driven by continuing supply growth from Australia. The year-end price also decreased 14 per cent versus the average price for the year.

**Nickel:** The average LME cash settlement nickel price decreased by seven per cent during FY2014. Increased supply growth coming mainly from Chinese nickel pig iron and new production from greenfield projects was greater than demand growth in the first half of the year. The price increase in the second half of the year was driven by decreased low-cost supply due to the Indonesian ore export ban. Demand growth increased, supported by a recovery in stainless steel production in Europe and the United States. The year-end price increased 23 per cent versus the average price for the year.

**NGL:** The Mont Belvieu ethane average price decreased by two per cent during FY2014 following increases in ethane supply. Mont Belvieu propane average prices increased by 29 per cent during FY2014, supported by a decrease in supply growth. Mont Belvieu butane average prices decreased by eight per cent during FY2014 due to increased butane supply. Since 30 June 2014, the Mont Belvieu ethane price decreased to US\$9.92 /bbl on 31 August 2014.

### **Exchange rates**

We are exposed to exchange rate transaction risk on foreign currency sales and purchases, as we believe active currency hedging does not provide long-term benefits to our shareholders. Because a majority of our sales are denominated in US dollars, and the US dollar plays a dominant role in our business, we borrow and hold surplus cash predominantly in US dollars to provide a natural hedge. Operating costs and costs of locally sourced equipment are influenced by fluctuations in local currencies, primarily the Australian dollar, Brazilian real, Chilean peso and South African rand. Foreign exchange gains and losses reflected in operating costs owing to fluctuations in the local currencies relative to the US dollar may potentially offset one another. The US dollar strengthened in the last quarter of FY2013, resulting in a stronger average US dollar during FY2013 compared to FY2014. Overall, the Australian dollar ended the financial year stronger against the US dollar, while the Chilean peso, Brazilian real and South African rand weakened.

We are also exposed to exchange rate translation risk in relation to net monetary liabilities, being our foreign currency denominated monetary assets and liabilities, including debt and other long-term liabilities. Details of our exposure to foreign currency fluctuations are contained within note 29 Financial risk management to the Financial Statements.

## Changes in product demand and supply

Global demand and supply for the commodities we produce is a key driver of commodity prices, and fluctuations in product demand and supply affect our results, including cash flows and asset values.

The global economy grew at a moderate rate in FY2014. Momentum in the United States, Japan and the United Kingdom was underpinned by central bank monetary policy. Europe s economy improved marginally, although the recovery was constrained by high levels of unemployment. Emerging markets, including China, experienced a moderate slowdown.

In a relative sense, the Chinese economy continues to grow strongly with signs that it is rebalancing. Consumption continued to be supported by higher household incomes while fixed asset investment softened, led by the property

sector, as the central bank restricted access to credit. Rapid credit growth in the non-bank financial sector remained an important concern for policy makers.

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We remain confident in the short-term to medium-term outlook for the Chinese economy. Measured stimulus recently introduced by the government demonstrates their commitment to maintain economic growth above seven per cent. We believe consumption and services will continue to increase in importance, while the market s role in allocating capital will be enhanced. Greater transparency within the fiscal system is also expected to reshape the relationship between central and local government.

The underlying performance of the US economy continued to improve despite the significant disruption caused by severe weather in the March quarter of FY2014. The curtailment of quantitative easing appears to have had a limited impact on sentiment as a solid increase in demand reflects a stronger labour market, rising disposable incomes, and higher equities and housing prices. Business investment has been a weak link in the recovery so far as companies have responded slowly to better economic conditions, despite higher levels of profitability. An increase in capital spending will be required to sustain the recovery in the medium term.

The Japanese economy has responded strongly to expansionary monetary and fiscal policy over the past year. Investment spending and wages increased as corporate profits benefited from the depreciation of the yen, while an increase in the national sales tax in April had a limited impact on consumption. These factors have increased the potential for faster growth in the short term, although a longer-term, sustainable recovery will be contingent on the scale and speed of structural reform.

With regard to the global economy, stronger United States growth and an associated tightening of monetary policy could result in the rapid outflow of capital from emerging economies. However, developing nations with sound macroeconomic fundamentals would be less likely to experience a severe impact from this transition.

As anticipated, Chinese crude steel production growth decelerated in response to weakness in the construction sector. On average, we expect the ratio of Chinese crude steel production growth to underlying GDP growth to remain below one, although seasonal factors and policy settings will continue to influence short-term output. Global steel demand growth outside of China is likely to accelerate during the remainder of CY2014.

The supply of low-cost steelmaking raw materials has grown more quickly than demand. As predicted, lower-cost seaborne iron ore supply is increasingly displacing higher cost Chinese domestic production. As this trend continues, the cost curve is likely to flatten as high cost production exits the market. In metallurgical coal, high-cost, uneconomic supply has remained resilient although we do expect to see an increasing number of production cuts, particularly in the United States. Given robust underlying demand growth for premium hard coking coals, pricing for our products is likely to be well supported in the medium and longer term.

Indonesian and Australian exports continue to keep the thermal coal market well supplied, prolonging the weaker pricing environment. While demand from key importing regions remains steady, prices are unlikely to respond unless uneconomic supply exits the market.

In copper, robust demand for refined metal, supply disruptions and a shortage of scrap has ensured that the market remains broadly balanced. We believe the longer-term fundamentals for copper remain compelling as grades decline, rising costs and a scarcity of high-quality future development opportunities are likely to constrain low-cost supply.

Demand growth, supply disruptions and geopolitical tension have continued to support crude oil prices. We expect prices to remain supported by an increase in demand from non-OECD countries, which has recently outstripped growth in demand from OECD countries.

United States natural gas prices benefited from a cold winter, which reduced inventory levels significantly below the five-year average. In the longer term, demand is expected to benefit from increasing industrial use, growth in gas-fired power generation and the commencement of LNG exports. Conversely, high inventory levels at Asian utilities, mild summer temperatures and the commissioning of additional supply have led to a decline in Asia-Pacific LNG prices from their February peak.

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The nickel price rose sharply during the second half of FY2014 as the Indonesian ore export ban took effect in the March quarter of FY2014. Demand growth remains robust given rising stainless steel production in China, Europe and the United States.

While aluminium demand growth has been strong, new supply continues to offset the curtailment of high cost capacity. However, we expect the premia currently being realised in certain regions to remain at elevated levels as warehouse bottlenecks are likely to take some time to be resolved.

#### Capital expenditure

Capital expenditure is important in pursuing our strategy through the development of large-scale resource projects and in sustaining our existing operations. Capital expenditure is disclosed for each Business in section 1.6.3 of this Annual Report.

## **Operating costs**

As the prices for our products are determined by the global commodity markets in which we operate, we do not generally have the ability to offset cost pressures through corresponding price increases; therefore, controlling our operating costs is a key driver of our results. Operating costs for the last three years are set out in section 1.11 as well as an analysis of the change in Total expenses. Further analysis of the factors that impacted expenses during FY2014 is set out below and in section 1.15.3.

In discussing the factors that affected Total expenses, we refer to the change in operating cash costs and change in exploration and business development. Collectively we refer to these as change in controllable cash costs. Operating cash costs by definition do not include non-cash costs being depreciation, amortisation, impairments and movements in deferred stripping balances. The change in operating cash costs also excludes the impact of exchange rates and inflation on the actual costs incurred in the corresponding period, changes in fuel and energy costs, changes in exploration and business development costs and one-off items. These items are excluded so as to provide a consistent measurement of changes in costs across all the Businesses based on the factors that are within their control and responsibility.

Change in operating cash costs and change in controllable cash costs are not measures that are recognised under IFRS and they may differ from similarly titled measures reported by other companies. A reconciliation of the movements in Underlying EBIT to the financial statement line items in the Income Statement is included in section 2.5 of this Annual Report.

Our focus on reducing operating costs through productivity initiatives saw a decrease in operating cash costs of US\$1.5 billion and a reduction in exploration and business development of US\$398 million to give a reduction in controllable cash costs of US\$1.9 billion in FY2014. In addition operating costs were aided by favourable exchange rate impacts of US\$2.0 billion. These factors were offset by other factors such as inflation (US\$805 million) and the production costs associated with higher volumes (US\$2.6 billion). With higher depreciation and amortisation charges of US\$1.7 billion and higher impairment charges of US\$450 million, total expenses excluding exceptional items increased from US\$45.0 billion to US\$46.5 billion.

### **Exploration and development of resources**

## Minerals exploration

Over the past six years, brownfield exploration has increased our reserve base around our portfolio of existing assets in large resource basins, which now provide us with significant growth opportunities. This has allowed us to reduce brownfield exploration expenditure and rationalise our greenfield exploration program.

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Greenfield minerals (new sites) exploration is focused on advancing targets within Chile and Peru, and is organised through our Copper Business. Greenfield activities include opportunity identification, application for and acquisition of mineral title, early reconnaissance operations and multi-million dollar delineation drilling programs.

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

Our expenditure on minerals exploration over the last three financial years is set out below.

Year ended 30 June	2014 US\$M	2013 US\$M	2012 US\$M
Greenfield exploration	46	179	324
Brownfield exploration	364	497	814
Total minerals exploration	410	676	1,138

The Group s minerals exploration expenditure declined by 39 per cent in FY2014 to US\$410 million as we sharpened our focus on greenfield copper porphyry targets in Chile and Peru.

### Petroleum exploration

We have reduced exploration expenditure in Petroleum over recent years with a sharpened focus on high impact liquids opportunities in the Gulf of Mexico, Western Australia and Trinidad and Tobago.

Year ended 30 June	2014 US\$M	2013 US\$M	2012 US\$M
Petroleum exploration	600	675	1,355
Exploration expense			

Exploration expense represents that portion of exploration expenditure that is not capitalised in accordance with our accounting policies, as set out in note 1 Accounting policies to the Financial Statements.

Exploration expense for each Business over the three-year period is set out below.

Year ended 30 June	2014 US\$M	2013 US\$M	2012 US\$M
Exploration expense (1)			
Petroleum and Potash	544	709	1,038
Copper	116	274	366
Iron Ore	56	74	135
Coal	34	39	174

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Aluminium, Manganese and Nickel	38	53	68
Group and unallocated items			7
BHP Billiton Group	788	1,149	1,788

(1) Includes US\$72 million (2013: US\$102 million, 2012: US\$144 million) exploration expense previously capitalised, written off as impaired.

Following our focus on productivity and reducing costs, the reduction in the Group s exploration expense excluding impairment of exploration expense previously capitalised increased Underlying EBIT in FY2014 by US\$331 million.

#### **Interest rates**

We are exposed to interest rate risk on our outstanding borrowings and investments. Our policy on interest rate exposure is for interest on our borrowings to be on a US dollar floating interest rate basis. Deviation from our policy requires the prior approval of our Financial Risk Management Committee and is managed within our Cash Flow at Risk (CFaR) framework, which is described in note 29 Financial risk management to the Financial Statements. When required under this strategy, we use interest rate swaps, including cross currency interest rate swaps, to convert a fixed rate exposure to a floating rate exposure. As at 30 June 2014, the Group held US\$3.3 billion (2013: US\$5.4 billion) of centrally managed fixed interest rate borrowings, as well as US\$2.0 billion (2013: US\$3.5 billion) of other fixed interest rate borrowings, that have not been swapped to floating interest rates, primarily arising from debt raised during FY2014, debt assumed as part of the acquisition of Petrohawk and debt raised prior to the DLC merger.

Our earnings are sensitive to changes in interest rates on the floating interest rate component of the Group s net borrowings. Based on the net debt position as at 30 June 2014, taking into account interest rate swaps and cross currency interest rate swaps, it is estimated that a one percentage point increase in the US LIBOR interest rate will decrease the Group s equity and profit after taxation by US\$126 million (2013: decrease of US\$128 million). This assumes that the change in interest rates is effective from the beginning of the financial year and the fixed/floating mix and balances are constant over the year. However, interest rates and the net debt profile of the Group may not remain constant over the coming financial year and therefore such sensitivity analysis should be used with care.

## Health, safety, environment and community

We operate in an industry where many of our activities are highly regulated by laws governing health, safety and the environment. We are committed to compliance with the laws and regulations of the countries in which we operate and, where applicable, to exceeding legal and other requirements which are less stringent than our own. However, regulatory standards and community expectations are constantly evolving. As a result, we may be exposed to increased litigation, compliance costs and unforeseen environmental rehabilitation expenses, despite our best efforts to work with governments, community groups and scientists to keep pace with regulations, law and public expectations.

Further information about our compliance with HSEC regulations can be found in section 1.14 of this Annual Report.

#### Insurance

During FY2014, we maintained an insurance program encompassing property damage, business interruption, sabotage and terrorism, marine cargo, construction, directors and officers liability and public and certain other liabilities. The program includes a combination of self-insurance via subsidiary captive insurance companies, industry mutuals and external market insurance and reinsurance. Mandates are established as to risk retention levels, policy cover and, where applicable, insurance and reinsurance counterparty security. As part of our portfolio risk management approach, we regularly conduct an assessment of maximum foreseeable loss potential, cash flow at risk, loss experience, claims received and insurance premiums paid, and will make adjustments to the balance of self-insurance and external insurance as required.

The Group is largely self-insured for losses arising from property damage and business interruption, sabotage and terrorism, marine cargo, construction and primary public liability. For these risks, we internally insure our Businesses (for wholly owned assets and for our share of joint venture assets) via our captive insurance companies. Any losses incurred will consequently impact the Financial Statements as they arise.

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## 1.15.2 Application of critical accounting policies

The preparation of our Financial Statements requires management to make estimates and judgements that affect the reported amounts of assets and liabilities, the disclosure of contingent liabilities at the date of the Financial Statements and the reported revenue and expenses during the periods presented therein. On an ongoing basis, management evaluates its estimates and judgements in relation to assets, liabilities, contingent liabilities, revenue and expenses. Management bases its estimates and judgements on historical experience and on various other factors it believes to be reasonable under the circumstances, the results of which form the basis of making judgements about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions and conditions.

We have identified the following critical accounting policies under which significant judgements, estimates and assumptions are made and where actual results may differ from these estimates under different assumptions and conditions and may materially affect financial results or the financial position reported in future periods:

reserve estimates;
exploration and evaluation expenditure;
development expenditure;
property, plant and equipment and intangible assets recoverable amount;
defined benefit pension schemes;
provision for closure and rehabilitation;

taxation.

In accordance with International Financial Reporting Standards (IFRS), we are required to include information regarding the nature of the estimates and judgements and potential impacts on our financial results or financial position in the Financial Statements. This information can be found in note 1 Accounting policies to the Financial Statements.

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## 1.15.3 Operating results

The following table describes the approximate impact of the principal factors that affected Underlying EBIT for FY2014 and FY2013.

Year ended 30 June	2014 US\$M	2013 US\$M
Underlying EBIT as reported in the prior year	22,930	28,086
Change in volumes:		
Productivity	962	1,257
Growth	1,929	707
	2,891	1,964
Net price impact:		
Change in sales prices	(3,396)	(8,454)
Price-linked costs	(80)	582
Tice-inixed costs	(00)	302
	(3,476)	(7,872)
Change in controllable cash costs:		
Operating cash costs	1,524	1,556
Exploration and business development	398	949
	1,922	2,505
Change in other costs:		
Exchange rates	1,760	229
Inflation on costs	(805)	(646)
Fuel and energy	(46)	(133)
Non-cash	(2,091)	154
One-off items	(2,0)1)	(103)
	(1,182)	(499)
Asset sales	53	(66)
Ceased and sold operations	(492)	(657)
Other	215	(531)
Underlying EBIT	22,861	22,930

The method of calculation of the factors that affected Underlying EBIT and the Financial Statement line items of Revenue, Other income and Expenses (excluding net finance costs) that are affected by the factors are as follows.

Factor affecting Underlying EBIT Volumes Growth	Method of calculation  Volume Growth comprises Underlying EBIT for operations that are new or acquired in the current period minus Underlying EBIT for operations that are new or acquired in the corresponding period, change in volumes for operations identified as a Growth project from the corresponding period to the current period multiplied by the prior year Underlying EBIT margin, and change in volume for Petroleum Business from the corresponding period to the current period multiplied by the prior year Underlying EBIT margin.	Financial statement line item affected Revenue and Expenses
Volumes Productivity	Change in volumes for each operation not included in the Growth category from the corresponding period to the current period multiplied by the prior year Underlying EBIT margin.	Revenue and Expenses
Change in sales prices	Change in average realised price for each operation from the corresponding period to the current period multiplied by current period volumes.	Revenue
Price-linked costs	Change in price-linked costs for each operation from the corresponding period to the current period multiplied by current period volumes.	Expenses
Operating cash costs	Change in total costs, other than price-linked costs, exchange rates, inflation on costs, fuel and energy costs, non-cash costs and one-off items as defined below for each operation from the corresponding period to the current period.	Expenses
Exploration and business development	Exploration and business development expense in the current period minus exploration and business development expense in the corresponding period.	Expenses
Exchange rates	Change in exchange rate multiplied by current period local currency revenue and expenses. The majority of the Group s selling prices are denominated in US dollars and so there is little impact of exchange rate changes on Revenue.	Revenue and Expenses
Inflation on costs	Change in inflation rate applied to expenses, other than depreciation and amortisation, price-linked costs, exploration and business development expenses, expenses in ceased and sold operations and expenses in new and acquired operations.	Expenses
Fuel and energy	Fuel and energy expense in the current period minus fuel and energy expense in the corresponding period.	Expenses
Non-cash	Includes non-cash items, mainly depreciation, amortisation, and impairments.	Expenses

One-off items

Change in cash costs exceeding a predetermined threshold associated with an unexpected event that had not occurred in the last two years and is not reasonably likely to occur within the next two years.

Expenses

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Factor affecting Underlying EBIT Asset sales	Method of calculation Profit/loss on the sale of assets or operations in the current period minus profit/loss on sale in the corresponding period.	Financial statement line item affected Other income
Ceased and sold operations	Underlying EBIT for operations that are ceased or sold operations in the current period minus Underlying EBIT for operations that are ceased or sold in the corresponding period.	Revenue, Other income and Expenses
Other	Variances not explained by the above factors.	Expenses

A reconciliation of the movements in Underlying EBIT for FY2014 to the financial statement line items in the Income Statement is included in section 2.5 of this Annual Report.

The following commentary describes the principal factors outlined in the table above for FY2014 and FY2013.

#### **Volumes**

Volume efficiencies attributed to productivity and the ramp-up of major projects underpinned an increase in production in a number of Businesses in FY2014 and an additional US\$2.9 billion in Underlying EBIT. WAIO was the major contributor as the ramp-up of the Jimblebar mining hub and a series of productivity initiatives raised the capacity of our integrated supply chain and supported a US\$1.8 billion increase in Underlying EBIT. Despite the impact of natural field decline, stronger volumes in our Petroleum Business generated an additional US\$994 million of Underlying EBIT, reflecting 73 per cent growth in Onshore US liquids volumes and a near doubling of production at Atlantis.

#### **Prices**

Lower average prices reduced Underlying EBIT by US\$3.4 billion in FY2014.

In metallurgical coal, an increase in seaborne supply and the resilience of higher cost, along with uneconomic capacity led to a 20 per cent and 14 per cent decline in the average realised price of hard coking coal and weak coking coal, respectively. The average price received for thermal coal also declined by 14 per cent during the period. In total, lower average realised prices in our Coal Business reduced Underlying EBIT by US\$1.5 billion.

A five per cent decline in the average realised price of copper reflected the near-term rebalancing of the market, while the acceleration of low-cost, seaborne iron ore supply growth, predominantly from Australia s Pilbara region, weighed on prices in the June 2014 half year. In total, lower average realised prices for copper and iron ore reduced Underlying EBIT by US\$1.4 billion.

Nickel and aluminium prices rallied towards the end of FY2014 but remained lower on average for the period, reducing Underlying EBIT by a further US\$258 million.

The value of diversification was again evident as higher average realised prices for our petroleum products increased Underlying EBIT by US\$219 million. In this context, the average price achieved for our natural gas sales book, covering domestic and international markets, increased by 16 per cent.

Price-linked costs decreased Underlying EBIT by US\$80 million during the period, primarily reflecting higher royalty charges in our Petroleum and Iron Ore Businesses.

## Controllable cash costs

Our focus on improving operating costs through productivity initiatives saw a decrease in operating cash costs of US\$1.5 billion and a decrease in exploration and business development costs of US\$398 million, to give a decrease in controllable cash costs of US\$1.9 billion during FY2014.

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Operating cash costs

The Group s commitment to further improve the competitive position of its assets delivered tangible results in FY2014 as operating cash costs declined by US\$1.5 billion. A general increase in labour and contractor productivity had the greatest impact, increasing Underlying EBIT by US\$1.3 billion.

An improvement in equipment productivity increased Underlying EBIT by a further US\$268 million as contract stripping activities were further optimised at Queensland Coal. A reduction in consumable costs in our Aluminium, Manganese and Nickel Business more than accounted for a US\$33 million decrease in Group supply costs.

Exploration and business development

The Group s exploration expenditure declined by 25 per cent in FY2014 to US\$1.0 billion as we sharpened our focus on greenfield copper porphyry targets in Chile and Peru, and high impact liquids opportunities in the Gulf of Mexico, Western Australia and Trinidad and Tobago. The associated reduction in the Group s exploration expense increased Underlying EBIT by US\$331 million, while a further decline in business development expenditure increased Underlying EBIT by US\$67 million.

#### Other costs

Exchange rates

A stronger US dollar increased Underlying EBIT by US\$1.8 billion and included the restatement of monetary items in the balance sheet, which reduced Underlying EBIT by US\$352 million. Average and closing exchange rates for FY2014 and FY2013 are detailed in note 1 Accounting policies to the Financial Statements.

Inflation on costs

Inflation had an unfavourable impact on all Businesses and reduced Underlying EBIT by US\$805 million during FY2014. This was most notable in Australia, Chile and South Africa, which accounted for over 85 per cent of the total variance.

Non-cash

An increase in non-cash charges reduced Underlying EBIT by US\$2.1 billion during the period.

A US\$631 million increase in the depreciation and amortisation charge at Onshore US reflected the ramp-up of liquids production and the progressive development of our Permian acreage. We continue to expect the depreciation rate in the Permian to normalise at a lower level as reserves are booked and the production rate grows towards 100 Mboe per day over the medium term. The completion and progressive ramp-up of several major projects in our Iron Ore and Coal Businesses resulted in an US\$871 million increase in the depreciation and amortisation expense during the period.

Depreciation and amortisation expense included the following impairment charges: a US\$292 million charge at Energy Coal South Africa; a US\$184 million charge related to minor Gulf of Mexico assets; and a US\$68 million charge associated with our decision to allow the exclusivity agreement for Terminal 5 at the Port of Vancouver (United States) to lapse.

A US\$300 million charge related to the revision of mine site rehabilitation provisions for the Group s North American closed mines and a lower capitalisation rate for deferred stripping at Escondida and Pampa Norte also contributed to the increase in non-cash charges.

Asset sales

The divestment of Liverpool Bay more than accounted for the US\$53 million increase in Underlying EBIT related to asset sales.

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## Ceased and sold operations

Underlying EBIT from ceased and sold operations decreased by US\$492 million in FY2014 and largely reflected: a US\$143 million negative adjustment to the Browse divestment price; the closure of the Nickel West Leinster Perseverance underground mine in November 2013; and the cessation of aluminium smelting activities at Bayside in June 2014.

#### Other

Other items increased Underlying EBIT by US\$215 million and largely reflected an increase in margins at our equity accounted investments and an US\$84 million profit related to the sale of the Energy Coal South Africa Optimum Coal purchase agreement. A US\$112 million UK pension plan expense in our Petroleum Business is also reported in this category.

#### **Net finance costs**

Net finance costs of US\$1.2 billion decreased by US\$100 million from the prior period. This was primarily related to a decrease of US\$245 million in net interest expenses, which was partially offset by a decrease in interest capitalised of US\$108 million.

## **Taxation expense**

Total taxation expense, including royalty-related taxation, exceptional items and exchange rate movements, was US\$7.0 billion, representing a statutory effective tax rate of 31.5 per cent (30 June 2013: 35.0 per cent).

Government imposed royalty arrangements calculated by reference to profits are reported as royalty-related taxation. The Minerals Resource Rent Tax (MRRT) reduced taxation expense by US\$238 million in FY2014 (30 June 2013: increase of US\$321 million) as royalty-related credits in the Coal Business more than offset Iron Ore MRRT expense for the period. This included the remeasurement of deferred tax assets associated with the MRRT which decreased taxation expense by US\$170 million in the period (30 June 2013: increase of US\$207 million).

The Group s adjusted effective tax rate, which excludes the influence of exchange rate movements, remeasurement of deferred tax assets associated with the MRRT and exceptional items, was 32.5 per cent (30 June 2013: 34.2 per cent).

Adjusted effective tax rate is not an IFRS measure and is reconciled to the statutory effective tax rate below:

		2014			2013	
Year ended 30 June	Profit before tax US\$M	Income tax expense US\$M	%	Profit before tax US\$M	Income tax expense US\$M	%
Statutory effective tax rate	22,236	(7,012)	31.5%	19,726	(6,906)	35.0%
Less:						
Exchange rate movements		(24)			245	
Remeasurement of deferred tax assets						
associated with the MRRT		(170)			207	
Exceptional items	(551)	166		1,928	(943)	

**Adjusted effective tax rate 21,685 (7,040) 32.5**% 21,654 **(7,397)** 34.2%

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Other royalty and excise arrangements that are not profit based are recognised as operating costs within Profit before taxation. These amounted to US\$2.8 billion during the period (30 June 2013: US\$2.6 billion).

## **Exceptional items**

Year ended 30 June 2014	Gross	Tax	Net
	US\$M	US\$M	US\$M
Sale of Pinto Valley	551	(166)	385
	551	(166)	385

On 11 October 2013, BHP Billiton completed the sale of its Pinto Valley mining operation for a cash consideration of US\$653 million, after working capital adjustments. A gain on sale of US\$385 million (after tax expense) was recognised in FY2014.

Refer to note 3 Exceptional items to the Financial Statements for more information.

Year ended 30 June 2013	Gross US\$M	Tax US\$M	Net US\$M
Exceptional items by category			
Sale of Yeelirrie uranium deposit	420		420
Sale of Richards Bay Minerals	1,212	(183)	1,029
Sale of diamonds business	(97)	(42)	(139)
Sale of East and West Browse Joint Ventures	1,539	(188)	1,351
Impairment of Nickel West assets	(1,698)	454	(1,244)
Impairment of Worsley assets	(2,190)	559	(1,631)
Impairment of Permian Basin assets	(266)	99	(167)
Other impairments arising from capital project review	(1,006)	291	(715)
Newcastle steelworks rehabilitation	158	(47)	111
	(1,928)	943	(985)

The Group announced the sale of its wholly owned Yeelirrie uranium deposit resulting in a gain on sale of US\$420 million, while the associated tax expense was offset by the recognition of deferred tax benefits on available tax losses.

The Group announced it had completed the sale of its 37.76 per cent effective interest in Richards Bay Minerals resulting in a gain on sale of US\$1.0 billion (after tax expense).

The Group announced the sale of its diamonds business, comprising its interests in the EKATI Diamond Mine and Diamond Marketing operations. The transaction was completed on 10 April 2013 for an aggregate cash consideration of US\$553 million (after adjustments). An impairment charge of US\$139 million (after tax expense) was recognised based on the final consideration.

The Group signed a definitive agreement to sell its 8.33 per cent interest in the East Browse Joint Venture and 20 per cent interest in the West Browse Joint Venture resulting in a gain on sale of US\$1.5 billion being recognised in FY2013. The associated tax expense of US\$462 million was partly offset by the recognition of deferred tax benefits on available tax losses of US\$241 million and the derecognition of deferred tax liabilities of US\$33 million. The final sales price was determined during FY2014 requiring a loss of US\$143 million recognised in FY2014.

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As a result of expected continued strength in the Australian dollar and weak nickel prices, the Group recognised an impairment charge of US\$1.2 billion (after tax benefit) at Nickel West in FY2013.

The Group recognised an impairment of assets at Worsley as a result of expected continued strength in the Australian dollar and weak alumina prices. A total impairment charge of US\$1.6 billion (after tax benefit) was recognised.

An impairment charge of US\$167 million (after tax benefit) was recognised as the performance of specific evaluation wells in certain areas of the Permian Basin (United States) did not support economic development.

In FY2013, WAIO refocused its attention on the capital efficient expansion opportunity that exists within the Port Hedland inner harbour, and all early works associated with the outer harbour development option were suspended. This revision to the WAIO development sequence and the change in status of other minor capital projects across the Group resulted in the recognition of impairment charges of US\$639 million (after tax benefit) and other restructuring costs of US\$76 million (after tax benefit) in FY2013, of which US\$580 million (after tax benefit) were related to WAIO.

The Group recognised a decrease of US\$158 million (before tax expense) to its rehabilitation obligations in respect of former operations at the Newcastle steelworks (Australia). This followed the completion of the Hunter River Remediation Project and reaching agreement with the Environment Protection Authority in March 2013 regarding the necessary scope of work to repeal the Environmental Classification at Steel River.

Exceptional items during FY2013 are classified by nature as follows:

		Impairment of		Closure and	
Year ended 30 June 2013	Sale of	goodwill and other	Restructuring	rehabilitation provisions	
US\$M	assets	assets	costs	released	Gross
Sale of Yeelirrie uranium deposit	420				420
Sale of Richards Bay Minerals	1,212				1,212
Sale of diamonds business		(97)			(97)
Sale of East and West Browse Joint					
Ventures	1,539				1,539
Impairment of Nickel West assets		(1,698)			(1,698)
Impairment of Worsley assets		(2,190)			(2,190)
Impairment of Permian Basin assets		(266)			(266)
Other impairments arising from capital					
project review		(898)	(108)		(1,006)
Newcastle steelworks rehabilitation				158	158
	3,171	(5,149)	(108)	158	(1,928)

Refer to note 3 Exceptional items to the Financial Statements for more information.

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## Third party sales

We differentiate sales of our production from sales of third party products due to the significant difference in profit margin earned on these sales. The table below shows the breakdown between our production and third party products.

Year ended 30 June (1)	2014 US\$M	2013 US\$M	2012 US\$M
Group production	СБФПП	Ουφίνι	СБФ111
Revenue	64,227	63,067	66,969
Related operating costs	(41,410)	(40,264)	(39,017)
Underlying EBIT	22,817	22,803	27,952
Underlying EBIT Margin	35.5%	36.2%	41.7%
Third party products			
Revenue	2,979	2,886	3,508
Related operating costs	(2,935)	(2,759)	(3,374)
Operating profit	44	127	134
Margin on third party products (2)	1.5%	4.4%	3.8%

(2) Operating profit divided by revenue.

We engage in third party trading for the following reasons:

Production variability and occasional shortfalls from our own assets means that we sometimes source third party materials to ensure a steady supply of product to our customers.

To optimise our supply chain outcomes, we may buy physical product from third parties.

In order to support the development of liquid markets, we will sometimes source third party physical product and manage risk through both the physical and financial markets.

<sup>(1)</sup> Excluding exceptional items.

## 1.15.4 Cash flow analysis

A Consolidated Cash Flow Statement is contained in the Financial Statements. The explanatory notes appear in note 23 Notes to the consolidated cash flow statement to the Financial Statements. A summary table has been presented below to show the key sources and uses of cash.

Year ended 30 June	2014 US\$M	2013 US\$M	2012 US\$M
Cash generated from operations	31,384	28,793	32,987
Dividends received	1,284	721	722
Net interest paid	(839)	(786)	(412)
Taxation paid	(6,465)	(8,574)	(8,038)
Net operating cash flows	25,364	20,154	25,259
Purchases of property plant and equipment	(15,993)	(22,243)	(18,637)
Exploration expenditure	(1,010)	(1,351)	(2,493)
Exploration expenditure expensed and included in operating cash flows	716	1,047	1,644
Purchases of intangibles	(192)	(400)	(219)
Investment in financial assets	(1,193)	(475)	(471)
Investment in subsidiaries, operations and jointly controlled entities			(12,556)
Investment in equity accounted investments	(44)	(84)	(83)
Net proceeds from investing activities	1,882	4,780	330
Net investing cash flows	(15,834)	(18,726)	(32,485)
Net proceeds (repayment of)/from interest bearing liabilities	(910)	7,157	8,644
Share buy-back			(83)
Dividends paid	(6,639)	(7,004)	(6,220)
Contribution from non-controlling interest	1,435	73	101
Other financing activities	(354)	(424)	(403)
Net financing cash flows	(6,468)	(198)	2,039
Net increase/(decrease) in cash and cash equivalents	3,062	1,230	(5,187)

Net operating cash flows after interest and tax increased by 26 per cent to US\$25.4 billion in FY2014. A US\$2.6 billion increase in cash generated from operations (after changes in working capital balances) and a US\$2.1 billion decrease in net taxes paid were the major contributors to the strong increase. The decrease in net taxes paid was attributed to lower income tax payments in the year of US\$1.2 billion in line with our lower effective tax rate and income tax refunds of US\$852 million.

Net investing cash outflows decreased by US\$2.9 billion to US\$15.8 billion during the period. This reflected a US\$6.6 billion reduction in capital and exploration expenditure partially offset by a decline in proceeds from asset sales of US\$2.9 billion. Expenditure on major growth projects totalled US\$13.1 billion, including US\$5.6 billion on petroleum projects and US\$7.5 billion on minerals projects. Sustaining capital expenditure and other items totalled

US\$2.9 billion. Exploration expenditure was US\$1.0 billion, including US\$716 million classified within net operating cash flows.

Net financing cash flows included the proceeds from interest bearing liabilities of US\$6.3 billion and contributions from non-controlling interests of US\$1.4 billion. Proceeds from interest bearing liabilities included the issuance of a four tranche Global Bond of US\$5.0 billion. These inflows were more than offset by debt repayments of US\$7.2 billion and dividend payments to our shareholders of US\$6.4 billion.

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## 1.15.5 Net debt and sources of liquidity

Our policies on debt and treasury management are as follows:

a commitment to a solid A credit rating;

gearing to be a maximum of 40 per cent;

diversification of funding sources;

generally to maintain borrowings and excess cash in US dollars.

## Gearing and net debt

Net debt, comprising Interest bearing liabilities less Cash and cash equivalents, was US\$25.8 billion, which represented a decrease of US\$1.7 billion compared with the net debt position at 30 June 2013. Gearing, which is the ratio of net debt to net debt plus net assets, was 23.2 per cent at 30 June 2014, compared with 26.8 per cent at 30 June 2013.

Cash at bank and in hand less overdrafts at 30 June 2014 was US\$8.8 billion compared with US\$5.7 billion at 30 June 2013. Included within this were short-term deposits at 30 June 2014 of US\$7.1 billion compared with US\$3.2 billion at 30 June 2013.

#### **Funding sources**

During FY2014, the Group issued a four tranche Global Bond totalling US\$5.0 billion comprising US\$500 million Senior Floating Rate Notes due 2016 paying interest at three month US dollar LIBOR plus 25 basis points, US\$500 million 2.050 per cent Senior Notes due 2018, US\$1.5 billion 3.850 per cent Senior Notes due 2023, and US\$2.5 billion 5.000 per cent Senior Notes due 2043.

None of our Group level borrowing facilities are subject to financial covenants. Certain specific financing facilities in relation to specific Businesses are the subject of financial covenants that vary from facility to facility, but which would be considered normal for such facilities.

Our maturity profile for US dollar bonds, Euro bonds and Australian dollar bonds for the following five years is set out below.

Year ended 30 June	2015 US\$M	2016 US\$M	2017 US\$M	2018 US\$M	2019 US\$M
USD Bonds	3,825	1,050	3,250		2,250
Euro Bonds		1,365			1,706
AUD Bonds				939	·

3,825 2,415 3,250 939 3,956

	Facility available 2014 US\$M	Used 2014 US\$M	Unused 2014 US\$M	Facility available 2013 US\$M	Used 2013 US\$M	Unused 2013 US\$M	
Commercial paper program (1)	6,000		6,000	6,000	(1,330)	4,670	
Total financing facilities	6,000		6,000	6,000	(1,330)	4,670	

<sup>(1)</sup> The Group has a US\$6.0 billion commercial paper program backed by US\$6.0 billion of revolving credit facilities. In May 2014, the US\$5.0 and US\$1.0 billion revolving credit facilities expiring in December 2015 and December 2014, were replaced by a US\$6.0 billion revolving credit facility. The new facility has a

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five-year maturity with two one-year extension options. The facility is used for general corporate purposes and as backup for the commercial paper programs. The interest rates under these facilities are based on an interbank rate plus a margin. The applicable margin is typical for a credit facility extended to a company with the Group s credit rating. The Group had no US commercial paper outstanding in the market at the end of the financial year (2013: US\$1.3 billion).

Additional information regarding the maturity profile of our debt obligations and details of our standby and support agreements is included in note 29 Financial risk management to the Financial Statements.

The Group s credit ratings are currently A1/P-1 (Moody s long-term/short-term) and A+/A-1 (Standard & Poor s long-term/short-term). The ratings outlook from both agencies did not change during FY2014.

#### 1.15.6 Other information

## Quantitative and qualitative disclosures about market risk

We identified our primary market risks in section 1.15.1 of this Annual Report. A description of how we manage our market risks, including both quantitative and qualitative information about our market risk sensitive instruments outstanding at 30 June 2014, is contained in note 29 Financial risk management to the Financial Statements.

## Off-balance sheet arrangements and contractual commitments

Information in relation to our material off-balance sheet arrangements, principally contingent liabilities, commitments for capital expenditure and commitments under leases at 30 June 2014 is provided in note 21 Contingent liabilities and note 22 Commitments to the Financial Statements.

## **Subsidiary information**

Information about our significant subsidiaries is included in note 26 Subsidiaries to the Financial Statements.

## **Related party transactions**

Related party transactions are outlined in note 32 Related party transactions to the Financial Statements.

### Significant changes since the end of the year

Significant changes since the end of the year are outlined in note 36 Subsequent events to the Financial Statements.

The Strategic Report is made in accordance with a resolution of the Board.

#### Jac Nasser AO

Chairman

Dated: 11 September 2014

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#### 2 Our assets

#### 2.1 Business overview

#### 2.1.1 Petroleum and Potash Business

Our Petroleum and Potash Business headquartered in Houston, United States, comprises conventional and non-conventional operations located in six countries throughout the world and a potash project based in Saskatchewan, Canada.

#### **Petroleum**

Our Petroleum Business includes exploration, development, production and marketing activities. We have a high-quality resource base concentrated in the United States and Australia. Our core production operations are primarily located in the US Gulf of Mexico, Onshore US and in Australia. We also have operations in Trinidad and Tobago, Pakistan, Algeria and the United Kingdom. We produce crude oil and condensate, natural gas and natural gas liquids (NGLs).

The Petroleum portfolio consisted of conventional oil and gas operations up until 2011, when we moved into the unconventional shale business. Our Onshore US operations evolved from the acquisition of the Fayetteville shale assets from Chesapeake Energy Corporation and the acquisition of Petrohawk Energy Corporation.

Our overall production for FY2014 was 246.0 million barrels of oil equivalent (MMboe). This was mainly attributable to our US and Australian operations, which produced 144.3 MMboe and 80.0 MMboe, respectively, with the majority of US production coming from Onshore US, which produced 108.1 MMboe. Operations outside Australia and the United States delivered the remaining production volumes. Information relating to our oil and gas reserves is set out in section 2.3.1.

In line with our aim of simplification and a sharper strategic focus, we continue to evaluate our existing portfolio in order to optimise our position around our core business.

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Our production operations include the following:

#### **United States**

## Gulf of Mexico

We operate two fields in the Gulf of Mexico (Shenzi with a 44 per cent interest and Neptune with a 35 per cent interest) and hold non-operating interests in three other fields (Atlantis with a 44 per cent interest, Mad Dog with a 23.9 per cent interest, and Genesis with a 4.95 per cent interest). We have on going infill drilling in our Gulf of Mexico fields. We completed water injection development projects at Shenzi and Atlantis in CY2013. All the fields are located between 155 and 210 kilometres offshore of the US state of Louisiana. 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. These pipelines transport oil and gas from the Green Canyon area, where all our Gulf of Mexico fields are located, to connecting pipelines that transport product onshore. Our US oil production is delivered to refineries along the Gulf Coast of the United States.

#### Onshore US

We produce oil, condensate, NGLs and natural gas in four shale areas: Eagle Ford, Permian, Haynesville and Fayetteville. The Eagle Ford area has two sections, Black Hawk and Hawkville. Our combined leasehold acreage onshore in the United States is approximately 1.2 million net acres. Our ownership interests in those leases range from less than one per cent to 100 per cent. At 30 June 2014, we held an interest in approximately 7,700 gross wells and approximately 2,600 net wells. We acted as joint venture operator for approximately 32 per cent of our gross wells. Production in FY2014 was 108.1 MMboe up from 99.2 MMboe in FY2013.

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During FY2014, we sold our interest in our Onshore US South Midland shale operation, located in the Permian Basin, to EP Energy for cash consideration of US\$153 million.

Shale reservoirs are characterised by low permeability, so it is necessary to stimulate the reservoir to create additional permeability and, therefore, the flow of liquids and gas to the wellbore. Extracting oil and gas from shale involves hydraulic fracturing, which is a process developed to efficiently access supplies of oil and natural gas locked inside dense subsurface rock formations, such as shale. Hydraulic fracturing involves using water, sand and a small amount of chemicals to fracture the hydrocarbon-bearing rock formation to allow the well to produce commercial volumes.

The development phase of an onshore shale operation requires an extensive drilling and completion program, which may include associated gas compression and treatment facilities and connecting pipelines. Shale development has a repetitive, manufacturing-like nature that provides opportunities for increased efficiency. Much of our development of the shale reservoirs utilises horizontal drilling with average lateral lengths between 1,400 and 1,700 metres. We enter into service contracts with third parties to provide drilling and completion services at our operated sites. At the end of FY2014, we had 24 drilling rigs in operation.

Much of the Eagle Ford and Permian areas are focused on hydrocarbon liquids. The Eagle Ford area is located in south Texas, where our leasehold acreage comprises 0.3 million net acres. The Permian area is located in west Texas, where our leasehold acreage currently comprises 0.2 million net acres following the sale of our South Midland interest and other leasehold acquisitions and disposals. Production volume from the Permian area was 3.8 MMboe. The combined production in FY2014 from our liquids-focused Eagle Ford and Permian areas was 51.9 MMboe, up from 33.4 MMboe in FY2013, with a production mix of 42 per cent crude oil and condensate (FY2013: 35 per cent), 36 per cent natural gas (FY2013: 42 per cent) and 22 per cent NGLs (FY2013: 23 per cent).

The Haynesville and Fayetteville areas are focused on natural gas. The Haynesville area is located in northwest Louisiana and east Texas, where our leasehold acreage comprises 0.3 million net acres. The Fayetteville field is located in north central Arkansas, where our leasehold acreage comprises 0.4 million net acres. The Haynesville and Fayetteville areas had combined production in FY2014 of 56.2 MMboe of natural gas (FY2013: 65.8 MMboe).

Oil and gas production from our onshore shale areas is sold domestically in the United States, via connections to intrastate and interstate pipelines. Prices for oil, NGLs and natural gas are based on US regional price indices, including West Texas Intermediate prices for oil, Henry Hub prices for natural gas and Mont Belvieu prices for NGLs.

## Australia

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#### Bass Strait

Together with our 50-50 joint venture partner, Esso Australia (a subsidiary of ExxonMobil), through the Gippsland Basin Joint Venture, we participated in the original discovery of hydrocarbons in 1965 and we have been producing oil and gas from Bass Strait for more than 40 years. The Bass Strait operations are located between 25 and 80 kilometres off the southeastern coast of Australia.

We sell the majority of our Bass Strait crude oil and condensate production to refineries along the east coast of Australia under 12-month term contracts. The contract price is based on the average Dated Brent price. Gas is piped onshore to the joint venture s Longford processing facility, from which we sell our share of production to domestic distributors under contracts with periodic price reviews.

#### Minerva

We are the operator of Minerva (90 per cent interest), a gas field located 11 kilometres south-southwest of Port Campbell in western Victoria. The operation consists of two subsea wells, with gas piped onshore to a processing plant. After processing the gas is delivered into a pipeline and sold domestically under long-term contracts.

## North West Shelf

We are a joint venture participant in the North West Shelf Project, located approximately 125 kilometres northwest of Dampier in Western Australia. The North West Shelf Project was developed in phases: the domestic gas phase supplies gas to the Western Australian domestic market, mainly under long-term contracts, and a series of liquefied natural gas (LNG) expansion phases supplying LNG to buyers in Japan, South Korea and China under a series of long-term contracts.

We continue to expand our operations in North West Shelf. The North Rankin compression project was completed during FY2014 to recover remaining lower pressure gas from the North Rankin and Perseus gas fields. North Rankin B platform was constructed adjacent to existing North Rankin A platform connected by a 100-metre long bridge and operates as a single facility.

Gas from North West Shelf is piped to the Karratha Gas Plant for processing. Liquefied petroleum gas (LPG), condensate and LNG are transported to market by ship, while domestic gas is transported by the Natural Gas and Pilbara Energy pipelines. We are also a joint venture partner in four nearby oil fields Cossack, Wanaea, Lambert and Hermes. All North West Shelf gas and oil joint ventures are operated by Woodside.

## **Pyrenees**

We operate six oil fields in Pyrenees, which are located offshore approximately 23 kilometres northwest of Northwest Cape, Western Australia. We had an effective 62 per cent interest in the fields as at 30 June 2014, based on inception-to-date production from two permits in which we have interests of 71.43 per cent and 40 per cent, respectively. The project uses a floating, production, storage and off-take (FPSO) facility. The crude oil produced is sold internationally on the spot market.

#### Macedon

We are the operator of Macedon (71.43 per cent interest), an offshore gas field located approximately 75 kilometres west of Onslow, Western Australia and a gas processing facility onshore, approximately 17 kilometres southwest of

Onslow. The operation achieved first gas in August 2013 and consists of four subsea wells, with gas piped onshore to the processing plant. After processing, the gas is delivered into a pipeline and sold domestically under long-term contracts.

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## **Stybarrow**

We are the operator of Stybarrow (50 per cent interest), an oil field located 55 kilometres west-northwest of Exmouth, Western Australia. The project uses a FPSO facility. The crude oil produced is sold internationally on the spot market.

### Other production operations

## Algeria

Our Algerian operations comprise a 38 per cent interest in the ROD Integrated Development, which consists of six satellite oil fields that pump oil back to a dedicated processing train. The oil is sold on a spot basis to international markets. Our interest in ROD is subject to a contractual determination with our joint venture partner ENI, which could result in a future change in our interest under certain conditions.

## **United Kingdom**

We hold a 16 per cent non-operating interest in the Bruce oil and gas field in the North Sea and operate the Keith oil and gas field (31.83 per cent interest), a subsea tie-back, which is processed via the Bruce platform facilities.

We divested our interest in Liverpool Bay (46.1 per cent interest) on 31 March 2014 to ENI ULX Limited for a cash consideration of US\$29.1 million (subject to finalisation) and the transfer of the rehabilitation and restoration liability to the buyer. Liverpool Bay was an integrated development consisting of five producing offshore oil and gas fields in the Irish Sea, the Point of Ayr onshore processing plant in northern Wales and associated infrastructure.

#### Trinidad and Tobago

We operate the Greater Angostura field (45 per cent interest in the production sharing contract), an integrated oil and gas development, located offshore, 40 kilometres east of Trinidad. The crude oil is sold on a spot basis to international markets, while the gas is sold domestically under term contracts. During FY2014 we extended the termination date of our Production Sharing Contract with the Government of Trinidad and Tobago from 2021 to 2026.

#### Pakistan

We operate the Zamzama gas project (38.5 per cent interest) in the Sindh province of Pakistan. Both gas and condensate are sold domestically under term contracts in accordance with the Pakistan Government s pricing policies.

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## **Information on Petroleum operations**

The following table contains additional details of our production operations. This table should be read in conjunction with the production (refer to section 2.2.1) and reserve tables (refer to section 2.3.1).

Operation & location United States Neptune	Product	Ownership	Operator	Title, leases or options	Nominal production capacity	Facilities, use & condition
(Green Canyon 613) Offshore deepwater Gulf of Mexico (1,300m)	Oil and gas	BHP Billiton 35% Marathon Oil 30% Woodside Energy 20%	BHP Billiton	Lease from US Government as long as oil and gas produced in paying quantities	50 Mbbl/d oil 50 MMcf/d gas	Permanently moored tension leg platform (TLP)
Shenzi (Green		Maxus US Exploration 15%				
Canyon 653) Offshore deepwater Gulf of Mexico	Oil and gas	BHP Billiton 44%	BHP Billiton	Lease from US Government as long as oil and gas produced in paying	100 Mbbl/d oil 50 MMcf/d gas	Stand-alone TLP
(1,310m)		Hess Corporation 28% Repsol 28%		quantities	gas	Genghis Khan field (part of same geological structure) tied back to Marco Polo TLP
Atlantis (Green Canyon 743)						
Offshore deepwater  Gulf of Mexico	Oil and gas	BHP Billiton 44%	BP	Lease from US Government as long as oil and gas produced in paying	200 Mbbl/d oil 180 MMcf/d gas	Permanently moored semi-submersible platform
(2,155m)		BP 56%		quantities	gas	

Mad Dog (Green Canyon 782)						
Offshore deepwater	Oil and gas	BHP Billiton 23.9%	BP	Lease from US Government as	80 Mbbl/d oil 60 MMcf/d	Permanently moored integrated truss spar,
Gulf of Mexico		23.9 %		long as oil and gas	gas	facilities for
(1,310m)				produced in paying quantities		simultaneous production and
		BP 60.5%				drilling operations
		Chevron 15.6%				
Genesis (Green Canyon 205)						
Offshore	Oil and gas	BHP Billiton	Chevron	Lease from US	55 Mbbl/d oil	Floating cylindrical
deepwater	_	4.95%		Government as long as oil and gas	72 MMcf/d gas	hull (spar) moored to seabed with
Gulf of Mexico				produced in paying quantities		integrated drilling facilities
(approximately		Chevron 56.67%		1		
790m)		ExxonMobil				
		38.38%				

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Operation & location Onshore US	Product	Ownership	Operator	Title, leases or options	Nominal production capacity	Facilities, use & condition		
Eagle Ford, south Texas	Oil, condensate, gas and NGL	BHP Billiton working interest in leases range from <1% to 100%	BHP Billiton operated approximately 32% of approximately	We currently own leasehold interests in approximately 1.2 million net acres:	Average daily production during FY2014	Eagle Ford producing oil and gas wells and associated pipeline and compression		
Permian, west Texas			7,700 wells	Eagle Ford 0.3 million acres	1,230 MMcf/d gas	facilities		
Haynesville,		BHP Billiton average net working interest is approximately		Permian 0.2 million acres	60.1 Mbbl/d oil and condensate	Permian oil and gas wells with associated		
Louisiana and east Texas		34%		Haynesville 0.3 million acres	31.3 Mbbl/d NGL	31.3 Mbbl/d	gathering 31.3 Mbbl/d processing	gathering systems, processing plant and compression
Fayetteville,		Largest partners include		Fayetteville 0.4 million acres		facilities		
Arkansas		Southwestern Energy, XTO, Devon Energy		Other 0.1 million acres		Haynesville producing gas wells with a third party operated		
				Leases associated with producing wells remain in		pipeline network		
				place as long as oil and gas is produced in paying quantities		Fayetteville producing gas wells with associated pipeline and compression infrastructure		
						All production from Onshore US fields is transported to various intrastate and interstate pipelines through multiple		

interconnects

## Australia

Offshore and	Oil and gas	Gippsland Basin	Feen Australia	20 production	200 Mbbl/d	20 producing fields
onshore	On and gas	Joint Venture	Esso Australia	licences and 2	oil	with 23 offshore
Victoria		(GBJV):		retention leases		developments (15
				issued by	1,075	steel jacket
		BHP Billiton		Australian	MMcf/d gas	platforms, 4 subsea
		50%		Government	5 150 tmd	developments,
					5,150 tpd LPG	2 steel gravity based mono
					LIG	towers, 2 concrete
		Esso Australia		Expire between	850 tpd	gravity based
		(Exxon Mobil		2016 and end of	ethane	platforms)
		subsidiary) 50%		life of field		
		Oil Basins Ltd				
		2.5% royalty				Onshore
		interest in 19		One production		infrastructure:
		production		licence held with		
		licences		Santos Ltd		Longford facility
						(3 gas plants,
						liquid processing
		Vinnau Hait Islat				facilities)
		Kipper Unit Joint Venture (KUJV):				Interconnecting
		venture (KOJV).				Interconnecting pipelines
		BHP Billiton				pipelines
		32.5% Esso				Long Island Point
		Australia 32.5%				LPG and oil
						storage facilities
		Santos Offshore				
		Pty Ltd 35%				Ethane pipeline

Operation & location Minerya	Product	Ownership	Operator	Title, leases or options	Nominal production capacity	Facilities, use & condition	
Offshore and onshore Victoria	Gas and condensate	BHP Billiton	BHP Billiton	Production licence issued by Australian	150 TJ/d gas 600 bbl/d condensate	2 well completions	
		90% Santos (BOL) 10%	1 ,		Single flow line transports gas to onshore gas processing facility		
						Gas plant located approximately 4 kms inland from Port Campbell	
North West S		N. 41 W. 4 Cl. 1C	XX7 1 1 1	9 production	N d D 1	Production from	
Offshore and onshore Western Australia	Domestic gas, LPG, condensate,	as, LPG, Project is an	Woodside Petroleum Ltd		North Rankin Complex: 2,500 MMcf/d gas	North Rankin and Perseus processed through the	
Australia	LNG	DID Dilly		Government	60 Mbbl/d condensate	interconnected North Rankin A and North Rankin B platforms	
North Rankin		BHP Billiton:		6 expire in 2022			
Goodwyn Perseus		8.33% of original domestic gas JV,		and 3 expire 5 years from end of	Goodwyn A		
Angel and Searipple fields		will ultimately increase to 16.67%		production	platform: 1,450 MMcf/d gas 110 Mbbl/d condensate	•	
		16.67% of Incremental				Searipple processed through Goodwyn A	
		Pipeline Gas (IPG) domestic			Angel platform: 960 MMcf/d gas	platform	
		gas JV 16.67% of original LNG JV			50 Mbbl/d		
		12.5% of China LNG JV 16.67%			condensate	4 subsea wells in Perseus field tied into Goodwyn A	
		of LPG JV			Withnell Bay gas plant: 600 MMcf/d gas	platform	

Oil Corporation

Other participants:

subsidiaries of

Woodside,

Chevron, BP,

Shell,

Mitsubishi/Mitsui

and China

National Offshore

Production from

Angel field

processed through

45,000 tpd LNG

Angel platform

Angel platform

Onshore gas

Onshore gas treatment plant at Withnell Bay processes gas for domestic market

5-train LNG plant

North	West
Shelf	

Offshore Western Australia	Oil	BHP Billiton 16.67%	3 production licences issued by Australian Government	Production: 60 Mbbl/d Storage: 1 MMbbl	Floating production storage and off-take (FPSO) unit
			expire in 2014		
		Woodside	(currently in		
Wanaea		33.34%,	renewal), 2018 and 2033,		
Cossack		BP, Chevron,	respectively		
		Japan Australia	-		
Lambert and		LNG (MIMI)			
		16.67% each			
Hermes fields					

Operation & location Pyrenees	Product	Ownership	Operator	Title, leases or options	Nominal production capacity	Facilities, use & condition
Offshore Western Australia	Oil	WA-42-L permit:  BHP Billiton 71.43%	BHP Billiton	Production licence issued by Australian Government expires 5 years	Production: 96 Mbbl/d oil	24 subsea well completions (19 producers, 4 water injectors, 1 gas injector), FPSO
Crosby				after production ceases	Storage: 920 Mbbl	
Moondyne		Apache PVG 28.57%				
Wild Bull						
Tanglehead		WA-43-L				
Stickle and		permit: BHP Billiton 40%				
Ravensworth fields						
		Apache APG Permits 31.5%				
		Inpex Alpha 28.5%				
Macedon Offshore and onshore Western	Gas and condensate	WA-42-L permit	BHP Billiton	Production licence issued by Australian	Production: 200 MMcf/d gas	4 well completions
Australia		BHP Billiton 71.43%		Government expires 5 years after production ceases	20 bbl/d condensate	Single flow line transports gas to onshore gas processing facility
		Apache PVG 28.57%				
						Gas plant located approximately 17 km southwest of Onslow
Offshore Western Australia	Oil and gas	BHP Billiton 50%	BHP Billiton	Production licence issued by Australian	Production: 80 Mbbl/d oil	10 subsea well completions (6 producers, 3 water

Stybarrow and Eskdale fields		Woodside 50%		Government expires 5 years after production ceases	Storage: 900 Mbbl	injectors, 1 gas injector)
						Gas production is reinjected
Other product	ion operatio	ons				
Algeria						
ROD Integrated Development						
Onshore Berkine Basin, 900 kilometres southeast of Algiers, Algeria	Oil	BHP Billiton 45% interest in 401a/402a production sharing contract ENI 55%	Joint Sonatrach/ENI entity	Production sharing contract with Sonatrach (title holder)	Approximately 80 Mbbl/d oil	Development and production of 6 oil fields
		BHP Billiton effective 38% interest in ROD unitised integrated		Expires in 2016 with option for two 5-year extensions under certain conditions specified in the contracts		2 largest fields (ROD and SFNE) extend into neighbouring blocks 403a, 403d
		development ENI 62%				Production through dedicated processing train on block 403

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Operation & location United Kingdom	Product	Ownership	Operator	Title, leases or options	Nominal production capacity	Facilities, use & condition
Bruce/Keith Offshore North Sea, UK	Oil and gas	Bruce: BHP Billiton 16% BP 37% Total SA 43.25% Marubeni 3.75%	Bruce B Keith BHP Billiton	P3 production licences issued by UK Government expire in 2015, 2018 and 2046	920 MMcf/d gas	Integrated oil and gas platform  Keith developed as tie-back to Bruce facilities
		Keith:  BHP Billiton 31.83% BP 34.84%  Total SA 25% Marubeni 8.33%				
Liverpool Bay Offshore northwest England, Irish Sea	Oil and gas	BHP Billiton 46.1% ENI 53.9%	BHP Billiton	3 production licences issued by UK Government expire in 2016, 2025 and 2027	308 MMcf/d gas 70 Mbbl/d oil and condensate	Integrated development of 5 producing fields
Douglas and Douglas West oil fields, Lennox		BHP Billiton s interest in Liverpool Bay divested				Oil treated at Douglas complex then piped to oil storage barge for export by tankers
Hamilton Hamilton North gas fields		31 March 2014				Gas processed at Douglas complex then piped by subsea pipeline to Point of Ayr gas terminal for further processing

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Table of Conte	ents					
Operation & location Trinidad and Tobago	Product	Ownership	Operator	Title, leases or options	Nominal production capacity	Facilities, use & condition
Greater Angostura Offshore Trinidad and Tobago	Oil and gas	BHP Billiton 45%  National Gas Company 30%  Chaoyang 25%	BHP Billiton	Production sharing contract with the Trinidad and Tobago Government entitles us to operate Greater Angostura until 2026		Integrated oil and gas development: central processing platform connected to the Kairi-2 platform and gas export platform with 3 satellite wellhead protector platforms and flow lines
						Oil pipeline from processing platform to storage and export at Guayaguayare
Pakistan						Gas supplied to Trinidad and Tobago domestic markets
Zamzama Onshore Sindh Province, Pakistan	Gas and condensate	BHP Billiton 38.5%  ENI Pakistan 17.75% PKP Exploration 9.375% PKP Exploration 2 9.375%	BHP Billiton	20-year development and production lease from the Pakistan Government expires in 2022 (option to extend 5 years)	500 MMcf/d gas 3,350 bbl/d condensate	<ul><li>10 production wells</li><li>4 process trains</li><li>2 front end compression trains</li></ul>

Government Holdings 25%

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### Capital projects

### **United States**

### Shenzi Water Injection

The Shenzi Water Injection program was approved as part of the original sanctioned Shenzi project, which began production in 2009, to supplement aquifer pressure for additional recovery. The program included drilling and completion of three water injection wells and provides facilities to inject up to 125 thousand barrels per day (Mbbl/d) of water at 7,000 pounds per square inch (psi). The final Water Injector well #3 was drilled and completed in August 2013. The additional recovery resulting from water injection is expected to be approximately 80 million barrels (gross). Our share of final development costs was approximately US\$375 million. We are the operator with a 44 per cent interest and Repsol and Hess Corporation each hold a 28 per cent interest.

## **Atlantis South Water Injection**

During the initial Atlantis South development, water injection topsides and subsea facilities were approved and installed. The Atlantis South Water Injection project was later approved in January 2009 to provide pressure support. The water injection project involved the drilling of four subsea water injectors, tying them into the existing infrastructure and commissioning the 75 Mbbl/d of water injection facilities. Project completion took place in June 2013 and our 44 per cent share of the project costs was approximately US\$242M. The Atlantis platform is operated by BP and located approximately 190 miles offshore from New Orleans, Louisiana.

### Onshore US

BHP Billiton s Onshore US drilling and development investment in FY2014 was US\$4.2 billion, down from US\$4.7 billion in FY2013, with US\$3.6 billion (FY2013: US\$3.8 billion) spent in the liquids-focused areas of Eagle Ford and Permian, and US\$0.6 billion (FY2013: US\$0.9 billion) in the gas-focused areas of Haynesville and Fayetteville. The expenditure primarily related to drilling and completion activities at all four areas. Our onshore drilling activity in FY2014 resulted in 413 net development wells completed primarily in the Eagle Ford and Permian areas.

Of the US\$4.2 billion, approximately US\$400 million was spent on the installation of more than 200 kilometres of pipeline infrastructure and additional gas processing facilities, primarily in our Eagle Ford and Permian areas.

The majority of drilling and completion activity in Onshore US was directed towards the liquids-focused Eagle Ford and Permian areas to capitalise on relatively stronger liquid prices as compared with natural gas prices. At the end of FY2014, more than 85 per cent of drilling activity was conducted in these areas.

Our Onshore US capital investment is expected to remain at approximately US\$4.0 billion in FY2015, as we continue to optimise our drilling program. This includes an operated rig count of 26 for the period. Approximately 65 per cent of operated drilling activity will be conducted in our liquids-focused acreage in the Eagle Ford area. The remaining activity will occur in the Haynesville and Permian areas, where we are continuing to evaluate our most prospective acreage. Our operated drilling program in the Fayetteville area remains temporarily suspended; however, we continue to invest in wells operated by third parties where we see value.

## Australia

### Macedon

Macedon is a domestic gas development that consists of a 200 million cubic feet per day (MMcf/d) stand-alone gas plant, four subsea production wells, a 90-kilometre 20-inch wet gas pipeline and a 67-kilometre 20-inch sales

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gas pipeline. The project was approved in August 2010 at an investment level of US\$1.1 billion (BHP Billiton share). First gas occurred in August 2013 with a final development cost of approximately US\$1.2 billion (BHP Billiton share).

### 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. A supplemental approval of the development was granted in January 2011. The first phase of the project included two new subsea wells, three new pipelines and platform modifications to supply 10 Mbbl/d of condensate and 80 MMcf/d of gas. Facilities were completed in September 2012; however, first production did not commence due to the need to provide for mercury removal.

Gas and liquids will be processed via the existing Gippsland Basin Joint Venture facilities. The Kipper gas field development is comprised of the Kipper Unit Joint Venture and the Gippsland Basin Joint Venture. We own a 32.5 per cent interest in the Kipper Unit Joint Venture, with Esso Australia (32.5 per cent) and Santos (35 per cent). We own a 50 per cent interest in the Gippsland Basin Joint Venture, with Esso Australia owning the remaining 50 per cent.

Funding for the installation of the mercury treatment facilities of US\$120 million was approved in March 2014 with completion expected to occur in CY2016. Our share of costs incurred to 30 June 2014 was US\$25 million.

## Bass Strait Turrum field development

Further expansion of the Gippsland Basin facilities is underway following approval by the Board in July 2008 of the full field development of the Turrum oil and gas field. A supplemental approval of the development was obtained in January 2011. The project consists of four production and two injection wells and a new platform, Marlin B, linked by a bridge to the existing Marlin A platform. The Turrum field, which has a capacity of 11 Mbbl/d of oil and 200 MMcf/d of gas, is located 42 kilometres offshore in approximately 60 metres of water. Our share of development costs is approximately US\$1.4 billion, of which US\$ 1.3 billion was incurred as of 30 June 2014. The Turrum field development operates under the Gippsland Basin Joint Venture, in which we own a 50 per cent interest, with Esso Australia owning the remaining 50 per cent. Initial production of low carbon dioxide gas through the Turrum facilities occurred in June 2013. High carbon dioxide production from the Turrum reservoir will come online with completion of the Longford Gas Conditioning Plant in CY2016.

### Longford

The Longford Gas Conditioning Plant (LGCP) Project was approved by the Board in December 2012 to enable the production of Turrum reserves plus the production of Kipper and other undeveloped high carbon dioxide content hydrocarbons. The project scope includes a carbon dioxide extraction facility, brownfield tie-ins, an electrical upgrade and multiple supporting utilities. Our share of development costs is approximately US\$520 million, of which US\$202 million was incurred as of 30 June 2014. First gas production is expected in CY2016. Esso Australia is the operator of the LGCP, owning a 50 per cent interest and BHP Billiton owns the remaining 50 per cent.

### North West Shelf North Rankin gas compression project

The North West Shelf gas compression project was approved by the Board in March 2008 to recover remaining lower pressure gas from the North Rankin and Perseus gas fields. The project consisted of a new gas compression platform, North Rankin B, capable of processing 2,500 MMcf/d of gas, which was constructed adjacent to the existing North

Rankin A platform, 135 kilometres offshore from Karratha on the northwest coast of Western Australia. The two platforms are connected by a 100-metre long bridge and operate as a single facility. Our share of development costs was approximately US\$721 million subject to finalisation. First gas production from this site occurred in October 2013. This project is operated by Woodside, with an equally shared interest between Woodside, BHP Billiton, BP, Chevron, MIMI and Shell.

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## North West Shelf Greater Western Flank A

The North West Shelf Greater Western Flank A (GWF-A) gas project was approved by the Board in November 2011 to recover gas from the near field Goodwyn H and Tidepole fields. The project consists of a five well subsea tie-back of the Goodwyn H and Tidepole fields to the Goodwyn A platform. The Goodwyn A platform is located in 130 metres of water, approximately 130 kilometres offshore from Karratha on the northwest coast of Australia. Our share of development costs is approximately US\$400 million, of which US\$206 million was incurred as of 30 June 2014. First gas production is expected in CY2016. Woodside is the operator and we own a 16.67 per cent interest.

## Significant evaluation activities

We perform development evaluation activities to determine the technical feasibility and commercial viability of prospective projects after exploration and appraisal. Our significant recent evaluation activities include the following:

#### **United States**

## Mad Dog Phase 2

The Mad Dog Phase 2 project is in response to the successful Mad Dog South appraisal well, which confirmed significant hydrocarbons in the southern portion of the Mad Dog field. The project has been sent back to the study phase to re-evaluate the concept. Discussions are ongoing with the operator to potentially modify the development plan. BP is the operator and we hold a 23.9 per cent working interest.

### Stampede (formerly known as Knotty Head)

We decided effective April 2014, to withdraw from our 20 per cent non-operated working interest in the Stampede Operating Agreement following the completion of our development planning.

### Australia

### Scarborough

Development planning for the large Scarborough gas field offshore Western Australia is in progress. We continue to evaluate development options. Esso is the operator of the WA-1-R lease and we hold a 50 per cent working interest. We are the operator and have a 100 per cent working interest in the adjacent Thebe discovery and the WA-346-P block.

## North West Shelf Other Greater Western Flank 2

Planning continues for the development of Greater Western Flank 2. Greater Western Flank 2. represents the second phase of development of the core Greater Western Flank fields, behind the GWF-A development, and is located to the southwest of the existing Goodwyn A platform. Woodside is the operator and we own a 16.67 per cent share.

## **Exploration and appraisal**

Our exploration strategy is to focus on material opportunities, at high working interest, with a bias for liquids and operatorship. While the majority of our expenditure occurs in our two principal areas of activity, the Gulf of Mexico and Western Australia, we also have exploration activities in Trinidad and Tobago, Brazil, South Africa, South East

Asia, and Onshore US.

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#### Access

In FY2014, we gained access to acreage in Australia, Trinidad and Tobago, Brazil and the Gulf of Mexico region of the United States. In Australia, we farmed into Block 480-P in Western Australia (55 per cent working interest and operator; 12,585 square kilometres). In Trinidad and Tobago, we signed a production sharing contract on Block 23b (60 per cent working interest and operator; 2,579 square kilometres) and farmed into Blocks 23a and 14 (70 per cent working interest and operator; 3,597 square kilometres). In Brazil, we signed a contract on two blocks in the Foz do Amazonas (100 per cent working interest and operator; 3,069 square kilometres). In the Gulf of Mexico, we were awarded eight blocks (100 per cent working interest and operator; 186 square kilometres) after being the highest bidder on Lease Sale 227, held during the March 2013 quarter.

### **Exploration program expenditure details**

In Western Australia, we drilled Bunyip-1 exploration well on Block WA-335P in February 2014 (52.5 per cent working interest and operator). The well discovered gas in the target Triassic Mungaroo section.

Also in Western Australia, we drilled several near field targets that may be tied back to our existing infrastructure. The first of these, Stybarrow East-1 (50 per cent working interest and operator) was spud in December 2013 and discovered a non-commercial quantity of hydrocarbons. A subsequent sidetrack, Stybarrow East-2, was a dry hole. Both wells were plugged and abandoned and costs were expensed. A secondary near field target, Rydal-1 (50 per cent working interest and operator) was drilled in January 2014. The well encountered non-commercial hydrocarbons and was subsequently plugged, abandoned and expensed.

In the Gulf of Mexico, following the discovery of oil in the Raptor-1 well in FY2013 (50 per cent working interest, APC operator), we participated in a sidetrack, which spud in the June 2013 quarter. The sidetrack failed to find hydrocarbons and the costs associated with both the Raptor discovery well and the subsequent sidetrack were expensed as a non-commercial discovery. In the September 2013 quarter, we drilled the Sake exploration well (60 per cent working interest and operator). The well was plugged, abandoned and the costs were expensed in September 2013.

During FY2014, our gross expenditure on exploration was US\$600 million, of which US\$369 million was expensed.

Exploration and appraisal wells drilled or in the process of drilling during the year:

Well	Location	Target	BHP Billiton equity	Snud date	Water denth	Total well depth	Status
Stybarrow	Location	Oil	50%	10 December	-	2,533 metres	Plugged and abandoned
East-1	Carnarvon		(Operator)	2013			
	Basin						Hydrocarbons encountered
	WA-32-L						Non-commercial
Stybarrow	Carnarvon	Oil	50%	26 December	675 metres	2,670 metres	Plugged and abandoned

East-2	Basin		(Operator)	2013			Dry hole
D1-1-1	WA-32-L	0.1	<b>5</b> 00/	12 I	752	2.200	Discordand
Rydal-1		Oil	50%	13 January	752 metres	3,268 metres	Plugged and abandoned
	Carnarvon		(Operator)	2014			Hydrocarbons
	Basin						encountered
	WA-255P						Non-commercial
Bunyip-1		Gas	52.5%	4 February 2014	1,187 metres	4,579 metres	Plugged and abandoned
	Carnarvon		(Operator)	2011			
	Basin						Hydrocarbons encountered
	WA-335P						Under evaluation
Raptor-1/ST-1	Gulf of Mexico	Oil	50%	28 May	2,490 metres	6,348 metres	Plugged and abandoned
	DC535		(Anadarko Operator)	2013			Hydrocarbons encountered
							Non-commercial
Sake-2	Gulf of	Oil	60%	4 August 2013	1,064 metres	5,597 metres	Plugged and abandoned
	Mexico DC726		(Operator)				Dry hole

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In Trinidad and Tobago, we farmed out a 35 per cent interest in Block 5 and 6 to BG International Limited in the June 2014 quarter. We have retained 65 per cent interest and operatorship. Also in Trinidad and Tobago, we commenced acquisition of a 17,719 square kilometre 3D seismic survey in the March 2014 quarter over our seven operated deepwater blocks (Blocks 5, 6, 28, 29, 23a, 23b and 14). We expect the survey to be completed in the first half of FY2015.

In South Africa, we hold the exploration rights to Block 3B/4B, which is located off the country s west coast. In the September 2013 quarter, we acquired Global Energy Holdings LLC s 10 per cent interest in the block, bringing our equity in Block 3B/4B to 100 per cent. During the past year we completed the processing of the 10,075 square kilometre 3D seismic survey that was acquired in FY2013. Evaluation of this survey is ongoing.

In India, we hold interests and operate nine offshore blocks acquired during the NELP VII & VIII licensing rounds. Due to the inability to gain unencumbered access to explore and produce hydrocarbons in these blocks we have notified the government of our intent to exit and are currently awaiting government approval. We have retained our 50 per cent non-operated interest (BG operator) in one deep water block acquired during the NELP IX licensing round. All exploration expenditure to date on India has been expensed.

In Malaysia, we relinquished our interest in Block Q in the March 2014 quarter. Also in Malaysia, we are planning acquisition of a 2,940 square kilometre 3D seismic survey over Block SK-2A. The survey is expected to commence in the first half of FY2015.

Following a strategic review in the first half of FY2014, we decided to exit the Philippines. In SC55, we have formally reassigned our 60 per cent interest and operatorship back to Otto. In SC59, we have reassigned our 75 per cent interest and operatorship to the Philippines National Oil Company (PNOC).

# **Drilling**

The number of wells in the process of drilling and/or completion as of 30 June 2014 was as follows:

	Explorato	- •		<b>Development wells</b>		Total	
	Gross	<b>Net</b> (1)	Gross	Net (1)	Gross	Net (1)	
Australia			5	1	5	1	
United States			397	183	397	183	
Other			2	1	2	1	
Total			404	185	404	185	

(1) Represents our share of the gross well count.

## **Delivery commitments**

We have delivery commitments of natural gas and LNG of approximately 2,353 billion cubic feet through 2031 (74 per cent Australia, seven per cent US and 19 per cent Other) and crude, condensate, and NGL commitments of 15.0 million barrels through 2018 (55 per cent Australia, 43 per cent United States and two per cent Other). We have sufficient proved reserves and production capacity to fulfil these delivery commitments.

Primarily as a result of our recent acquisitions and asset purchases in our Onshore US shale asset, we have obligations for contracted capacity on transportation pipelines and gathering systems for which we are the shipper. We have obligations to gather and transport 1,400 billion cubic feet of natural gas and 23 million barrels of oil in FY2015. The agreements with the gas gatherers and transporters have annual escalation clauses.

## **Potash**

Our Potash strategy is to build a material industry position over the long term.

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We hold exploration permits and mining leases, issued by the Government of Saskatchewan, covering more than 14,000 square kilometres of mineral rights in the province of Saskatchewan in Canada. We have progressively explored our permit areas over the past seven years and continue to evaluate their economic development potential. We are converting our exploration permits to long-term lease as these permits mature in order to enable further evaluation. To date, we have secured 4,400 square kilometres under long-term mining leases.

We continue to progress our Jansen Potash Project, a greenfield potash project, located approximately 140 kilometres east of Saskatoon in south-central Saskatchewan. We believe Jansen is the world s best undeveloped potash resource and is likely to be a low-cost source of supply once fully developed. Investment in Jansen could underpin a potential fifth pillar of BHP Billiton, given the opportunity to develop a multi-decade, multi-mine basin in Saskatchewan.

On 20 August 2013, we announced an additional US\$2.6 billion investment for Jansen, bringing total approved spending to US\$3.8 billion. This investment is funding the excavation and lining of the Project s production and service shafts, and the installation of essential surface infrastructure and utilities.

The level of expenditure on the Jansen Potash Project in FY2014 was US\$596 million, which was lower than the annual instalment of US\$800 million previously announced for FY2014. We suspended excavation of the production and service shafts in the December 2013 quarter to enable a thorough review of activities completed and to ensure all learnings were captured and adopted in future works. Shaft excavation resumed in the March 2014 quarter and progressed in a staggered manner to mitigate risk and optimise their development. As at 30 June 2014, the pre-development phase was 30 per cent complete.

During FY2014, we allowed our exclusivity for Terminal 5 at the Port of Vancouver to lapse. We are currently assessing a range of options to meet our port requirements.

With our investment premised on the attractive longer-term market fundamentals for potash, we will continue to modulate the pace of development as we seek to time our entrance to meet market demand. The introduction of one or more minority partners, consistent with our approach for certain of our other resource operations, will be considered at the appropriate time.

On the basis of our current projections and assuming Board approval, the Jansen Potash Project is likely to ramp-up to its nameplate capacity of approximately 10 Mtpa of agricultural grade potassium chloride (KCl) in the decade beyond 2020. The Government of Saskatchewan has issued a Potash Lease Special Agreement (KLSA) for our Jansen Project, which provides long-term security of tenure to allow the ongoing development and subsequent operation of Jansen for the life of the operation.

We are continuing to evaluate other areas for which we have exploration permits in the Saskatchewan potash basin, including Young, Boulder and Melville, through analysis of the extensive data collected from successive exploration programs.

In 2013, the management of the closed mine sites associated with Base Metals North America was transitioned from the Copper to the Potash Business. All locations are in care and maintenance or in various stages of closure.

## 2.1.2 Copper Business

Our Copper Business, headquartered in Santiago, Chile, is one of the world s premier producers of copper, silver, lead and uranium, and is a leading producer of zinc. Our portfolio of mining operations includes the Escondida mine in Chile, the world s largest single producer of copper, and Olympic Dam in South Australia, a major producer of copper

and uranium. Our total copper production in FY2014 was 1.7 million tonnes (Mt). Our concentrate production, which represents 58 per cent of total production, results from flotation of sulphide ores mined at our Escondida and Antamina mines. Oxide ores and sulphide ores amenable to leaching are mined and

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processed into copper cathode, using conventional heap leaching, followed by solvent extraction and electrowinning processes at Escondida, Cerro Colorado and Spence. Copper cathode is also produced at Olympic Dam, where sulphide ores are processed through conventional flotation and the resulting concentrate is further transformed into cathodes through a smelting and refining process.

We market five primary products: copper cathodes, copper, lead and zinc concentrates and uranium oxide. We sell most of our copper cathode production to wire rod mills, brass mills and casting plants around the world under contracts with prices at premiums to the London Metal Exchange (LME) prices. We sell the majority of our uranium oxide to electricity generating utilities, principally in western Europe, North America and east Asia. Uranium is typically sold under a mix of long-term and short-term contracts. We sell most of our copper, lead and zinc concentrates to smelters located in diversified geographic markets such as China, South America, Japan, India and South Korea. Treatment charges and refining charges (collectively referred to as TCRCs) are negotiated with counterparties on a variety of tenors. Some of the ores we mine contain quantities of silver and gold, which remain in the base metal concentrates we sell and are typically subject to payment credits. We sell refined silver and gold from Olympic Dam.

Our five operating assets, which are located in South America and Australia, consist of the following:

#### **Americas**

### Escondida

Our 57.5 per cent owned and operated Escondida mine is the largest producer of copper in the world. Located in the Atacama Desert in northern Chile, Escondida employs approximately 14,000 operational employees and contractors and has the capacity to move in excess of 1.3 Mt of material per day. Its two open-cut pits feed two concentrator plants, which use grinding and flotation technologies to produce copper concentrate, as well as two leaching operations (oxide and sulphide). In FY2014, our share of Escondida production was 485.7 kilotonnes (kt) of payable copper in concentrate and 177.1 kt of copper cathode. Escondida has a reserve life of 52 years.

The availability of key inputs like power and water at competitive prices is an important focus for our Copper Business. In November 2013, we awarded a long-term energy contract to a consortium consisting of Korea Southern Power Co. and Samsung Construction & Trading Corp. for the development and operation of a 517 MW combined-cycle gas-fired power plant in the town of Mejillones, Chile. The plant, which will be connected to the Northern Interconnected Grid (SING), will supply the increasing demand for electricity at our operations, and is expected to reduce our carbon footprint. Construction work commenced in 2014 with commercial operation expected in the second half of CY2016.

A contract for the supply of natural gas to the Kelar power plant has been finalised with first deliveries under the supply contract with Gas Natural Fenosa scheduled to commence in 2016, simultaneously with the commissioning and commercial operation of the plant.

To address limitations on the availability of water, we desalinate sea water and carefully manage our use and re-use of available water. The recently approved Escondida Water Supply (EWS) project, which involves the construction of a second desalination plant, will reduce our reliance on the region saquifers and help meet our environmental commitments. The EWS project is expected to be commissioned in 2017.

### Pampa Norte

Pampa Norte consists of two operations Spence and Cerro Colorado. Copper cathode is produced at both operations following a leaching, solvent extraction and electrowinning process.

Our wholly owned Spence copper mine is located in the Atacama Desert, 162 kilometres northeast of Antofagasta in Chile. During FY2014, Spence produced 152.8 kt of high quality copper cathode, using oxide and sulphide ore treatment through leaching, solvent extraction and electrowinning processes. Spence has a reserve life of 10 years.

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Our wholly owned Cerro Colorado mine, located in the Atacama Desert, 120 kilometres east of Iquique in Chile, remains a significant producer of copper cathode, although production levels have fallen in recent years as grades have declined. Despite this, production in FY2014 reached 80.3 kt of copper cathode. Cerro Colorado has a reserve life of nine years. The extension of the existing environmental and mining licences to continue to enable Cerro Colorado to operate beyond December 2016 is currently pending approval.

#### Antamina

We own 33.75 per cent of Antamina, a large, low-cost copper and zinc mine in north central Peru. Our share of Antamina s FY2014 production was 143.5 kt of copper in concentrate and 52.0 kt of zinc in concentrate. Antamina also produces molybdenum and lead/bismuth concentrate, as well as small amounts of silver in the form of by-products. Antamina has a reserve life of 13 years.

In FY2013, Antamina completed execution of an expansion project, increasing milling capacity to 130 kilotonnes per day (ktpd). In FY2014, following identification of further milling capacity upside, Antamina commenced execution of a debottlenecking project, to increase milling capacity by 12 per cent to 145 ktpd.

### Australia

### Cannington

Our wholly owned Cannington mine is one of the world s largest producers of silver and lead. Located in northwest Queensland, Australia, the underground mine feeds a beneficiation processing facility that extracts silver/lead and zinc concentrates from sulphide ore. In FY2014, Cannington produced concentrates containing 186.5 kt of lead, 57.9 kt of zinc and approximately 25.2 million ounces of silver. Cannington has a reserve life of nine years.

### Olympic Dam

Our wholly owned Olympic Dam mine is a producer of copper cathode and uranium oxide and a refiner of gold and silver bullion. The site includes an underground mine, where the primary method of ore extraction is long-hole open stoping with cemented aggregate fill, and an integrated metallurgical processing plant.

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. 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 operation includes a fully integrated metallurgical complex with a grinding and concentrating circuit, hydrometallurgical plant incorporating solvent extraction circuits for copper and uranium, a copper smelter, copper refinery and a recovery circuit for precious metals.

In FY2014, Olympic Dam produced 184.4 kt of copper cathode, 3,988 tonnes of uranium oxide, 121.3 fine kilo-ounces (koz) of refined gold and 972 koz of refined silver. Olympic Dam has a reserve life of 47 years.

## **Divested assets** Pinto Valley

In October 2013, we completed the sale of our Pinto Valley mining operation in the United States and the associated San Manuel Arizona Railroad Company to Capstone Mining Corp for US\$653 million, after working capital adjustments.

As a consequence of the sale, and due to their location in North America, the management of 22 closed sites transferred from our Copper Business to our Potash Business. All locations are no longer actively producing and are in care and maintenance or in various stages of closure.

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# **Information on Copper mining operations**

The following table contains additional details of our mining operations. This table should be read in conjunction with the production (refer to section 2.2.2) and reserve tables (refer to section 2.3.2).

9 J &	M	O1-	2	Title, leases or		Mine type & mineralisation		Facilities, us
e & location ericas	Means of access	Ownersnip	Operator	options	History	style	source	conditior
per								
ondida cama Desert, km southeast intofagasta, e			BHP Billiton	Mining concession from Chilean	completed in	Escondida and	lines connect to	2 concentrate plants extract copper concentrate f
	Copper cathode transported by	Escondida Limitada (MEL)		Government valid indefinitely (subject to		Escondida and	power grid	sulphide ore flotation extraction process
	Antofagasta and Mejillones	Rio Tinto		payment of annual fees)	leach copper production commenced	Escondida Norte mineral deposits are	Electricity purchased under contracts	
	Copper concentrate transported by Escondida-owned	30% JECO Corporation consortium comprising Mitsubishi, JX Nippon Mining and			in 2006	adjacent but distinct supergene enriched porphyry copper deposits		2 solvent extraction pla produce copp cathode
	Coloso port facilities	Metals 10% JECO2 Ltd 2.5%						Nominal capacity: 85.6 Mtpa copper concentrate (nominal mil capacity) and 330 ktpa copy cathode (nominal capacity of ta

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house)

Two 168 km concentrate pipelines 166 km wate pipeline

Port facilities Coloso, Antofagasta

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				Title leages on		Mine type & mineralisation	Power	Facilities
k location Norte	Means of access	Ownership	Operator	Title, leases or options	History	style	source	condi
a Desert, northeast fagasta,	Public road	100%	BHP Billiton	Mining concession from Chilean Government valid	Development cost of US\$1.1 billion	Open-cut	Spence-owned transmission lines connect to Chile s	Processing crushing facilities, separate
	Copper cathode transported by rail to ports at Mejillones and	orted by ports at ones and		indefinitely (subject to payment of annual fees)	approved in 2004	Enriched and oxidised porphyry copper deposit	northern power grid	dynamic ( leach pade solvent extraction
	Antofagasta				First copper produced in 2006	that presents dominantly in situ copper oxide mineralisation	Electricity purchased under contract	electrowii plant
						that overlies a near-horizontal sequence of supergene sulphide, transitional sulphide, and lower-most primary (hypogene) sulphide mineralisation		Nominal capacity of house: 17 copper ca
Norte Colorado a Desert, east of , Chile	Public road	100%	BHP Billiton	Mining concession from Chilean Government valid	Commercial production commenced	Open-cut	Long-term contracts with northern Chile	•
, Chile	Copper cathode trucked to port at Iquique			indefinitely (subject to payment of annual fees)	in 1994	Enriched and oxidised porphyry	power grid	leaching p solvent extraction electrowin
					Expansions in 1996 and 1998	that presents dominantly in situ copper		plant
						oxide mineralisation that overlies a		Nominal capacity of house: 86

near-horizontal sequence of supergene sulphide, transitional sulphide, and lower-most primary (hypogene) sulphide mineralisation copper ca

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	Means of			Title, leases		Mine type & mineralisation	Power	Facilities, use
ne & location pper and zinc	access	Ownership	Operator	options	History	style	source	condition
tamina	Public road  Copper and zinc concentrates transported by pipeline to port of Huarmey  Molybdenum and lead/bismuth	BHP Billiton 33.75% of Compañía Minera Antamina SA  Glencore Xstrata 33.75%  Teck 22.5% Mitsubishi 10%	Compañía Minera Antamina SA	rights	Commercial production commenced in 2001  Capital cost US\$2.3 billion (100%)	Zoned porphyry and skarn deposit with central copper-only ores and an outer band of copper-zinc ore zone	contracts with individual	Primary crush concentrator, copper and zin flotation circu bismuth/moly cleaning circu Nominal milli capacity 52 Mtpa  300 km concentrate
stralia	concentrates transported by truck			1				pipeline Port facilities Huarmey
ver, lead and c								
stralia	and Group-owned airstrip	100%	BHP Billiton	Mining leases granted by Queensland Government expire in 2029	subsequent projects improved mill	Underground Broken Hill-type silver-lead-zinc sulphide deposit	•	Beneficiation plant: primary and secondary grinding circu pre-flotation circuits, flotat circuits, leach
	Product trucked to Yurbi, then by rail to public port				throughput and metal recovery			circuits, concentrate filtration circu paste plant

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Nominal mill capacity:

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location and	Means of access	Ownership	Operator	Title, leases or options	History	Mine type & mineralisation style	Power source	Facilitie cond
n c Dam								
st of e, South	Public road	100%	BHP Billiton	Mining lease granted by South	Acquired in 2005 as part of WMC acquisition	Underground	Supplied via 275 kV power line from Port	Undergreautomate and truck network
	Copper cathode trucked to			Australian Government	Conner production	Large poly-metallic deposit of iron oxide-copper-uranium-gold	transmitted	crushing and ore l facilities
	ports			expires in 2036	began in 1988	mineralisation	ElectraNet	racinues
	Uranium oxide							2 grindir
	transported by road to ports			Right of extension for 50 years	Nominal milling capacity raised to 9 Mtpa in 1999			circuits
				(subject to remaining				Nominal capacity
				mine life)	Optimisation project completed in 2002			10.3 Mtp
								Flash fur
					New copper			anodes, 1
					solvent extraction			refined t
					plant			produce
					commissioned in 2004			cathodes

Electrowon copper cathode and uranium oxide concentrate produced by leaching and solvent extracting flotation tailings.

## **Development projects**

#### **Americas**

#### Escondida

The Organic Growth Project 1 (OGP1), is the replacement project for the Los Colorados concentrator with a new 152 ktpd plant. This project is in execution. We expect this project to provide additional processing capacity and allow access to high-grade ore. OGP1 was approved in February 2012 with budgeted expenditure of US\$3.8 billion (US\$2.2 billion BHP Billiton share). Project completion is targeted for the first half of CY2015. Work on OGP1 was 79 per cent complete at 30 June 2014.

We announced the Escondida Water Supply project (EWS) in July 2013, which consists of a new 2,500 litres per second sea water desalination facility. This project will provide an alternative water supply to Escondida, as water usage increases upon completion of the 152 ktpd OGP1 copper concentrator. Construction of the new desalination facility commenced in July 2013 and includes the development of two pipelines, four high-pressure pump stations, a reservoir at the mine site and high-voltage infrastructure to support the system. The new facility is expected to be commissioned in 2017 at a cost of US\$3.4 billion (US\$2.0 billion BHP Billiton share). Prior to completion of the EWS project, water supply for OGP1 will continue to be sourced from aquifers and the existing 500 litres per second desalinisation plant.

The Oxide Leach Area Project (OLAP), is also in execution phase. This project involves the creation of a new dynamic leaching pad and mineral handling system that will include several overland conveyors. The new pad is expected to maintain oxide leaching capacity at current levels following the exhaustion of the existing heap leach in CY2014. OLAP was approved in February 2012 with budgeted expenditure of US\$721 million (US\$414 million BHP Billiton share). A US\$212 million increase in the budget of OLAP to US\$933 million (US\$536 million BHP Billiton share) was approved in March 2014. Work on the project was 93 per cent complete at 30 June 2014, and is expected to be completed in the second half of CY2014.

### Pampa Norte

The Spence Growth Option (SGO) project, currently being studied in pre-feasibility stage, plans to exploit the hypogene sulphide resource with associated molybdenum sulphide by building a 95 ktpd concentrator at the current Spence operation. SGO would extend the mine life by 50 years following the current 2025 closure date. As the hypogene ore underlies the supergene reserves currently being exploited, the need for pre-stripping and additional mine maintenance infrastructure is minimised. The option of using existing solvent extraction and electrowinning infrastructure to recover copper by leaching low-grade chalcopyrite ores in parallel to the concentrator is also being considered. SGO would increase the overall copper production at Spence by approximately 220 kilotonnes per annum (ktpa) in the first 10 years.

## Olympic Dam

A pre-feasibility study is being conducted regarding the proposed expansion of Olympic Dam. The objective of the study is to identify the full range of development path alternatives for Olympic Dam by investigating all possible mining methods and less capital-intensive designs, including new technologies.

In July 2014, we lodged an application for assessment by the Australian and South Australian Governments to construct and operate a demonstration plant on the existing mining lease at Olympic Dam. This process would enable

heap leaching trials to progress to the next phase as part of our efforts to identify an alternative, less capital intensive process for extracting metals from ore mined underground. Should Government and Board approvals be granted, construction of the demonstration plant is expected to commence in the second half of CY2015. A trial period of 36 months is envisaged, commencing in late 2016.

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## Resolution Copper

We hold a 45 per cent interest in the Resolution Copper project in the US state of Arizona, a project which is operated by Rio Tinto (55 per cent interest). Resolution is among the top 10 largest undeveloped copper assets in the world and could eventually become the largest copper producer in North America. In FY2014, Resolution Copper completed a pre-feasibility study into a 120 ktpd underground panel cave operation and processing facility. Further opportunities to economically optimise the project and minimise any technical risks have been identified, and the project plans to study these opportunities. Additionally, a Mine Plan of Operations was submitted to the U.S. Forest Service in November 2013. Approval of the plan would allow mining to occur on lands where the Company currently holds mineral title.

Throughout FY2014, Resolution Copper continued to advance sinking of the No #10 Shaft to gain access to the orebody. Following cooling and ventilation upgrades during FY2014, No #10 Shaft is expected to reach a final depth of 2,116 metres by December 2014. Our share of project expenditure for FY2014 was US\$38 million.

## **Exploration activities**

Our greenfield copper exploration activities during FY2014 were focused on advancing targets within Chile and Peru. Greenfield activities include opportunity identification, application for and acquisition of mineral title, early reconnaissance operations and drilling programs.

#### 2.1.3 Iron Ore Business

Our Iron Ore Business is one of the leading iron ore producers in the world. We sell lump and fines products produced in Australia and pellets from our operations in Brazil.

Our two assets consist of the following:

### Western Australia Iron Ore

Operations at Western Australia Iron Ore (WAIO) involve an integrated system of mines and more than 1,000 kilometres of rail infrastructure and port facilities in the Pilbara region of northern Western Australia, with our headquarters located in Perth. Our focus is to safely maximise output through operating our mines and utilising available infrastructure at our disposal. This includes our plan to continue to grow production following the recent completion of a number of expansion projects and ongoing debottlenecking of the supply chain to underpin potential further growth in capacity to 290 Mtpa.

We have expanded our WAIO operations in response to increasing demand for iron ore, particularly from China. Since 2001, we have completed eight expansion projects to increase our mine, rail and port capacity. Our share of FY2014 production was 193 Mt of ore, which is expected to increase in FY2015 to 211 Mtpa.

We have been transitioning to owner-operated mines since September 2011 when we acquired the HWE Mining subsidiaries from Leighton Holdings. We completed the transition to owner-operated mines with the last contractor run site, Orebody 18, finalising its transition during FY2014.

Our Pilbara reserve base is relatively concentrated, allowing us to plan our development around a series of integrated mining hubs joined to the orebodies by conveyors or spur lines. This approach enables us to maximise the value of installed infrastructure by using the same processing plant and rail infrastructure for a number of orebodies.

Lump and fines products are sold to steel mills in China, South Korea, Japan, Singapore, Hong Kong, Taiwan, Switzerland and Australia under long-term and short-term contracts. Contract prices are generally linked to market indices.

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In order to establish a consistent, long-term, high-quality lump ore product with a stable grade, we recently transitioned to a blended lump product. The product is a blend of lump ores produced from the Newman, Area C and Jimblebar mining areas, known as Newman Blend lump. During FY2014, 23 per cent of our sales were lump and 77 per cent were fines.

## **WAIO** operations

Our WAIO operations consist of four main joint ventures: Mt Newman, Yandi, Mt Goldsworthy and Jimblebar. Our interest in the joint ventures is 85 per cent with Mitsui and ITOCHU owning the remaining 15 per cent. The joint ventures are unincorporated except Jimblebar, where we diluted our interest in a subsidiary company to 85 per cent in July 2013 for which BHP Billiton received total consideration of US\$1.5 billion.

The Mt Newman Joint Venture (JV) consists of a number of orebodies joined by conveyors and spur lines to a mining hub at Mt Whaleback. Ore is crushed, beneficiated (where necessary) and blended to create the Newman Blend for lump and fines. The ore is then transported to port using Mt Newman JV-owned rail facilities. The Yandi JV comprises the Yandi mine where ore is crushed and screened and then transported by rail on the Newman main line. The Mt Goldsworthy JV consists of the Area C mine in the central Pilbara and the Yarrie mine in northern Pilbara. Ore is crushed and screened at Area C and transported by rail to the hub at Mt Whaleback. Production at Yarrie was suspended on 25 February 2014, following improved productivity at our other mining operations. The Jimblebar operation was officially opened on 23 April 2014 and comprises the new Jimblebar mine located 40 kilometres east of Newman. Jimblebar delivered first production in the September 2013 quarter and produced 9 Mt during FY2014. Jimblebar is expected to deliver phase one capacity of 35 Mtpa by the end of FY2015. Production from Wheelarra, a sublease of the Jimblebar tenement, which was previously processed through Newman, was permanently connected to the Jimblebar processing hub during the period.

All ore is transported by rail on the Mt Newman JV and Mt Goldsworthy JV rail lines to our port facilities. A typical train configuration consists of two locomotives per 124 ore cars, called a rake, with two rakes per train. Each individual ore car carries approximately 128 tonnes of iron ore. Our rail operations are controlled from Perth via our integrated remote operations centre which co-locates rail control, port production control, mine dispatch control and mine fixed plant control.

Our port facilities are located on both sides of the harbour at Port Hedland. These facilities consist of Nelson Point, owned by the Mt Newman JV, and Finucane Island, owned by the Mt Goldsworthy JV. The port facilities include five ore car dumpers, three screening plants, nine stackers, five reclaimers, stock and blending yards, and eight ship loaders. Vessels depart the harbour via a dredged channel that is approximately 45 kilometres long and has a width of 300 metres.

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### Map of WAIO operations

Along with the other joint venture partners, we have entered into marketing agreements in the form of joint ventures with certain customers. These customer joint ventures, JW4, Wheelarra and POSMAC, involve subleases of part of WAIO s existing mineral leases. The ore is sold to the existing joint ventures with contractual terms applying to the customers—share. As a consequence, we are entitled to 85 per cent of production from these subleases and the customer joint ventures are not jointly controlled operations for accounting purposes.

WAIO Mineral Resources and Ore Reserves are reported for the Pilbara as a whole by ore type, to reflect our production of the Newman Blend lump product and our single logistics chain and associated management system. The reserve life of our Western Australian mines is 16 years.

#### Samarco

We are a 50 50 joint venture partner with Vale at the Samarco operation in Brazil. Samarco is currently comprised of a mine and two concentrators located in the state of Minas Gerais, and three pellet plants and a port located in Anchieta in the state of Espirito Santo. Three 396-kilometre pipelines connect the mine site to the pelletising facilities.

Samarco s main product is iron ore pellets. Extraction and beneficiation of iron ore is conducted at the Germano facilities in the municipalities of Mariana and Ouro Preto. Conveyor systems are used to extract the ore and convey it from the mines. Ore beneficiation then occurs in concentrators, where crushing, milling, desliming and flotation processes produce iron concentrate. The concentrate leaves the concentrators as slurry and is pumped through the slurry pipelines from the Germano facilities to the pellet plants in Ubu, Anchieta, where the slurry is processed into pellets. The iron ore pellets are then heat treated. The pellet output is stored in a stockpile yard before being shipped out of the Samarco-owned Port of Ubu in Anchieta.

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Pellets are independently marketed by Samarco and sold to steelmakers in 20 countries in the Americas, Asia, Africa, the Middle East and Europe, with prices generally linked to market indices.

In FY2014, our share of production was 11 Mt of pellets. The reserve life of Samarco is 39 years.

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## **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 (refer to section 2.2.2) and reserve tables (refer to section 2.3.2).

Mine & location Iron ore	Means of access	Ownership	Operator	Title, leases or options	History	Mine type & mineralisation style	Power source	Facilities, use & condition
Mt Newman Joint Venture Pilbara region, Western Australia	Private road	BHP Billiton 85%	BHP Billiton: Mt Whaleback	Mining lease under the Iron Ore (Mt Newman)	Production began at Mt Whaleback orebody in 1969	Open-cut  Bedded ore	From May 2014 Yarnima power station started supplying	Newman Hub: primary and secondary crushing and
Mt Whaleback Orebodies 18, 24, 25, 29, 30 and 35	•	Mitsui ITOCHU Iron 10% ITOCHU Minerals and Energy of Australia 5%	Orebodies 18, 24, 25, 29, 30 and 35 Operatorship of Orebody 18 transitioned to BHP Billiton in July 2014		Production from Orebodies 18, 24, 25, 29, 30 and 35 complements production from Mt Whaleback First ore from Newman Hub as part of RGP4	types classified as per host Archaean or Proterozoic iron formation, which are Brockman and Marra Mamba	Alinta Dewap Newman	screening plants (nominal capacity 60 Mtpa); heavy media beneficiation plant, stockyard blending facility, single cell rotary car dumper, train-loading facility
					construction delivered in 2009			Orebody 25: primary and secondary crushing and screening plant (nominal capacity 10 Mtpa)

## Yandi Joint Venture

V CIITUI C								
Pilbara region,	Private	BHP	BHP	Mining	Development	Open-cut	From May	Three
Western	road	Billiton 85%	Billiton	lease under	began in 1991		2014 Yarnima	processing
Australia				the Iron			power station	plants,
		Mitsui Iron		Ore			started	primary
		Ore		(Marillana		Channel Iron	supplying	crusher and
	Iron ore	Corporation		Creek)	First	Deposits are	approximately	overland
	transported	7%		Agreement	shipment in	Cainozoic	two thirds of	conveyor
	by Mt	ITOCHU		Act 1991	1992	fluvial	power, with a	(nominal
	Newman	Minerals		expires in		sediments	supplementary	capacity 78
	JV-owned	and Energy		2033 with			contract with	Mtpa)
	rail to Port	of Australia		one			Alinta Dewap	
	Hedland	8%		renewal	Capacity		Newman	Ore delivered
	(316  km)			right to a	expanded		power station	to two
				further 21	between 1994			train-loading
				years	and 2013			facilities

Yandi JV s railway spur links Yandi mine to Newman main line

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	Means of			Title, leases or		Mine type & mineralisation	Power	Facilities, use
Mine & location JW4 Joint Venture	access	Ownership	Operator	options	History	style	source	condition
Pilbara region, Western Australia	Private road	BHP Billiton 68%	BHP Billiton	Sublease over part of the mining lease under the Iron Ore	Operations began in April 2006	Open-cut Channel Iron	From May 2014 Yarnima power station started supplying	Mine site
	Iron ore on-sold to Yandi JV, then transported via rail to Finucane Island and Nelson Point shipping facilities, Port Hedland	ITOCHU Minerals and Energy of Australia 6.4% Mitsui Iron Ore Corporation 5.6% JFE Steel Australia 20%		(Marillana Creek) Agreement Act 1991 expires in 2033 with one		Deposits are Cainozoic fluvial sediments	approximately two thirds of power, with a supplementary contract with Alinta Dewap Newman power station	
		Sublease agreement over JW4 deposit						
Jimblebar								
<b>operation</b> Pilbara region, Western Australia	Private road	BHP Billiton 85%	BHP Billiton	Mining lease under the Iron Ore (McCamey s Monster)		Open-cut  Bedded ore	From May 2014 Yarnima power station started supplying	Two primary and secondary crusher, ore handling
		ITOCHU Minerals and Energy of Australia 8%, Mitsui Iron Ore Corporation 7%		Agreement Authorisation Act 1972 expires in 2030 with rights to successive renewals of 21 years	From 2004, production was transferred to Wheelarra as part of the Wheelarra	types classified as per host Archaean or Proterozoic banded iron formation, which are	approximately two thirds of power, with a supplementary contract with Alinta Dewap Newman power station	plant, stockyards and supporting mining hub infrastructure (nominal capacity 55 Mtpa)

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sublease

agreement

First ore from newly commissioned Jimblebar mine was delivered in September 2013

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	Means of			Title, leases or		Mine type & mineralisation	Power	Facilities, use
Mine & location Wheelarra Joint Venture	access	Ownership	Operator	options	History	style	source	condition
Pilbara region, Western Australia	Private road	BHP Billiton 51%	BHP Billiton Operatorship transitioned	Sublease agreement over the Wheelarra deposit of	Wheelarra JV produces iron ore from	Open-cut  Bedded ore	From May 2014 Yarnima power station started supplying	Two primary and secondary crusher, ore handling
	and iron ore is now transported	Maanshan Iron	to BHP Billiton in January 2014	deposit of Jimblebar lease with ITOCHU Minerals and Energy of Australia, Mitsui Iron Ore and four separate subsidiaries of Chinese steelmakers This arrangement,	Wheelarra deposit of Jimblebar lease  Ore produced is processed and blended with	types classified as per host Archaean or Proterozoic banded iron formation, which is Brockman	approximately two thirds of power, with a supplementary contract with Alinta Dewap Newman power station	plant, stockyards and supporting mining hub infrastructure (nominal capacity 55 Mtpa)
		Steel Australia 10%  Wugang Australia 10%  Sublease agreement over		entitles us to 85% of production from the Wheelarra sublease consistent with BHP Billiton ownership in	ore at Jimblebar mine and then sold to Mt Newman JV			

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Mt Newman

JV

Wheelarra

deposit

	Means of			Title, leases or		Mine type & mineralisation	Power	Facilities, use &
Mine & location Mt Goldsworthy Joint Venture	access	Ownership	Operator	options	History	style	source	condition
Pilbara region, Western Australia	Private road  Yarrie and	BHP Billiton 85%	BHP Billiton	4 mineral leases under the Iron Ore (Mt Goldsworthy)	Operations commenced at Mt Goldsworthy in 1966 and	Area C, Yarrie and Nimingarra all open-cut	From May 2014 Yarnima power station started supplying	Ore processing plant, primary crusher
Area C Yarrie Nimingarra	Nimingarra iron ore transported by Mt Goldsworthy	Mitsui Iron Ore Corporation 7% ITOCHU		Agreement Act 1964 and the Iron Ore (Goldsworthy Nimingarra)	at Shay Gap in 1973	Bedded ore types classified as per host	approximately two thirds of power, with a supplementary contract with	and overland conveyor (nominal
	JV-owned rail to Port Hedland (218 km)	Minerals and Energy of Australia 8%		Agreement Act 1972, expire between 2014 and 2028, with rights to successive	Original Goldsworthy mine closed in 1982	Archaean or Proterozoic iron formation, which are Brockman, Marra Mamba and	Alinta Dewap Newman power station	capacity: 50 Mtpa)
	Area C iron ore transported by Mt Newman			renewals of 21 years	Associated Shay Gap mine closed in 1993	Nimingarra		
	JV-owned rail to Port Hedland (360 km) Mt Goldsworthy JV railway spur links Area C mine to Yandi railway spur			A number of smaller mining leases granted under the Mining Act 1978 expire in 2026	Nimingarra mine ceased in 2007, then			
					Opened Area C mine in 2003			

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Yarrie mine suspended

operations in February 2014

## **POSMAC Joint**

Venture							
Pilbara Region,	Private road	BHP	BHP	Sublease over	Operations	Open-cut	Fre
Western		Billiton 65%	Billiton	part of	commenced		20
Australia				mineral lease	in October		po
				held by Mt	2003		sta
	Iron ore			Goldsworthy		Bedded ore	suj
	on-sold to Mt	ITOCHU		JV under the		types classified	ap

Iron ore	
on-sold to Mt	ITOCHU
Goldsworthy	Minerals
JV, it is then	and Energy
transported	of Australia
via Mt	8%, Mitsui
Goldsworthy	Iron Ore
JV-owned	Corporation
rail and Mt	7%
Newman	
JV-owned	POSCO
rail to Port	20%
Hedland	Sublease
	agreement
	over
	POSMAC
	deposit

Sublease over	Operations
part of	commenced
mineral lease	in October
held by Mt	2003
Goldsworthy	
JV under the	
Iron Ore (Mt	
Goldsworthy)	Iron ore
Agreement	currently
Act 1964 with	being
rights to	produced is
successive	sold to Mt
renewals of 21	Goldsworthy
years	JV and
	blended with
	Area C ore

Open-cut	From May	Ore
	2014 Yarnima	processing
	power station	plant,
	started	primary
Bedded ore	supplying	crusher
types classified	approximately	and
as per host	two thirds of	overland
Archaean or	power, with a	conveyor
Proterozoic	supplementary	
iron formation,	contract with	(nominal
which is Marra	Alinta Dewap	capacity:
Mamba	Newman	50 Mtpa)
	power station	

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Means of			Title, leases or			Mine type & mineralisation	Power	Facilities, use &
Mine & location Samarco	access	Ownership	Operator	options	History	style	source	condition
Southeast Brazil	Public road  Conveyor	BHP Billiton 50% of Samarco Mineração	Samarco	Mining concessions granted by Brazilian Government	Production began at Germano mine in 1977 and at	Open-cut Itabirites	Samarco holds interests in 2 hydroelectric power plants	Facilities with capacity to process and pump 24
	belts transport iron ore to beneficiation plant	SA Vale 50%		as long as Alegria complex mined according to	Alegria complex in 1992	(metamorphic	which supply 20.3% of its electricity	Mtpa ore concentrate and produce and ship 22.3 Mtpa
				agreed plan	Second pellet plant		Power supply contract with	pellets (100%
	Three slurry pipelines transport concentrate				built in 1997		Cemig Geração e Transmissão expires in	
	to pellet plants on coast				Third pellet plant, second concentrator and second pipeline built in 2008		2022	
	Iron pellets exported via port facilities				III 2006			
					Fourth pellet plant, third concentrator and third pipeline built in 2014			

### **Development projects**

#### Western Australia Iron Ore

WAIO has been executing a number of expansion projects in recent years. These projects, approved in March 2011 for a total of US\$7.4 billion (BHP Billiton share US\$6.6 billion) plus pre-commitment funding of US\$2.3 billion (BHP Billiton share US\$2.1 billion), were designed to deliver an integrated operation with a minimum capacity of 220 Mtpa (100 per cent basis).

These projects included:

the Jimblebar Mine Expansion project to develop the Jimblebar mine and rail links, and procure mining equipment and rolling stock in order to deliver a capacity of 35 Mtpa. Initial production was achieved in the September 2013 quarter. The project costs as at 30 June 2014 amounted to US\$3.4 billion (BHP Billiton share); final costs are expected to be delivered below the revised budget of US\$3.6 billion;

further development of Port Hedland, including two additional berths and ship loaders, a car dumper, connecting conveyor route, and associated rail works and rolling stock. Initial production was achieved in the December 2012 quarter. The project costs as at 30 June 2014 amounted to US\$1.7 billion (BHP Billiton share); final costs are expected to be delivered below the revised budget of US\$1.9 billion;

port blending facilities and rail yards to enable ore blending and expand resource life. Initial production was achieved in the December 2013 quarter. The project costs as at 30 June 2014 amounted to US\$0.9 billion (BHP Billiton share); final costs are expected to be delivered below the revised budget of US\$1 billion.

### Western Australia Iron Ore Orebody 24 mine

In FY2014, WAIO completed execution of its development of the Orebody 24 mine, located approximately 10 kilometres northeast of Newman. Orebody 24 is a sustaining mine to maintain iron ore production output from the Mt Newman JV operations. The project was approved in November 2011 and included the construction of an ore crushing plant, train loadout facility, rail spur and other associated support facilities. The project was delivered at a cost of US\$0.5 billion (BHP Billiton share), subject to finalisation, in the September 2014 quarter versus a budget of US\$0.7 billion.

#### Samarco

During FY2011, Samarco shareholders approved a US\$3.5 billion (US\$1.75 billion BHP Billiton share) expansion project, the Fourth Pellet Plant Project (P4P), consisting of a fourth pellet plant, a new concentrator and a third slurry pipeline. The project is complete, with its first pellet production in March 2014. This has expanded Samarco s iron ore pellet production capacity from 22.3 Mtpa to 30.5 Mtpa. The final cost of the project was US\$3.2 billion (US\$1.6 billion BHP Billiton share).

#### **Exploration activities**

#### Western Australia

WAIO has a substantial existing reserve base supported by considerable additional mineralisation all within a 250-kilometre radius of our existing infrastructure. This concentration of orebodies also gives WAIO the flexibility to add growth tonnes to existing hub infrastructure and link brownfield developments to our existing mainline rail and port facilities. The total area covered by exploration and mining tenure amounts to 6,500 square kilometres. This excludes crown leases, and general purpose and miscellaneous licences, which are used for infrastructure space and access.

The majority of deposits are located on five main lease areas held by BHP Billiton and our joint venture partners, as appropriate. Iron ore mineralised materials fall mainly within the Hamersley Ranges of the Pilbara district, with a minor component of the inventory lying within the Pilbara Craton of northwest Western Australia.

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In FY2014, exploration activity was completed over multiple project areas and deposits. The total drilling carried out amounts to 492,000 metres, composed of reverse circulation drilling of 421,500 metres, diamond drilling of 52,500 metres and hydrology drilling of 18,000 metres consisting of approximately 5,300 drill holes. Total exploration expenditure amounted to US\$166 million.

### **Guinea Iron Ore**

BHP Billiton has a 41.3 per cent interest in a joint venture that holds the Nimba Mining Concession and four iron ore prospecting permits in southeast Guinea.

On 29 July 2014, BHP Billiton and ArcelorMittal signed an agreement for the acquisition by ArcelorMittal of BHP Billiton s 43.5 per cent stake in Euronimba Limited, which holds an effective 95 per cent interest in the Mount Nimba iron ore project in Guinea. Completion of the transaction is subject to the receipt of regulatory approval and other customary closing conditions.

### Liberia Iron Ore

BHP Billiton has a 100 per cent interest in a Mineral Development Agreement with the Government of Liberia. This enables the further exploration and development of our Liberian iron ore mineral leases.

### 2.1.4 Coal Business

Our Coal Business, headquartered in Brisbane, Australia, is the world s largest supplier of seaborne metallurgical coal, a key input in steel production. Our Coal Business is also one of the largest suppliers of seaborne energy coal (also known as thermal or steaming coal) and a significant domestic energy coal supplier in the countries where its mines are located.

Our export metallurgical coal customers are steel producers around the world, principally in China, India, Japan and Europe. In FY2014, the majority of our metallurgical coal sales contracts were based on annual volumes, with prices largely negotiated on a monthly, index or spot basis.

We are a domestic supplier of energy coal to the electricity generation industry in Australia, South Africa and the United States. Our domestic energy sales are generally made to nearby power stations under long-term fixed price or cost plus arrangements. Export sales are delivered to power generators and industrial users principally in China, India, Japan, Europe and the Middle East, under contracts that are generally index linked or short-term fixed.

Total metallurgical coal production in FY2014 was 45.1 Mt and total energy coal production in FY2014 was 73.5 Mt.

Our assets, located in Australia, South Africa, Colombia and the United States, consist of both open-cut and underground mines. At our open-cut mines, overburden is removed after blasting, using either draglines or truck and shovel. Coal is then extracted using excavators or loaders and loaded onto trucks to be taken to stockpiles. At our underground mines, coal is extracted by either longwall or continuous miner. The coal is then transported to stockpiles on the surface by conveyor. Coal from stockpiles is then crushed, and for a number of the operations, washed and processed through the coal preparation plant. Domestic coal is then transported to the nearby customer via conveyor, truck or rail. Export coal is transported to the port via trucks or trains, and as part of this coal supply chain both single and multi-user rail and port infrastructure is used.

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Our assets consist of the following:

### **Queensland Coal**

Queensland Coal comprises the BHP Billiton Mitsubishi Alliance (BMA) and BHP Billiton Mitsui Coal (BMC) Assets in the Bowen Basin in Central Queensland, Australia.

The Bowen Basin is well positioned to supply the seaborne market because of its high-quality metallurgical coals, which are ideally suited to efficient blast furnace operations, and its geographical proximity to Asian customers. We have access to key infrastructure in the Bowen Basin, including a modern, multi-user rail network, our own coal loading terminal at Hay Point, located near the city of Mackay. We also have contracted capacity at three other multi-user port facilities including the Port of Gladstone (RG Tanna Coal Terminal), Dalrymple Bay Coal Terminal and Abbot Point Coal Terminal.

#### Map of Queensland Coal

#### **BHP Billiton Mitsubishi Alliance**

BMA comprises two unincorporated joint ventures Central Queensland Coal Associates Joint Venture (CQCA) and Gregory Joint Venture. We share 50 50 ownership with Mitsubishi Development.

BMA owns and operates open-cut and underground metallurgical coal mines in the Bowen Basin and also owns and operates the Hay Point Coal Terminal. The terminal consists of coal inloading dump stations, stacker reclaimers and two ship loaders, capable of loading 44 Mtpa of coal. The terminal is undergoing expansion to increase its capacity to 55 Mtpa through the addition of a third ship loader. This infrastructure enables us to blend products from multiple mines of BMA to optimise the value of our production and to satisfy customer requirements.

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BMA operates the Goonyella Riverside, Broadmeadow, Daunia, Caval Ridge, Peak Downs, Saraji, Gregory Crinum and Blackwater mines. In May 2012, production ceased at Norwich Park mine, following a review of the mine s viability. In October 2012, production also ceased at the Gregory open-cut mine, part of the Gregory Crinum complex. First production commenced at Caval Ridge in the June 2014 quarter.

Our share of total production in FY2014 was 29.3 Mt. Production figures for BMA include some energy coal (less than three per cent). The reserve lives of our mines range from 2.8 years at Gregory Crinum to 37 years at Saraji. The reserve life for each mine is set out in section 2.3.2.

#### **BHP Billiton Mitsui Coal**

BMC is a subsidiary company owned by BHP Billiton (80 per cent) and Mitsui and Co (20 per cent). BMC owns and operates South Walker Creek and Poitrel, both open-cut metallurgical coal mines in the Bowen Basin.

Total production in FY2014 was 8.3 Mt. The reserve lives of our mines are 15 years at Poitrel and 11 years at South Walker Creek. The reserve life for each mine is set out in section 2.3.2.

#### Illawarra Coal

Our wholly owned Illawarra Coal Asset owns and operates three underground coal mines Appin, West Cliff and Dendrobium, in the Illawarra region of New South Wales, Australia. The mines supply metallurgical coal to the nearby BlueScope Port Kembla steelworks and to other domestic and export markets. The Appin mine is currently being developed to sustain Illawarra Coal s production following the end of the mine life at West Cliff.

Coal is exported via the Port Kembla Coal Terminal, in which we own a 16.67 per cent interest. Total production in FY2014 was 7.5 Mt. Production figures for Illawarra Coal include some energy coal (approximately 20 per cent). The reserve lives of our mines range from 2.0 years at West Cliff to 25 years at Appin. The reserve life for each mine is set out in section 2.3.2.

## **Energy Coal South Africa**

Energy Coal South Africa (known as BECSA) operates four energy coal mines Khutala, Klipspruit, Middelburg and Wolvekrans, in the Witbank region in the province of Mpumalanga, South Africa.

BECSA is 90 per cent owned by BHP Billiton, two per cent owned by its employees through an Employee Share Ownership Plan (ESOP) and eight per cent owned by a Broad-Based Black Economic Empowerment (B-BBEE) consortium led by Pembani Group Proprietary Limited.

Production in FY2014 was 30.4 Mt. The reserve lives of our mines range from 5.8 years at Khutala to 23 years at Middelburg. The reserve life for each mine is set out in section 2.3.2.

In FY2014, approximately 55 per cent of BECSA s sales were to Eskom, the government-owned electricity utility in South Africa. The remaining production was exported, predominantly to India and China, via the Richards Bay Coal Terminal (RBCT), in which we own a 21 per cent interest.

### **New Mexico Coal**

We own and operate the San Juan energy coal mine located in the US state of New Mexico. The mine transports its production directly to the nearby San Juan Generating Station. The San Juan mine has a reserve life of 3.5 years, which is the life of the current customer contract. Production for FY2014 was 5.7 Mt.

We also operate the nearby Navajo mine, located on Navajo Nation land in New Mexico. Full ownership of the Navajo Coal Company transferred to the Navajo Transitional Energy Company (NTEC), an entity of the Navajo Nation, effective 30 December 2013. New Mexico Coal and NTEC have entered into a Mine Management Agreement where New Mexico Coal will continue as mine operator until 31 December 2016.

Navajo mine transports its production directly to the nearby Four Corners Power Plant. Navajo mine reduced capacity during FY2014 from 7.4 Mtpa to 5.4 Mtpa in response to reduced customer demand. Production for FY2014 was 5.1 Mt. As we retain control of the mine until full consideration is paid, production continues to be reported by the Group.

### **New South Wales Energy Coal**

Our wholly owned New South Wales Energy Coal Asset owns and operates the Mt Arthur Coal open-cut energy coal mine in the Hunter Valley region of New South Wales, Australia. New South Wales Energy Coal produced 20 Mt in FY2014 and has a reserve life of 33 years. In FY2014, we delivered approximately seven per cent of Mt Arthur's production to a local power station and exported the rest, predominantly to Japan and China, via the port of Newcastle.

We own a 35.5 per cent interest in the Newcastle Coal Infrastructure Group, which operates the Newcastle Third Port export coal loading facility. The facility currently has a port expansion project in execution (refer to Development projects). We also have a 1.75 per cent interest in Port Waratah Coal Services Limited, which operates two coal loading facilities at the port of Newcastle.

### Cerrejón

We have a one-third interest in Cerrejón Coal Company, which owns and operates one of the world s largest open-cut export energy coal mines, located in the La Guajira province of Colombia. Cerrejón also owns and operates integrated rail and port facilities through which the majority of production is exported to European, Middle Eastern, North and South American customers. In FY2014, our share of Cerrejón production was approximately 12.3 Mt. Cerrejón has a reserve life of 17 years.

In FY2012, Cerrejón commenced an expansion project (P40), which is ultimately expected to increase our share of production from 10.7 Mtpa to 13.3 Mtpa (refer to Development projects).

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## **Information on Coal mining operations**

The following table contains additional details of our mining operations. The tables should be read in conjunction with the production (refer to section 2.2.2) and reserves tables (refer to section 2.3.2).

				Title, leases or		Mine type & mineralisation		TF91*4*
k location lia	Means of access	Ownership	Operator	options	History	style	Power source	Facilities, u conditio
l sland ssociates 'enture								
Basin, land, ia	Public road  Coal transported	BHP Billiton 50%	BMA	Mining leases, including undeveloped tenements,	Goonyella mine commenced in 1971, merged with	All open-cut except Broadmeadow: longwall underground	Queensland electricity grid under long-term contracts	On-site benef processing fac
	by rail to Hay	Mitsubishi		expire	adjoining		contracts	Combined no
ella	Point,	Development		between	Riverside			capacity: in e
de	Gladstone, and	50%		2014 and	mine in 1989.	Bituminous coal is		of 61 Mtpa
neadow	Abbot Point			2043,	Operates as	mined from the		
	ports			renewable	Goonyella	Permian Moranbah		
Ridge				for further periods as	Riverside	and Rangal Coal measures		
duge				Queensland		measures		
owns	Distances			Government				
	between the			legislation	Production			
	mines and port			allows	commenced	Products range		
	are between				at:	from premium		
ater and	160 km and				D1- D	quality, low		
h Park	315 km			Mining is	Peak Downs in 1972	volatile, high vitrinite, hard		
				permitted to	III 1772	coking coal to		
				continue	Saraji in 1974	medium volatile		
				under the		hard coking coal,		
				legislation		to weak coking		
				during the	in 1979	coal, some		
				renewal application	Blackwater in	pulverised coal injection (PCI)		
				period	1967	coal and medium		
						ash thermal coal as		
						a secondary		
						product		

Broadmeadow (longwall operations) in 2005 Daunia in 2013 and Caval Ridge in 2014

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	M			Title, leases or		Mine type & mineralisation		Facilities,
Mine & location Gregory Joint	Means of access	Ownership	Operator	options	History	style	Power source	use & condition
Operation Bowen Basin, Queensland, Australia	Public road Coal	BHP Billiton 50%	BMA	Mining leases, including undeveloped tenements,	Production commenced at:  Gregory in	Gregory: open-cut	Queensland electricity grid under long-term contracts	On-site beneficiation processing facility
Gregory and Crinum mines	transported by rail to Hay Point and Gladstone ports	Mitsubishi Development 50%		expire between 2014 and 2043, renewable for further periods as Queensland Government	1979 Crinum mine (longwall) in 1997	Crinum: longwall underground  Bituminous coal is mined from the		Nominal capacity: in excess of 6 Mtpa
	Distances between the mines and port are between 310 km and			legislation allows Mining is	Production at Gregory open-cut mine ceased in October 2012	Permian German Creek Coal measures		
	370 km			permitted to continue under the legislation during the renewal application period		Product is a high volatile, low ash hard coking coal		
BHP Billiton Mitsui Coal Bowen Basin, Queensland, Australia	Public road	BHP Billiton 80%	BMC	Mining leases, including	South Walker Creek	Open-cut	Queensland electricity grid	South Walker Creek coal beneficiated
South Walker Creek and Poitrel mines	by rail to	Mitsui and Co 20%	,	undeveloped tenements expire between 2014 and 2031, and are renewable for further	commenced in 1996  Poitrel commenced in 2006	Bituminous coal is mined from the Permian Rangal Coal measures		Nominal capacity: in excess of 5 Mtpa

periods as
Queensland
Distances
Government
between the legislation
mines and allows
port are
between
135 km and

165 km

Mining is permitted to continue under the legislation during the renewal application

period

Produces a range of coking coal, PCI coal and thermal coal products with medium to high phosphorus and ash properties

has Red Mountain joint venture with adjacent Millennium Coal mine to share processing and rail loading facilities

Poitrel mine

Nominal capacity: in excess of 3 Mtpa

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	Means of			Title, leases or		Mine type & mineralisation	Power	Facilities, use &
Mine & location Illawarra Coal	access	Ownership	Operator	options	History	style	source	condition
Illawarra, New South Wales, Australia	Public road	100%	BHP Billiton	Mining leases expire between 2016 and	Production commenced at:	Underground	New South Wales electricity	2 beneficiation facilities
	Coal transported			2033, renewable	Appin in 1962	Bituminous coal is mined	grid	
Dendrobium Appin and West Cliff mines	by road or rail to BlueScope Steel s Port Kembla steelworks or Port			for further periods as NSW Government legislation allows	(longwall operations 1969) West Cliff in 1976 and Dendrobium	from the Permian Illawarra Coal Measures		Nominal capacity: in excess of 9 Mtpa
	Kembla for export				in 2005	Produces premium quality hard coking coal and some		
	Distances between the mines and port are between 8 km and 38 km					thermal coal from the Wongawilli and Bulli seams		
Mt Arthur Coal Approximately 126 km northwest of Newcastle, New	Public road	100%	BHP Billiton	Various mining leases and licences	Production commenced in 2002	Open-cut	Local energy providers	
South Wales, Australia	Domestic coal transported by conveyor to Bayswater			expire between 2010 and 2032	Government approval permits extraction of	Produces a medium rank bituminous thermal coal (non-coking)		handling, preparation, washing plants
	Power Station			Renewal is being sought for expired mining leases	up to 36 Mtpa of run of mine coal from underground and open-cut			Nominal capacity: in excess of 23 Mtpa

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Export coal coperations, transported comparts with the party rail to comparty rail to comparts compared comp

other activities to continue during renewal application

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	3.4			Title, leases or		Mine type & mineralisation	D.	Facilit
e & location h Africa	Means of access	Ownership	Operator	options	History	style	Power source	use & condit
tala								
km east of nnesburg, Gauteng ince, South Africa	Public road	BHP Billiton 90% Newshelf	BHP Billiton	BECSA holds a 100% share of Converted	Production commenced in 1984	Combination open-cut and underground	Eskom (national power supplier)	Undergreand oper crushers Nominal
	Domestic coal transported by overland conveyor to Kendal	(BEE SPV)		Mining Right, granted October 2011	Open-cut operations in 1996	Produces a continuity medium rank bituminous	under long-term contracts	capacity excess of 12 Mtpa
	Power Station	Eyami Trust Management Company (RF) Proprietary Limited (ESOP) 2%		Mining Right was amended 15 February 2013 to include Portion 16 of Zondagsvlei 9 IS	Commenced mining thermal/metallurgical coal for domestic market in 2003	thermal coal (non-coking)		
delburg/Wolvekrans								
n southeast of ank, Mpumalanga ince, South Africa	Public road	BHP Billiton 90% Newshelf	BHP Billiton	BECSA and Tavistock are joint holders of 3	Production commenced in 1982	Open-cut	Eskom under long-term contracts	Benefici facilities tips and crushing
	Export coal transported to RBCT by third party rail (558 km)	Proprietary Limited (BEE SPV) 8% Eyami Trust		-	Middelburg Mines and Duvha Colliery became one operation in 1995	most of which can be beneficiated		plants, 2 export w plants, middling wash pla de-stone plant
	Domestic coal transported by conveyor to Duvha Power Station	Management Company (RF) Proprietary Limited (ESOP) 2%		BECSA is the 100% holder of a fourth Converted Mining Right	Douglas-Middelburg Optimisation project completed in July 2010  Mine was split into Middelburg and	for the European or Asian export markets		Nominal capacity excess of Mtpa

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Previous JV All 4 Rights Wolvekrans during

(84:16) with comprise the 2011

Glencore Middelburg Xstrata Plc Mine

(through Complex (1)

Tavistock Collieries Pty Limited) was

amended in The February Converted 2008 Mining

Rights were granted during October and December 2011 (2)

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	Means of			Title, leases or		Mine type & mineralisation	Power	Facilities, use &
Mine & location Klipspruit	access	Ownership	Operator	options	History	style	source	condition
30 km west of Witbank, Mpumalanga Province, South Africa	Export coal	90% Newshelf 1129	BHP Billiton	holds a Converted Mining Right,	Production commenced in 2003	Open-cut Produces a	Eskom, under long-term contracts	Beneficiation facilities: tip and crushing plant, export wash plant
	transported to RBCT by third party rail	Proprietary Limited (BEE SPV) 8%		granted on 11 October 2011	Expansion project	medium rank bituminous thermal coal, most of which		Nominal
	(611 km)	Eyami Trust Management Company			FY2010, includes 50% share in Phola Coal	can be		capacity Phola Coal Processing Plant: in
		(RF) Proprietary Limited (ESOP) 2%			Plant	market		excess of 7 Mtpa
		Phola Coal Plant in JV with Anglo Inyosi Coal 50%						
United States								
San Juan								
25 km west of Farmington, New Mexico, US	Public road	100%	BHP Billiton	Mining leases from federal and state	Surface mine operations commenced in 1973	Underground Produces a medium rank	San Juan Generating Station	Coal sized and blended to meet contract
	Coal transported by truck and			governments	Development	bituminous thermal coal (non-coking suitable for the		quantities and specification
	conveyor to San Juan Generating Station			Leases viable as long as minimum production criteria achieved	of underground mine to replace open-cut mine approved in	domestic market only)		Nominal capacity: 6 Mtpa

2000

Mtpa

١	a	V	a	J	0	
				J	_	

40 km southwest	Public road		BHP Billiton		Production	Open-cut		Stackers and
of Farmington,		0%		by Navajo	commenced		Power Plant	reclaimers
New Mexico, US				Transitional	in 1963			used to size
				Energy				and blend
	Coal			Company	Divested	Produces a		coal to meet
	transported	Navajo			FY2014	medium rank		contract
	by rail to	Transitional				bituminous		quantities
	Four	Energy				thermal coal		and
	Corners	Company				(non-coking		specification
	Power	100%			BHP Billiton	suitable for the		
	Plant				continues as	domestic		
					operator	market only)		
								Nominal
								capacity: 5.4

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Mine & location Colombia	Means of access	Ownership	Operator	Title, leases or options	History	Mine type & mineralisation style	Power source	Facilities, use & condition
Cerrejón La Guajira province, Colombia	Public road  Coal exported by company-owned rail to Puerto Bolivar (150 km)	BHP Billiton 33.33%  Anglo American 33.33% Glencore Xstrata 33.33%	Cerrejón Coal Company	Mining leases expire in 2034	mine began	Open-cut  Produces a medium rank bituminous thermal coal (non-coking, suitable for the	Local Colombian power system	Beneficiation facilities: crushing plant with capacity of 32 Mtpa and washing plant Nominal
					interest acquired in 2000	export market)		capacity: 3 Mtpa

- This includes the Wolvekrans and Middelburg collieries and excludes the portion Tavistock obtained as a result of the amendment of the Douglas-Tavistock JV agreement.
- The JV agreement has been amended so that upon the Department of Mineral Resources amending the Converted Mining Rights, the mining area will be divided into an area wholly owned and operated by Tavistock and an area wholly owned and operated by BECSA as the new Douglas-Middelburg mine. Applications were made in December 2008 to the Department of Mineral Resources to amend the Converted Mining Rights, but a date for execution has not yet been provided. Ministerial consent to amend the Mining Rights has been granted.

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### **Development projects**

### **BMA Expansions**

In November 2011, we approved the development of the Caval Ridge mine project, with a revised investment of US\$1.9 billion (BHP Billiton share). The Caval Ridge mine is an open-cut dragline and truck and shovel operation, with coal railed to the Hay Point Coal Terminal. First coal at the Caval Ridge mine occurred in the June 2014 quarter and the mine was 100 per cent completed at 30 June 2014.

In March 2011, we approved the expansion of the Hay Point Coal Terminal. The expansion of the terminal will deliver an additional 11 Mt of annual port capacity (100 per cent basis). Following a review of the project during FY2013, first shipment is expected in CY2015 with a revised budget of US\$1.5 billion (BHP Billiton share). The project was 87 per cent complete at 30 June 2014.

### Appin Area 9 Project

In June 2012, approval was given to invest US\$845 million to sustain operations at Illawarra Coal by establishing a replacement mining area at Appin mine. The replacement area will have a production capacity of 3.5 Mtpa and will sustain Illawarra Coal s production capacity at 9 Mtpa. The Appin Area 9 project was 67 per cent complete at 30 June 2014 and is expected to be operational in CY2016, whereupon it will replace production at the West Cliff mine. The project includes roadway development, new ventilation infrastructure, new and reconfigured conveyors and other mine services.

#### Cerrejón P40 Project

In August 2011, we announced a US\$437 million (BHP Billiton share) investment in the expansion of Cerrejón, known as the P40 Project, which is expected to enable Cerrejón s thermal coal production to increase by 8 Mtpa to approximately 40 Mtpa. The project scope includes a second berth and dual quadrant ship loader at Cerrejón s 100 per cent owned and operated Puerto Bolivar, along with necessary mine, rail and associated supply chain infrastructure. Construction commenced in CY2011 and the project handled its first coal in the December 2013 quarter. The port expansion associated with the Cerrejón P40 project is currently being commissioned, although operational issues are expected to constrain capacity to approximately 35 Mtpa (100 per cent basis) in the medium term. At 30 June 2014, the project was 94 per cent complete.

#### **Newcastle Port Third Phase Expansion**

In August 2011, we announced a US\$367 million (BHP Billiton share) investment in the third stage development of the Newcastle Coal Infrastructure Group s coal handling facility in Newcastle. The port expansion project is expected to increase total capacity at the coal terminal from 53 Mtpa to 66 Mtpa. This is expected to increase New South Wales Energy Coal s allocation by 4.6 Mtpa to 19.2 Mtpa. First coal on ship, being the first ship loading through the new facility, was achieved in June 2013, ahead of schedule. At 30 June 2014, the project was 86 per cent complete.

### **IndoMet Coal Project**

IndoMet Coal comprises seven coal contracts of work (CCoWs) covering a large metallurgical coal resource in Central and East Kalimantan, Indonesia, which was discovered by BHP Billiton in the 1990s. Following an assessment of the importance of local participation in developing the project, in 2010 we sold a 25 per cent interest in the project to a subsidiary of PT Adaro Energy TBK. We retain 75 per cent of the project and hold management

responsibility.

Construction works on infrastructure development for this project is ongoing with initial production from a small mine expected in CY2015.

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### 2.1.5 Aluminium, Manganese and Nickel Business

#### Aluminium

Our Aluminium, Manganese and Nickel Business, headquartered in Perth, Australia, has a portfolio of assets in three stages of the aluminium value chain: mining bauxite, refining bauxite into alumina and smelting alumina into aluminium metal. We are a major producer of aluminium, with total production in FY2014 of 1.2 Mt. We also produced 5.2 Mt of alumina in FY2014.

During FY2014, we consumed 35 per cent of our alumina production in our aluminium smelters and sold the balance to third party smelters. Our alumina and aluminium customers are located mostly in western Europe and Asia. Our alumina sales are a mixture of legacy long-term contract sales at LME-linked prices and long-term contracts priced from an alumina index or spot negotiated prices. Prices for our aluminium sales are generally linked to prevailing LME and premium prices. We have a diversified customer portfolio, with demand driven by end-use consumption in transportation, packaging, construction and household items.

Our assets consist of the following operations:

### **Boddington/Worsley**

Boddington/Worsley is an integrated bauxite mining/alumina refining operation located in Western Australia. The Boddington bauxite mine supplies bauxite ore to the Worsley alumina refinery via a 51-kilometre long conveying system. We own 86 per cent of the mine and the refinery. It is our sole integrated bauxite, mining/alumina refining asset, and one of the largest and lowest cost refineries in the world. Worsley s Efficiency and Growth project reached nameplate capacity in FY2014, bringing the capacity of the refinery to 4.6 Mtpa (100 per cent) of alumina. Our share of Worsley s FY2014 production was 3.9 Mt of alumina. Worsley s export customers include our own Hillside and Mozal smelters in southern Africa. Boddington has a reserve life of 17 years.

### Hillside and Bayside

Our wholly owned Hillside and Bayside smelters are located at Richards Bay in South Africa. Hillside is the largest aluminium smelter in the southern hemisphere. Hillside and Bayside imported alumina from our Worsley refinery and Alcoa during FY2014; however, the Alcoa supply was discontinued by 30 June 2014. In June 2014, Bayside completed the ramp-down of its remaining smelting capacity of 97 ktpa. The Bayside Casthouse continues to operate and began processing liquid metal transfers from Hillside in June 2014. Hillside sources 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, where the price is linked to the South African and US producer price indices). The Bayside Casthouse sources power from the grid at market rates. Production in FY2014 for Hillside was 715 kt and Bayside was 89 kt.

#### Mozal

We own 47.1 per cent of and operate the Mozal aluminium smelter located near Maputo, Mozambique. Mozal sources power generated by Hydro Cahora Basa via Motraco, a transmission joint venture between Eskom and the national electricity utilities of Mozambique and Swaziland. Our share of Mozal s FY2014 production was 266 kt.

#### Mineração Rio do Norte

We own a 14.8 per cent investment in Mineração Rio do Norte (MRN), which owns and operates a large bauxite mine, located at Porto Trombetas in the province of Pará, Brazil. MRN has a reserve life of 6.1 years.

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#### Alumar

Alumar is an integrated alumina refinery/aluminium smelter. 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 São Luís in the Maranhão province of Brazil. BHP Billiton sources the majority of the bauxite it processes at Alumar from MRN.

The Alumar smelter has currently suspended production from pot lines 2 and 3 reducing overall annual capacity to 124 ktpa, from 447 ktpa (100 per cent), due to challenging global market conditions in primary aluminium and increased costs. During FY2014, approximately 16 per cent of Alumar s alumina production was used to feed the smelter, while the remainder was exported. Our share of Alumar s FY2014 saleable production was 1.3 Mt of alumina and 104 kt of aluminium.

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## **Information on Aluminium mining operations**

The following table contains additional details of our mining operations. This table should be read in conjunction with the production (refer to section 2.2.2) and reserve tables (refer to section 2.3.2).

				Title, leases or		Mine type & mineralisation		F 3142 9
Mine & location Bauxite	Means of access	Ownership	Operator	options	History	style	Power source	Facilities, use & condition
Boddington bauxite mine								
Boddington, 123 km southeast of Perth, Western Australia		BHP Billiton 86%	BHP Billiton Worsley Alumina	Mining leases from Western Australia	Opened in 1983	Open-cut	power line connected	Crushing plant Nominal capacity: 19 Mtpa bauxite
	Ore transported		Pty Ltd	Government		Surficial	alumina	1
	to Worsley	G		expire over	•	gibbsite-rich	refinery	
	alumina refinery by a 51 km	Sojitz Alumina		the period 2014 2032,	extended in 2000	weathering of	site	
	conveyor	Alullilla		all with	2000	Darling Range		
		4%		21-year		rocks		
				renewal				
		Japan		available.				
		Alumina		Renewal				
		Associates 10%		process in				
		10%		progress for lease that				
				expires in				
				September				
		Ownership		2014.				
		structure of						
		operator as						
		per		2 subleases				
		Worsley JV		from Alcoa				
				of Australia				
Mineração Rio do Norte								
Porto Trombetas,	Sealed road and	BHP	MRN	Mining	Production	Open-cut	On-site	Crushing
880 km from	28 km of rail	Billiton		rights	commenced		fuel oil	facilities,
Belém, the	connects mine	14.8%		granted by	in 1979		generators	conveyors, wash
capital of Pará	area with Porto			Brazilian Government		Lateritic		plant
state, Brazil	Trombetas			until		weathering of		
				GIILII		" camering of		

Alcoa and affiliates 18.2% Vale 40%	reserves exhausted	Expanded in 2003	nepheline syenite occurring primarily as gibbsite in a	Nominal capacity: 18 Mtpa washed bauxite
Rio Tinto Alcan 12%			clay matrix overlain by clay sediments	
Votorantim 10%			·	
Hydro 5%				

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### Information on Aluminium smelters and refineries

Smelter, refinery or processing plant	Location	Ownership	Operator	Title, leases or options	Product	Nominal production capacity	Power source
Aluminium and alum Hillside	mina						
Aluminium smelter	Richards Bay, 200 km north of Durban, South Africa	100%	BHP Billiton	Freehold title to property, plant, equipment  Leases over harbour facilities	Standard aluminium ingots Liquid metal transferred	726 ktpa primary aluminium	Eskom (national power supplier) under long-term contracts
					to Bayside Casthouse		Contract prices for Hillside 1 and 2 linked to LME aluminium price
Bayside							Prices for Hillside 3 linked to SA and US producer price indices
Aluminium smelter	Richards Bay, 200 km north of Durban, South Africa	100%	BHP Billiton	Freehold title to property, plant, equipment	Primary aluminium, slab products	Ramp-down activities completed in June 2014, going forward only the Casthouse will operate processing	requirements reduced due to closure of
Mozal						liquid metal from Hillside	supply from grid at market rates

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Aluminium smelter	17 km from Maputo, Mozambique	BHP Billiton 47.1% of Mozal SARL	BHP Billiton	50-year government concession to use the land  Renewable for 50 years	Standard aluminium ingots	561 ktpa	Motraco under long-term contract
		Mitsubishi 25% Industrial Development Corporation of South Africa Ltd 24%					Contract price-linked to SA producer price index
		Mozambique Government 3.9%					

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Smelter, refinery or processing plant Worsley	Location	Ownership	Operator	Title, leases or options	Product	Nominal production capacity	Power source
Alumina refinery	55 km northeast of Bunbury, Western Australia	BHP Billiton 86% Sojitz	BHP Billiton Worsley Alumina Pty Ltd	2,480 ha refinery lease from Western Australia Government expires in 2025	grade	4.6 Mtpa	JV-owned on-site coal power station, third party on-site gas-fired steam power generation plant,
		Alumina 4%  Japan Alumina Associates 10%		21-year renewal available			third party leased on-site multifuel co-generation steam and power generation plant
Alumar		Ownership structure of operator as per Worsley JV					
Alumina refinery and aluminium smelter	São Luís, Maranhão, Brazil	Aluminium smelter: BHP Billiton 40%	Alcoa operates both facilities	All property held freehold	Alumina and aluminium ingots	Refinery: 3.5 Mtpa alumina	Electronorte (Brazilian public power generation concessionaire), under long-term
	Alumina refinery: BHP Billiton 36% Alco and	refinery: BHP Billiton 36% Alcoa				Smelter: 124 ktpa primary aluminium (Potline 1)	contract
		54% Rio Tinto 10%					

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### **Development projects**

There were no active aluminium development projects in FY2014.

### Manganese

Our Aluminium, Manganese and Nickel Business produces a combination of manganese ores and alloys from sites in South Africa and Australia. We are the world s largest producer of manganese ore and one of the top global producers of manganese alloy. Manganese alloy is a key input into the steelmaking process. Manganese high-grade ore is particularly valuable to alloy producers because of the value in use differential over low-grade ore. The value in use differential is the degree to which high-grade ore is proportionately more efficient than low-grade ore to process in the production of alloy.

Manganese alloy smelters are a key conduit of manganese alloy and ore into steelmaking and enable us to access markets with an optimal mix of ore and alloy, optimise production to best suit market conditions and give us technical insight into the performance of our ores in smelters.

Approximately 83 per cent of our ore production is sold directly to external customers, predominantly located in China, South Korea and India, and the remainder is used as feedstock in our alloy smelters. Manganese alloy is sold to steel mills, mainly in Europe and North America. Manganese ore and alloy are sold on short-term or spot contracts, with prices linked to published indices. Neither commodity is exchange traded, and prices are largely determined by supply and demand balances. Ore is priced per dry metric tonne unit and referenced to a benchmark ore of 44 per cent manganese grade cost insurance freight (CIF) China. Alloy is priced per tonne, typically on a delivered basis (DDP). Manganese production in FY2014 was 8,302 kt of ore and 646 kt of alloy.

We own and manage all of our manganese mining operations and alloy plants through the Manganese joint ventures with Anglo American. In South Africa, we own 60 per cent of Samancor Holdings (Pty) Ltd which via its wholly owned subsidiary, Samancor Manganese (Pty) Ltd, operates the Metalloys division. Samancor Manganese owns 74 per cent of Hotazel Manganese Mines (Pty) Ltd (HMM), which gives us an effective interest of 44.4 per cent in HMM. The remaining 26 per cent of HMM is owned under the terms of the South African B-BBEE legislation, which reflects our commitment to economic transformation in South Africa. In Australia, we own 60 per cent of Groote Eylandt Mining Company Pty Ltd (GEMCO) and we have an effective interest of 60 per cent in GEMCO s wholly owned subsidiary, Tasmanian Electro Metallurgical Company Pty Ltd (TEMCO).

Our assets, Manganese Australia and Manganese South Africa, consist of the following:

#### Mines

#### **HMM**

HMM owns the Mamatwan open-cut mine and the Wessels underground mine. Mined ore is processed into a saleable product through a crushing and wet screening operation, with some ore undergoing further processing in the form of dense media separation and sintering. Approximately 25 per cent of the ore mined is beneficiated into alloy at Metalloys, with the rest being exported via road and rail through Port Elizabeth (approximately 950 kilometres) and Durban (approximately 1,100 kilometres). In FY2014, the total manganese ore production was 3,526 kt. Wessels has a reserve life of 46 years and Mamatwan has a reserve life of 18 years.

#### **GEMCO**

GEMCO is an open-cut mining operation, located 16 kilometres from our port facilities at Milner Bay, Northern Territory. These operations, consisting of crushing, screening, washing and dense media separation, combined with its high-grade ore are in relative close proximity to the Asian export markets. FY2014 production of manganese ore was 4,776 kt. GEMCO has a reserve life of 11 years.

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### **Alloy Plants**

### Metalloys

The Samancor Manganese Metalloys alloy plant is one of the largest manganese alloy producers in the world. Metalloys produces high- and medium-carbon ferromanganese using ore transported by rail from HMM. Production of manganese alloy in FY2014 was 377 kt.

### **TEMCO**

TEMCO, located in Tasmania, is a medium-sized producer of high-carbon ferromanganese, silicomanganese and sinter using ore shipped from GEMCO, primarily using hydroelectric power. Production of manganese alloy in FY2014 was 269 kt.

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### **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 (refer to section 2.2.2) and reserve tables (refer to section 2.3.2).

	Means of			Title, leases or		Mine type & mineralisation	Power	Facilities, use &
Mine & location Manganese ore	access	Ownership	Operator	options	History	style	source	condition
Hotazel Manganese Mines (HMM)								
Kalahari Basin, South Africa	Public road	BHP Billiton	BHP Billiton	Existing New Order Rights valid until	Mamatwan commissioned in 1964	Mamatwan: open-cut	Eskom (national	Mamatwan beneficiation plant:
Mamatwan and	Most ore and sinter products transported by	44.4%		2035	Wessels	Wessels: underground	power supplier) under contracts	primary, secondary and tertiary crushing with
Wessels mines	rail	Anglo American 29.6%			commissioned in 1973	undorground	at regulated prices	associated screening plants
	Approximately 34% of ore					Banded iron manganese ore type		•
	beneficiated locally, balance exported via Port Elizabeth	Ntsimbintle 9% NCAB 7%				71		Dense medium separator and sinter plant
	(approximately 950 km) and Durban	Iziko 5% HMM						(capacity 1 Mtpa sinter) (1)
	(approximately 1,100 km)	Education Trust 5%						sinter) (-)
								Wessels: primary and secondary crushing circuits with associated screening (1)

**Groote Eylandt Mining** 

# Company (GEMCO)

Groote Eylandt, Northern Territory,	Ore transported 16 km from concentrator by	Billiton	BHP Billiton	All leases on Aboriginal	Commissioned in 1965	Open-cut	On-site diesel power	Beneficiation process: crushing,
Australia	road train to			land held			generation	<b>O</b> .
	port at Milner			under		Sandstone		washing and
	Bay			Aboriginal		claystone		dense media
		Anglo		Land		sedimentary		separation
		American		Rights		manganese ore		
		40%		(Northern		type		
				Territory)				
				Act 1976				Produces
								lump and
				Valid until				fines
				2031				products
								Capacity: 4.8 wet Mtpa

<sup>(1)</sup> Capacity: Mamatwan approximately 3.5 Mtpa of ore; Wessels approximately 1 Mtpa of ore.

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

Smelter, refinery or processing plant Manganese alloy	Location	Ownership	Operator	Title, leases or options	Product	Nominal production capacity	Power source
Metalloys Manganese alloy plant  (division of Samancor Manganese (Pty) Ltd)	Meyerton, South Africa	BHP Billiton 60% Anglo American 40%	BHP Billiton	Freehold title over property, plant and equipment	Manganese alloys including high-carbon ferromanganese, refined (medium-carbon ferromanganese) alloy	410 ktpa high-carbon ferromanganese (including hot metal)  90 ktpa medium-carbon ferromanganese	Eskom  32 MW of internal power generated from furnace
Tasmanian Electro Metallurgical Company (TEMCO) Manganese alloy plant	Bell Bay, Tasmania, Australia	BHP Billiton 60%  Anglo American 40%	BHP Billiton	Freehold title over property, plant and equipment	Ferroalloys, including high-carbon ferromanganese, silicomanganese and sinter	150 ktpa high-carbon ferromanganese 120 ktpa silicomanganese 325 ktpa sinter	Aurora Energy  On-site energy recovery unit generates 11 MW for internal use

### **Development projects**

### **GEMCO** expansion

The US\$279 million GEMCO Expansion Project (GEEP2) (US\$167 million BHP Billiton share), approved in July 2011, was delivered on time and on budget in the December 2013 quarter. GEEP2 increased GEMCO s capacity from 4.2 Mtpa to 4.8 Mtpa through the introduction of a dense media circuit by-pass facility. The expansion has also addressed key infrastructure constraints by increasing road and port capacity to 5.9 Mtpa, creating 1.1 Mtpa of additional capacity for future expansions.

### **Premium Concentrate (PC02)**

In August 2014 a project to build a stand-alone PC02 plant at GEMCO was approved for US\$139 million (BHP Billiton share US\$83 million). The project is expected to complete by the December 2015 quarter and produce 0.2 Mtpa in FY2016 and ramp-up to 0.5 Mtpa in FY2017.

#### **HMM**

The central block development project at the Wessels underground mine is being progressed in two phases. The first phase of the project was commissioned in December 2013 at a cost of US\$92.4 million (US\$40.7 million BHP Billiton share) and comprised the construction of the ventilation shaft and development of the associated underground ventilation network.

The second phase will complete infrastructure required to expand the mine to 1.5 Mtpa and comprises the development of a run of mine infrastructure handling system for central block, the development and equipping of underground workshops, including materials handling design, procurement and installation. A feasibility study was successfully completed in FY2014 and was approved for execution in July 2014 at a cost of US\$30.8 million (US\$13.7 million BHP Billiton share). The project is expected to complete in the September 2016 quarter.

#### Nickel

Our Aluminium, Manganese and Nickel Business primarily supplies nickel products to customers in the stainless steel industry, principally in northern Asia and western Europe. Nickel is an important component of the most commonly used types of stainless steel. We also supply nickel to other markets, including the specialty alloy, foundry, chemicals and refractory material industries. We are a major producer of nickel with total production in FY2014 of 143 kt of contained nickel. We sell our nickel products at various stages including concentrate, matte and metal under a mix of long-term, medium-term and spot volume contracts, with prices linked to the LME nickel price.

Our assets, located in Australia and Colombia, consist of the following operations:

#### **Nickel West**

Our wholly owned Nickel West Asset in Western Australia consists of an integrated system of mines, concentrators, a smelter and a refinery. We mine nickel-bearing sulphide ore at our Mt Keith and Cliffs operations, located north of Kalgoorlie. Mt Keith has a reserve life of 5.9 years. Cliffs is an underground mine with a reserve life of 3.2 years. We operate concentrator plants at Mt Keith and at Leinster, which also concentrate ore from Cliffs. On 31 October 2013, production at the Nickel West Leinster Perseverance underground mine was suspended following a significant seismic event. A subsequent review of the incident determined it was unsafe to resume operations. The Rocky s Reward

open-cut mine, near Leinster, provided a temporary alternative ore supply to Nickel West, with mining operations completed in July 2014.

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We also operate the Kambalda concentrator south of Kalgoorlie, where we source ore through tolling and concentrate purchase arrangements with third parties in the Kambalda region. We also have purchase agreements in place for the direct purchase of concentrate, which we re-pulp, dry and blend with other concentrate processed at Kambalda.

Ore from our Mt Keith mine is concentrated at Mt Keith and then transported by road approximately 110 kilometres to Leinster for drying. Ore from the Cliffs and Leinster mines is concentrated and dried at Leinster. Dry nickel concentrate is then transported via road and rail approximately 375 kilometres to our Kalgoorlie smelter. Concentrate from Kambalda is transported via rail approximately 60 kilometres to our Kalgoorlie smelter.

Small volumes of concentrate are sold into the external market; however, the majority of volumes are processed into nickel matte, containing approximately 65 per cent nickel. In FY2014, we exported approximately 29 per cent of our nickel matte production. The remaining nickel matte is transported, principally by rail, to our Kwinana nickel refinery, a distance of approximately 650 kilometres. The nickel matte is processed into nickel metal in the form of LME grade briquettes and nickel powder, together with a range of saleable by-products.

Nickel West production in FY2014 was 98.9 kt of contained nickel.

### Cerro Matoso

Our 99.98 per cent owned Cerro Matoso Asset in Colombia combines a lateritic nickel ore deposit with a ferronickel smelter. The smelter produces high-purity, low-carbon ferronickel granules. Cerro Matoso has an estimated reserve life of 15 years. Production in FY2014 was 44.3 kt of nickel in ferronickel form.

During FY2013, Cerro Matoso successfully extended its mining concessions with the Colombian Government until 2029, with a conditional extension until 2044. The agreement includes an increase in the royalty rate from 12 per cent to 13 per cent. The extension of the contract term to 2044 is conditional on Cerro Matoso increasing processing capacity by 50 per cent by 2022.

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### **Information on Nickel mining operations**

The following table contains additional details of our mining operations. This table should be read in conjunction with the production (refer to section 2.2.2) and reserve tables (refer to section 2.3.2).

ne & location kel	Means of access	Ownership	Operator	Title, leases or options	History	Mine type & mineralisation style	Power source	Facilities, use condition
Keith km north of goorlie,	Private road	100%	BHP Billiton	Mining leases granted by Western Australia	Officially commissioned in 1995 by WMC	Open-cut	On-site third party leased gas-fired	Concentration plant with a nominal capacity: 11
stern stralia	Nickel concentrate transported by road to Leinster			Government	Acquired in	Disseminated textured magmatic nickel-sulphide	turbines	Mtpa of ore
	nickel operations for drying and on-shipping			Key leases expire between 2015 and 2034	2005 as part of	mineralisation, associated with a metamorphosed ultramafic intrusion	Contracts expire in 2024	
				Renewals at government discretion			Natural gas sourced and transported under separate long-term contracts	
nster km north of goorlie, stern stralia	Public road  Nickel concentrate	100%	BHP Billiton	Mining leases granted by Western Australia	Production commenced in 1979	Open-cut	On-site third party leased gas-fired	Concentration plant with a nominal capacity: 3 M
	shipped by road and rail to Kalgoorlie nickel			Government  Key leases	Acquired in	Steeply dipping disseminated and massive	turbines	of ore
	smelter			expire between 2019 and 2034 Renewals at		nickel-sulphide mineralisation, associated with	Contracts expire in 2024	
				government discretion		metamorphosed ultramafic lava flows and	Natural gas sourced and	

Perseverance	intrusions	transported
underground		under
mine ceased		separate
operations		long-term
during 2013		contracts

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_	Means of access	Ownership	Operator	Title, leases or options	History	Mine type & mineralisation style	Power source	Facilities, us condition
fs km north of goorlie, tern tralia	Private road	100%	BHP Billiton	Mining leases granted by Western Australia	Production commenced in 2008	Underground	Supplied from Mt Keith	Mine site
	Nickel ore transported by road to Leinster nickel operations for further processing			Government  Key leases expire between 2025 and 2028	2005 as part of WMC	Steeply dipping massive textured nickel-sulphide mineralisation, associated with metamorphosed ultramafic lava flows		
				Renewals at government discretion				
<b>ro Matoso</b> itelibano, Public road doba, ombia	Public road	BHP Billiton 99.98%	BHP Billiton	New terms agreed effective 1 October 2012 until 2029 with	Mining commenced in 1980	Open-cut  Nickel-laterite	electricity grid under	integrated wit
		Employees and former employees 0.02%		conditional extension to 2044 if ore processing capacity is	Nickel production started in 1982	mineralisation formed from residual weathering of ophiolitic	December 2014	Beneficiation plant: primary
				increased 50% by 2022	Ownership increased to	peridotite		and secondary crusher
					53% in 1989 and to 99.94% in 2007		2018	Nominal capacity: 50 k of nickel in ferronickel fo
							Renewal process for 2015 in	
					Expansion project to double		1 0	Actual production depends on

installed capacity completed in 2001

Domestic nickel grade natural gas from the mine for drier and kiln operation supplied

Gas supply contracts expiring December 2021

by owned pipeline

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### Information on Nickel smelters, refineries and processing plants

Smelter, refinery or				Title, leases or		Nominal production	
processing plant Nickel	Location	Ownership	Operator	options	Product	capacity	Power source
Kambalda Nickel concentrator	56 km	100%	BHP Billiton	Mineral	Concentrate containing	1.6 Mtna ore	On-site third
Tueker concentrator	south of Kalgoorlie, Western	100%	Jin Jimen	leases granted by Western	approximately 14% nickel	1.0 Mapa ore	party leased gas-fired turbines
	Australia			Australia Government		Ore sourced through tolling and concentrate	supplemented by access to grid power
				Key leases expire in 2028		purchase arrangements with third parties in Kambalda region	Contracts expire in January 2024
				Renewals at			Notanal acc
				government discretion			Natural gas sourced and transported under separate long-term contracts
Kalgoorlie							
Nickel smelter	Kalgoorlie, Western Australia	100%	BHP Billiton	Freehold title over the property	Matte containing approximately 65% nickel	110 ktpa nickel matte	On-site third party leased gas-fired turbines
							Contracts expire in January 2024
							Natural gas sourced and

transported
under separate
long-term
contracts

Kwinana						
Nickel refinery	30 km south of Perth, Western Australia	100%	BHP Billiton	C	70 ktpa nickel metal	Power is sourced from the local grid which is supplied under a retail
				Also intermediate products, including copper sulphide, cobalt-nickel-sulphide, ammonium-sulphate		contract.

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### **Development projects**

There were no active nickel development projects in FY2014.

### 2.1.6 Marketing

BHP Billiton s Marketing organisation manages the Group s revenue line and is responsible for:

selling the Group s products and for purchasing all major raw materials;

supporting the Businesses to maximise the value of upstream resources;

managing the supply chain to customers;

achieving market clearing prices for the Group s products;

developing the Group-wide view of the markets and future pricing.

Our responsibilities require an active presence in the various commodities markets, the global freight market, and in crude and gas pipeline transportation. We manage the supply chain for our products and develop strong relationships with our customers. We actively manage the levels of finished goods inventory, supply vendor payables and trade receivables, thereby ensuring we do not carry excess working capital. We also manage credit and price risk by assessing customers for creditworthiness while ensuring our sales positions are reflective of the market at the time of delivery by linking to commodity market indices.

Marketing adds value by releasing full economic value of the Group s products through maximising unit price; minimising the costs of distribution and major traded raw materials that are consumed in the Businesses production processes; supporting the Businesses in optimising the value of our resources via our approach to quality and other commercial parameters; and ensuring the Group s view of long-run markets is well informed and insightful.

Our market insight is strengthened by our proximity to our customers and the flow of information in our centralised marketing structure. We research and analyse the fundamentals of demand and supply and integrate this knowledge into long-run views of the commodity markets, enabling the Group to plan and invest optimally.

The primary hub for our marketing activities is Singapore, while our marketing of oil and gas is headquartered in Houston, United States. The two hub offices incorporate all the functions required to manage marketing and distribution from our Businesses to our customers. In addition, we have marketers located close to our customers in 14 cities across the world. This model enables centralised decision-making supported by regional liaison offices close to our customers that build long-term value-creating relationships.

The consolidation of commercial accountabilities through our centralised model enables the optimisation of our sales positions, provides greater value to distribution activities, and ensures more effective risk management, which improves our commercial capability. Marketing demonstrates leadership in the drive towards improved liquidity and

transparency in the markets for many of our commodities through our investments in electronic platforms as physical sales channels, such as the development and introduction of globalORE, globalCOAL and the China Beijing International Mining Exchange. We actively focus on sustaining relationships with our customers to assure our access to market and to sell our products at market prices.

Within the Singapore hub, we have a centralised ocean freight business that manages our in-house freight requirements for the Group. The objective of the freight business is to create a competitive advantage through the procurement of safe, sustainable shipping solutions, which both maximise production throughput and minimise costs through the Group supply chains.

As one of the largest global shippers of bulk commodities, we are seen as a key trading partner, allowing us to select among the highest quality freight service providers and ship owners. The scope and scale of our commodity portfolio

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and extensive fleet of hire chartered vessels allows us to arbitrage and optimise positions to minimise freight costs. This includes flexibility in diverting tonnages between markets; maximising tonnages for both inbound and outbound journeys; and parcelling of commodities.

We are proud of our strong partnerships with our customers. We provide them with reliable supply of product at market-reflective prices. We engage in technical collaboration with many of our customers, to improve our understanding of their needs and help ensure they are able to make optimal use of our products.

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### 2.2 Production

### 2.2.1 Petroleum

The table below details Petroleum s historical net crude oil and condensate, natural gas and natural gas liquids production, primarily by geographic segment, for each of the three years ended 30 June 2014, 2013 and 2012. 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		
	2014	2013	2012
Production volumes			
Crude oil and condensate ( 000 of barrels)			
Australia	23,645	25,922	31,145
United States	53,964	38,724	30,824
Other (5)	6,452	7,866	9,232
Total crude oil and condensate	84,061	72,512	71,201
Natural gas (billion cubic feet)			
Australia	287.5	276.13	249.97
United States	460.2	489.03	456.69
Other (5)	91.6	109.11	115.60
Total natural gas	839.3	874.27	822.26
Natural Gas Liquids (1) ( 000 of barrels)			
Australia	8,448	7,927	7,943
United States	13,620	9,575	5,744
Other (5)	18	37	398
Total NGL (1)	22,086	17,539	14,085
<b>Total production of petroleum products</b> (million barrels of oil			
equivalent) (2)			
Australia	80.01	79.87	80.75
United States	144.28	129.80	112.69
Other (5)	21.74	26.09	28.90
Total production of petroleum products	246.03	235.76	222.34
<u> </u>			
Average sales price			
Crude oil and condensate (US\$ per barrel)			
Australia	111.88	110.83	114.33

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United States	97.57	102.33	106.22
Other (5)	108.13	107.46	113.26
Total crude oil and condensate	102.47	105.91	110.66
Natural gas (US\$ per thousand cubic feet)			
Australia	5.20	4.73	4.62
United States	4.10	3.29	2.82
Other (5)	3.92	4.42	4.13
Total natural gas	4.35	3.76	3.40
Natural Gas Liquids (US\$ per barrel)			
Australia	63.12	63.13	61.61
United States	30.28	30.41	45.72
Other (5)	32.00	28.61	55.06
Total NGL	42.28	45.70	54.85
<b>Total Average production cost</b> (US\$ per barrel of oil equivalent) (3) (4)			
Australia	8.18	8.23	7.95
United States	7.80	6.27	5.91
Other (5)	9.58	8.45	7.84
Total Average production cost	8.08	7.18	6.90

- (1) LPG and ethane are reported as Natural Gas Liquids (NGL).
- (2) Total barrels of oil equivalent (boe) conversion is based on the following: 6,000 scf of natural gas equals one boe.
- (3) Average production costs include direct and indirect costs relating to the production of hydrocarbons and the foreign exchange effect of translating local currency denominated costs into US dollars, but excludes ad valorem and severance taxes.
- (4) Total average production costs reported here do not include the costs to transport our produced hydrocarbons to the point of sale. Total production costs, including transportation costs, but excluding ad valorem and severance taxes, were US\$11.70 per boe, US\$10.85 per boe, and US\$10.00 per boe for the years ended 30 June 2014, 2013 and 2012, respectively.
- (5) Other is comprised of Algeria, Pakistan, Trinidad and Tobago, and the United Kingdom.

### 2.2.2 Minerals

The table below details our mineral and derivative product production for all Businesses except Petroleum for the three years ended 30 June 2014, 2013 and 2012. The production numbers represent our share of production, including our proportional share of production for which income is derived from our equity accounted investments, unless otherwise stated. The Group changed its accounting policy for equity accounted investments from 1 July 2013 as set out in note 1 Accounting policies and note 37 Impact of new accounting standards and change in accounting policies in the Financial Statements. For discussion of minerals pricing during the past three years, refer to section 1.15.1.

	BHP Billiton Group interest	BHP Billiton Group share of production Year ended 30 June		
	%	2014 2013 2012		
Copper Business (1)				
Copper				
Payable metal in concentrate ( 000 tonnes)				
Escondida, Chile (2)	57.5	844.7	831.5	580.5
Antamina, Peru	33.75	143.5	139.7	127.0
Pinto Valley, United States (3)	100	12.5	16.6	
Total copper concentrate		1,000.7	987.8	707.5
Copper cathode ( 000 tonnes)				
Escondida, Chile (2)	57.5	308.0	297.9	299.1
Pampa Norte, Chile (4)	100	233.1	232.6	263.7
Pinto Valley, United States (3)	100	0.9	4.9	5.4

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Olympic Dam, Australia	100	184.4	166.2	192.6
Total copper cathode		726.4	701.6	760.8
Total copper concentrate and cathode		1,727.1	1,689.4	1,468.3
Lead				
Payable metal in concentrate ( 000 tonnes)				
Cannington, Australia	100	186.5	213.4	239.1
Antamina, Peru	33.75	1.5	1.0	0.8
Total lead		188.0	214.4	239.9

<u></u>				
	BHP Billiton Group interest	BHP Billiton Group share of production Year ended 30 June		
	%	2014	2013	2012
Zinc				
Payable metal in concentrate ( 000 tonnes)				
Cannington, Australia	100	57.9	56.3	54.7
Antamina, Peru	33.75	52.0	71.9	57.5
Total zinc		109.9	128.2	112.2
Gold				
Payable metal in concentrate ( 000 ounces)				
Escondida, Chile (2)	57.5	72.9	71.5	88.5
Pinto Valley, United States (3)	100	0.1		
Olympic Dam, Australia (refined gold)	100	121.3	113.3	117.8
Total gold		194.3	184.8	206.3
Silver				
Payable metal in concentrate ( 000 ounces)				
Escondida, Chile (2)	57.5	4,271	2,960	3,341
Antamina, Peru	33.75	4,359	3,952	4,272
Cannington, Australia	100	25,161	31,062	34,208
Olympic Dam, Australia (refined silver)	100	972	880	907
Pinto Valley, United States (3)	100	41	59	701
Total silver		34,804	38,913	42,728
		- /		,
Uranium				
Payable metal in concentrate (tonnes)	100	2.000	4.066	2.052
Olympic Dam, Australia	100	3,988	4,066	3,853
Total uranium		3,988	4,066	3,853
Molybdenum				
Payable metal in concentrate (tonnes)				
Antamina, Peru	33.75	1,201	1,561	2,346
Total molybdenum		1,201	1,561	2,346
Iron Ore Business				
WAIO				
Production ( 000 tonnes) (5)				
Newman, Australia	85	56,915	44,620	39,988
Yarrie, Australia (6)	85	836	1,106	768
Area C Joint Venture, Australia	85	46,960	44,717	42,425
Yandi Joint Venture, Australia	85	68,518	60,054	53,536

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Jimblebar, Australia <sup>(7)</sup> Wheelarra, Australia <sup>(8)</sup>	85 85	8,863 10,553	8,377	11,338
Total WAIO		192,645	158,874	148,055
Samarco, Brazil	50	10,919	10,982	11,423
Total iron ore		203,564	169,856	159,478

	BHP Billiton Group interest	BHP Billiton Group share of produc Year ended 30 June		
c in '	%	2014	2013	2012
Coal Business				
Metallurgical coal				
Production (000 tonnes) (9)	50	<i>( 5</i> 20	5 420	4 425
Blackwater, Australia	50	6,730	5,432	4,435
Goonyella Riverside, Australia	50	7,330	6,221	5,003
Peak Downs, Australia	50	4,909	4,545	3,534
Saraji, Australia	50	4,558	3,449	3,053
Gregory Joint Venture, Australia	50	2,965	2,523	1,411
Daunia, Australia	50	2,201	475	
Caval Ridge, Australia (10)	50	563		1 177
Norwich Park, Australia	50			1,175
Total BMA		29,256	22,645	18,611
South Walker Creek, Australia (11)	80	5,246	4,351	4,081
Poitrel, Australia (11)	80	3,063	2,712	2,612
Total BHP Billiton Mitsui Coal		8,309	7,063	6,693
Total Queensland Coal		37,565	29,708	25,304
Illawarra Coal, Australia	100	7,513	7,942	7,926
Total metallurgical coal		45,078	37,650	33,230
Energy coal				
Production ( 000 tonnes)				
Navajo, United States (12)	100	5,127	7,468	7,054
San Juan, United States	100	5,685	5,323	5,514
Total New Mexico Coal		10,812	12,791	12,568
Middelburg/Wolvekrans, South Africa (13)	90	13,368	14,669	14,848
Khutala, South Africa (13)	90	9,718	9,554	10,863
Klipspruit, South Africa (13)	90	7,298	7,404	7,568
Total Energy Coal South Africa		30,384	31,627	33,279
Mt Arthur Coal, Australia	100	19,964	18,010	16,757
Cerrejón, Colombia	33.3	12,332	10,017	11,663
Total energy coal		73,492	72,445	74,267

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Aluminium, Manganese and Nickel Business				
Alumina				
Saleable production ( 000 tonnes)				
Worsley, Australia	86	3,916	3,675	2,917
Alumar, Brazil	36	1,262	1,205	1,235
Total alumina		5,178	4,880	4,152
Aluminium				
Production (000 tonnes)				
Hillside, South Africa	100	715	665	621
Bayside, South Africa (14)	100	89	96	98
Alumar, Brazil	40	104	154	170
Mozal, Mozambique	47	266	264	264
Total aluminium		1,174	1,179	1,153

<u> </u>				
	BHP Billiton Group interest	BHP Billiton Group share of product Year ended 30 June		
	%	2014	2013	2012
Manganese ores				
Saleable production (000 tonnes)				
Hotazel Manganese Mines, South Africa (15)	44.4	3,526	3,490	3,625
GEMCO, Australia (15)	60	4,776	5,027	4,306
Total manganese ores		8,302	8,517	7,931
Manganese alloys				
Saleable production (000 tonnes)				
Metalloys, South Africa (15) (16)	60	377	374	404
TEMCO, Australia (15)	60	269	234	198
Total manganese alloys		646	608	602
Nickel				
Saleable production ( 000 tonnes)				
Cerro Matoso, Colombia	99.9	44.3	50.8	48.9
Nickel West, Australia	100	98.9	103.3	109.0
Total nickel		143.2	154.1	157.9
Divested businesses				
Diamonds				
Production ( 000 carats)				
EKATI, Canada	80		972	1,784
Total diamonds			972	1,784
Titanium minerals				
Production ( 000 tonnes)				
Titanium slag				
Richards Bay Minerals, South Africa	37.76		53	384
Rutile				
Richards Bay Minerals, South Africa	37.76		6	38
Zircon				
Richards Bay Minerals, South Africa	37.76		16	100
Total titanium minerals			75	522

(2)

<sup>(1)</sup> Metal production is reported on the basis of payable metal.

Shown on 100 per cent basis following the application of IFRS 10 which came into effect from 1 July 2013. BHP Billiton interest in saleable production is 57.5 per cent.

- (3) On 11 October 2013 BHP Billiton completed the sale of its Pinto Valley operations.
- (4) Includes Cerro Colorado and Spence.
- (5) Iron ore production is reported on a wet tonnes basis.
- (6) Yarrie ceased production on 25 February 2014.
- (7) Shown on 100 per cent basis. BHP Billiton interest in saleable production is 85 per cent.
- (8) All production from Wheelarra is now processed via the Jimblebar processing hub.
- (9) Metallurgical coal production is reported on the basis of saleable product. Production figures include some thermal coal.

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- (10) Caval Ridge achieved first production in the June 2014 quarter.
- (11) Shown on 100 per cent basis. BHP Billiton interest in saleable production is 80 per cent.
- (12) BHP Billiton completed the sale of Navajo Mine on 30 December 2013. As BHP Billiton will retain control of the mine until full consideration is received, production will continue to be reported by the Group.
- (13) Shown on 100 per cent basis. BHP Billiton interest in saleable production is 90 per cent.
- (14) Aluminium smelting at Bayside ceased with the closure of the final potline in June 2014.
- (15) Shown on 100 per cent basis. BHP Billiton interest in saleable production is 60 per cent, except Hotazel Manganese Mines which is 44.4 per cent.
- (16) Production includes medium-carbon ferromanganese.

#### 2.3 Reserves

#### 2.3.1 Petroleum reserves

### Reserves and production

BHP Billiton Petroleum proved reserves are estimated and reported according to US Securities and Exchange Commission (SEC) standards and have been determined in accordance with SEC Rule 4-10(a) of Regulation S-X. Proved oil and gas reserves are those quantities of crude oil, natural gas and natural gas liquids (NGL), which, by analysis of geoscience and engineering data can be estimated with reasonable certainty to be economically producible from a given date forward from known reservoirs, and under existing economic conditions, operating methods, operating contracts and government regulations. Unless evidence indicates that renewal of existing operating contracts is reasonably certain, estimates of economically producible reserves reflect only the period before the contracts expire. The project to extract the hydrocarbons must have commenced or the operator must be reasonably certain that it will commence within a reasonable time. Developed oil and gas reserves are reserves that can be expected to be recovered through existing wells with existing equipment and operating methods, and through installed extraction equipment and infrastructure operational at the time of the reserve estimate if the extraction is by means not involving a well. As specified in SEC Rule 4-10(a) of Regulation S-X, oil and gas prices are taken as the unweighted average of the corresponding first day of the month prices for the 12 months prior to the ending date of the period covered.

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 were estimated by reference to available well and reservoir information, including but not limited to well logs, well test data, core data, production and pressure data, geologic data, seismic data and, in some cases, to

similar data from analogous, producing reservoirs. A wide range of engineering and geoscience methods, including performance analysis, well analogues and geologic studies were used to estimate high confidence proved developed and undeveloped reserves in accordance with SEC regulations. For our conventional assets, performance of producing wells was based on rate and pressure decline methods, including material balance, and was supplemented by reservoir simulation models where appropriate. In our Onshore US shale assets, performance of producing wells was based on decline and pressure normalised decline curve analysis methods. For wells that lacked sufficient production history, reserves were estimated using performance-based type curves and offset location analogues with similar geologic and reservoir characteristics. When assessing proved undeveloped locations, a combination of geologic and engineering data, and where appropriate, statistical analysis was used to support the assignment of proved undeveloped reserves. Performance data, along with log and core data, was used to delineate consistent, continuous reservoir characteristics in core areas of the

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development. Proved undeveloped locations were included in core areas between known data and adjacent to productive wells. Locations where a high degree of certainty could not be demonstrated using the above technologies and techniques, were not categorised as proved.

Proved reserve estimates were attributed to future development projects only where there is a significant commitment to project funding and execution, and for which applicable government and regulatory approvals have been secured or are reasonably certain to be secured. Furthermore, estimates of proved reserves include only 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.

Reserve estimates contained in this section have been estimated with deterministic methodology, with the exception of the North West Shelf gas operation in Australia where probabilistic methodology has been utilised to estimate and aggregate reserves for the reservoirs dedicated to the gas project only. The probabilistic based portion of these reserves totals 30 MMboe (total boe conversion is based on the following: 6,000 scf of natural gas equals 1 boe) and represents approximately one per cent of our total reported proved reserves. Aggregation of proved reserves beyond the field/project level has been performed by arithmetic summation. Due to portfolio effects, aggregates of proved reserves may be conservative. The custody transfer point(s) or point(s) of sale applicable for each field or project are the reference point for reserves. The reserves replacement ratio is the reserves change during the year before production, divided by the production during the year stated as a percentage.

The Petroleum Reserves Group (PRG) is a dedicated group that provides oversight of the reserves—assessment and reporting processes. It is independent of the various asset teams directly responsible for development and production activities. The PRG is staffed by individuals averaging more than 25 years—experience in the oil and gas industry. The manager of the PRG, Abhijit Gadgil, is a full-time employee of BHP Billiton and is the individual responsible for overseeing and supervising the preparation of the reserve estimates and compiling the information for inclusion in this Annual Report. He has an advanced degree in engineering and more than 30 years of diversified industry experience in reservoir engineering, reserves assessment, field development and technical management and is a 30-year member of the Society of Petroleum Engineers (SPE). He has also served on the Society of Petroleum Engineers Oil and Gas Reserves Committee. Mr Gadgil has the qualifications and experience required to act as a qualified petroleum reserves evaluator under the Australian Securities Exchange (ASX) Listing Rules. The estimates of petroleum reserves are based on, and fairly represent, information and supporting documentation prepared under the supervision of Mr Gadgil and he has reviewed and agrees with the information included in section 2.3.1 of this Annual Report and has given his prior written consent for its publication. No part of the individual compensation for members of the PRG is dependent on reported reserves.

Petroleum s reserves are estimated as of 30 June 2014. Reserve assessments for all Petroleum operations were conducted by technical staff within the operating organisation. These individuals meet the professional qualifications outlined by the Society of Petroleum Engineers, are trained in the fundamentals of SEC reserves reporting and the reserves processes and are endorsed by the PRG. Each reserve assessment is reviewed annually by the PRG to ensure technical quality, adherence to internally published Petroleum guidelines and compliance with SEC reporting requirements. Once endorsed by the PRG, all reserves receive final endorsement by senior management and the Risk and Audit Committee prior to public reporting. Our internal Group Risk Assessment and Assurance provides secondary assurance of the oil and gas reserve reporting processes through annual audits.

Production for FY2014 totalled 246 MMboe in sales, which is an increase of 10 MMboe from FY2013. There were an additional 6 MMboe in non-sales production, primarily for fuel consumed in our Petroleum operations. During FY2014, Petroleum added a total of 131 MMboe of proved oil and gas reserves. Excluding net purchases and sales of

negative 14 MMboe, proved additions of 145 MMboe replaced 58 per cent of production sales and fuel through extensions, discoveries, and revisions. At 30 June 2014, approximately 47 per cent of our proved reserves were in conventional assets, while approximately 53 per cent were in unconventional assets.

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New additions from extensions and discoveries totalled 368 MMboe, primarily for new development projects in the North American shale fields where areas with high liquids production and greater value are being targeted. The Eagle Ford shale area contributed 157 MMboe to these new additions, while the Haynesville and Fayetteville areas contributed 131 MMboe. Revisions were negative 222 MMboe and are primarily related to deferral of drilling and adjustments to predicted well performance in undeveloped areas of the Eagle Ford, Permian, Haynesville and Fayetteville areas. The locations of the wells where drilling has been deferred are in relatively dry gas areas and are now planned to be drilled in more than five years—time, as a result of our refocused drilling plans, and have been reclassified out of proved undeveloped reserves. None of the current unconventional proved undeveloped reserves will be more than five years old at the time they are drilled.

Our proved additions through extensions and revisions for conventional assets excluding purchases and sales totalled 83 MMboe in FY2014. Strong production performance in Macedon and other fields, and the Pyrenees Phase III infill project allowed the addition of 42 MMboe in our Australian operated fields while the non-operated joint interest Bass Strait and North West Shelf fields added 6 MMboe. Our US Gulf of Mexico fields had additions of 16 MMboe from extensions and revisions, while 27 MMboe was added for the extended gas sales project and production performance for the Angostura project in Trinidad and Tobago. During the year, we sold our interest in the Liverpool Bay fields in the UK offshore, which reduced proved reserves by 13 MMboe.

These results are summarised in the tables below, which detail estimated oil, condensate, NGL and natural gas reserves at 30 June 2014, 30 June 2013 and 30 June 2012, 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. Reserves of 75 MMboe are in two production and risk-sharing arrangements that involve the Group in upstream risks and rewards without transfer of ownership of the products. At 30 June 2014, approximately three per cent of the proved reserves are attributable to those arrangements.

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		United		
Millions of barrels	Australia	States	Other (b)	Total
Proved developed and undeveloped oil and condensate				
reserves <sup>(a)</sup>				
Reserves at 30 June 2011	171.2	257.9	40.8	469.9
		22.2		22.2
Improved recovery	0.7	33.2	<b>5</b> 1	33.2
Revisions of previous estimates	8.7	120.6	5.1	134.4
Extensions and discoveries Purchase/sales of reserves	8.8	2.9 32.0		11.7 32.0
Production	(21.2)		(0.2)	
Production	(31.2)	(30.8)	(9.2)	(71.2)
Total changes	(13.6)	157.8	(4.1)	140.1
Total changes	(13.0)	137.0	(4.1)	140.1
Reserves at 30 June 2012	157.6	415.7	36.6	610.0
Improved recovery		12.6	0.1	12.7
Revisions of previous estimates	13.7	(65.7)	1.1	(50.9)
Extensions and discoveries	0.2	137.5	0.2	137.9
Purchase/sales of reserves		(1.9)		(1.9)
Production	(25.9)	(38.7)	(7.9)	(72.5)
Total changes	(12.0)	43.8	(6.5)	25.4
December of 20 June 2012	145 7	450.6	20.1	625 A
Reserves at 30 June 2013	145.7	459.6	30.1	635.4
Improved recovery				
Revisions of previous estimates	14.2	(50.0)	(0.4)	(36.1)
Extensions and discoveries		99.0	0.3	99.3
Purchase/sales of reserves		(0.4)	(3.5)	(3.9)
Production	(23.6)	(54.0)	(6.5)	(84.1)
		,		
Total changes	(9.4)	(5.4)	(10.0)	(24.8)
Reserves at 30 June 2014	136.2	454.2	20.1	610.5
Developed				
Proved developed oil and condensate reserves				
as of 30 June 2011	116.0	92.2	38.5	246.7
as of 30 June 2012	101.5	148.6	36.5	286.6
as of 30 June 2013	105.0	209.5	27.7	342.2
Developed Reserves as of 30 June 2014	96.5	237.8	14.7	349.0
Undeveloped				
Proved undeveloped oil and condensate reserves				
as of 30 June 2011	55.2	165.7	2.2	223.1
as of 30 June 2012	56.2	267.1	0.1	323.4
as of 30 June 2012 as of 30 June 2013	40.6	250.1	2.5	293.2
as of 50 Julio 2015	10.0	250.1	2.3	<i>-75.</i> -

261.5

- (a) Small differences are due to rounding to first decimal place.
- (b) Other is comprised of Algeria, Pakistan, Trinidad and Tobago, and the United Kingdom.

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		United		
Millions of barrels	Australia	States	Other (c)	Total
Proved developed and undeveloped NGL reserves (a)				
Reserves at 30 June 2011	102.9	9.6	0.7	113.2
Improved recovery		0.9		0.9
Revisions of previous estimates	0.2	49.7	(0.1)	49.9
Extensions and discoveries		2.1		2.1
Purchase/sales of reserves		41.9		41.9
Production (b)	(7.9)	(5.7)	(0.4)	(14.1)
Total changes	(7.7)	89.0	(0.5)	80.8
Reserves at 30 June 2012	95.2	98.6 (d)	0.2	194.0 (d)
Improved recovery		1.0		1.0
Revisions of previous estimates	3.5	(23.3)		(19.8)
Extensions and discoveries	0.1	82.2		82.3
Purchase/sales of reserves				
Production (b)	(7.9)	(9.6)		(17.5)
Total changes	(4.3)	50.3		45.9
Reserves at 30 June 2013	90.9	148.9 (d)	0.2	239.9 (d)
Improved recovery				
Revisions of previous estimates	(0.3)	(25.3)	(0.1)	(25.7)
Extensions and discoveries		46.9		46.9
Purchase/sales of reserves		(0.2)		(0.2)
Production (b)	(8.5)	(13.6)		(22.1)
Total changes	(8.8)	7.7	(0.1)	(1.2)
Reserves at 30 June 2014	82.1	156.6 (d)		238.7 (d)
Developed				
Proved developed NGL reserves				
as of 30 June 2011	60.3	2.6	0.7	63.6
as of 30 June 2012	53.9	22.5	0.2	76.6
as of 30 June 2013	54.7	54.1	0.2	108.9
Developed Reserves as of 30 June 2014	46.0	<b>75.0</b>		121.0
Undeveloped				
Proved undeveloped NGL reserves				
as of 30 June 2011	42.6	7.0	0.1	49.7
as of 30 June 2012	41.3	76.1		117.4
as of 30 June 2013	36.2	94.8		131.0
Undeveloped Reserves as of 30 June 2014	36.1	81.5		117.7

- (a) Small differences are due to rounding to first decimal place.
- (b) Production includes volumes consumed in operations.
- (c) Other is comprised of Algeria, Pakistan, Trinidad and Tobago, and the United Kingdom.
- (d) For 2012, 2013 and 2014, amounts include 1.7, 4.0 and 3.9 million barrels, respectively that are anticipated to be consumed in operations in the United States.

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Table of Contents				
		United	4.50	
Billions of cubic feet	Australia <sup>(c)</sup>	States	Other (d)	Total
Proved developed and undeveloped natural gas				
reserves <sup>(a)</sup>	4 020 1	2 720 0	<b>535</b> (	<b>5</b> 502 5
Reserves at 30 June 2011	4,038.1	2,729.8	735.6	7,503.5
Improved recovery		3.3		3.3
Revisions of previous estimates	90.1	328.1	29.1	447.3
Extensions and discoveries	6.6	128.3		134.9
Purchase/sales of reserves		3,297.3		3,297.3
Production (b)	(276.1)	(458.4)	(122.6)	(857.2)
Total changes	(179.5)	3,298.7	(93.5)	3,025.7
Total changes	(177.5)	3,270.7	(55.5)	3,023.7
Reserves at 30 June 2012	<b>3,858.6</b> (e)	<b>6,028.5</b> (f)	<b>642.1</b> (g)	10,529.2 (h)
Improved recovery		3.4		3.4
Revisions of previous estimates	34.6	(1,159.5)	(54.9)	(1,179.8)
Extensions and discoveries	8.7	1,675.4	(34.7)	1,684.1
Purchase/sales of reserves	0.7	(0.5)		(0.5)
Production (b)	(299.3)	(491.3)	(116.3)	(906.9)
Froduction	(299.3)	(491.3)	(110.3)	(900.9)
Total changes	(255.9)	27.4	(171.2)	(399.7)
Reserves at 30 June 2013	<b>3,602.6</b> (e)	<b>6,055.9</b> (f)	<b>471.0</b> (g)	10,129.5 (h)
Tesser (es de es gane 2010	2,002.0	0,000	1, 100	10,12>10
Improved recovery				
Revisions of previous estimates	207.9	(1,174.3)	3.4	(962.9)
Extensions and discoveries		1,205.9	123.6	1,329.5
Purchase/sales of reserves		(1.5)	(58.4)	(59.9)
Production (b)	(315.2)	(462.7)	(96.9)	(874.8)
Total changes	(107.2)	(432.4)	(28.4)	(568.0)
		, ,	. ,	
Reserves at 30 June 2014	<b>3,495.4</b> <sup>(e)</sup>	<b>5,623.5</b> (f)	<b>442.6</b> (g)	<b>9,561.5</b> (h)
Developed				
Proved developed natural gas reserves				
as of 30 June 2011	1,754.0	1,122.1	719.9	3,596.0
as of 30 June 2012	1,619.0	2,742.5	634.5	4,996.0
as of 30 June 2013	2,674.4	3,094.3	471.0	6,239.7
Developed Reserves as of 30 June 2014	2,553.7	3,208.3	315.5	6,077.5
		2,230.0		2,011.00
Undeveloped				
Proved undeveloped natural gas reserves				

2,284.1

2,239.6

928.2

1,607.7

3,286.0

2,961.6

15.7

7.6

3,907.4

5,533.2

3,889.8

as of 30 June 2011

as of 30 June 2012

as of 30 June 2013

941.7

2,415.2

127.1

3,484.0

- (a) Small differences are due to rounding to first decimal place.
- (b) Production includes volumes consumed by operations.
- (c) Production for Australia includes gas sold as LNG.
- (d) Other is comprised of Algeria, Pakistan, Trinidad and Tobago, and the United Kingdom.
- (e) For 2012, 2013 and 2014, amounts include 397, 387 and 360 billion cubic feet, respectively that are anticipated to be consumed in operations in Australia.
- (f) For 2012, 2013 and 2014, amounts include 104, 91 and 185 billion cubic feet, respectively that are anticipated to be consumed in operations in the United States.
- (g) For 2012, 2013 and 2014, amounts include 65, 49 and 30 billion cubic feet, respectively that are anticipated to be consumed in operations in Other areas.
- (h) For 2012, 2013 and 2014, amounts include 566, 527 and 575 billion cubic feet, respectively that are anticipated to be consumed in operations.

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Millions of barrels of oil equivalent (a)	Australia	United States	Other (d)	Total
Proved developed and undeveloped oil, condensate,				
natural gas and NGL reserves (b)				
Reserves at 30 June 2011	947.2	722.4	164.1	1,833.7
Improved recovery		34.7		34.7
Revisions of previous estimates	23.9	225.0	9.9	258.8
Extensions and discoveries	9.9	26.4		36.3
Purchase/sales of reserves		623.5		623.5
Production (c)	(85.1)	(113.0)	(30.1)	(228.2)
Total changes	(51.3)	796.6	(20.2)	725.2
Reserves at 30 June 2012	<b>895.9</b> (e)	<b>1,519.0</b> (f)	<b>143.9</b> (g)	2,558.8 (h)
Improved recovery		14.2		14.2
Revisions of previous estimates	23.0	(282.3)	(8.1)	(267.3)
Extensions and discoveries	1.8	498.9	0.2	500.9
Purchase/sales of reserves		(2.0)		(2.0)
Production (c)	(83.7)	(130.2)	(27.3)	(241.2)
Total changes	(59.0)	98.7	(35.1)	4.7
Reserves at 30 June 2013	<b>837.0</b> (e)	<b>1,617.7</b> (f)	<b>108.8</b> (g)	<b>2,563.5</b> (h)
Improved recovery				
Revisions of previous estimates	48.6	(271.0)	0.1	(222.4)
Extensions and discoveries		346.8	20.9	367.7
Purchase/sales of reserves		(0.9)	(13.2)	(14.1)
Production (c)	(84.6)	(144.7)	(22.6)	(251.9)
Total changes	(36.1)	(69.7)	(14.9)	(120.6)
Reserves at 30 June 2014	<b>800.9</b> (e)	<b>1,548.0</b> (f)	<b>93.9</b> (g)	2,442.8 (h)
Developed				
Proved developed oil, condensate, natural gas and NGL				
reserves				
as of 30 June 2011	468.6	281.9	159.2	909.7
as of 30 June 2012	425.1	628.2	142.5	1,195.8
as of 30 June 2013	605.5	779.2	106.3	1,491.0
Developed Reserves as of 30 June 2014	568.1	847.6	67.3	1,483.0
Undeveloped				
Proved undeveloped oil, condensate, natural gas and NGL reserves				
as of 30 June 2011	478.6	440.5	4.9	924.0

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Undeveloped Reserves as of 30 June 2014	232.8	700.4	26.6	959.8
as of 30 June 2013	231.5	838.5	2.5	1,072.5
as of 30 June 2012	470.8	890.8	1.4	1,363.0

- (a) Barrel oil equivalent conversion based on 6,000 scf of natural gas equals 1 boe.
- (b) Small differences are due to rounding to first decimal place.
- (c) Production includes volumes consumed by operations.
- (d) Other is comprised of Algeria, Pakistan, Trinidad and Tobago and the United Kingdom.

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- (e) For 2012, 2013 and 2014, amounts include 66, 64 and 60 million barrels equivalent, respectively that are anticipated to be consumed in operations in Australia.
- (f) For 2012, 2013 and 2014, amounts include 19, 19 and 35 million barrels equivalent, respectively that are anticipated to be consumed in operations in the United States.
- (g) For 2012, 2013 and 2014, amounts include 11, 8 and 5 million barrels equivalent, respectively that are anticipated to be consumed in operations in Other areas.
- (h) For 2012, 2013 and 2014, amounts include 96, 92 and 100 million barrels equivalent, respectively that are anticipated to be consumed in operations.

#### **Proved undeveloped reserves**

At 30 June 2014, Petroleum had 960 MMboe of proved undeveloped reserves, of which 604 MMboe, or 63 per cent, resided in our North American shale fields, while 356 MMboe or 37 per cent resided primarily in our offshore conventional fields in Australia, the Gulf of Mexico and the Caribbean. Compared to the total proved undeveloped of 1,072 MMboe reported at 30 June 2013, this represents a net reduction of 112 MMboe in proved undeveloped reserves during the year. This reduction was the combined result of development activities that converted proved undeveloped reserves into proved developed, the addition of new North American shale drilling locations, as well as revisions to the proved undeveloped reserves previously reported at 30 June 2013. Our active development program successfully drilled and converted 190 MMboe from proved undeveloped reserves to proved developed reserves during the year. Development activities in our North American shale fields converted 132 MMboe of this amount, while 34 MMboe of proved undeveloped were converted into proved developed in the Atlantis field in the Gulf of Mexico, with the remaining 20 MMboe of conversions in the Pyrenees, Macedon and Minerva fields in Australia.

New additions to proved undeveloped reserves through extensions to existing proven acreage for new planned drilling locations totalled 280 MMboe. Of this amount, 218 MMboe was added in our North American Shale fields for new planned wells, which will be fully drilled within the next five years. Other extensions totalling 41 MMboe occurred in the Atlantis and Mad Dog fields in the US Gulf of Mexico, with the remaining 21 MMboe for the Angostura field Phase III expansion in Trinidad and Tobago. Offsetting these new additions were revisions which reduced proved undeveloped reserves by 203 MMboe. Virtually all of these revisions were in our North American shale fields and resulted from refocusing of our drilling program to target the most productive and highest value drilling locations. This resulted in the deferral of planned drilling for selected locations beyond our five-year plan and reclassification of the related volumes from proved undeveloped into non-proved categories. Technical adjustments reflecting observed well performance also contributed to this reduction.

Of the 960 MMboe currently classified as proved undeveloped at 30 June 2014, 210 MMboe has been reported for five or more years. All of this amount is in our offshore conventional fields that are currently producing or being actively pursued, which are scheduled to start producing within the next five years. The largest component of this is 128 MMboe in the Kipper-Tuna-Turrum project in Bass Strait, Australia. This project is expected to be on production in 2016. The Atlantis field in the Gulf of Mexico contains 39 MMboe, which is actively being drilled. The remainder resides in other Australian offshore fields that have active development plans. Our North American shale fields do not contain any proved undeveloped reserves reported for five or more years. In addition, management plans anticipate drilling all the proved undeveloped reserves in the North American shale fields in the next five years, with none of the proved undeveloped reserves being more than five years old at the time they are drilled.

During FY2014, Petroleum continued timely development of our inventory of proved undeveloped projects by converting 190 MMboe to proved developed reserves. Over the past three years, the conversion of proved undeveloped to developed has totalled 585 MMboe, averaging 195 MMboe per year. In currently producing conventional fields, the remaining proved undeveloped reserves will be developed and brought on stream in a phased manner to best optimise the use of production facilities and to meet sales commitments. During FY2014, Petroleum spent US\$6.1 billion on development activities worldwide.

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#### 2.3.2 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 Ore 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 2014 (unless otherwise stated). All tonnes and grade information has been rounded, hence small differences may be present in the totals. Tonnes are reported as dry metric tonnes unless otherwise stated.

Our mineral leases are of sufficient duration (or convey a legal right to renew for sufficient duration) to enable all Ore 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 Ore Reserves contained in this Annual Report do not exceed the quantities that we estimate could be extracted economically if future prices for each commodity were equal to the average historical prices for the three years to 31 December 2013, using current operating costs. 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 Hotazel Manganese Mines, geological stratigraphic controls, cut-off grade and plant feed requirements are used to determine reserves.

Also, in some cases where commodities are produced as by-products (or co-products) with other metals, we use the three-year average historical prices for the combination of commodities produced at the relevant mine in order to verify that each ore reserve is economic. The three-year historical average prices used for each traded commodity to test for impairment of the Ore Reserves contained in this Annual Report are as follows:

**Commodity Price** US\$ Copper 3.65/lb Gold 1,550/oz Nickel 8.39/lb Silver 30.07/oz 1.00/lb Lead Zinc 0.92/lbUranium 47.91/lb Iron Ore Fines 2.194/dmtu Iron Ore Lump 2.361/dmtu Metallurgical Hard Coking Coal 200.5/t

Thermal Coal Newcastle (1)

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99.7/t

Thermal Coal Colombia (1) 88.4/t

(1) Thermal coal prices reported are sourced from the McCloskey Report FOB by region. Newcastle 6000 kcal/tonne Net As Received and Colombia 11,300 British Thermal Units Gross As Received. These are comparable to realised prices used to test for impairment. The realised price for South African Coal used to test for impairment is not aligned with the McCloskey Report price and is not disclosed in this table due to contractual commercial sensitivity.

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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 Exploration Results, Mineral Resources and Ore Reserves, December 2012 (the JORC Code), which contemplates the use of reasonable investment assumptions in calculating reserve estimates.

**Copper Business** 

Ore Reserves in accordance with Industry Guide 7

Proven (	Ore Re	serves			30 June Probable		eserves			Total (	Ore Res	serves			BHP Billiton nterest	
% TCu	% SCu			Mt	% TCu	% SCu			Mt	% TCu	ı% SCu	l		years)	<b>%</b>	Mt
0.88				53	0.67				145	0.80				50	57.5	145
0.75				1,610	0.59				5,150	0.70				52	57.5	5,100
0.46				610	0.40				2,260	0.44						2,020
0.59	0.42			73	0.55	0.37			103	0.56	0.38			9.0	100	113
0.65	0.13			29	0.66	0.11			62	0.65	0.12					66
0.76	0.53			2.8	0.77	0.63			37	0.76	0.54			10	100	35
0.96	0.44			12	0.57	0.22			33	0.82	0.36					38
0.96	0.12			32	0.64	0.11			153	0.90	0.12					153
				61	0.39	0.09			61	0.39	0.09					85
																67
																13
% Cu	kg/t	~/4 Å xx	a/+ A a	N/I4	% Cu	kg/t	~/4 A xx	~/+ A ~	N/I4	% Cu	kg/t	~/4 A xx	~/ <b>t</b> A ~			Mt
Cu	$0_30_8$	g/tAu	g/tAg	Mt	Cu	$U_3U_8$	g/tAu	g/tAg	IVIL	Cu	$U_3U_8$	g/tAu	g/tAg			IVIL
1.97	0.59	0.72	4	389	1.82	0.56	0.72	4	518	1.86	0.57	0.72	4	47	100	619
%	<b>%</b>				%	%				%	%					
% Cu	% Zn	alt A a r	рртМо	Мŧ	% Cu	∞ Zn	alt A a	рртМо	Мŧ	% Cu	∞ Zn	alt A a	рртМо			Mt
Cu	<b>Z</b> /11	g/tAg]	ppinivio	IVIL	Cu	ZII	g/tAg	ppiiivio	IVIL	Cu	ZII	g/tAg	ppiiiwio			IVIL
1.00	0.14	9	350	277	0.98	0.17	9	290	413	0.99	0.16	9	310	13	33.75	498
1.12	2.02	18	90	207	0.91	1.86	14	70	260	0.95	1.89	15	74			226
g/tAg		% Zn		Mt	g/tAg		% Zn		Mt	g/tAg		% Zn				Mt

	% Pb				% Pb				% Pb				
239	6.38	3.92	2.7	240	6.15	4.01	21	239	6.35	3.93	9.0	100	25

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## (1) Cut-off grades:

Deposit	Ore Type	Ore Reserves
Escondida	Oxide	<sup>3</sup> 0.20%SCu
	Sulphide Leach	<sup>3</sup> 0.30%TCu and lower than variable
	1	cut-off grade (V_COG) of
		concentrator this is a
		complementary process to
		concentrators.
	Concentrator	V_COG mine plans optimised
		considering financial and technical
		parameters in order to maximise Net
		Present Value.
Cerro Colorado	Oxide & Sulphide	<sup>3</sup> 0.30%TCu
Spence	Oxide	<sup>3</sup> 0.30%TCu
•	Oxide Low Solubility	<sup>3</sup> 0.30%TCu
	Sulphide	<sup>3</sup> 0.30%TCu
	ROM	<sup>3</sup> 0.10%TCu
Olympic Dam	Sulphide	Variable between 1.2%Cu and
• •	•	1.5%Cu
Antamina	Sulphide Cu only	Net value incorporating all material
		revenue and cost factors and
		includes metallurgical recovery (see
		footnote 4 for averages).
		Mineralisation at the US\$6,000/hr
		limit averages 0.23%Cu, 7g/tAg,
		31ppmMo and 5,530t/hr mill
		throughput.
	Sulphide Cu-Zn	Net value incorporating all material
		revenue and cost factors and
		includes metallurgical recovery (see
		footnote 4 for averages).
		Mineralisation at the US\$6,000/hr
		limit averages 0.11%Cu, 0.83%Zn,
		12g/tAg and 5,760t/hr mill
		throughput.
Cannington	UG Sulphide	Net value cut-off incorporating
		material revenue and cost factors
		and includes metallurgical recovery
		(see footnote 4 for averages).
		Mineralisation at A\$140/t averages
		99g/tAg, 4.40%Pb and 2.82%Zn.
Antamina and Cannington: All metals us	sed in net value calculations for the Ant	amına and Cannıngton reserves are

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recovered into concentrate (see footnote 4 for averages) and sold.

Approximate drill hole spacings used to classify the reserves were:

Deposit	Proven Ore Reserves	Probable Ore Reserves
Escondida	Oxide: 30m x 30m	Oxide: 45m x 45m
	Sulphide: 50m x 50m	Sulphide: 90m x 90m
	Sulphide Leach: 60m x 60m	Sulphide Leach: 115m x 115m
Cerro Colorado		120m x 120m on second kriging
	70m x 70m on first kriging pass	pass
Spence	Oxide: maximum 50m x 50m	Oxide and Sulphide: maximum
	Sulphide: maximum 75m x 75m	100m x 100m
Olympic Dam	Drilling grid of 20m to 30m	Drilling grid of 30m to 70m
Antamina	30m drill spacing	55m drill spacing
Cannington	12.5m sectional x 15m vertical	25m sectional x 25m vertical

- (3) Ore delivered to process plant.
- (4) Metallurgical recoveries for the operations were:

**Deposit Metallurgical Recovery** 

Oxide: 70% Escondida

Sulphide: 84%

Sulphide Leach: 32%

74% of TCu Cerro Colorado

Spence Oxide: 73% of TCu

Oxide Low Solubility: 71% of TCu

Sulphide: 72%

ROM: 30%

Cu 94%, U<sub>3</sub>O<sub>8</sub> 72%, Au 70%, Ag 64% Olympic Dam

Antamina Sulphide Cu only: Cu 93%, Zn 0%, Ag 78%, Mo 64%

Sulphide Cu-Zn: Cu 79%, Zn 80%, Ag 69%, Mo 0%

Ag 87%, Pb 86%, Zn 79% Cannington

- (5) Divestment of Pinto Valley was completed in October 2013.
- (6) Olympic Dam The decrease in reserves was due to changes in Proven and Probable Reserves and a revised stope design process.

#### **Iron Ore Business**

Ore Reserves in accordance with Industry Guide 7

			As	at 30 Jun	e 2014											
Reserves	S			Proba	ble Ore	Reserve	S			Tota	l Ore R	Reserves			B	BHP
														Res	ser <b>B</b> i	lliton
														Ι	ifeInt	terest
% SiO%	Al <sub>2</sub> O	% LOI	Mt	% Fe	% P	% SiO%	Al <sub>2</sub> O <sub>2</sub>	% LOI	Mt	% Fe	% P	% SiO%	Al <sub>2</sub> O%	LOIye	ears)	<b>%</b>
2		3				-		,				-	2 3			
2.9	1.9	3.5	1,400	61.5	0.12	4.1	2.3	5.0	2,100	62.2	0.12	3.7	2.2	4.5	16	88
6.7	2.7	1.7	80	60.0	0.09	8.3	2.8	1.8	170	60.7	0.09	7.5	2.7	1.7		
6.3	1.8	10.9	190	57.3	0.05	5.7	1.5	10.4	840	56.5	0.05	6.1	1.7	10.8		
3.1	1.7	5.7	310	61.0	0.07	3.8	2.0	6.2	530	61.5	0.07	3.5	1.9	6.0		
10.2	1.4	2.5	20	60.0	0.05	10.1	1.0	2.1	30	59.8	0.05	10.2	1.2	2.3		
			3.54	e/ F	~ D				3.54	~ F	~ D					
			Mt	% Fe	% Pc				Mt	% Fe	% Pc					
			1.100	38.8	0.05				2,900	39.6	0.05				39	50

- (1) Western Australia Iron Ore (WAIO) Reserves are reported on a Pilbara basis by ore type to align with our production of the Newman Blend lump product which comprises of BKM, BKM Bene and MM ore types, in addition to other lump and fines products. This also reflects our single logistics chain and associated management system and our equalisation of joint venture equity.
- (2) WAIO BHP Billiton interest is reported as Pilbara reserve tonnes weighted average across all Joint Ventures.
- (3) Approximate drill hole spacings used to classify the reserves were:

Deposit	<b>Proven Ore Reserves</b>	<b>Probable Ore Reserves</b>
WAIO	50m x 50m	150m x 50m
Samarco JV	Maximum 150m x 100m	Maximum 300m x 200m

- WAIO metallurgical recovery was 100%, except for BKM Bene-Brockman Beneficiated Ore, where recovery was 73% (tonnage basis), Samarco JV recovery was 82% (metal basis).
- (5) The reserves grades listed refer to in situ mass percentage on a dry weight basis. WAIO tonnages represent wet tonnes based on the following moisture contents: BKM 3%, BKM Bene 3%, CID 8%, MM 4%, NIM 3.5%. For Samarco JV, the reserve tonnages also represent wet tonnes based on a moisture content of 6.5% for ROM. Iron ore is marketed for WAIO as Lump (direct blast furnace feed) and Fines (sinter plant feed) and for Samarco JV as Fines (sinter plant feed), direct reduction and blast furnace pellets.

- (6) Cut-off grades: WAIO 50 58%Fe for all material types; Samarco JV Fe <sup>3</sup> 22%, Pc £ 0.097% (phosphorous in concentrate) and PPCc £ 7.7% (LOI in concentrate).
- (7) Ore delivered to process plant.
- (8) The operations to support NIM ore type are currently on care and maintenance.
- (NIM), which resides on a standard Western Australian mining lease. Across WAIO, State Government approvals (including environmental and heritage clearances) are required before commencing mining operations in a particular area. Included in the Ore Reserves are select areas where one or more approvals remain outstanding, but where, based on the technical investigations carried out as part of the mine planning process and company knowledge and experience of the approvals process, it is expected that such approvals will be obtained as part of the normal course of business and within the time frame required by the current mine schedule.

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### **Coal Business**

Ore Reserves in accordance with Industry Guide 7

			<b>Cotal</b> l Coal Reserves	<b>P</b> 1	As at roven M Coal Ro			Pro	obable N Coal R		ıble	Tota	al Mark Rese		Coal		eserveBHP Life Billiton yealsyterest 9 30 50 34 50 37 50			
ype	Mt	Mt	Mt	Mt	% Ash	% VM	% S	Mt	% Ash	% VM	% S	Mt	% Ash	% VM	% S	(yeals)t	erest %			
	221	22.1			0.0		0.70	4.60	40.7		0.70	40.4	0.0		0.70	20	<b>-</b> 0			
et	321	224	545	244	9.3	22.7	0.50	160	10.5	22.7	0.50	404	9.8	22.7	0.50		50			
et	43	160	203	35	8.0	23.0	0.52	109	9.3	23.6	0.54	144	9.0	23.4	0.54					
et	492	548	1,040	296	10.6	22.3	0.60	317	10.3	21.9	0.59	613	10.5	22.1	0.60					
et	386	153	539	240	10.6	18.0	0.60	87	10.6	18.5	0.70	327	10.6	18.1	0.63	37	50			
et	154	62	216	111	10.3	16.8	0.70	42	10.3	16.4	0.70	153	10.3	16.7	0.70	25	50			
et/Th	143	379	522	126	8.0	26.7	0.40	333	9.1	26.1	0.40	459	8.8	26.3	0.40	30	50			
et	88	50	138	72	8.2	20.8	0.36	40	8.4	20.5	0.34	112	8.3	20.7	0.35	25	50			
et	6.6	0.3	6.9	5.4	7.0	34.8	0.60	0.2	7.0	35.3	0.60	5.6	7.0	34.8	0.60	2.8	50			
et		13	13					11	7.2	33.8	0.58	11	7.2	33.8	0.58					
et	68	21	89	50	9.0	14.3	0.32	15	9.0	13.9	0.31	65	9.0	14.2	0.32	11	80			
et	33	33	66	23	8.3	23.2	0.33	22	8.3	24.0	0.34	45	8.3	23.6	0.34	14	80			
et/Th	24	133	157	20	8.9	23.5	0.37	112	8.9	24.9	0.36	132	8.9	24.7	0.36	25	100			
et/Th	5.4	0.4	5.8	3.8	8.9	20.6	0.36	0.3	8.9	20.1	0.36	4.1	8.9	20.6	0.36	2.0	100			
et/Th	21	24	45														100			
et				8.6	9.7	23.8	0.59	9.9	9.7	24.2	0.59	18	9.7	24.0	0.59	8.9				
n				5.2	23.0			6.3	23.0			12	23.0							

<sup>(1)</sup> Only geophysically logged, fully analysed cored holes with greater than 95% recovery were used to classify the reserves. Drill hole spacings vary between seams and geological domains and were determined in conjunction with geostatistical analyses where applicable. The range of maximum spacings was:

Deposit	<b>Proven Coal Reserves</b>	<b>Probable Coal Reserves</b>
Goonyella Riverside	500m to 1,000m plus 3D seismic coverage	
Broadmeadow	for UG	1,000m to 2,050m
Peak Downs	500m to 1,050m	500m to 2,100m
Saraji	500m to 1,040m	900m to 2,100m
Norwich Park	500m to 1,400m	1,000m to 2,800m
Blackwater	500m	500m to 1,000m

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Daunia	500m to 1,000m	1,000m to 2,000m
Gregory Crinum	850m plus 3D seismic coverage for UG	850m to 1,700m
South Walker Creek	500m to 800m	1,000m to 1,500m
Poitrel-Winchester	300m to 950m	550m to 1,850m
Appin	700m	1,500m
West Cliff	700m	1,500m
Dendrobium	700m	1,500m

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(2) Product recoveries for the operations were:

Deposit Product Recovery

Goonyella Riverside

Broadmeadow 73%

Peak Downs: 62%

Caval Ridge: 56%

Saraji 61% Norwich Park 71% Blackwater 88% 80% Daunia **Gregory Crinum** 80% South Walker Creek 73% Poitrel-Winchester 67% 84% **Appin** West Cliff 71% Dendrobium 67%

- (3) Total Coal Reserves are at the moisture content when mined (4% CQCA JV, Gregory JV, BHP Billiton Mitsui; 6% Appin, West Cliff; 7% Dendrobium). Total Marketable Coal Reserves are the tonnes of coal available, at moisture content (9% CQCA JV, Gregory JV, Appin, West Cliff; 9.5% South Walker Creek; 12.0% Poitrel-Winchester; 13.5% Dendrobium Met; 7% Dendrobium Th) and air-dried qualities, for sale after the beneficiation of the Total Coal Reserves.
- (4) Cut-off criteria applied were Goonyella Riverside, Peak Downs, Caval Ridge, Saraji, Norwich Park, Blackwater, Gregory, South Walker Creek <sup>3</sup> 0.5m seam thickness; Broadmeadow <sup>3</sup> 2.5m seam thickness; Daunia, Poitrel-Winchester <sup>3</sup> 0.3m seam thickness; Crinum <sup>3</sup> 2.0m seam thickness; Appin, West Cliff, Dendrobium <sup>3</sup> 1.8m seam thickness.
- (5) Coal delivered to wash plant.
- (6) Peak Downs The reserves for Caval Ridge are reported as part of Peak Downs.
- (7) Norwich Park and Gregory mines remain on care and maintenance.
- (8) Blackwater The decrease in Reserve Life was due to an increased nominated production rate from 15.4Mtpa in FY2013 to 17.7Mtpa in FY2014.

(9)

Daunia The decrease in Reserve Life was due to an increased nominated production rate from 4.5Mtpa in FY2013 to 5.5Mtpa in FY2014.

- (10) South Walker Creek The decrease in Coal Reserves was mainly due to revised price and cost assumptions. The decrease in Reserve Life was due to the decrease in Coal Reserves and an increased nominated production rate from 5.6Mtpa in FY2013 to 7.9Mtpa in FY2014.
- (11) Poitrel-Winchester The decrease in Reserve Life was due to an increased nominated production rate from 4.2Mtpa in FY2013 to 4.7Mtpa in FY2014.

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### **Coal Business**

Ore Reserves in accordance with Industry Guide 7

As at 30 June 2014

	Proven	Marketa Reserve		oal	Probable Marketable Coal Reserves			Total Marketable Coal Reserves Reserve BHP								
Mt	% Ash	% VM	% S	KCal/kg CV	Mt	% Ash	% VM	% S	KCal/kg CV	Mt	% Ash	% VM	% S	KCal/k	g Life	Billiton hterest %
21	17.2		0.99	5,640						21	17.2		0.99	5,640	3.5	100
17	21.8		0.76	4,900						17	21.8		0.76	4,900		100
1.3	35.7 33.6	21.1 20.3	1.15 0.76	,						1.3	35.7 33.6	21.1 20.3	1.15 0.76	4,640 4,440		90 90
273	21.8	23.4	0.70		12	22.5	23.7	0.45	5,950	285	21.8	23.4	0.76	6,010		90
80	23.2	23.0	0.47	5,890						80	23.2	23.0	0.47	5,890	23	90
36	23.0	23.3	0.82	5,800						36	23.0	23.3	0.82	5,800	6.0	90
445	16.6	30.7	0.57	6,420	372	16.8	29.9	0.50	6,410	817	16.7	30.3	0.54	6,410	33	100
610	9.4	33.8	0.60	6,180	94	9.0	32.7	0.60	6,110	704	9.3	33.7	0.60	6,170	17	33.33

<sup>(1)</sup> Approximate drill hole spacings used to classify the reserves were:

Deposit	<b>Proven Coal Reserves</b>	<b>Probable Coal Reserves</b>
San Juan	<500m (250m radius from drill hole)	500m to 1,000m (250m to 500m radius from drill hole)
Navajo	<500m (250m radius from drill hole)	500m to 1,000m (250m to 500m radius from drill hole)
Khutala	>8 boreholes per 100ha	4 to 8 boreholes per 100ha
Wolvekrans	>8 boreholes per 100ha	4 to 8 boreholes per 100ha
Middelburg	>8 boreholes per 100ha	4 to 8 boreholes per 100ha
Klipspruit	>8 boreholes per 100ha	4 to 8 boreholes per 100ha
Mt Arthur Coal	<500 m	500m to 1,000m

Cerrejón > 6 boreholes per 100ha 2 to 6 boreholes per 100ha

## (2) Product recoveries for the operations were:

Deposit		<b>Product Recovery</b>
San Juan	100%	
Navajo	100%	
Khutala	92%	
Wolvekrans	70%	
Middelburg	82%	
Klipspruit	84%	
Mt Arthur Coal	79%	
Cerrejón	97%	

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(3) Cut-off criteria applied were:

Deposit Coal Reserves

San Juan <sup>3</sup> 3.0m seam thickness, <sup>3</sup> 5,000KCal/kg CV

Navajo <sup>3</sup> 0.6m seam thickness

Khutala <sup>3</sup> 1.0m seam thickness for OC and <sup>3</sup> 3.6m seam thickness

for UG

Wolvekrans <sup>3</sup> 1.0m seam thickness, <sup>3</sup> 2,870KCal/kg CV, £ 45% ash, <sup>3</sup>

17.9% volatile matter

Middelburg <sup>3</sup> 1.0m seam thickness, <sup>3</sup> 2,870KCal/kg CV, £ 45% ash, <sup>3</sup>

17.9% volatile matter

Klipspruit <sup>3</sup> 1.0m seam thickness, varying <sup>3</sup> 3,580KCal/kg to <sup>3</sup>

4,300KCal/kg, £ 45% ash

Mt Arthur Coal <sup>3</sup> 0.3m mineable seam thickness, £ 26.5% ash, <sup>3</sup> 50%

product yield

Cerrejón <sup>3</sup> 0.65m seam thickness

- (4) Coal delivered to wash plant, except for San Juan, Navajo and Khutala, where coal is not washed.
- (5) Total Coal Reserves are at the moisture content when mined (8.5% San Juan; 13.0% Navajo; 8.7% Mt Arthur Coal; 12.8% Cerrejón). Total Marketable Coal Reserves are the tonnes of coal available, at moisture content (8.5% San Juan; 13.0% Navajo; 9.3% Mt Arthur Coal; 14.1% Cerrejón) and air-dried qualities, for sale after the beneficiation of the Total Coal Reserves.
- (6) Total moisture is for Total Marketable Coal Reserves product.
- (7) San Juan and Navajo Coal Reserves were reduced to align with current sales contracts.
- Navajo Divestment completed in December 2013. BHP Billiton will remain the mine manager and operator until 2016 and therefore production will continue to be reported.
- (9) Tonnages and qualities for Khutala, Wolvekrans, Middelburg and Klipspruit are reported on an air-dried basis.
- (10) Khutala The decrease in Coal Reserves was due to revised extraction factors for underground pillars in structurally disturbed areas.
- (11) Wolvekrans The decrease in Marketable Coal Reserves was due to a reduced yield impact as a result of increased loss and dilution in pillar mining areas.

- (12) Middelburg The decrease in Coal Reserves was mainly due to the inclusion of a 100m bufferzone around major powerlines and the exclusion of environmentally sensitive areas.
- (13) Klipspruit The decrease in Coal Reserves was due to a lower extraction factor. In addition, the Marketable Coal Reserves decreased due to a revised wash plant efficiency factor used to determine the product yield.
- (14) Mt Arthur Coal The decrease in Reserve Life was due to an increased nominated production rate from 26Mtpa in FY2013 to 30.8Mtpa in FY2014.
- (15) Cerrejón The decrease in Reserve Life was due to an increased nominated production rate from 40 Mtpa in FY2013 to 41.5 Mtpa in FY2014.

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### Aluminium, Manganese & Nickel Business

Ore Reserves in accordance with Industry Guide 7

	As at 30 June 2014												As a	at 30 Jui	ne 20	)13	
		<b>Proven Ore</b>			Pro	bable O	re	<b>Total Ore</b>			Ţ	BHP	To	otal Ore	;		
		R	Reserves		F	Reserves	,	R	eserves	F	ReservB	illiton	R	Reserves	J	Reserve	
Commodity											Life In	ıterest				Life	
Deposit $(1)(2)(3)(4)$	Ore Type	Mt%	A.Al%	R.Si	<b>₯</b>	A.Al%	R.SiO	$_2$ Mt%	A.Al201	Ŗ.Si€	<i>Y</i> ears)	<b>%</b>	Mt%	A.Al%	R.Si	(years)	
Bauxite																	
Australia																	
Worsley	Laterite	274	31.0	1.6	22	30.2	1.7	295	31.0	1.6	17	86	301	30.9	1.8	17	
Brazil																	
MRN (5)(6)	MRN																
	Washed	79	49.3	4.6	19	49.8	4.8	98	49.4	4.6	6.1	14.8	51	50.9	4.1	3	

Cut-off grades Worsley: variable ranging from 24-29.5% A.A2D3, £ 3% R.SiO2 and ³ 1m thickness; MRN: ³ 50% TAl2O3, £ 10% TSiO2, ³ 1m thickness and ³ 30% recovery on a weight per cent basis.

(3) Approximate drill hole spacings used to classify the reserves were:

Deposit	<b>Proven Ore Reserves</b>	<b>Probable Ore Reserves</b>
Worsley	Maximum 80m	Maximum 160m
MRN	A bauxite intersection grid of 200m, plus at	Those areas with a bauxite intersection grid
	least 10 samples reached by search	spacing of less than 400m and/or a 400m
	ellipsoid. Mining and metallurgical	spaced grid with a 200m offset fill in, plus
	characterisation (test pit/bulk sample), plus	a minimum of 7 samples reached by search
	a reliable suite of chemical and size	ellipsoid, plus a reliable suite of chemical
	distribution data	and size distribution data

<sup>(4)</sup> Metallurgical recoveries for the operations were:

Deposit	Estimated Metallurgical Recovery of A.Al <sub>2</sub> O <sub>3</sub>
Worsley (Worsley	
Refinery)	91%
MRN (Alumar Refinery)	92%

<sup>(2)</sup> Ore delivered to process plant.

- (5) MRN Washed tonnes and grade represent expected product based on forecast beneficiated yield.
- (6) MRN The reserves are located on mining leases that provide MRN the right to mine. Current mining areas have environmental approval to operate. The increase in reserves was due to the approval of mining permits for additional plateaus.

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### Aluminium, Manganese & Nickel Business

Ore Reserves in accordance with Industry Guide 7

		A	s at 30 J	une 201	4								As	s at 30 Ju	ιn
			roven O			obable (			Total Or		Reserve			Total Or	
- (1)(0)(0)(1)			Reserves			Reserves			Reserves			Billiton		Reserves	
y Deposit (1)(2)(3)(4)	Ore Type	Mt	% Mn%	y Yield	Mt	% Mn%	% Yield	Mt	% Mn%	% Yiel¢	tyeails)ı	terest %	% Mt	% Mn%	6
	ROM	78	45.0	58	16	42.6	57	94	44.6	58	11	60	101	44.7	
ca (6)		Mt	% Mn	% Fe	Mt	% Mn	% Fe	Mt	% Mn	% Fe			Mt	% Mn	%
	Lower Body-HG	1.2	48.0	12.2	7.2	47.6	12.3	8.4	47.7	12.3	46	44.4	11	47.6	ı
	Lower Body-LG	2.2	41.3	11.9	13	41.8	13.2	15	41.7	13.0			13	42.1	1
	Upper Body				46	41.4	18.2	46	41.4	18.2			48	41.5	
	M, C, N Zones	19	37.6	4.4	41	37.1	4.5	60	37.3	4.5	18	44.4	65	37.2	
	X Zone	1.6	38.2	4.7	2.4	36.7	4.8	4.0	37.3	4.8			4.0	36.7	

Cut-off grades GEMCO: <sup>3</sup> 40%Mn washed product and <sup>3</sup> 1m ore thickness; Wessels: <sup>3</sup> 45%Mn for Lower Body-HG, <sup>3</sup> 37.5%Mn for Lower Body-LG and Upper Body; Mamatwan: <sup>3</sup> 35%Mn for M, C, N and X Zones.

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

Deposit	Proven Ore Reserves	Probable Ore Reserves
GEMCO	60m x 120m and 60m x 60m	120m x 120m
Wessels	Defined as rim ±30m wide around	Defined as all ground beyond 30m
	mined-out areas, supplemented by some	
	economically viable remnant blocks	
	within mined-out areas	
Mamatwan	80m x 80m	160m x 160m

(3) Metallurgical recoveries for the operations were:

Deposit Metallurgical Recovery

GEMCO See yield in Ore Reserves table

Wessels 88% Mamatwan 96%

<sup>(4)</sup> Ore delivered to process plant.

(5) GEMCO Tonnes are stated as ROM, manganese grades are reported as expected product and should be read together with their respective tonnage yields.

(6) Wessels and Mamatwan Tonnes are stated as wet tonnes.

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## Aluminium, Manganese & Nickel Business

Ore Reserves in accordance with Industry Guide 7

		As a	t 30 Jui	ne 2014	ı					As	at 30 J 2013	une
Commodity		O	oven Ore erves		ble Ore erves		l Ore erves		BHP Billiton Interest		l Ore erves	Reserve Life
<b>Deposit</b> (1)(2)(3)(4)	Ore Type	Mt	% Ni	Mt	% Ni	Mt	% Ni	(years)	<b>%</b>	Mt	% Ni	(years)
Nickel												
Colombia												
Cerro Matoso (5)	Laterite	16	1.2	7.7	1.0	24	1.1	15	99.94	43	1.2	28
	SP	24	1.3			24	1.3			40	1.2	
	MNR Ore									18	0.2	
Australia Nickel West												
Leinster (6)	OC	2.8	1.3	0.2	0.9	3.0	1.3	1.5	100	3.1	1.3	8
	SP									0.1	2.3	
	UG									9.3	1.8	
Mt Keith (7)	OC	51	0.6	1.1	0.5	52	0.6	5.9	100	93	0.6	12
	SP	5.7	0.5	5.5	0.5	11	0.5			20	0.5	
Cliffs	UG	0.7	2.6	0.9	2.5	1.6	2.6	3.2	100	1.6	2.8	4

Cut-off grades Cerro Matoso: <sup>3</sup> 0.7%Ni for Laterite and SP; Leinster: <sup>3</sup> 0.6%Ni for OC, <sup>3</sup> 0.9%Ni for UG and SP; Mt Keith: variable ranging from 0.35-0.40% Ni and <sup>3</sup> 0.18% recoverable Ni for OC and SP; Cliffs: <sup>3</sup> 1.1% Ni for UG.

<sup>(2)</sup> Approximate drill hole spacings used to classify the reserves were:

Deposit	<b>Proven Ore Reserves</b>	<b>Probable Ore Reserves</b>
Cerro Matoso	35m or less with three drill holes	35m to 100m with three drill holes
Leinster	25m x 25m	25m x 50m
Mt Keith	60m x 40m	80m x 80m
Cliffs	25m x 25m (and development)	50m x 50m

(3) Metallurgical recoveries for the operations were:

DepositMetallurgical RecoveryCerro Matoso82% (reserves to metal)

Leinster Concentrator (including Cliffs) 84% at 12% concentrate grade Mt Keith 57% at 16% concentrate grade

- (4) Ore delivered to process plant.
- (5) Cerro Matoso The decrease in laterite reserves was due to the exclusion of La Esmerelda (environmental licence approval delay), lower nickel price assumptions, an updated geotechnical model, revised processing plant specifications and changed stockpile assumptions.
- (6) Leinster The decrease in reserves was due to suspension of mining at the Perseverance underground mine subsequent to a seismic event in October 2013.
- (7) Mt Keith The decrease in in-situ reserves was due to the exclusion of Stage H2 after testing with current prices.

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#### 2.4 Major projects

### Major projects

At the end of FY2014, BHP Billiton had seven low-risk, relatively brownfield major projects under development and one major pre-development project in evaluation (Jansen Potash) with a combined budget of US\$14.1 billion. The Group completed the WAIO Jimblebar Mine Expansion and Caval Ridge projects during the year. In addition a further four projects were successfully completed; namely: Macedon; North West Shelf North Rankin B Gas Compression; Samarco Fourth Pellet Plant; and WAIO Port Blending and Rail Yard Facilities. Another two projects, Newcastle Third Port Stage 3 and Cerrejón P40, delivered first coal during the year.

The port expansion associated with the Cerrejón P40 project is currently being commissioned, although operational issues are expected to constrain capacity at approximately 35 Mtpa (100 per cent basis) in the medium term.

A US\$212 million increase in the budget of the Escondida Oxide Leach Area Project (OLAP) to US\$933 million was approved during the period. The project is now expected to be completed in the second half of CY2014, with no associated impact to production.

In July 2013, BHP Billiton announced an investment of US\$3.4 billion to construct a desalination facility which will deliver sustainable water supply to Escondida over the long term. In August 2013, BHP Billiton also approved a US\$2.6 billion investment to finish the excavation and lining of the Jansen Potash Project production and service shafts, and to continue the installation of essential surface infrastructure and utilities.

BHP Billiton s share of capital and exploration expenditure declined by 32 per cent during FY2014, to US\$15.2 billion. Capital and exploration expenditure is expected to remain broadly unchanged in the 2015 financial year with a planned investment rate of US\$14.8 billion.

#### Projects completed or delivered first production during the 2014 financial year

			Capital expenditure				
<b>.</b>	<b>.</b>	G (1)	(US\$M) (1)		Date of initial production		
Business	Project	Capacity (1)	Actual (2)	Budget	Actual	Target	
Petroleum	Macedon (Australia) 71.43% (operator)	200 million cubic feet of gas per day.	1,200	1,050	Q3 CY13	CY13	
	North West Shelf North Rankin B Gas Compression (Australia) 16.67% (non-operator)	2,500 million cubic feet of gas per day.	721	850	Q4 CY13	CY13	
Iron Ore	Samarco Fourth Pellet Plant (Brazil) 50%	Increases Samarco iron ore pellet production capacity by 8.3 million tonnes per annum to	1,576	1,750	Q1 CY14	H1 CY14	

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	30.5 million tonnes per annum.				
WAIO Jimblebar Mine Expansion (Australia) 85%	Increases mining and processing capacity to 35 million tonnes per annum with incremental debottlenecking opportunities to 55 million tonnes per annum.	3,380	3,640 (3)(4)	Q3 CY13	Q4 CY13 <sup>(4)</sup>

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	Capital expenditure						
		~ (1)	(US\$I	$M)^{(1)}$	Date of initial	-	
Business	Project	Capacity (1)	Actual (2)		Actual	Target	
	WAIO Port Blending and Rail Yard Facilities (Australia) 85%	Optimises resource and enhances efficiency across the WAIO supply chain.	916	1,000 (3)(4)	Q4 CY13	H2 CY14	
Coal	Caval Ridge (Australia) 50%	Greenfield mine development to produce an initial 5.5 million tonnes per annum of export metallurgical coal.	1,706	1,870 (3)	Q2 CY14	CY14	
	Newcastle Third Port Project Stage 3 (Australia) 35.5%	Increases total coal terminal capacity from 53 million tonnes per annum to 66 million tonnes per annum.	367	367	Q3 CY13	CY14	
	Cerrejón P40 Project (Colombia) 33.3%	Increases saleable thermal coal production by 8 million tonnes per annum to approximately 40 million tonnes per annum.	437	437	Q4 CY13	CY13	
			10,303	10,964			

# Projects in execution at the end of the 2014 financial year

Business Projects under dev	Project velopment	Capacity (1)	Capital expenditure (US\$M) (1) Budget	Date of initial production Target
Petroleum	North West Shelf Greater Western Flank-A (Australia) 16.67% (non-operator)	To maintain LNG plant throughput from the North West Shelf operations	400	CY16
	Bass Strait Longford Gas Conditioning Plant (Australia) 50% (non-operator)	Designed to process approximately 400 million cubic feet of high CO <sub>2</sub> gas	520	CY16
Copper	•	- 20	933 (4)	H2 CY14 (4)

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Escondida Oxide Leach Area Proje (Chile) 57.5%	<b>,</b>		
Escondida Organ Growth Project 1 (Chile) 57.5%	•	3,838	H1 CY15
Escondida Water Supply (Chile) 57.5%		3,430	CY17

		(	Capital expenditure	
Business Projects under d	Project levelopment	Capacity (1)	(US\$M) <sup>(1)</sup> Budget	Date of initial production Target
Coal	Hay Point Stage Three Expansion (Australia) 50%	Increases port capacity from 44 million tonnes per annum to 55 million tonnes per annum and reduces storm vulnerability	1,505 (3)(4)	CY15 <sup>(4)</sup>
	Appin Area 9 (Australia) 100%	Maintains Illawarra Coal s production capacity with a replacement mining domain and capacity to produce 3.5 million tonnes per annum of metallurgical coal	845	CY16
			11,471	

# Other projects in progress at the end of the 2014 financial year

Business Projects under development	Project	Capacity (1)	Capital expenditure (US\$M) <sup>(1)</sup> Budget
Potash	Jansen Potash (Canada) 100%	Investment to finish the excavation and lining of the production and service shafts, and to continue the installation of essential surface infrastructure and utilities.	2,600

14,071

<sup>(1)</sup> Unless noted otherwise, references to capacity are on a 100 per cent basis, references to capital expenditure from subsidiaries are reported on a 100 per cent basis and references to capital expenditure from equity accounted investments and other operations are reported at our equity share.

<sup>(2)</sup> Number subject to finalisation.

- (3) Excludes announced pre-commitment funding.
- (4) As per revised budget schedule.

### 2.5 Business performance

The discussion of results for our Businesses is set out in section 1.12 of this Annual Report with further information below.

# 2.5.1 Group Revenue and Underlying EBIT

# Year ended 30 June 2014 compared with year ended 30 June 2013

An analysis of the financial performance of the Group for FY2014 compared to FY2013 is included in section 1.15.3.

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The following table reconciles our statutory income statement to the principal factors that affected Underlying EBIT for FY2014.

US\$M Revenue Revenue 65,953 Cother income and share of equity accounted investments operations items EBIT  For the year ended 30 June 2013  Revenue 65,953 Cother income 3,947  Expenses excluding net finance costs Share of operating profit of equity accounted investments 1,142
US\$M Revenue Revenue investments operations items EBIT  For the year ended 30 June 2013  Revenue 65,953  Other income 3,947  Expenses excluding net finance costs Share of operating profit of equity
US\$M Revenue investments operations items EBIT  For the year ended 30 June 2013  Revenue 65,953  Other income 3,947  Expenses excluding net finance costs Share of operating profit of equity
For the year ended 30 June 2013 Revenue 65,953 Other income 3,947 Expenses excluding net finance costs (50,040) Share of operating profit of equity
Revenue 65,953 Other income 3,947 Expenses excluding net finance costs (50,040) Share of operating profit of equity
Other income 3,947 Expenses excluding net finance costs (50,040) Share of operating profit of equity
Share of operating profit of equity
accounted investments 1,142
Total expenses, other income and share of
equity accounted investments (44,951)
Profit from operations 21,002
Exceptionals items 1,928
Underlying EBIT 22,930
Changes in volumes:
Productivity 2,260 (1,298) <b>962 962</b>
Growth 3,221 (1,292) <b>1,929 1,929</b>
5,481 (2,590) <b>2,891 2,891</b>
Net price impact:
Change in sales prices (3,301) (95) (3,396) (3,396)
Price-linked costs (80) (80)
(2.201) (2.470)
(3,301) (175) ( <b>3,476</b> ) ( <b>3,476</b> )
Change in controllable cosh costs.
Change in controllable cash costs:  Operating cash costs  1,524  1,524  1,524
Exploration and business development 398 398 398
Exploration and business development 376 376 376
1,922 <b>1,922 1,922</b>
1,722 1,722 1,722
Change in other costs:
Exchange rates (202) 1,962 <b>1,760 1,760</b>
Inflation on costs (805) (805)
Fuel and energy (46) (46)
Non-cash (2,091) (2,091) (2,091)

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	(202)	(980)	(1,182)		(1,182)
Asset sales		53	53		53
Ceased and sold operations	(494)	2	(492)		(492)
Exceptional items		2,479	2,479	(2,479)	
Other	(231)	446	215		215
For the year ended 30 June 2014					
Revenue	67,206				
Other income		1,524			
Expenses excluding net finance costs		(46,513)			
Share of operating profit of equity					
accounted investments		1,195			
		,			
Total expenses, other income and share of					
equity accounted investments		(43,794)			
Profit from operations			23,412		
Exceptionals items			ŕ	(551)	
•					
Underlying EBIT					22,861

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# Year ended 30 June 2013 compared with year ended 30 June 2012

Revenue in FY2013 was US\$66.0 billion, a decrease of US\$4.5 billion, or 6.4 per cent, from US\$70.5 billion in the corresponding period. The revenue decrease was primarily driven by the Iron Ore and Coal Businesses, with decreases of US\$2.0 billion and US\$2.6 billion, respectively. The loss of revenue due to the sale of assets previously reported in the former Diamonds and Specialty Products Business (decrease of US\$382 million) and the decrease in the Aluminium, Manganese and Nickel Business (US\$633 million) were offset by the increase in the Copper Business of US\$1.0 billion. The breakdown of revenue by Business for FY2013 and FY2012 is set out in section 1.12.1.

The decrease in revenue in Iron Ore was driven by a 17 per cent fall in the average realised price of iron ore to US\$110 per tonne which more than offset record sales volumes at WAIO, which increased 9.6 per cent. The revenue decrease in Coal also reflected lower realised prices as hard coking coal and weak coking coal prices fell 34 per cent and 31 per cent, respectively, partially offset by higher sales volumes driven by a 19 per cent increase (100 per cent basis) in production at Queensland Coal. The revenue increase in Copper was largely driven by an increase in production at Escondida of 28 per cent, partially offset by a five per cent decrease in average realised copper prices to US\$3.41 per pound.

Total expenses increased from US\$48.6 billion in FY2012 to US\$50.0 billion in FY2013. Excluding exceptional items, the majority of which related to impairments in FY2013, total expenses were almost unchanged at US\$45.0 billion in FY2013 compared to US\$44.9 billion in FY2012.

Year ended 30 June	2013	2012
	US\$M	US\$M
Raw materials and consumables used	8,926	8,128
Employee benefits expense	7,168	6,035
External services (including transportation) (1)	12,478	14,293
Third party commodity purchases	2,759	3,402
Net foreign exchange (gains)/losses	(284)	(571)
Fair value change on derivatives	<b>79</b>	(141)
Government royalties paid and payable	2,562	2,880
Depreciation and amortisation expense	7,031	6,431
Exploration and evaluation expenditure	1,047	1,644
Impairment of assets (2)	5,496	3,763
Operating lease rentals	776	658
Other operating expenses (3)	2,002	2,122
Total expenses	50,040	48,644
Less exceptional items	(5,087)	(3,786)
Total expenses excluding exceptional items	44,953	44,858

<sup>(1)</sup> Includes exceptional items of US\$96 million (2012: US\$ nil).

- (2) Includes exceptional items of US\$5,149 million (2012: US\$3,663 million).
- (3) Includes exceptional items credit of US\$158 million (2012: US\$ nil). Reductions in various costs were offset by higher non-cash costs and one-off items. Our focus on reducing operating costs was demonstrated by a decrease of external services costs of US\$1.8 billion In addition we reduced exploration and evaluation expenditure by US\$597 million. These savings were predominantly offset by higher impairment charges of US\$1.7 billion, higher depreciation and amortisation charges of US\$600 million and an unfavourable variance in the change in fair value on derivatives of US\$220 million. Increases in costs attributable to inflation were US\$646 million.

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Other income increased from US\$898 million in FY2012 to US\$3.9 billion, mainly due to US\$3.2 billion related to sale of Yeelirrie, Richards Bay Minerals and interests in the East and West Browse Joint Ventures, which were all classified as exceptional items. Excluding exceptional items, other income increased from US\$598 million to US\$788 million.

Profit from operations decreased by US\$3.6 billion or 15 per cent from US\$24.6 billion to US\$21.0 billion. Exceptional items during FY2013 were a charge of US\$1.9 billion, mainly comprised of US\$3.2 billion (before taxation) of assets sales offset by impairment charges and related costs of US\$5.3 billion (before taxation), compared with net exceptional before taxation charges mainly impairment charges, of US\$3.5 billion in FY2012.

Year ended 30 June	2013 US\$M	2012 US\$M
Underlying EBIT	22,930	28,086
Exceptional items (before taxation) refer section 2	.5.5 below (1,928)	(3,486)
Profit from operations (EBIT)	21,002	24,600

Attributable profit in FY2013 of US\$11.2 billion was negatively affected by an increase in the Group s effective tax rate from 30.6 per cent to 35.0 per cent. In addition Attributable profit decreased due to an increase in net interest expense and a change in fair value on non-hedging instruments of US\$572 million, including financing charges of US\$280 million incurred in managing interest rate exposure on debt securities issued during FY2013.

Underlying Attributable profit (comprising Profit after taxation attributable to members of the BHP Billiton Group less exceptional items) of US\$12.2 billion decreased by US\$5.0 billion from US\$17.2 billion in FY2012.

Net operating cash flows of US\$20.2 billion declined by 20 per cent from US\$25.3 billion in FY2012. A decrease of US\$4.2 billion in cash generated from operations, an increase of US\$374 million in net interest paid and an income tax refund of US\$530 million received in FY2012 were the major contributors to that decline.

#### 2.5.2 Underlying EBIT

#### Year ended 30 June 2014 compared with year ended 30 June 2013

An analysis of the consolidated EBIT for FY2014 compared to FY2013 is included in section 1.15.3.

#### Year ended 30 June 2013 compared with year ended 30 June 2012

A description of the impact of the principal factors that affected Underlying EBIT in FY2013 as compared to FY2012 is set out in the table in section 1.15.3.

Underlying EBIT for FY2013 was US\$22.9 billion, compared with US\$28.1 billion in the corresponding period, a decrease of 18.4 per cent.

#### Volumes

Strong operating performance across the Group s major basins in FY2013 delivered an increase in total production volumes in a number of Businesses. This was underpinned by a thirteenth consecutive annual production record at WAIO and a 28 per cent increase in copper production at Escondida. This volume growth was supported by a significant recovery in production at Queensland Coal and a 76 per cent increase in liquids production at our Onshore US Asset.

In this context, stronger sales volumes increased Underlying EBIT by US\$2.0 billion in FY2013, of which US\$1.3 billion were volume efficiencies attributed to productivity. Increased iron ore, copper and coal sales were

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the major contributors and together increased Underlying EBIT by US\$2.5 billion. In contrast, natural field decline at our conventional Australian oil and gas assets contributed to a US\$526 million volume related reduction in Petroleum s Underlying EBIT.

#### **Prices**

Substantially lower prices reduced Underlying EBIT by US\$8.5 billion in FY2013. The major contributor to the decline was a 17 per cent reduction in the average realised price of iron ore, which reduced Underlying EBIT by US\$3.8 billion. The recovery in low-cost supply led to a significant decline in metallurgical coal prices, which, together with softer energy coal prices, reduced Underlying EBIT by a further US\$3.5 billion. Overcapacity in the nickel and aluminium markets, and concerns of a near-term rebalancing in the copper market, also weighed on metals prices and reduced Underlying EBIT by a combined US\$1.2 billion.

A 17 per cent increase in the average realised price of US natural gas and a four per cent rise in the average realised price of liquefied natural gas (LNG) benefited Underlying EBIT during the period; however, this was largely offset by a four per cent decrease in the average realised price of oil.

A reduction in price-linked costs increased Underlying EBIT by US\$582 million during the period and primarily reflected lower price-linked royalty charges in our Iron Ore and Metallurgical Coal Businesses.

#### Controllable cash costs

The Group s concentrated effort to reduce operating costs and drive productivity improvements realised tangible results, with a decrease in controllable cash costs of US\$2.5 billion during the period, being a decrease in operating cash costs of US\$1.6 billion and a decrease in exploration and business development costs of US\$949 million.

#### Operating cash costs

The reduction in costs was underpinned by a reduction of US\$1.6 billion of operating cash costs. A strong focus on contractor usage and rates and a significant reduction in consumables expenditure contributed to the substantial reduction in operating costs at Queensland Coal, which contributed to a US\$933 million reduction in operating cash costs. Productivity gains at Escondida associated with a 12 per cent improvement in concentrator throughput following a major maintenance campaign and a 24 per cent increase in the ore grade mined during the period contributed US\$653 million to Underlying EBIT. With productivity improvements already well advanced, consisting principally of the improvement plan at Worsley, substantial cost savings of US\$368 million were achieved during the period in Aluminium, Manganese and Nickel. These savings were offset by an increase in operating cash costs of US\$405 million in Iron Ore which reflects our decision to invest in operating capability prior to the full commissioning and ramp-up of expanded capacity at WAIO.

### Exploration and business development

Our increased focus on reducing our cost base in FY2013 and our confidence in the quality and longevity of our asset base led to a substantial US\$949 million reduction in the Group s exploration and business development expenditure. Total exploration expenditure declined by 46 per cent to US\$1.4 billion in FY2013, with a focus on greenfield copper porphyry targets in Chile and Peru and oil and gas prospects in the Gulf of Mexico and offshore Western Australia. The associated decline in the Group s exploration expense increased Underlying EBIT by US\$597 million.

A general reduction in business development expenditure increased Underlying EBIT by a further US\$352 million in FY2013, primarily in Iron Ore for US\$102 million and Coal for US\$194 million.

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#### Other costs

### Exchange rates

A stronger US dollar against several producer currencies, in particular the South African rand, benefited our cost base during the period and increased Underlying EBIT but this was partially offset by the revaluation of monetary items in the balance sheet with year-end exchange rates. In total, exchange rate volatility increased Underlying EBIT by US\$229 million.

Average and closing exchange rates for FY2013 and FY2012 are detailed in note 1 Accounting policies to the financial statements.

#### Inflation on costs

Inflation had an unfavourable impact on all Businesses and reduced Underlying EBIT by US\$646 million in FY2013. This was most notable in Australia and South Africa, which accounted for over 75 per cent of the total variance.

#### Non-cash

Non-cash costs had a favourable impact on Underlying EBIT of US\$154 million in FY2013. This was principally due to a higher capitalisation rate for deferred stripping mainly in Copper and Iron Ore.

### One-off items

The only One-off item was due to higher costs at Escondida relating to major maintenance activities undertaken on the conveyor belt system and at both concentrator plants.

#### Asset sales

The divestments of Yeelirrie, Richards Bay Minerals, the East and West Browse Joint Ventures and our diamonds business were completed during the period. The gains or losses arising from each sale were reported within exceptional items, and therefore were not included in Underlying EBIT.

The contribution of asset sales to Underlying EBIT declined by US\$66 million in FY2013. The variance was largely attributable to a post-closing payment received during FY2012 that followed the divestment of our interests in Cascade and Chinook.

#### Ceased and sold operations

Underlying EBIT from ceased and sold operations declined by US\$657 million in FY2013. The decline largely reflected a reduced contribution, decrease in Underlying EBIT of US\$310 million, from EKATI, following the sale of our diamonds business. Ceased and sold operations included a further reduction of Underlying EBIT of US\$126 million related to the sale of Pinto Valley mining operation and the associated San Manuel Arizona Railroad Company.

#### Other

A decrease in our share of operating profit in equity accounted investments primarily contributed to the reduction of Underlying EBIT by US\$531 million. Cerrejon profit after taxation decreased by US\$177 million to US\$117 million mainly due to reduced production and decreased thermal coal prices. Antamina profit after taxation decreased by US\$83 million to US\$531 million as increased copper production was more than offset by weaker sales prices and general cost pressure over our Copper portfolio. Samarco profit after taxation decreased by US\$396 million to US\$513 million mainly due to a decrease in sales prices.

These decreases were partially offset by a non-cash adjustment of our Angostura (Trinidad and Tobago) Production Sharing Contract.

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#### 2.5.3 Net finance costs

### Year ended 30 June 2014 compared with year ended 30 June 2013

An analysis of net finance costs for FY2014 compared to FY2013 is included in section 1.15.3.

#### Year ended 30 June 2013 compared with year ended 30 June 2012

Net finance costs increased to US\$1.3 billion from US\$668 million in the corresponding period. This was primarily attributable to an increase in net interest expense on higher net debt and financing charges of US\$280 million incurred in managing interest rate exposure on debt securities issued in FY2013. The US\$280 million was composed of realised fair value losses of US\$97 million on non-hedging derivatives recognised in interest on borrowings and unrealised fair value losses of US\$183 million on similar instruments. Net interest expense on other debt securities increased net finance costs by an additional US\$270 million.

### 2.5.4 Taxation expense

#### Year ended 30 June 2014 compared with year ended 30 June 2013

An analysis of taxation expenses for FY2014 compared to FY2013 is included in section 1.15.3.

#### Year ended 30 June 2013 compared with year ended 30 June 2012

Total taxation expense, including royalty-related taxation, exceptional items and exchange rate movements, was US\$6.9 billion, representing an effective tax rate of 35.0 per cent (2012: 30.6 per cent).

Exceptional items decreased taxation expense by US\$943 million (2012: decrease of US\$1.7 billion), predominantly due to the income tax benefit on impairments of US\$1.4 billion, which more than offset the income tax expense associated with divestments of US\$371 million, as detailed in section 1.15.3.

Government imposed royalty arrangements calculated by reference to profits are reported as royalty-related taxation. Royalty-related taxation, excluding exceptional items, contributed US\$1.2 billion to taxation expense. The Minerals Resource Rent Tax (MRRT) came into effect in Australia on 1 July 2012 and the Group expensed US\$321 million of MRRT in FY2013, mainly due to Iron Ore MRRT expense for the period. This included the remeasurement of deferred tax assets associated with the MRRT which increased taxation expense by US\$207 million in FY2013.

The Group s adjusted effective tax rate was 34.2 per cent (2012: 31.8 per cent).

Year ended 30 June		2013			2012	
	Profit before tax US\$M	Income tax expense US\$M	%	Profit before tax US\$M	Income tax expense US\$M	%
Statutory effective tax rate	19,726	(6,906)	35.0%	23,932	(7,315)	30.6%
Less:						
Exchange rate movements		245			347	
_		207				

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Remeasurement of deferred tax assets associated with the MRRT

Exceptional items	1,928	(943)		3,486	(1,745)	
Adjusted effective tax rate	21,654	(7,397)	34.2%	27,418	(8,713)	31.8%

Other royalty and excise arrangements, which are not profit based, are recognised as operating costs within Profit before taxation. These amounted to US\$2.6 billion during the period (2012: US\$2.9 billion).

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### 2.5.5 Exceptional items

#### Years ended 30 June 2014 and 30 June 2013

An analysis of the exceptional items for FY2014 and FY2013 are included in section 1.15.3.

Year ended 30 June 2012	Gross US\$M	Tax US\$M	Net US\$M
Exceptional items by category			
Impairment of Fayetteville goodwill and other assets	(2,835)	996	(1,839)
Impairment of Nickel West goodwill and other assets	(449)	94	(355)
Suspension or early closure of operations and the change in status of specific			
projects (1)	(502)	108	(394)
Settlement of insurance claims (1)	300	(90)	210
Recognition of deferred tax assets on enactment of MRRT and PRRT extension legislation in Australia		637	637
	(3,486)	1,745	(1,741)

(1) Includes amounts attributable to non-controlling interests of US\$(34) million (US\$7 million tax expense). As a result of the fall in United States domestic gas prices and the Company s decision to adjust its development plans, the Group recognised impairments of goodwill and other assets in relation to its Fayetteville shale gas assets. A total impairment charge of US\$1.8 billion (after tax benefit) was recognised in FY2012.

The Group recognised impairments of goodwill and other assets at Nickel West as a result of the continued downturn in the nickel price and margin deterioration. A total impairment charge of US\$355 million (after tax benefit) was recognised in FY2012.

As part of our regular portfolio review, various operations and projects around the Group were either suspended, closed early or changed in status. These included: the change in status of the Olympic Dam expansion project; the temporary suspension of production at TEMCO and the permanent closure of the Metalloys South Plant in South Africa; the indefinite cessation of production at Norwich Park; and the suspension of other minor capital projects. As a result, impairment charges of US\$338 million (after tax benefit), idle capacity costs and inventory write-down of US\$28 million (after tax benefit) and other restructuring costs of US\$28 million (after tax benefit) were recognised in FY2012, of which US\$242 million (after tax benefit) related to Olympic Dam.

During 2008, extreme weather across the central Queensland coalfields affected production from the BMA and BMC operations. The Group settled insurance claims in respect of the lost production and insurance claim income of US\$210 million (after tax expense) was recognised in FY2012.

The Australian MRRT and PRRT extension legislation were enacted in March 2012. Under the legislation, the Group is entitled to a deduction against future MRRT and PRRT liabilities based on the market value of its Coal, Iron Ore and Petroleum assets. A deferred tax asset, and an associated net income tax benefit of US\$637 million, was recognised in FY2012 to reflect the future deductibility of these market values for MRRT and PRRT purposes, to the

extent they were considered recoverable.

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Exceptional items during FY2012 are classified by nature as follows.

Impairment of goodwill and other assets	Idle capacity costs and inventory write-downs	Restructuring costs	Insurance recoveries	Gross
(2,835)				(2,835)
(406)	(43)			(449)
(422)	(40)	(40)		(502)
			300	300
(3,663)	(83)	(40)	300	(3,486)
	goodwill and other assets (2,835) (406)	goodwill costs and and other inventory assets write-downs  (2,835)  (406) (43)  (422) (40)	goodwill costs and and other inventory write-downs costs  (2,835)  (406) (43)  (422) (40) (40)	goodwill costs and and other inventory write-downs costs  (2,835)  (406) (43)  (422) (40) (40)  300

# 2.5.6 Petroleum and Potash Business

# Year ended 30 June 2014 compared with year ended 30 June 2013

An analysis of the financial performance of our Petroleum and Potash Business for FY2014 compared to FY2013 is included in section 1.12.2.

Financial information for the Petroleum and Potash Business for FY2014 and FY2013 is presented below.

Year	end	led
ıvaı	UII	ıvu

Tear chaca							]	Exploration
30 June 2014					Net	E	Exploration	-
TIOO III		Underlying	D 0 4	Underlying			gross	profit
US\$ million	Revenue (i)(ii)	EBITDA	D&A	EBIT	assets	expenditure <sup>(ii</sup>	i) (iv)	(v)
Bass Strait	1,885	1,555	132	1,423	2,864	259		
North West Shelf (vi)	2,432	1,599	175	1,424	1,691	193		
Atlantis	1,535	1,407	335	1,072	2,272	409		
Shenzi	1,430	1,281	243	1,038	1,598	306		
Mad Dog	217	171	16	155	461	83		
Onshore US	4,264	2,270	2,426	(156)	26,945	4,226		
Algeria	465	396	30	366	104	19		
UK (vii)	155	70	52	18	(38)	15		
Exploration		(369)	113	(482)	464			
Other (viii)(ix)	2,027	1,744	735	1,009	1,907	369		
Total Petroleum	14,410	10,124	4,257	5,867	38,268	5,879	600	497

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Potash		(211)	74	(285)	2,255	544	47	47
Other (x)		(298)		(298)	(1,009)			
Total Petroleum and Potash from Group production	14,410	9,615	4,331	5,284	39,514	6,423	647	544
Third party products	437	3		3				
Total Petroleum and Potash	14,847	9,618	4,331	5,287	39,514	6,423	647	544
Statutory adjustments (xi)	(14)	(3)	(3)					
Total Petroleum and Potash statutory result	14,833	9,615	4,328	5,287	39,514	6,423	647	544

### Year ended

### 30 June 2013

							Ex	ploration
(Republished)					Net		Exploration	
		Underlying		Underlying		Capital		profit
US\$ million	Revenue (i)(ii		D&A	EBIT		penditure	(iii) (iv)	( <b>v</b> )
Bass Strait	1,921	1,564	119	1,445	2,834	526		
North West Shelf	2,578	1,913	234	1,679	1,880	221		
Atlantis	853	710	147	563	2,166	419		
Shenzi	1,614	1,519	283	1,236	1,524	289		
Mad Dog	276	233	98	135	420	89		
Onshore US	2,987	1,508	1,795	(287)	25,019	4,699		
Algeria	533	460	18	442	90	22		
UK	244	95	46	49	45	8		
Exploration		(522)	230	(752)	529			
Other (viii)(ix)	2,032	1,746	282	1,464	1,973	794		
Total Petroleum	13,038	9,226	3,252	5,974	36,480	7,067	675	620
Potash		(309)	25	(334)	1,758	608	89	89
Other (x)	18	(15)		(15)	(713)			
Total Petroleum and Potash from Group production	13,056	8,902	3,277	5,625	37,525	7,675	764	709
Third party products	175	11		11				
Total Petroleum and Potasl	n 13,231	8,913	3,277	5,636	37,525	7,675	764	709
Statutory adjustments (xi)	(7)	(3)	(3)					
Total Petroleum and Potasi statutory result	n 13,224	8,910	3,274	5,636	37,525	7,675	764	709

<sup>(</sup>i) Petroleum revenue from Group production includes: crude oil US\$8,645 million (2013: US\$7,604 million), natural gas US\$3,119 million (2013: US\$2,842 million), LNG US\$1,614 million (2013: US\$1,686 million), NGL US\$916 million (2013: US\$823 million) and other US\$102 million (2013: US\$76 million).

<sup>(</sup>ii) Includes inter-segment revenue of US\$262 million (2013: US\$ nil).

<sup>(</sup>iii) Capital expenditure in aggregate comprises Petroleum US\$5,600 million growth and US\$279 million other (2013: US\$6,883 million growth and US\$184 million other) and Potash US\$533 million growth and US\$11 million other (2013: US\$597 million growth and US\$11 million other).

- (iv) Includes US\$231 million of Petroleum capitalised exploration (2013: US\$153 million).
- (v) Includes US\$128 million of Petroleum exploration expenditure previously capitalised, written off as impaired (included in depreciation and amortisation) (2013: US\$98 million).
- (vi) Includes an expense of US\$143 million incurred in May 2014 related to the purchase price adjustment for the Browse asset sale completed in the 2013 financial year.
- (vii) Includes an expense of US\$112 million incurred in November 2013 related to the closure of the UK pension plan. Also includes a gain of US\$120 million related to the sale of the Liverpool Bay asset in March 2014.
- (viii) Includes Macedon, Pyrenees, Stybarrow, Neptune, Minerva, Angostura, Genesis, Pakistan, divisional activities, business development and ceased and sold operations. Also includes the Caesar oil pipeline and the Cleopatra gas pipeline which are equity accounted investments and are reported on a proportionate consolidation basis (with the exception of net operating assets).
- (ix) Includes an unrealised gain of US\$74 million related to Angostura embedded derivative (2013: US\$84 million unrealised loss).
- (x) Includes closed mining and smelting operations in Canada and the United States.

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(xi) Includes statutory adjustments for the Caesar oil pipeline and the Cleopatra gas pipeline to reconcile the proportionately consolidated business total to the statutory result.

### Year ended 30 June 2013 compared with year ended 30 June 2012

Petroleum production increased by six per cent in FY2013, to 236 million barrels of oil equivalent (MMboe) (BHP Billiton share) and included strong performance from Onshore US, which delivered 99 MMboe (BHP Billiton share). The Eagle Ford area contributed 33 per cent of total Onshore US production to become Petroleum s largest producing field at the end of the period.

Petroleum and Potash revenue increased by US\$291 million to US\$13.2 billion in FY2013. Revenue for Onshore US grew by US\$818 million to US\$3.0 billion, an increase of 37.7 per cent. The increase in revenue in Onshore US resulted from higher volumes, which grew by 15.9 per cent. The increase in volume included a 76 per cent increase in higher value liquids production and a seven per cent increase in natural gas production. Increases in revenue at Mad Dog of US\$276 million, with recommencement of operations during the year, and an increase at North West Shelf of US\$203 million, due to higher LNG sales, were partially offset by reductions in our other assets, primarily due to natural field decline at our operated Australian oil and gas assets.

The average realised price of natural gas across our portfolio increased by 11 per cent in FY2013 to US\$3.76 per Mscf. This included a 17 per cent increase in the average realised price of US natural gas to US\$3.29 per Mscf. The average realised price of LNG also increased during the period, rising by four per cent to US\$14.82 per Mscf. These gains were partially offset by a four per cent decrease in the average realised price of oil to US\$106 per barrel. The average realised price of natural gas liquids (NGLs) was US\$45.70 per barrel.

Petroleum and Potash Underlying EBIT for FY2013 declined by US\$397 million to US\$5.6 billion. Petroleum s Underlying EBIT decreased by US\$363 million to US\$6.0 billion. The natural field decline at our Australian assets and the negative contribution of Onshore US contributed to a US\$526 million volume related reduction in Underlying EBIT. A series of charges, which included Onshore US drill rig contract termination costs and an impairment that followed the suspension of studies and re-evaluation of alternative development options associated with the Mad Dog Phase 2 project, reduced Underlying EBIT by a further US\$160 million. In contrast, a US\$126 million reduction in exploration and business development expense reflected our sharpened focus on high value oil and gas prospects in the Gulf of Mexico and offshore Western Australia.

The Onshore US Underlying EBIT was a loss of US\$287 million compared with a loss of US\$140 million in FY2012. The FY2013 loss included a charge for the drill rig termination costs of US\$77 million. The FY2012 loss included a gain of US\$192 million associated with legacy US gas derivatives. Adjusting for the gains and losses, the loss in Underlying EBIT reduced year-over-year. The reduced loss was primarily due to increased volumes and prices partially offset by higher depreciation and amortisation of US\$355 million and higher transportation costs due to higher volumes.

Capital expenditure for our conventional and unconventional operations totalled US\$7.1 billion in FY2013. This included US\$4.7 billion in Onshore US drilling and development expenditure, with over 80 per cent of drilling activity directed towards the Eagle Ford and Permian areas. While still in its early stages, the Permian evaluation program continues to deliver encouraging results, as demonstrated by the 1 MMboe produced in FY2013.

Petroleum exploration expenditure for FY2013 was US\$675 million, of which US\$522 million was expensed.

The Potash Business is not in production and had a loss, in Underlying EBIT terms, for FY2013 of US\$334 million, which was largely unchanged from the prior period. A reduction in our global potash exploration activity was offset

by higher costs associated with the establishment of our Potash Business in Saskatchewan (Canada).

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# 2.5.7 Copper Business

# Year ended 30 June 2014 compared with year ended 30 June 2013

An analysis of the financial performance of our Copper Business for FY2014 compared to FY2013 is included in section 1.12.3.

Financial information for the Copper Business for FY2014 and FY2013 is presented below.

#### Year ended

30 June 2014					Net		Ex	ploration
		Underlying		Underlying	operating	Capital Ex	ploration	to
US\$ million	Revenue	<b>EBITDA</b>	D&A	<b>EBIT</b>	assets ex	kpenditure <sup>(i)</sup>	gross	profit
Escondida (ii)	8,085	4,754	760	3,994	11,779	3,186		
Pampa Norte (iii)	1,796	785	429	356	2,575	336		
Antamina (iv)	1,261	818	84	734	1,341	262		
Cannington	1,079	459	47	412	234	60		
Olympic Dam	1,777	299	265	34	6,320	167		
Other (iv)(v)	101	(193)	7	(200)	(18)	13		
<b>Total Copper from Group</b>								
production	14,099	6,922	1,592	5,330	22,231	4,024		
Third party products	1,030	8		8				
Total Copper	15,129	6,930	1,592	5,338	22,231	4,024	118	118
Statutory adjustments (vi)	(1,261)	(344)	(86)	(258)		(267)	(2)	(2)
Total Copper								
statutory result	13,868	6,586	1,506	5,080	22,231	3,757	116	116

### Year ended

# 30 June 2013

(Republished)					Net		E	xploration
		Underlying		Underlying	operating	Capital Exp	ploration	n to
<b>US</b> \$ million	Revenue	<b>EBITDA</b>	D&A	<b>EBIT</b>	assets ex	xpenditure <sup>(i)</sup>	gross	profit
Escondida (ii)	8,596	5,175	649	4,526	9,450	2,859		
Pampa Norte (iii)	1,913	841	291	550	2,643	348		
Antamina (iv)	1,295	901	80	821	1,311	326		
Cannington	1,365	646	40	606	206	39		

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Olympic Dam	1,873	245	249	(4)	6,418	399		
Other (iv)(v)	90	(554)	19	(573)	46	289		
Total Copper from Group production	15,132	7,254	1,328	5,926	20,074	4,260		
Third party products	700	3		3				
Total Copper	15,832	7,257	1,328	5,929	20,074	4,260	277	277
Statutory adjustments (vi)	(1,295)	(372)	(82)	(290)		(330)	(3)	(3)
Total Copper statutory result	14,537	6,885	1,246	5,639	20,074	3,930	274	274

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<sup>(</sup>i) Capital expenditure in aggregate comprises US\$2,629 million growth and US\$1,128 million other (2013: US\$2,167 million growth and US\$1,763 million other).

<sup>(</sup>ii) Escondida is consolidated under IFRS 10 and reported on a 100 per cent basis.

<sup>(</sup>iii) Includes Spence and Cerro Colorado.

<sup>(</sup>iv) Antamina and Resolution are equity accounted investments and are reported on a proportionate consolidation basis (with the exception of net operating assets).

- (v) Predominantly comprises divisional activities, greenfield exploration, business development and ceased and sold operations. Includes Pinto Valley and Resolution. Pinto Valley was sold effective 11 October 2013.
- (vi) Includes statutory adjustments for Antamina and Resolution to reconcile the proportionately consolidated business total to the statutory result. Statutory Underlying EBIT includes net finance costs of US\$4 million and taxation of US\$254 million (2013: net finance costs of US\$ nil and taxation of US\$290 million).

### Year ended 30 June 2013 compared with year ended 30 June 2012

Copper production increased by 10 per cent in FY2013 to 1.7 Mt. Escondida copper production increased by 28 per cent to 1.1 Mt (100 per cent basis) as the average copper grade mined rose to 1.4 per cent and milling rates improved. Record annual copper production at Antamina also contributed to the strong result having benefited from a full-year contribution from the recently expanded concentrator.

Copper revenue increased by US\$984 million to US\$14.5 billion, largely driven by production increases at Escondida, partially offset by a five per cent decrease in average realised copper prices. Revenue for Escondida increased to US\$8.6 billion due to the 28 per cent increase in production, driven by higher average copper grades mined and improved milling rates partially offset by lower average realised prices. This increase was partially offset by decreases at Pampa Norte, Cannington and Olympic Dam in line with lower production and lower average realised prices.

The average realised price of copper for the period declined by five per cent to US\$3.41 per pound.

Underlying EBIT for FY2013 increased by US\$326 million to US\$5.6 billion. Increased sales volumes and operating cash cost savings associated with productivity gains and broader economies of scale increased Underlying EBIT by US\$1.1 billion. In this context, strong production growth and a material reduction in operating cash costs contributed to a 15 per cent reduction in unit cash costs at Escondida. In contrast, the external influences of lower prices, inflation and foreign exchange variations reduced Underlying EBIT by US\$808 million. Payments associated with major planned maintenance programs at Escondida reduced Underlying EBIT by a further US\$103 million.

Revenue for Olympic Dam decreased by US\$273 million to US\$1.9 billion, primarily due to lower prices and reduced volumes. Price, grade and smelter availability contributed to the decrease in Underlying EBIT from US\$214 million in FY2012 to an Underlying EBIT loss of US\$4 million in FY2013.

#### 2.5.8 Iron Ore Business

#### Year ended 30 June 2014 compared with year ended 30 June 2013

An analysis of the financial performance of our Iron Ore Business for FY2014 compared to FY2013 is included in section 1.12.4.

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Financial information for the Iron Ore Business for FY2014 and FY2013 is presented below.

### Year ended

30 June 2014					Net	Ex	ploration	on
		Underlying		Underlying	operating	Capital	grossE	Exploration
US\$ million	Revenue (i)	<b>EBITDA</b>	D&A	<b>EBIT</b>	assets ex	penditure <sup>(ii)</sup>	(iii) t	o profit <sup>(iv)</sup>
Western Australia								
Iron Ore	21,013	12,988	1,429	11,559	22,278	2,947		
Samarco (v)	1,634	846	56	790	1,072	424		
Other (vi)		(54)		(54)	40			
<b>Total Iron Ore from</b>								
Group production	22,647	13,780	1,485	12,295	23,390	3,371		
Third party products (vii)	343	(3)		(3)				
<b>Total Iron Ore</b>	22,990	13,777	1,485	12,292	23,390	3,371	169	56
Statutory adjustments (viii)	(1,634)	(246)	(56)	(190)		(422)		
<b>Total Iron Ore statutory</b>								
result	21,356	13,531	1,429	12,102	23,390	2,949	169	56

# Year ended

# 30 June 2013

(Republished)					Net	Ex	plorat	ion
		Underlying		Underlying	operating	Capital	gross	Exploration
US\$ million	Revenue (i)	<b>EBITDA</b>	D&A	<b>EBIT</b>	assets ex	penditure <sup>(ii)</sup>	(iii)	to profit <sup>(iv)</sup>
Western Australia								
Iron Ore	18,452	11,668	1,004	10,664	21,074	5,979		
Samarco (v)	1,622	811	61	750	1,037	772		
Other (vi)		(84)		(84)	15			
Total Iron Ore from Group production	20,074	12,395	1,065	11,330	22,126	6,751		
Third party products (vii)	141	31		31				
Total Iron Ore	20,215	12,426	1,065	11,361	22,126	6,751	217	74
Statutory adjustments (viii)	(1,622)	(313)	(61)	(252)		(772)		

# Total Iron Ore statutory

result 18,593 12,113 1,004 11,109 22,126 5,979 217 74

- (i) Includes inter-segment revenue of US\$213 million (2013: US\$55 million).
- (ii) Capital expenditure in aggregate comprises US\$2,762 million growth and US\$187 million other (2013: US\$5,848 million growth and US\$131 million other).
- (iii) Includes US\$57 million capitalised exploration (2013: US\$143 million).
- (iv) Includes a reversal of US\$56 million of exploration expenditure previously written off as impaired (included in depreciation and amortisation) (2013: US\$ nil).
- (v) Samarco is an equity accounted investment and is reported on a proportionate consolidation basis (with the exception of net operating assets).
- (vi) Predominantly comprises divisional activities, business development and ceased operations.
- (vii) Includes inter-segment and external sales of contracted gas purchases.
- (viii) Includes statutory adjustments for Samarco to reconcile the proportionately consolidated business total to the statutory result. Statutory Underlying EBIT includes net finance costs of US\$87 million and taxation of US\$103 million (2013: net finance costs of US\$25 million and taxation of US\$227 million).

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#### Year ended 30 June 2013 compared with year ended 30 June 2012

Iron ore production increased by seven per cent in FY2013 to 170 Mt (BHP Billiton share). WAIO production of 187 Mt (100 per cent basis) represented a thirteenth consecutive annual production record. The delivery of WAIO s capital efficient growth program and continued strong operating performance across the supply chain contributed to this record result. The three pellet plants at Samarco continued to operate at capacity during the period.

Iron Ore revenue decreased by US\$2.0 billion to US\$18.6 billion in FY2013. Revenue for WAIO decreased US\$2.0 billion to US\$18.5 billion, a decrease of 9.9 per cent. Record sales volumes at WAIO, which increased 9.6 per cent, were more than offset by a 17 per cent fall in the average realised price of iron ore to US\$110 per tonne.

Underlying EBIT for FY2013 declined by US\$2.9 billion to US\$11.1 billion. The increased sales volumes at WAIO increased Underlying EBIT by US\$1.5 billion. However, this was more than offset by the fall in the average realised price of iron ore, which reduced Underlying EBIT by US\$3.6 billion, net of price-linked costs. WAIO s export volumes for FY2013 were sold on the basis of shorter term, market-based prices. Revenue for FY2013 reflected the average index price one month prior to the month of shipment, adjusted for product characteristics such as iron and moisture content. Approximately 65 per cent of shipments were delivered on a Cost and Freight (CFR) basis.

Increased operating cash costs associated with labour and contractor costs were the main contributor to the reduction in Underlying EBIT of US\$405 million during FY2013. This largely reflected our decision to invest in operating capability prior to the full commissioning and ramp-up of expanded capacity at WAIO. WAIO unit cash costs, including freight and royalty charges of US\$856 million and US\$1.2 billion, respectively, remained largely unchanged during FY2013.

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### 2.5.9 Coal Business

# Year ended 30 June 2014 compared with year ended 30 June 2013

An analysis of the financial performance of our Coal Business for FY2014 compared to FY2013 is included in section 1.12.5.

Financial information for the Coal Business for FY2014 and FY2013 is presented below.

#### Year ended

30 June 2014					Net		E	xploration
US\$ million	Revenue	Underlying EBITDA	D&A	Underlying EBIT		Capital expenditure	Exploration (i) gross	to profit
Queensland Coal	4,666	949	514	435	9,115	1,790	_	-
Illawarra (ii)	886	131	170	(39)	1,384	309		
Energy Coal South								
Africa (ii)	1,279	315	485	(170)	989	65		
New Mexico	520	105	46	59	202	26		
New South Wales								
Energy Coal (ii)	1,350	324	150	174	1,392	170		
Colombia (ii)	814	305	85	220	1,037	133		
Other (iii)		(166)	2	(168)	162	34		
Total Coal from Group production	9,515	1,963	1,452	511	14,281	2,527		
Third party products	456	18		18	19			
Total Coal	9,971	1,981	1,452	529	14,300	2,527	34	34
Statutory adjustments (iv)	(856)	(264)	(121)	(143)		(182)	)	
Total Coal statutory result	9,115	1,717	1,331	386	14,300	2,345	34	34

#### Year ended

30 June 2013

(Republished)					Net		Ex	ploration
		Underlying		Underlying	operating	Capital	<b>Exploration</b>	to
US\$ million	Revenue	<b>EBITDA</b>	D&A	<b>EBIT</b>	assets	expenditure	(i) gross	profit
Queensland Coal	4,452	627	376	251	7,988	2,771		
Illawarra (ii)	1,287	311	148	163	1,238	357		
Energy Coal South								
Africa (ii)	1,457	177	211	(34)	1,334	133		
New Mexico	588	95	49	46	164	28		
New South Wales								
Energy Coal (ii)	1,526	314	120	194	1,372	366		
Colombia (ii)	828	307	65	242	997	265		
Other (iii)		(158)	2	(160)	111	85		
Total Coal from Group production	10,138	1,673	971	702	13,204	4,005		
Third party products	585	44		44	21			
Total Coal	10,723	1,717	971	746	13,225	4,005	42	42
Statutory adjustments (iv)	(828)	(237)	(86)	(151)		(379)	(3)	(3)
Total Coal statutory result	9,895	1,480	885	595	13,225	3,626	39	39

<sup>(</sup>i) Capital expenditure in aggregate comprises US\$1,563 million growth and US\$782 million other (2013: US\$2,898 million growth and US\$728 million other).

<sup>(</sup>ii) Cerrejón, Newcastle Coal Infrastructure Group, Port Kembla Coal Terminal and Richards Bay Coal Terminal are equity accounted investments and are reported on a proportionate consolidation basis (with the exception of net operating assets).

<sup>(</sup>iii) Predominantly comprises divisional activities and greenfield projects.

<sup>(</sup>iv) Includes statutory adjustments for Cerrejón, Newcastle Coal Infrastructure Group, Port Kembla Coal Terminal and Richards Bay Coal Terminal to reconcile the proportionately consolidated business total to the statutory result. Statutory Underlying EBIT includes net finance income of US\$1 million and taxation of US\$81 million (2013: net finance income of US\$1 million and taxation of US\$99 million).

### Year ended 30 June 2013 compared with year ended 30 June 2012

Metallurgical coal production increased by 13 per cent in FY2013 to 38 Mt. A 19 per cent increase (100 per cent basis) in production at Queensland Coal was underpinned by record annual performance at both Peak Downs and South Walker Creek, and this was achieved despite the indefinite closure of Norwich Park and Gregory. In addition, Illawarra Coal achieved record annual production in FY2013.

Energy coal production increased by two per cent in FY2013 to 72 Mt, which included record annual production from New South Wales Energy Coal following the successful ramp-up of the RX1 project.

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Coal revenue for FY2013 decreased by US\$2.6 billion to US\$9.9 billion. Revenue at Queensland Coal decreased US\$1.4 billion to US\$4.5 billion, a decrease of 24.2 per cent. Volume increases at Queensland Coal were more than offset by the effect of decreases in average realised prices. Hard coking coal and weak coking coal prices fell 34 per cent and 31 per cent, respectively. Revenue at Energy Coal South Africa (BECSA) decreased by US\$437 million reflecting reduced production and decreased thermal coal prices, which fell 18 per cent during FY2013. Revenue at New South Wales Energy Coal and New Mexico Coal were in line with FY2012, with volume increases offset by reduced thermal coal prices.

Underlying EBIT for FY2013 declined by US\$2.0 billion to US\$595 million. The fall in hard coking coal, weak coking coal and thermal coal prices, reduced Underlying EBIT by US\$3.2 billion, net of price-linked costs. This was partially offset by increased sales volumes, operating cash cost savings and reduced exploration and business development expenses, which increased Underlying EBIT by US\$1.7 billion. A strong focus on contractor usage and rates and a significant reduction in consumables expenditure contributed to the substantial reduction in operating costs at Queensland Coal, as demonstrated by the 30 per cent decline in mine site unit cash costs at BMA.

During FY2013, the Daunia and Broadmeadow Life Extension projects (both Australia) delivered first production, ahead of schedule.

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# 2.5.10 Aluminium, Manganese and Nickel Business

# Year ended 30 June 2014 compared with year ended 30 June 2013

An analysis of the financial performance of our Aluminium, Manganese and Nickel Business for FY2014 compared to FY2013 is included in section 1.12.6.

Financial information for the Aluminium, Manganese and Nickel Business for FY2014 and FY2013 is presented below.

#### Year ended

<b>30 June 2014</b>					Net			
		Underlying	J	<b>Inderlying</b>				Exploration
US\$ million	Revenue (i)	EBITDA	D&A	EBIT		enditure <sup>(ii)</sup>	gross (iii)	to profit <sup>(iv)</sup>
Alumina	1,548	217	202	15	4,454	60		
Aluminium	2,398	178	145	33	1,790	41		
Intra-divisional								
adjustment	(659)							
	2 20=	20.7	o 4=	40	c 2 4 4	101		
	3,287	395	347	48	6,244	101		
Manganese	2,096	639	163	476	1,613	178		
Nickel West	1,605	(91)	117	(208)	534	163		
Cerro Matoso	595	104	94	10	860	56		
Other (v)		(36)	1	(37)	71			
TD								
Total Aluminium,								
Manganese and Nickel from								
Group production	7,583	1,011	722	289	9,322	498		
Group production	1 7,303	1,011	122	209	9,322	<b>4</b> 70		
Third party								
products	828	18		18				
F								
Total Aluminium,								
Manganese and								
Nickel	8,411	1,029	722	307	9,322	498	44	38
Statutory								
adjustments								
Total Aluminium								
Total Aluminium, Manganese and								
Nickel statutory								
result	8,411	1,029	722	307	9,322	498	44	38
icali	0,711	1,047	1 44	307	9,022	770	7-7	30

# Year ended

# 30 June 2013

(Republished)					Net	Ex	xploratio	n
		Underlying		Underlying	operating	Capital	gross	Exploration
US\$ million	Revenue (i)	EBITDA	D&A	EBIT		xpenditure <sup>(ii)</sup>	(iii)	to profit <sup>(iv)</sup>
Alumina	1,422	114	239	(125)	3,844	157		
Aluminium	2,620	88	127	(39)	2,154	27		
Intra-divisional								
adjustment	(638)							
	3,404	202	366	(164)	5,998	184		
Manganese	2,113	623	116	507	1,658	375		
Nickel West	1,773	(104)	210	(314)	123	280		
Cerro Matoso	803	235	79	156	955	50		
Other (v)		(79)	(14)	(65)	75	4		
Total Aluminium,								
Manganese and								
Nickel from Group								
production	8,093	877	757	120	8,809	893		
Third party								
products	1,185	38		38				
Total Aluminium,								
Manganese and								
Nickel	9,278	915	757	158	8,809	893	57	53
Statutory								
adjustments								
Total Aluminium,								
Manganese and								
Nickel statutory								
result	9,278	915	757	158	8,809	893	57	53

<sup>(</sup>i) Includes inter-segment revenue of US\$5 million (2013: US\$20 million).

<sup>(</sup>ii) Capital expenditure in aggregate comprises US\$43 million growth and US\$455 million other (2013: US\$285 million growth and US\$608 million other).

- (iii) Includes US\$6 million capitalised exploration (2013: US\$8 million).
- (iv) Includes US\$ nil exploration expenditure previously capitalised, written off as impaired (included in depreciation and amortisation) (2013: US\$4 million).
- (v) Predominantly comprises divisional activities and business development.

## Year ended 30 June 2013 compared with year ended 30 June 2012

Alumina production increased by 18 per cent in FY2013 to a record 4.9 Mt (BHP Billiton share), underpinned by the ramp-up of the Efficiency and Growth project at Worsley. Aluminium production increased by two per cent to 1.2 Mt (BHP Billiton share), with improved performance at our southern African smelters.

Total manganese ore production increased by seven per cent in FY2013 to a record 8.5 Mt (100 per cent basis) and reflected a substantial improvement in plant availability at GEMCO (Australia). Total manganese alloy volumes were largely unchanged from FY2012. The recovery in TEMCO (Australia) production that followed the temporary suspension of operations in the prior period was offset by the permanent closure of energy-intensive silicomanganese production at Metalloys in January 2012.

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Nickel production in FY2013 was largely unchanged from the prior period. Strong operating performance at Cerro Matoso was offset by planned maintenance at the Nickel West Kalgoorlie smelter and Kwinana refinery.

Aluminium, Manganese and Nickel revenue decreased by 6.4 per cent, or US\$633 million, to US\$9.3 billion. The reduction was primarily due to decreases at Nickel West of US\$270 million and from sales of third party products of US\$398 million. The decrease in revenue was mainly driven by lower realised prices across all parts of the Business. In this context, lower average realised prices for aluminium (down six per cent to US\$2,191 per tonne), alumina (down nine per cent to US\$302 per tonne), nickel (down 15 per cent to US\$16,319 per tonne) and manganese alloy (down 10 per cent to US\$1,051 per tonne) were only partially offset by an increase in the average realised price of manganese ore (up nine per cent to US\$4.83 per dry metric tonne unit).

Underlying EBIT for FY2013 increased by US\$182 million to US\$158 million. With productivity improvements already well advanced, consisting principally of the improvement plan at Worsley, substantial controllable cash cost savings of US\$442 million were achieved during the period, while a stronger US dollar increased Underlying EBIT by a further US\$243 million. In contrast, weaker markets continued to challenge the Business as lower average realised prices contributed to a US\$474 million reduction in Underlying EBIT, net of price-linked costs.

The US\$167 million (BHP Billiton share) GEEP2 expansion at GEMCO delivered first production during FY2013, ahead of schedule.

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## 2.5.11 Cash flow analysis

# Year ended 30 June 2014 compared with year ended 30 June 2013

An analysis of the cash flow for FY2014 compared to FY2013 is included in section 1.15.4.

## Year ended 30 June 2013 compared with year ended 30 June 2012

Year ended 30 June	2013 US\$M	2012 US\$M
Cash generated from operations	28,793	32,987
Dividends received	721	722
Net interest paid	(786)	(412)
Taxation paid	(8,574)	(8,038)
Net operating cash flows	20,154	25,259
Purchases of property plant and equipment	(22,243)	(18,637)
Exploration expenditure	(1,351)	(2,493)
Exploration expenditure expensed and included in operating cash flows	1,047	1,644
Purchases of intangibles	(400)	(219)
Investment in financial assets	(475)	(471)
Investment in subsidiaries, operations and jointly controlled entities		(12,556)
Investment in equity accounted investments	(84)	(83)
Net proceeds from investing activities	4,780	330
Net investing cash flows	(18,726)	(32,485)
Net proceeds (repayment of)/from interest bearing liabilities	7,157	8,644
Share buy-back		(83)
Dividends paid	(7,004)	(6,220)
Contribution from non-controlling interest	73	101
Other financing activities	(424)	(403)
Net financing cash flows	(198)	2,039
Net increase/(decrease) in cash and cash equivalents	1,230	(5,187)

Net operating cash flow of US\$20.2 billion declined by 20 per cent from US\$25.3 billion in FY2012. A decrease of US\$4.2 billion in cash flow generated from the operation, an increase of US\$374 million in net interest paid and an income tax refund of US\$530 million received in FY2012 were the major contributors to that decline.

A US\$13.8 billion reduction in net investing cash outflows to US\$18.7 billion primarily reflected the acquisition of Petrohawk Energy Corporation in the prior period and a US\$4.5 billion increase in proceeds from asset sales. Capital and exploration expenditure totalled US\$23.6 billion in FY2013. Expenditure on major growth projects was US\$18.7 billion, including US\$6.9 billion on Petroleum projects and US\$11.8 billion on Minerals projects. Capital expenditure

on sustaining and other items was US\$3.5 billion. Exploration expenditure was US\$1.4 billion, including US\$1.0 billion classified within net operating cash flows. The breakdown of capital and exploration expenditure by Business is set out in section 1.6.3.

Net financing cash flows included proceeds from borrowings of US\$9.2 billion and were partially offset by debt repayments of US\$2.0 billion and dividend payments to our shareholders of US\$6.2 billion. Proceeds from

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borrowings include the issuance of a two tranche Euro bond of 2.0 billion, a two tranche Sterling bond of £1.75 billion, an Australian dollar bond of A\$1.0 billion, a Euro bond of 750 million and a Canadian dollar bond of C\$750 million.

### 2.5.12 Net debt and sources of liquidity

## Gearing and net debt

Year ended 30 June 2014 compared with year ended 30 June 2013

An analysis of the gearing and net debt for FY2014 compared to FY2013 is included in section 1.15.5.

## Year ended 30 June 2013 compared with year ended 30 June 2012

Net debt, comprising Interest bearing liabilities less Cash and cash equivalents, was US\$27.5 billion, which represented an increase of US\$5.3 billion compared with the net debt position at 30 June 2012. Gearing, which is the ratio of net debt to net debt plus net assets, was 26.8 per cent at 30 June 2013, compared with 24.3 per cent at 30 June 2012. The primary reason for the increase in gearing during FY2013 was due to the issue of bonds during the period.

Cash at bank and in hand less overdrafts at 30 June 2013 was US\$5.7 billion compared with US\$4.5 billion at 30 June 2012. Included within this were short-term deposits at 30 June 2013 of US\$3.2 billion compared with US\$3.3 billion at 30 June 2012.

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# 3 Corporate Governance Statement

### 3.1 Governance at BHP Billiton

Dear Shareholder

Welcome to BHP Billiton s Corporate Governance Statement.

At BHP Billiton, we have a governance framework that goes beyond an interest in governance for its own sake or the need to comply with regulatory requirements. Instead, we believe that high-quality governance supports long-term value creation. Simply put, we think good governance is good business, and our approach is to adopt what we consider to be the better of the prevailing governance standards in Australia, the United Kingdom and the United States.

In the same spirit, we do not see governance as just a matter for the Board. Good governance is also the responsibility of executive management and is embedded throughout the organisation.

The diagram on the following page describes the governance framework at BHP Billiton. It shows the interaction between the shareholders and the Board, demonstrates how the Board Committee structure facilitates the interaction between the Board and the Chief Executive Officer (CEO) and illustrates the flow of delegation from shareholders. We have robust processes in place to ensure that the delegation flows through the Board and its committees to the CEO and Group Management Committee (GMC) and into the organisation. At the same time, accountability flows back upwards from the Company to shareholders. This process helps to ensure alignment with shareholders.

As part of our corporate planning cycle, we have embedded a range of scenarios that are reviewed annually and updated by the Group with the GMC s involvement. The scenarios, and the governance process supporting them, also form part of the Board agenda.

These scenarios provide a lens to assess the performance of our business portfolio. They include assumptions around carbon and commodity prices, currencies, costs and tax rates and ranges for a number of risks that face the Group, including climate change, global growth, levels of trade, geopolitical situation and technology focus. All of the scenarios are used to inform BHP Billiton s strategy and the resilience of our diversified asset portfolio over the short and long term.

Regardless of which direction the world may take, we will always be guided by *Our Charter* values, including our value of Sustainability, in how we operate our business, interact with our stakeholders and plan for the future.

As we set out later in this report, while the five committees have accountability for making recommendations to the Board on certain matters such as remuneration and sustainability, we ensure that all the Board members have oversight and the opportunity for full discussion of those issues through the committee report-out process to the full Board.

*Our BHP Billiton Charter* is core to the governance framework of BHP Billiton. It embodies our corporate purpose, strategy and values, and defines when we are successful. We foster a culture that values and rewards high ethical standards, personal and corporate integrity and respect for others.

We live the values of *Our Charter* and adhere to the standards of conduct required by our BHP Billiton *Code of Business Conduct*.

### **BHP** Billiton governance structure

## **Appointment of Mr Brinded**

We are focused on enhancing the diversity of perspective on the Board. We do this in a structured manner, looking out over a five-year period at the skills, backgrounds, knowledge, experience and diversity on the Board. The right blend of skills, experience and perspective is critical to ensuring the Board oversees BHP Billiton effectively for shareholders. As a result of this process, and as described in last year s Annual Report, we have been seeking additional upstream oil, gas and shale experience.

We are therefore pleased that Malcolm Brinded joined the Board as a Non-executive Director and member of the Sustainability Committee in April 2014. Mr Brinded served on the Board of Royal Dutch Shell plc between 2002 and 2012. During his 37-year career with Shell, he held leadership roles, including Executive Director of Exploration and Production, Executive Director of Upstream International and UK Country Chair and Managing Director. His appointment reflects the structured and rigorous approach to the Board s succession and planning.

### Ongoing renewal

As part of our ongoing renewal of the Board, we announced in August that David Crawford will be retiring from the Board after the forthcoming Annual General Meetings. Mr Crawford has been appointed Chairman-designate of the new company that BHP Billiton plans to form in a demerger. On behalf of all shareholders, I would like to thank him for his exceptional service to the Board and the Group over many years and wish him all the best for the future. It is also intended that Keith Rumble will become a Non-executive Director of the demerged company, and that he will retire from the BHP Billiton Board at or around the time the demerger is completed (currently scheduled for mid-2015).

In relation to gender diversity, the Board has set a goal of increasing the number of women on the Board to at least three. This remains our target, which we aim to achieve by the end of 2015. More details about the Board s diversity of skills and experience are set out in section 3.8 of this Annual Report.

### **Continuous improvement**

The Board has a commitment to ongoing improvement. This year, we conducted an externally facilitated review of the Board, and a range of improvements to the Board s work and effectiveness has been agreed, which are set out in section 3.11. In particular, the formalising of a focused strategy day built around scenarios and sign posts for future developments provides an opportunity for the Board to undertake a deeper dive into a range of strategic and long-term plans.

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I hope you find this description of our corporate governance useful and look forward to receiving any feedback that fellow shareholders may have.

### Jac Nasser AO

Chairman

11 September 2014

### 3.2 Board of Directors and Group Management Committee

## 3.2.1 Board of Directors

Jac Nasser AO, BBus, Hon DT, 66

Chairman and Independent Non-executive Director

Director of BHP Billiton Limited and BHP Billiton Plc since June 2006. Appointed Chairman of BHP Billiton Limited and BHP Billiton Plc on 31 March 2010.

*Skills and experience:* Following a 33-year career with Ford Motor Company in leadership positions in Europe, Australia, Asia, South America and the United States, Mr Nasser served as a member of the Board of Directors and as President and Chief Executive Officer of Ford Motor Company from 1998 to 2001. He has more than three decades of experience in large-scale global businesses and a decade of private equity investment and operating expertise.

## Other directorships and offices (current and recent):

Director of 21st Century Fox (since June 2013).

Consultant to One Equity Partners (since March 2013) (Partner from November 2002 until March 2010, Non-Executive Advisory Partner from March 2010 to March 2013).

Member of Australian Prime Minister s Business Advisory Council (since December 2013).

Member of the International Advisory Council of Allianz Aktiengesellschaft (since February 2001).

Former Director of British Sky Broadcasting Group plc (from November 2002 to November 2012). *Board Committee membership:* 

Chairman of the Nomination and Governance Committee.

Andrew Mackenzie BSc (Geology), PhD (Chemistry), 57

Non-independent

Director of BHP Billiton Limited and BHP Billiton Plc since May 2013. Mr Mackenzie was appointed Chief Executive Officer on 10 May 2013.

*Skills and experience:* Mr Mackenzie has over 30 years experience in oil and gas, petrochemicals and minerals. He joined BHP Billiton in November 2008 as Chief Executive Non-Ferrous. Prior to BHP Billiton, Mr Mackenzie worked at Rio Tinto, where he was Chief Executive of Diamonds and Minerals, and BP, where he held a number of senior roles, including Group Vice President for Technology and Engineering, and Group Vice President for Chemicals.

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Other directorships and offices (current and recent):

Director of the Grattan Institute (since May 2013).

Director of the International Council on Mining and Metals (since May 2013).

Former Non-executive Director of Centrica plc (from September 2005 to May 2013). *Board Committee membership:* 

None.

Malcolm Brinded CBE, MA, 61

Independent Non-executive Director

Director of BHP Billiton Limited and BHP Billiton Plc since April 2014.

*Skills and experience:* Malcolm has extensive experience in energy, governance and sustainability. He served as a member of the Board of Directors of Royal Dutch Shell plc from 2002 to 2012. During his 37-year career with Shell, he held various leadership positions in the United Kingdom, Europe, the Middle East and Asia, including Executive Director of Exploration and Production, Executive Director of Upstream International and Chairman and Upstream Managing Director of Shell UK.

Other directorships and offices (current and recent):

Director of CH2M Hill Companies, Ltd (since July 2012).

Director of Network Rail Ltd; Network Rail Infrastructure Ltd (since October 2010).

Former Director of Royal Dutch Shell plc (from July 2002 to March 2012, including as a Director of Royal Dutch Petroleum and Shell Transport and Trading Ltd prior to unification of Shell s corporate structure).

Former Director of Shell Petroleum N.V. (from July 2002 to March 2012).

Chairman of the Shell Foundation (since July 2009 and Trustee since June 2004).

Vice President of The Energy Institute, UK (since October 2013). *Board Committee membership:* 

Member of the Sustainability Committee.

Malcolm Broomhead MBA, BE, 62

Independent Non-executive Director

Director of BHP Billiton Limited and BHP Billiton Plc since March 2010.

Skills and experience: Mr Broomhead has extensive experience in running industrial and mining companies with a global footprint and broad global experience in project development in many of the countries in which BHP Billiton operates. Mr Broomhead was Managing Director and Chief Executive Officer of Orica Limited from 2001 until September 2005. Prior to joining Orica, Mr Broomhead held a number of senior positions at North Limited, including Managing Director and Chief Executive Officer and, prior to that, held senior management positions with Halcrow (UK), MIM Holdings, Peko Wallsend and Industrial Equity.

Other directorships and offices (current and recent):

Chairman of Asciano Limited (since October 2009).

Former Director of Coates Group Holdings Pty Ltd (from January 2008 to July 2013).

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## **Board Committee memberships:**

Member of the Sustainability Committee.

Member of the Finance Committee. **Sir John Buchanan** BSc, MSc (Hons 1), PhD, 71

Senior Independent Director, BHP Billiton Plc

Director of BHP Billiton Limited and BHP Billiton Plc since February 2003.

*Skills and experience:* Educated at Auckland, Oxford and Harvard, Sir John Buchanan has broad international business experience gained in large and complex international businesses. Sir John has substantial experience in the petroleum industry and knowledge of the international investor community. Sir John has held various leadership roles in commercial, strategic, financial, operational and marketing positions, including executive experience in different countries. Sir John is a former Executive Director and Group Chief Financial Officer of BP.

Other directorships and offices (current and recent):

Chairman of the International Chamber of Commerce (UK) (since May 2008).

Former Chairman of the UK Trustees for the Christchurch Earthquake appeal (from April 2011 to September 2014).

Former Chairman of Smith & Nephew Plc (from April 2006 to April 2014) and former Deputy Chairman (from February 2005 to April 2006).

Former Chairman of ARM Holdings Plc (UK) (from May 2012 to March 2014).

Former member of Advisory Board of Ondra Bank (from June 2009 to November 2013).

Former Deputy Chairman and Senior Independent Director of Vodafone Group Plc (from July 2006 to July 2012) and Director (from April 2003 to July 2012).

Former Director of AstraZeneca Plc (from April 2002 to April 2010).

**Board Committee memberships:** 

Chairman of the Remuneration Committee.

Member of the Nomination and Governance Committee.

Carlos Cordeiro AB, MBA, 58

Independent Non-executive Director

Director of BHP Billiton Limited and BHP Billiton Plc since February 2005.

*Skills and experience:* Mr Cordeiro brings to the Board more than 30 years experience in providing strategic and financial advice to corporations, financial institutions and governments around the world. Mr Cordeiro was previously Partner and Managing Director of Goldman Sachs Group Inc and Vice Chairman of Goldman Sachs (Asia) LLC.

Other directorships and offices (current and recent):

Non-executive Advisory Director of The Goldman Sachs Group Inc (since December 2001).

Non-executive Vice Chairman of Goldman Sachs (Asia) LLC (since December 2001).

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## **Board Committee membership:**

Member of the Remuneration Committee. **David Crawford** AO, BComm, LLB, FCA, FCPA, 70

Independent Non-executive Director

Director of BHP Limited since May 1994. Director of BHP Billiton Limited and BHP Billiton Plc since June 2001.

*Skills and experience:* Mr Crawford has extensive experience in risk management and business reorganisation. He has acted as a consultant, scheme manager, receiver and manager and liquidator to very large and complex groups of companies. Mr Crawford was previously Australian National Chairman of KPMG, Chartered Accountants.

Mr Crawford is the Chairman-designate of the new company that BHP Billiton plans to form in the proposed demerger. Mr Crawford will retire from the BHP Billiton Board in November 2014.

Other directorships and offices (current and recent):

Chairman of Australia Pacific Airports Corporation Limited (since May 2012).

Chairman of Lend Lease Corporation Limited (since May 2003) and Director (since July 2001).

Former Chairman (from November 2007 to December 2011) and former Director (from August 2001 to December 2011) of Foster s Group Limited.

**Board Committee membership:** 

Chairman of the Finance Committee. **Pat Davies** BSc (Mechanical Engineering), 63

Independent Non-executive Director

Director of BHP Billiton Limited and BHP Billiton Plc since June 2012.

Skills and experience: Mr Davies has broad experience in the natural resources sector across a number of geographies, commodities and markets. From July 2005 until June 2011, Mr Davies was Chief Executive of Sasol Limited, an international energy, chemical and mining company with operations in 38 countries and listings on the Johannesburg and New York stock exchanges. Mr Davies began his career at Sasol in 1975 and held a number of diverse roles, including managing the group soil and gas businesses, before becoming Chief Executive in July 2005. He is a former Director of various Sasol Group companies and joint ventures.

Other directorships and offices (current and recent):

Former Director (from August 1997 to June 2011) and Chief Executive (from July 2005 to June 2011) of Sasol Limited.

Board Committee membership:

Member of the Remuneration Committee. **Carolyn Hewson** AO, BEc (Hons), MA (Econ), 59

Independent Non-executive Director

Director of BHP Billiton Limited and BHP Billiton Plc since March 2010.

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Skills and experience: Ms Hewson is a former investment banker and has over 30 years experience in the finance sector. Ms Hewson was previously an Executive Director of Schroders Australia Limited and has extensive financial markets, risk management and investment management expertise. Ms Hewson is a former Director of BT Investment Management Limited, Westpac Banking Corporation, AMP Limited, CSR Limited, AGL Energy Limited, the Australian Gas Light Company, South Australian Water and the Economic Development Board of South Australia.

Other directorships and offices (current and recent):

Member of Australian Federal Government Financial Systems Inquiry (since January 2014).

Director of Stockland Group (since March 2009).

Member of the Advisory Board of Nanosonics Limited (since June 2007).

Former Director of BT Investment Management Limited (from December 2007 to December 2013).

Former Director and Patron of the Neurosurgical Research Foundation (from April 1993 to December 2013).

Former Trustee and Chairman of Westpac Buckland Fund (from January 2011 to December 2013) and Chairman of Westpac Matching Gifts Limited (from August 2011 to December 2013), together known as the Westpac Foundation.

Former Director of Westpac Banking Corporation (from February 2003 to June 2012). **Board Committee memberships:** 

Member of the Risk and Audit Committee.

Member of the Remuneration Committee. **Lindsay Maxsted** DipBus (Gordon), FCA, FAICD, 60

Independent Non-executive Director

Director of BHP Billiton Limited and BHP Billiton Plc since March 2011.

*Skills and experience:* Mr Maxsted is a corporate recovery specialist who has managed a number of Australia s largest corporate insolvency and restructuring engagements and, until 2011, continued to undertake consultancy work in the restructuring advisory field. He was the Chief Executive Officer of KPMG Australia between 2001 and 2007. Mr

Maxsted is the Board s nominated audit committee financial expert for the purposes of the US Securities and Exchange Commission Rules, and the Board is satisfied that he has recent and relevant financial experience for the purposes of the UK Financial Conduct Authority s Disclosure and Transparency Rules and the UK Corporate Governance Code.

Other	directorshi	ins and	offices	(current and	recent):
O thick	will color bitt	ps with	0,1,10005	(	

Chairman of Westpac Banking Corporation (since December 2011) and a Director (since March 2008).

Chairman of Transurban Group (since August 2010) and a Director (since March 2008).

Director and Honorary Treasurer of Baker IDI Heart and Diabetes Institute (since June 2005). *Board Committee membership:* 

Chairman of the Risk and Audit Committee.

Member of the Finance Committee.

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Wayne Murdy BSc (Business Administration), CPA, 70

Independent Non-executive Director

Director of BHP Billiton Limited and BHP Billiton Plc since June 2009.

*Skills and experience:* Mr Murdy has a background in finance and accounting, where he has gained comprehensive experience in the financial management of mining, oil and gas companies during his career with Getty Oil, Apache Corporation and Newmont Mining Corporation. He served as the Chief Executive Officer of Newmont Mining Corporation from 2001 to 2007 and Chairman from 2002 to 2007. Mr Murdy is also a former Chairman of the International Council on Mining and Metals, a former Director of the US National Mining Association and a former member of the Manufacturing Council of the US Department of Commerce.

Other directorships and offices (current and recent):

Director of Weyerhaeuser Company (since January 2009).

Former Director of Qwest Communications International Inc (from September 2005 to April 2011). *Board Committee memberships:* 

Member of the Risk and Audit Committee.

Member of the Finance Committee. **Keith Rumble** BSc, MSc (Geology), 60

Independent Non-executive Director

Director of BHP Billiton Limited and BHP Billiton Plc since September 2008.

Skills and experience: Mr Rumble was previously Chief Executive Officer of SUN Mining, a wholly owned entity of the SUN Group, a principal investor and private equity fund manager in Russia, India and other emerging and transforming markets. Mr Rumble has over 30 years—experience in the resources industry, specifically in titanium and platinum mining, and is a former Chief Executive Officer of Impala Platinum (Pty) Ltd and former Chief Executive Officer of Rio Tinto Iron and Titanium Inc in Canada. Mr Rumble began his career at Richards Bay Minerals in 1980 and held various management positions before becoming Chief Executive Officer in 1996.

It is intended that Mr Rumble will become a Non-executive Director of the new company that BHP Billiton plans to form in the proposed demerger. M