

Financial Services Guide and Independent Expert's Report in relation to the proposed Demerger of South32 from BHP Billiton

This Report is not a prospectus. Any investment decision in relation to South32 should be made on the basis of the information contained in the South32 Listing Document.

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GRANT SAMUEL & ASSOCIATES

Financial Services Guide

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Grant Samuel had no part in the formulation of the Demerger proposal. Its only role has been the preparation of this report.

Grant Samuel will receive a fixed fee of US\$1.95 million for the preparation and publication of this report. This fee is not contingent on the conclusions reached or the outcome of the Demerger Proposal. Grant Samuel's out of pocket expenses in relation to the preparation of the report will be reimbursed. Grant Samuel will receive no other benefit for the preparation of this report.

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1 Details of the Proposed Demerger

BHP Billiton Limited and BHP Billiton Plc (collectively "BHP Billiton") operate as a single group under a dual listed company structure. BHP Billiton is a leading global resources company, with world class assets in its core iron ore, copper, coal and petroleum¹ businesses.

On 19 August 2014, BHP Billiton announced its intention to pursue a demerger of certain non-core assets into a separately listed, standalone company ("Demerger"). Following an extensive evaluation process, the BHP Billiton board has resolved to proceed with the Demerger.

The assets to be demerged ("Demerger Assets") are as follows:

- bauxite/alumina/aluminium assets: interests in the MRN bauxite mine and the Alumar alumina refinery and aluminium smelter in Brazil, the Worsley alumina refinery and associated bauxite mine in Western Australia, and the Aluminium South Africa and Mozal aluminium smelters in Southern Africa;
- manganese assets: interests in the Hotazel manganese mines and the Metalloys manganese alloy plant in South Africa, and the GEMCO manganese mine and TEMCO manganese alloy plant in Australia;
- the Cannington silver/lead/zinc mine in Queensland, Australia;
- the Illawarra Coal metallurgical coal operations in New South Wales, Australia;
- energy coal mines in South Africa; and
- the Cerro Matoso nickel mining, smelting and refining operation in Colombia.

Following the Demerger, BHP Billiton will be focussed on its large and long life iron ore, copper, coal, petroleum and potash assets. It will also retain several assets that are currently the subject of ownership reviews or are considered non-core (Nickel West, New Mexico Coal and certain smaller petroleum assets). BHP Billiton will retain its dual listed company structure and its shares will continue to be traded on the Australian Securities Exchange ("ASX") and the London Stock Exchange ("LSE"). It will retain the BHP Billiton name ("New BHP Billiton" has been used to describe BHP Billiton following the Demerger for the purpose of this report).

The Demerger Assets will be consolidated in a BHP Billiton subsidiary that has been renamed South32 Limited ("South32"). South32 is a conventional company (i.e. it is not a dual listed company) incorporated in Australia. Following the Demerger, South32 will have a primary listing on the ASX and its shares will also be traded on the LSE and the Johannesburg Stock Exchange ("JSE"). There will be no cross-shareholding between New BHP Billiton and South32, and New BHP Billiton and South32 will operate independently of each other apart from certain transitional arrangements.

The Demerger is to be effected via an in-specie distribution of South32 shares by way of dividend to shareholders in both BHP Billiton Limited and BHP Billiton Plc. Immediately following the Demerger, BHP Billiton shareholders will hold one South32 share for every BHP Billiton share held².

Although there is no regulatory requirement for shareholder approval, the BHP Billiton board has resolved to seek the approval of BHP Billiton shareholders for the Demerger.

¹ BHP Billiton's Petroleum business includes the Jansen potash project, currently under development.

² Shareholders in ineligible foreign jurisdictions will not be entitled to receive South32 shares under the Demerger.

2 Scope of the Report

2.1 Purpose of the Report

Although there is no regulatory requirement for shareholder approval pursuant to the Australian Corporations Act, the ASX Listing Rules, the United Kingdom Companies Act or the UK Listing Authority ("UKLA") Listing Rules, the BHP Billiton board has resolved to seek the approval of BHP Billiton shareholders for the Demerger. Similarly, although there is no requirement in the present circumstances for an independent expert's report, the directors of BHP Billiton have engaged Grant Samuel & Associates Pty Limited ("Grant Samuel") to prepare an independent expert's report setting out whether, in its opinion, the Demerger is in the best interests of BHP Billiton shareholders and to state reasons for that opinion. Grant Samuel has also been requested to give its opinion as to whether the dividend by which South32 shares will be distributed to BHP Billiton shareholders will materially prejudice BHP Billiton's ability to pay its creditors.

A concise version of the report accompanies the Shareholder Circular sent to shareholders by BHP Billiton. The full report is available on the BHP Billiton website (<u>http://www.bhpbilliton.com</u>) and will be mailed to shareholders on request. Both reports have been submitted to the Australian Securities and Investments Commission ("ASIC"), the UKLA and the JSE.

This report is general financial product advice only and has been prepared without taking into account the objectives, financial situation or needs of individual BHP Billiton shareholders. Accordingly, before acting in relation to their investment, shareholders should consider the appropriateness of the advice having regard to their own objectives, financial situation or needs. Shareholders should read the Shareholder Circular issued by BHP Billiton in relation to the Demerger.

Voting for or against the Demerger is a matter for individual shareholders based on their views as to value, their expectations about future market conditions and their particular circumstances including risk profile, liquidity preference, investment strategy, portfolio structure and tax position. Shareholders who are in doubt as to the action they should take in relation to the Demerger should consult their own professional adviser.

Similarly, it is a matter for individual shareholders as to whether to buy, hold or sell securities in BHP Billiton, New BHP Billiton or South32. These are investment decisions upon which Grant Samuel does not offer an opinion and are independent of a decision on whether to vote for or against the Demerger. Shareholders should consult their own professional adviser in this regard.

2.2 Basis of Evaluation

There is no legal definition of the expression "in the best interests". However, ASIC has issued Regulatory Guide 111 which establishes guidelines in respect of independent expert's reports. ASIC Regulatory Guide 111 differentiates between the analysis required for control transactions and other transactions. In the context of control transactions (whether by takeover bid, by scheme of arrangement, by the issue of securities or by selective capital reduction or buyback), the expert is required to distinguish between "fair" and "reasonable". A proposal that was "fair and reasonable" or "not fair but reasonable" would be in the best interests of shareholders.

For most other transactions the expert is to weigh up the advantages and disadvantages of the proposal for shareholders. This involves a judgement on the part of the expert as to the overall commercial effect of the proposal, the circumstances that have led to the proposal and the alternatives available. The expert must weigh up the advantages and disadvantages of the proposal and form an overall view as to whether the shareholders are likely to be better off if the proposal is implemented than if it is not. If the advantages outweigh the disadvantages, the proposal would be in the best interests of shareholders.

The Demerger is not a control transaction. Accordingly, Grant Samuel has evaluated the Demerger by assessing its overall impact on the shareholders of BHP Billiton and formed a

judgement as to whether the expected benefits outweigh any disadvantages and risks that might result.

In forming its opinion as to whether the Demerger is in the best interests of BHP Billiton shareholders, Grant Samuel has considered the following:

- the impact on business operations if the Demerger proceeds;
- the effect of the Demerger on the financial position of New BHP Billiton and South32;
- the likely impact on the market value of shareholders' interests and the market for shares in the demerged companies generally;
- any other advantages and benefits arising from the Demerger; and
- the costs, disadvantages and risks of the Demerger.

In forming its opinion as to whether the Demerger Dividend materially prejudices BHP Billiton's ability to pay its existing creditors, Grant Samuel has considered the following:

- the effect of the Demerger Dividend on the asset base, financial position, financial performance and prospects of New BHP Billiton;
- the impact of the Demerger Dividend on the credit rating of New BHP Billiton; and
- the debt facilities available to New BHP Billiton after the Demerger Dividend.

2.3 Sources of the Information

The following information was utilised and relied upon, without independent verification, in preparing this report:

Publicly Available Information

- the Shareholder Circular (including earlier drafts);
- the South32 Listing Document (including earlier drafts);
- annual reports of BHP Billiton for the five years ended 30 June 2014;
- the Interim Results announcement of BHP Billiton for the six months ended 31 December 2014;
- press releases, public announcements, media and analyst presentation material and other public filings by BHP Billiton including information available on its website;
- brokers' reports and recent press articles on BHP Billiton; and
- sharemarket data and related information on Australian and international listed companies engaged in the mining industry.

Non Public Information provided by BHP Billiton

- presentations and board papers regarding the Demerger process;
- presentations and board papers about the benefits, costs, and risks associated with the Demerger;
- business plan, financial analysis and assessments of the financial robustness of South32; and
- presentations and board papers on the impact of the Demerger on New BHP Billiton.

In preparing this report, representatives of Grant Samuel have held discussions with and obtained information from senior management and Directors of, and advisers to, BHP Billiton.

2.4 Limitations and Reliance on Information

Grant Samuel believes that its opinion must be considered as a whole and that selecting portions of the analysis or factors considered by it, without considering all factors and analyses together, could create a misleading view of the process employed and the conclusions reached. Any attempt to do so could lead to undue emphasis on a particular factor or component of the analysis. The preparation of an opinion is a complex process and is not necessarily susceptible to partial analysis or summary.

Grant Samuel's opinion is based on economic, sharemarket, business trading, financial and other conditions and expectations prevailing at the date of this report. These conditions can change significantly over relatively short periods of time. If they did change materially subsequent to the date of this report, the opinion could be different in these changed circumstances.

This report is also based upon financial and other information provided by BHP Billiton and its advisers. Grant Samuel has considered and relied upon this information. BHP Billiton has represented in writing to Grant Samuel that to its knowledge the information provided by it was then, and is now, in all material respects, complete, correct and not misleading. Grant Samuel has no reason to believe that any material facts have been withheld.

The information provided to Grant Samuel has been evaluated through analysis, inquiry and review to the extent that it considers necessary or appropriate for the purposes of forming an opinion as to whether the Demerger in the best interests of BHP Billiton shareholders. However, Grant Samuel does not warrant that its inquiries have identified or verified all of the matters that an audit, extensive examination or "due diligence" investigation might disclose. While Grant Samuel has made what it considers to be appropriate inquiries for the purposes of forming its opinion, "due diligence" of the type undertaken by companies and their advisers in relation to, for example, prospectuses or profit forecasts, is beyond the scope of an independent expert.

Accordingly, this report and the opinions expressed in it should be considered more in the nature of an overall review of the anticipated commercial and financial implications rather than a comprehensive audit or investigation of detailed matters.

An important part of the information used in forming an opinion of the kind expressed in this report consists of the opinions and judgement of management. This type of information was also evaluated through analysis, inquiry and review to the extent practical. However, such information is often not capable of external verification or validation.

Preparation of this report does not imply that Grant Samuel has audited in any way the management accounts or other records of BHP Billiton. It is understood that the accounting information that was provided was prepared in accordance with generally accepted accounting principles and in a manner consistent with the method of accounting in previous years (except where noted).

The information provided to Grant Samuel included pro forma income statements for the years ended 30 June 2012, 2013 and 2014 and the six months ended 31 December 2014 and pro forma balance sheets as at 31 December 2014 for New BHP Billiton and South32 (the "pro forma financial information"). BHP Billiton is responsible for this financial information.

The pro forma financial information was subject to review by the Independent Accountant, KPMG. The Independent Accountant's report is set out in Section 9 of the Shareholder Circular. On this basis, Grant Samuel considers that there are reasonable grounds to believe that the pro forma financial information as presented in the Shareholder Circular has been prepared on a reasonable basis.



In forming its opinion, Grant Samuel has also assumed that:

- matters such as title, compliance with laws and regulations and contracts in place are in good standing and will remain so and that there are no material legal proceedings, other than as publicly disclosed;
- the assessments by BHP Billiton with regard to legal, regulatory, tax and accounting matters relating to the transaction are accurate and complete;
- the information set out in the Shareholder Circular sent by BHP Billiton to its shareholders is complete, accurate and fairly presented in all material respects;
- the publicly available information relied on by Grant Samuel in its analysis was accurate and not misleading;
- the Demerger will be implemented in accordance with its terms; and
- the legal mechanisms to implement the Demerger are correct and will be effective.

To the extent that there are legal issues relating to assets, properties, or business interests or issues relating to compliance with applicable laws, regulations, and policies, Grant Samuel assumes no responsibility and offers no legal opinion or interpretation on any issue.

3 **Profile of BHP Billiton**

3.1 Background

BHP Billiton is a leading global resources company and one of the world's largest producers of iron ore, copper and coal. BHP Billiton was created through the merger of BHP Limited ("BHP") (now BHP Billiton Limited) and Billiton Plc ("Billiton") (now BHP Billiton Plc), effected by way of a dual listed company structure in June 2001. For the year ended 30 June 2014 ("FY14"), BHP Billiton generated revenue of US\$67.2 billion, EBITDA of US\$32.4 billion and EBIT of US\$22.9 billion^{3,4}. As at 6 March 2015, BHP Billiton had a market capitalisation of approximately US\$130 billion⁵.

The origins of Billiton and BHP date back to the mid to late 1800s. Billiton began with a tin mine on Billiton (Belitung) island in Indonesia in the mid-1880s. BHP's history commenced in 1885 with the development of a silver, lead and zinc mine in Broken Hill. By the time of the merger, Billiton had assembled a portfolio of aluminium and alumina, chrome, manganese, nickel, titanium, energy coal, steel and some copper assets. BHP had a portfolio of iron ore, copper, oil and gas, diamonds, silver, lead, zinc, coal and other minerals assets, having spun off part of its flat steel products business in 2000. Key events since the merger have included:

	BHP Billiton Background
Date	Event
2002	Demerger of the remaining flat steel products business to form BHP Steel (now Bluescope Steel) Exit from Ok Tedi copper mine in Papua New Guinea
2003	US\$1.1 billion investment commitment for the development of the Atlantis oil discovery in Gulf of Mexico
2004	Approval of the US\$870 million Escondida Sulphide Leach Copper Project and US\$990 million Spence Copper Project in Chile
2005	Acquisition of ASX-listed WMC Resources Limited, owner of Olympic Dam, nickel operations in Western Australia and a fertilizer business in Queensland
2006	Disposal of coal bed methane interests to The Australian Gas Light Company
2007	Acquisition of an interest in the Genghis Khan oil and gas development in the Gulf of Mexico
2008	Announcement and withdrawal of a takeover bid for Rio Tinto
2010	Withdrawal of the US\$40 billion offer for Potash Corporation of Saskatchewan Acquisition of Athabasca Potash Inc. in Canada for \$US320 million
2011	Acquisition of Chesapeake Energy Corporation's Fayetteville USA shale assets for US\$4.75 billion Acquisition of Petrohawk Energy Corporation for US\$15.1 billion
2012	Sale of the diamonds business
2013	Approval of a capital investment plan of US\$2.6 billion over three years at the Jansen Potash project Approval of the construction of a sea water desalination facility at Escondida
2014	Announcement of intention to pursue the Demerger
Source: B	HP Billiton

Source: BHP Billiton

EBITDA is earnings before depreciation, amortisation, impairments, net finance costs, taxation and exceptional items. EBIT is earnings before net finance costs, taxation and exceptional items. References to EBITDA and EBIT in this report relate to Underlying EBITDA and Underlying EBIT unless otherwise specified and reflect BHP Billiton's or South32's accounting policies as appropriate.

Sourced from the 2014 BHP Billiton annual report.

⁵ Combined market capitalisation of BHP Billiton Limited and BHP Billiton Plc.

3.2 **Business Operations and Strategy**

BHP Billiton has interests in 41 assets, located in 13 countries, across a broad range of commodities:



Source: BHP Billiton

Note: Bubble areas denote FY14 EBITDA⁶. Assets with EBITDA of US\$250 million or less are represented by bubbles of the same area. Exploration, appraisal, early stage development and certain non-core petroleum assets are not represented.

These assets are grouped under the following five business segments:

- Petroleum and Potash: interests in shale oil and gas in the United States, offshore oil and gas fields in the Gulf of Mexico, the Bass Strait and North West Shelf in Australia, and various other oil and gas fields across the world. BHP Billiton is also developing the large Jansen potash project (100%) in Canada;
- Copper: interests in Escondida, the world's largest copper producing mine (57.5%), and Pampa Norte (100%) in Chile, Antamina (33.8%) in Peru, the Olympic Dam copper/gold/uranium mine (100%) in Australia and the Cannington silver/lead/zinc mine (100%) in Australia;
- Iron Ore: 225mtpa⁷ integrated mine, rail and port iron ore operations in Western Australia ("WAIO", 85%) and Samarco operations (50%) consisting of a mine, three concentrators and four pellet plants with a pellet production capacity of 30.5mtpa in Brazil;
- Coal: interests in metallurgical coal operations in Australia (the BHP Billiton Mitsubishi Alliance ("BMA") (50%) and BHP Billiton Mitsui Coal ("BMC") (80%) (together "Queensland Coal") and Illawarra Coal (100%)) and in energy coal operations in Australia (New South Wales Energy Coal, 100%), Colombia (Cerrejon, 33.3%), South Africa (Energy Coal South Africa ("BECSA"), 90%) and the United States (New Mexico Coal, 100%); and
- Aluminium, Manganese and Nickel:
 - aluminium smelter and casthouse in South Africa (100%), Mozal aluminium smelter in Mozambique (47.1%), Worsley integrated bauxite mine and alumina refinery in Australia (86%), Alumar alumina refinery and aluminium smelter (36% and 40% respectively) and MRN bauxite mine (14.8%) in Brazil;

The following FY14 EBITDA (reflecting BHP Billiton's accounting policies) were used to derive the area of the bubbles: WAIO: US\$12,988m; Escondida: US\$4,754m; Shenzi, Mad Dog and Atlantis: US\$2,859m; Onshore US: US\$2,270m; North West Shelf: US\$1,599m; Bass Strait: US\$1,555m; Pyrenees and Macedon: US\$1,042m; Queensland Coal: US\$949m; Samarco: US\$846m; Antamina: US\$818m, Pampa Norte: US\$785m; Cannington: US\$459m; ROD: US\$396m; Angostura: US\$375m; New South Wales Energy Coal: US\$324m; BECSA: US\$315m; Cerrejon: US\$305m; Olympic Dam: US\$299m; GEMCO: US\$487m.

Based on FY14 production (100%)

- interests in manganese mining ("GEMCO", 60%) and alloying ("TEMCO", 60%) in Australia and manganese mining (44%) and alloying (60%) in South Africa; and
- Cerro Matoso integrated nickel mining and smelting operations in Colombia (99.9%) and Nickel West operations in Australia (100%).

BHP Billiton's assets are described in more detail in the Appendix.

BHP Billiton's share of production for the three years ended 30 June 2014 and the six months ended 31 December 2014 is as follows:

BHP Billiton – Share of Production ⁸						
	2012	Year ended 30 Ju 2013	ne2014	Six months ended 31 December 2014		
Petroleum (mmboe)	2012	236	246	131		
Copper (kt)	1,094	1,209	1,237	578		
Iron ore (kt)	159,478	169,856	202,235	112,425		
Metallurgical coal (kt)	31,891	36,237	43,416	25,441		
Energy coal (kt)	70,939	69,282	70,454	34,807		
Alumina (kt)	4,152	4,880	5,178	2,633		
Aluminium (kt)	1,153	1,179	1,174	517		
Manganese ore (kt)	4,193	4,566	4,431	2,412		
Manganese alloys (kt)	361	365	388	223		
Nickel (kt)	158	154	143	70		

Source: BHP Billiton and Grant Samuel analysis

Note: Petroleum production excludes fuel and flare.

The diversity of BHP Billiton's asset portfolio is illustrated by the breakdown of revenue by commodity, geography and market set out below:



Source: BHP Billiton

Note: Revenue by commodity and geography (i.e. location of assets) excludes revenue from the sale of third party products and statutory adjustments. Revenue by market (i.e. location of the customers) includes revenue from the sale of third party products and statutory adjustments.

⁸ Represents BHP Billiton's equity share of production. As BHP Billiton reports 100% of the production from certain assets it does not wholly-own, the data set out in this table may differ from data shown in BHP Billiton's annual reports. This applies to Escondida, Jimblebar, BMC, BECSA, Hotazel, GEMCO, Metalloys and TEMCO.



The iron ore, petroleum, copper and coal businesses account for the vast majority of BHP Billiton's revenue and earnings. On a combined basis, they contributed 89% of revenue, 97% of EBITDA and virtually all of the EBIT in FY14⁹. At an individual asset level, BHP Billiton's eleven largest contributors in terms of EBITDA accounted for 73% of the group's revenue and 88% of its EBITDA in FY14⁹:



Source: BHP Billiton

Note: Excludes revenue from sale of third party products and statutory adjustments.

⁹ Pre statutory adjustments and revenue from sale of third party products.

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3.3 Financial Performance

The financial performance of BHP Billiton for the three years ended 30 June 2014 and the six months ended 31 December 2014 is summarised below:

BHP Billiton - Financial I	Performanc	e (US\$ mil	lions)		
	Year ended 30 June			Six months to 31 December	
	2012	2013	2014	2014	
Revenue	70,477	65,953	67,206	29,900	
EBITDA	34,617	30,308	32,359	14,494	
Depreciation, amortisation and impairment	(6,531)	(7,378)	(9,498)	(5,268)	
EBIT	28,086	22,930	22,861	9,226	
Net finance expense	(668)	(1,276)	(1,176)	(232)	
Exceptional items	(3,486)	(1,928)	(551)	(409)	
Operating profit before tax	23,932	19,726	22,236	8,585	
Income tax expense	(7,315)	(6,906)	(7,012)	(3,792)	
Operating profit after tax	16,617	12,820	15,224	4,793	
Non-controlling interests	(1,144)	(1,597)	(1,392)	(528)	
NPAT ¹⁰ attributable to BHP Billiton shareholders	15,473	11,223	13,832	4,265	
Statistics					
Basic earnings per share (US cents)	291	211	260	80	
Dividends per share declared for the period (US cents)	112	116	121	62	
Dividend payout ratio (%)	39	55	47	77	
Revenue growth (%)	(2)	(6)	2	n.a.	
EBITDA growth (%)	(7)	(12)	7	n.a.	
EBIT growth (%)	(12)	(18)	0	n.a.	
EBITDA margin (%) ¹¹	49	43	47	48	
EBIT margin (%) ¹¹	39	33	33	31	

Source: BHP Billiton and Grant Samuel analysis

Notwithstanding a steady increase in production at its major operations, BHP Billiton's revenue and earnings have fluctuated, reflecting global economic volatility and movements in commodity prices over the period.

In FY13 and FY14, BHP Billiton's earnings were particularly affected by the downward pressure on commodity prices resulting from increased global supply and moderating demand growth. This pricing pressure was in part offset by a reduction in operating costs and enhanced productivity efficiencies at existing assets and an increase in production volumes following the successful commissioning of several development projects. The recent fall in commodity prices, in particular iron ore and oil, has significantly affected BHP Billiton's financial performance over the six months ended 31 December 2014.

¹⁰ NPAT is net profit after tax.

¹¹ The EBITDA and EBIT margins are based on EBITDA and EBIT including the contribution from the sale of third party products, other income and the share of operating profit/(loss) of equity accounted investments, divided by revenue plus other income.

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BHP Billiton – Exceptional Items (US\$ millions)							
	Yea	Six months to 31 December					
	2012	2013	2014	2014			
Profit on sale of assets	-	3,171	551	-			
Impairment of goodwill and other assets	(3,663)	(5,149)	-	(409)			
Restructuring costs	(40)	(108)	-	-			
Closure and rehabilitation provisions released	-	158	-	-			
Idle capacity costs and inventory write downs	(83)	-	-	-			
Insurance recoveries	300	-	-	-			
Total	(3,486)	(1,928)	551	(409)			

Over this period, BHP Billiton has reported a range of exceptional items as summarised below:

Source: BHP Billiton

The US\$409 million impairment for the six months ended 31 December 2014 relates to Nickel West. The major exceptional item in FY14 was the gain on the sale of the Pinto Valley mining operation. For FY13, gains on the sales of the Yeelirrie uranium deposit, Richards Bay Minerals and East and West Browse Joint Ventures were more than offset by significant charges relating to the impairment of the Nickel West and Worsley assets. The major asset impairment for FY12 related to the Fayetteville shale gas assets.

Despite the fluctuations in earnings over the period, BHP Billiton's dividend per share has increased each year, although the payout ratio declined in FY14. BHP Billiton has generated sufficient earnings in Australia to pay fully franked dividends to its BHP Billiton Limited shareholders and had accumulated franking credits of US\$13,390 million as at 30 June 2014.

Outlook

BHP Billiton has not publicly released earnings forecasts for the year ending 30 June 2015 or beyond. However, BHP Billiton has announced that it expects production from its core portfolio of assets to grow by 23% over the two years ending 30 June 2015¹² as the company completes a number of high return, brownfield projects and consolidates productivity gains. BHP Billiton is targeting a minimum of US\$4.0 billion in additional annualised pre-tax earnings by the end of FY17 from productivity gains in its core portfolio, including more than US\$2.6 billion of cash cost savings.

¹² Production from BHP Billiton's core portfolio grew by 15% in FY14.



3.4 Financial Position

The financial position of BHP Billiton as at 31 December 2014 is summarised below:

BHP Billiton - Financial Position (U	JS\$ millions)
	31 December 2014 actual
Debtors	5,584
Inventories	6,149
Creditors, accruals and provisions	(10,470)
Net operating working capital	1,263
Property, plant and equipment (net)	108,771
Investments accounted for using the equity method	3,550
Non-current provisions	(9,467)
Intangible assets	5,289
Current tax assets / (liabilities) (net)	223
Deferred tax assets / (liabilities) (net)	(2,413)
Other assets / (liabilities) (net)	3,973
Total funds employed	111,189
Cash and deposits	6,130
Interest bearing liabilities	(31,069)
Net cash / (debt)	(24,939)
Net assets	86,250
Non-controlling interests	(6,405)
Equity attributable to BHP Billiton shareholders	79,845
Statistics	
Shares on issue at period end (million)	5,324
Net assets per share	15.00
$NTA \ per \ share^{13}$	14.00
Gearing ¹⁴	22%

Source: BHP Billiton and Grant Samuel analysis

The following should be noted in relation to BHP Billiton's financial position:

- BHP Billiton has a strong balance sheet. The company reported net debt as at 31 December 2014 of US\$24.9 billion for a gearing ratio of 22%, which is well within its stated 40% limit;
- interest bearing debt includes unsecured notes and debentures (US\$27,855 million), unsecured bank loans (US\$1,368 million), finance leases (US\$1,192 million) and bank overdrafts and short term borrowings (US\$11 million); and
- investments accounted for using the equity method comprise BHP Billiton's 33.75% interest in Antamina, 33.33% interest in Cerrejón and 50% interest in Samarco.

None of the BHP Billiton level borrowing facilities is subject to financial covenants. However, certain financing facilities extended to individual business divisions are subject to various financial covenants.

¹³ NTA is net tangible assets, which is calculated as net assets less intangible assets.

¹⁴ Gearing is net borrowings divided by net assets plus net borrowings.

BHP Billiton retains Standard & Poor's ("S&P") and Moody's Investor Services ("Moody's") to provide independent credit ratings. It has ratings of A+/A-1/Stable from S&P and A1/P-1/Stable from Moody's. Following the announcement of the intention to pursue the Demerger, S&P and

BHP Billiton manages its exposure to movements in foreign currencies, interest rates and commodity prices predominantly through the natural diversification of its portfolio rather than the use of hedging instruments.

At 30 June 2014, BHP Billiton disclosed contingent liabilities of US\$3,376 million, principally relating to actual or potential litigation. None of the actions involved is individually significant.

3.5 Capital Structure and Ownership

3.5.1 Dual Listed Company Structure

Moody's have confirmed BHP Billiton's credit ratings.

Under the dual listed company structure, BHP Billiton Limited and BHP Billiton Plc have retained their separate legal identities and tax domiciles. The assets in the BHP Billiton "group" are owned by either BHP Billiton Limited (or its subsidiaries) or BHP Billiton Plc (or its subsidiaries)¹⁵. BHP Billiton Limited is listed on the ASX. BHP Billiton Plc has a primary listing on the UKLA (and its shares trade on the LSE) and a secondary listing on the JSE. Each entity also participates in its own American Depositary Share ("ADS") program on the New York Stock Exchange. However, BHP Billiton Limited and BHP Billiton Plc operate as a single economic enterprise with a common board and organisational structure and unified management of all the assets. The DLC Structure Sharing Agreement governs the relationship between the two companies, including as regards dividend and capital return matching, voting¹⁶ and cross guarantees of each company's obligations. Shareholders in BHP Billiton Limited and BHP Billiton Plc effectively have equivalent voting¹⁷ and economic rights in the combined group. The dual listed company structure is represented diagrammatically below:



Source: BHP Billiton

¹⁵ Except in the case of certain subsidiaries, such as BMAG (a marketing entity) and Rio Algom (owner of the Pampa Norte and Antamina copper assets), in which both BHP Billiton Ltd and BHP Billiton Plc are shareholders.

¹⁶ Each of BHP Billiton Limited and BHP Billiton Plc has issued one special voting share to a trustee company to give effect to special voting arrangements that enable shareholders of both companies to vote together as a single decision-making body on matters affecting the shareholders in similar ways.

¹⁷ Other than in exceptional circumstances.

3.5.2 Capital Structure

At 28 August 2014, BHP Billiton had 5,323,762,901 ordinary shares and 50,000 preference shares on issue as summarised below:

BHP Billiton – Share Capital as at 28 August 2014							
Share capital issued	BHP Billiton Limited	BHP Billiton Plc	Combined				
Ordinary shares fully paid	3,211,691,105	2,112,071,796	5,323,762,901				
Comprising:							
- Shares held by the public	3,210,206,876	2,110,945,784	5,321,152,660				
- Treasury shares	1,484,229	1,126,012	2,610,241				
5.5% preference share of £1 each ¹⁸	-	50,000	50,000				

Source: BHP Billiton

BHP Billiton operates a number of employee share award incentive plans. As at 11 September 2014, BHP Billiton Limited had 15.9 million share awards and BHP Billiton Plc had 3.9 million share awards on issue under these plans.¹⁹

3.5.3 Ownership

As at 22 August 2014, BHP Billiton Limited had 576,220 registered shareholders, predominantly based in Australia (over 96% of registered shareholders and approximately 98% of securities on issue) and BHP Billiton Plc had 23,523 registered shareholders, predominantly based in the United Kingdom (over 85% of registered shareholders and approximately 82% of securities on issue). Around 92% of registered shareholders in both companies hold 5,000 shares or less. These shareholders hold approximately 16% of shares on issue in BHP Billiton Limited and less than 1% in BHP Billiton Plc.

As at 22 August 2014, the top 20 shareholders for both companies accounted for approximately 60% of the ordinary shares on issue and are principally institutional nominee or custodian companies. As at 6 March 2015, there were no substantial shareholders of BHP Billiton Limited. BHP Billiton Plc has received substantial shareholder notices as follows:

BHP Billiton Plc – Substantial Shareholders as at 6 March 2015							
Shareholder	Date of Notice	Number of Shares	Percentage				
BlackRock, Inc.	3 December 2009	213,014,043	10.08%				
Aberdeen Asset Managers Limited	30 June 2014	133,883,328	6.34%				

Source: BHP Billiton

¹⁸ Preference shares have the right to repayment of the amount paid up on the nominal value and any unpaid dividends in priority to the holders of any other class on a return of capital or winding up. The holders of preference shares have limited voting rights if payment of the preference dividends are six months or more in arrears or a resolution is passed changing the rights of the preference shares are held by JP Morgan Limited.
¹⁹ A number of the preference shares are held by JP Morgan Limited.

⁹ A number of these share awards relate to shares that are already on issue and are held by the trustees of the plans.

3.6 Share Price Performance

3.6.1 Share Price History

A summary of the price and trading history of BHP Billiton Limited since the merger is set out below:

BHP Billiton Limited - Share Price History							
	Share Price (AUD)			Average Weekly – Volume	Average Weekly		
	High	Low	Close	(000's)	Transactions		
Year ended 31 December							
2001 (post-merger)	10.40	7.45	9.94	75,756	9,528		
2002	11.83	8.27	10.15	66,642	8,994		
2003	12.29	8.22	12.19	67,121	9,246		
2004	15.68	11.13	15.34	70,612	9,706		
2005	22.99	14.83	22.75	82,982	17,147		
2006	32.00	22.76	25.30	93,770	29,181		
2007	47.70	23.86	40.14	104,305	41,091		
2008	50.00	20.00	30.44	78,513	65,158		
2009	43.32	26.64	43.12	73,891	70,722		
2010	46.59	35.58	45.25	72,833	66,669		
2011	49.81	33.68	34.42	65,600	87,690		
2012	38.25	30.09	37.10	51,651	90,974		
2013	39.34	30.43	37.99	42,558	104,044		
Quarter ended							
31 March 2014	39.79	35.06	36.47	39,356	93,090		
30 June 2014	38.55	35.14	35.90	33,171	80,474		
30 September 2014	39.74	33.57	33.87	41,272	98,326		
31 December 2014	34.98	27.29	29.37	46,826	108,577		
Month ended							
31 January 2015	29.62	26.50	29.26	44,497	95,610		
28 February 2015	33.81	29.56	33.65	46,879	100,789		

Source: IRESS

	SI	hare Price (GBI	?)	Average Weekly Volume
	High	Low	Close	(000's)
Year ended 31 December				
2001 (post-merger)	3.45	2.26	3.28	78,277
2002	3.96	2.48	3.32	68,921
2003	4.92	2.80	4.88	77,857
2004	6.27	4.25	6.11	73,958
2005	9.51	5.77	9.50	79,171
2006	12.42	8.39	9.35	110,238
2007	18.98	8.77	15.46	126,923
2008	22.05	7.32	12.94	110,588
2009	20.25	10.25	19.95	63,624
2010	26.47	16.78	25.51	44,531
2011	26.54	16.25	18.78	36,154
2012	22.38	16.51	21.30	31,047
2013	22.52	16.44	18.69	31,889
Quarter ended				
31 March 2014	19.89	17.40	18.44	38,931
30 June 2014	20.18	18.31	18.90	27,039
30 September 2014	21.02	16.99	17.15	34,158
31 December 2014	17.19	12.51	13.89	45,543
Month ended				
31 January 2015	14.83	12.48	14.43	45,301
28 February 2015	16.71	14.53	16.71	47,617

A summary of the price and trading history of BHP Billiton Plc since the merger is set out below:

Source: Bloomberg



The following graph illustrates the weekly closing share price converted to US dollars and trading volumes for BHP Billiton Limited and BHP Billiton Plc shares since the merger became effective on 29 June 2001:



Source: Bloomberg

From 2001 to October 2007, the share prices of BHP Billiton Limited and BHP Billiton Plc rose strongly, fuelled by higher commodity prices resulting primarily from strong economic growth in China. Although the share prices fell steeply in late 2007 and from May to October 2008 as a result of the global financial crisis and its aftermath, they recovered over the following two and a half years on the back of recoveries in commodity prices and improved equity market conditions. The share prices of BHP Billiton Limited and BHP Billiton Plc reached highs of A\$49.81 and £26.54 on 11 April 2011. Since then, falls in commodity prices and market concerns regarding the outlook for commodities have put downward pressure on the companies' share prices.

While the share price performance of BHP Billiton Plc has largely mirrored that of BHP Billiton Limited, BHP Billiton Limited shares have consistently traded at higher prices than BHP Billiton Plc shares. This differential was generally less than 10% before the commencement of the global financial crisis. Following the global financial crisis, the differential widened considerably and was generally between 15% and 20% until early 2012. It has narrowed since then and has fluctuated within the 5-10% range for much of the past 12 months.

Both BHP Billiton Limited and BHP Billiton Plc are very liquid stocks with no restrictions on their free float. Average weekly volume over the twelve months prior to the announcement of the Demerger for BHP Billiton Limited and BHP Billiton Plc represented approximately 1.14% and 1.47% respectively of shares on issue or annualised turnover of around 60% and 78% respectively.

3.6.2 Relative Performance

BHP Billiton Limited is the third largest company listed on the ASX (based on BHP Billiton Limited's market capitalisation alone) and BHP Billiton Plc is in the top 30 companies listed on the LSE (based on BHP Billiton Plc's market capitalisation alone). The following graph illustrates the performance of BHP Billiton Limited and BHP Billiton Plc shares since 29 June 2001 relative to the S&P/ASX 200 index (in which BHP Billiton Limited had a weighting of approximately 6.6% as at 6 March 2015) and the FTSE 100



index (in which BHP Billiton Plc had a weighting of approximately 1.9% as at 6 March 2015):

Source: Bloomberg

BHP Billiton has strongly outperformed the S&P/ASX 200 index and the FTSE 100 index since the merger.

The share price performance of BHP Billiton Limited relative to its very large listed mining peers since the date of the BHP Billiton merger is shown in the graph below:



Source: Bloomberg

Notes: (1) Share prices of all entities have been converted to US dollars.

(2) The Glencore share price has been rebased against the BHP Billiton Limited share price on the date of Glencore's listing.

4 Background on Demergers

4.1 Rationale

A "demerger" or "spin-off" is generally understood to be a pro-rata transfer of shares in a wholly owned subsidiary to shareholders. The broad principle underlying demergers is that sharemarkets do not reward corporate diversification unless there are substantial synergies available to a corporate holder of a diversified portfolio of assets or there is some other strategic rationale. Investors can achieve diversification themselves and it is generally accepted that investors prefer the investment flexibility resulting from the separation of assets into separate companies that have relatively focussed businesses. Consequently, demergers have typically been undertaken to create investment opportunities with a single geographic focus, a single industry focus or a single product focus.

A pure demerger involves the transfer to existing shareholders of 100% of the shares in the subsidiary. There is no dilution of equity or transfer of ownership from the current shareholders. There are a number of variants that are also loosely referred to as demergers including:

- a majority demerger, where the parent distributes the bulk of the subsidiary's shares to
 existing shareholders and either retains the remaining shares for a period or sells them
 immediately through an initial public offering ("IPO") or other sale process;
- an equity carve-out, where the parent company sells a portion of a subsidiary's shares though an IPO. The carved-out subsidiary has its own board, management and financial statements while the parent company provides strategic direction and central resources; and
- a divestiture IPO, where 100% of the shares in the subsidiary are sold to the public, often with some kind of preferential right offered to the parent company shareholders.

The use of demergers as a method of divesting a subsidiary has become a common feature of equity markets in recent years.

		Business/		Business/	%
Date ²¹	Parent	Market focus	Demerged entity	Market focus	Demerged
Dec 2013	Amcor Limited	Flexible and rigid plastics packaging (global)	Orora Limited	Diversified packaging (Australasia) and packaging distribution (North America)	100.0%
Dec 2013	Brambles Limited	Pallet and container pooling solutions	Recall Holdings Limited	Document management	100.0%
Jun 2011	Tabcorp Holdings Limited	Wagering, gaming and keno	Echo Entertainment Group Limited	Casinos	100.0%
May 2011	Foster's Group Limited	Beer	Treasury Wine Estates Limited	Wine	100.0%
Jul 2010	Orica Limited	Mining services, chemicals	DuluxGroup Limited	Coatings and home improvement products	100.0%
Jul 2010	Arrow Energy Limited	Coal seam gas (Australia)	Dart Energy Limited	Coal seam gas (international)	100.0%
Jan 2010	Macquarie Infrastructure Group (renamed Intoll Group)	Toll roads	Macquarie Atlas Roads Group	Toll roads	100.0%
Dec 2007	Publishing and Broadcasting Limited (renamed Consolidated Media)	Media	Crown Limited	Gaming	100.0%

Examples of demergers implemented in Australia since 2000 include:

²⁰ The June 2013 demerger of the publishing business of News Corporation (now renamed Twenty-First Century Fox Inc.) as News Corporation has been excluded as both entities are United States companies, although they have secondary listings on the ASX.

²¹ Implementation date (i.e. when trading commenced as separate entities).

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		Selected Deme	rgers in Australia ²⁰		
Date ²¹	Parent	Business/ Market focus	Demerged entity	Business/ Market focus	% Demerged
Jun 2007	Toll Holdings Limited	Logistics	Asciano Limited	Ports and rail	100.0%
Nov 2006	Tower Limited	Multi-line insurance (New Zealand)	Tower Australia Group Limited	Life insurance (Australia)	100.0%
Jul 2006	Macquarie Infrastructure Group (renamed Intoll Group)	Toll roads (globally)	Sydney Roads Group	Toll roads (Sydney)	100.0%
Nov 2005	Mayne Group Limited (renamed Symbion Health Limited)	Healthcare	Mayne Pharma Limited	Pharmaceuticals	100.0%
Feb 2005	Tower Limited	Insurance (Australia/ New Zealand)	Australian Wealth Management Limited	Funds management (Australia)	100.0%
Oct 2003	AMP Limited	Life insurance, wealth management (Australia, New Zealand)	HHG plc	Life insurance, wealth management (UK, Europe)	85.0%
Mar 2003	CSR Limited	Building materials, aluminium, sugar	Rinker Group Limited	Heavy building materials	100.0%
Dec 2002	WMC Limited (renamed Alumina Limited)	Bauxite mining, alumina refining and aluminium smelting	WMC Resources Ltd	Resources	100.0%
Jul 2002	BHP Billiton Limited	Resources	BHP Steel Limited (renamed Bluescope Steel Limited)	Steel	94.0%
Oct 2000	The Broken Hill Proprietary Company Limited	Resources	OneSteel Limited (renamed Arrium Limited)	Steel	100.0%
Apr 2000	Amcor Limited	Packaging	PaperlinX Limited	Paper	82.0%
Feb 2000	Origin Energy Limited	Energy	Boral Limited	Building Materials	100.0%

Source: RESS

Examples of demergers implemented in the United Kingdom since 2000 include:

Date ²¹	Parent	Business/ Market focus	Demerged entity	Business/ Market focus	% Demerged
Dec 2012	Cookson Group plc (renamed Vesuvius plc)	Engineering services and solutions	Alent plc	Specialty chemicals and materials	100%
May 2010	Liberty International plc (renamed Intu Properties plc)	Regional shopping centres (United Kingdom)	Capital & Counties Properties plc	Property investment and development (London)	100%
Apr 2012	Lundin Petroleum AB ²²	Oil & gas exploration and production	EnQuest Plc	Oil & gas exploration and production (United Kingdom)	55%
Apr 2012	Petrofac Ltd	Services to oil & gas industry	EnQuest Plc	Oil & gas exploration and production (United Kingdom)	45%
Mar 2010	Cable & Wireless plc (renamed Cable & Wireless Communications plc)	Telecommunications services	Cable & Wireless Worldwide plc	Communications infrastructure and services	100%
Mar 2010	The Carphone Warehouse Group plc	Electrical and telecommunications retailing	TalkTalk Telecom Group plc	Fixed line broadband, voice telephone, mobile and television services	100%
May 2008	Cadbury plc	Confectionery production	Dr Pepper Snapple Group Inc.	Non-alcoholic beverage production	100%
Jul 2007	Anglo American plc	Metals and mining	Mondi Group ²³	Paper and packaging	100%

²² Lundin Petroleum AB and Petrofac Ltd combined their United Kingdom Continental Shelf oil and gas assets into EnQuest and each distributed the shares they held in EnQuest as a result of the combination to their respective shareholders.

Selected Demergers in United Kingdom					
Date ²¹	Parent	Business/ Market focus	Demerged entity	Business/ Market focus	% Demerged
Jul 2007	Provident Financial plc	Personal credit services (United Kingdom)	International Personal Finance plc	Home credit services (international)	100%
Oct 2006	Severn Trent plc	Provision of water and treatment of waste water	Biffa plc	Waste management and recycling	100%
Sep 2006	WH Smith plc	Retail	Smiths News plc (renamed Connect Group plc)	Newspaper and magazine distribution	100%
Jun 2005	Bunzl plc	Distribution of non- food products	Filtrona plc (renamed Essentra plc)	Manufacture of plastic and fibre products	100%
Jul 2003	Kingfisher plc	Home improvement retailer	Kesa Electricals plc (renamed Darty plc)	Electricals and furniture retailer	100%
Mar 2003	Six Continents plc (renamed Intercontinental Hotels Group plc)	Hotel ownership and management	Mitchells & Butlers plc	Restaurants	100%

Source: Capital IQ, Bloomberg

The benefits typically cited for demergers largely reflect the improved focus of the demerged entities. However, at the same time there are a number of disadvantages and potential risks associated with demergers:

Senefits	Disadvantages/Risks
transparency	 loss of synergies
investor attraction and interest	 transaction costs
enhanced flexibility to shareholders	 duplication of corporate costs
clarity in capital allocation	 increased financing costs
flexibility in raising capital	 loss of diversification
better targeted incentives and management focus	 reduced liquidity and rating in key indices
independence and strategic flexibility to undertake growth initiatives	

4.2 Market Evidence

There is little definitive evidence as to whether demergers have been successful in enhancing shareholder value, largely because it is not possible to measure what the share prices would have been had the demergers not occurred. Some of the evidence and views that have emerged are summarised below:

several studies²⁴ have found that there was a positive impact on the share price (of around 3-6%) at the time of the announcement. A similar increase occurred where there was a targeted share or equity carve-out. One study has shown that, in some circumstances, there is no decline in share price even if the demerger is ultimately withdrawn²⁵;

²³ Mondi Group operates under a dual listed company structure comprising Mondi Limited (a South African incorporated company holding African assets) and Mondi plc (a United Kingdom incorporated company holding non-African assets).

²⁴ See for example: P.L. Anslinger, S.J. Klepper and S. Subramaniam, "Breaking up is good to do", The McKinsey Quarterly, 1999 Number 1; Thomas Kirchmaier, "The Performance Effects of European Restructures", Centre for Economic Performance, London School of Economics and Political Science, May 2003; UBS Investment Research, "Q-Series: Spin-offs and restructures", UBS Limited, 14 April 2005, Roger Rüdisüli, "Value Creation of Spin-offs and Carve-outs", Doctoral Dissertation, University of Basel (Switzerland), May 2005, CIMB Quantitative Research, "Spin-off Candidates", CIMB Securities (Australia) Ltd, September 2013.

²⁵ K. Alli, G. Ramirez and K. Yung, "Withdrawn Spin-offs: An Empirical Analysis", The Journal of Financial Research, Winter 2001.

- several studies²⁶ have also found significantly positive abnormal returns over an extended period (of up to three years) following the demerger for the demerged company, the parent and the demerged company/parent combination. On the other hand, one study²⁷ found that demergers only delivered long term value benefits for the demerged subsidiary (and not the parent) and another study²⁸ found significant evidence that spin-offs create more value than carve-outs;
- some of the reasons found to be associated with positive abnormal returns have included:
 - corporate restructuring activity²⁹. Both the demerged subsidiary and the parent experience an unusually high incidence of takeovers in comparison to their control group comparable companies. The abnormal performance is limited to companies involved in takeover activity. The findings suggest that demergers provide a low-cost method of transferring control of corporate assets to bidders who are able to create greater value;
 - mitigation of information asymmetry³⁰. The hypothesis was that value would be enhanced if the demerged subsidiary is able to convey more information about its operating efficiency and future prospects when it is a separate entity than when it is part of a combined unit. The findings were that firms that engage in demergers have higher levels of information asymmetry compared to their industry and size matched counterparts and the information problems decrease significantly after the demerger as analyst scrutiny increases. The relationship is more pronounced for those companies that demerge related subsidiaries;
 - increased focus³¹ translating into better operating and sharemarket performance. The abnormal returns for focus-increasing demergers are significantly larger than the corresponding abnormal returns for the non-focus-increasing demergers. A focus-increasing demerger reduces the diversity of assets under management and thereby increases the efficiency of management. However, an analysis of non-focus increasing demergers showed that companies are likely to undertake these demergers to separate underperforming subsidiaries from their parents with efficiency not being a major motivating factor. Indeed, positive returns after the demerger have been found to be due to pre-announcement sharemarket weakness; and
 - improved financing decisions³². Conglomerates tend to divide resources evenly between divisions thus investing too little in strong industries and too much in weaker industries. The study showed that capital expenditure showed greater sensitivity to changes in growth opportunities after a division became independent; and
- one analyst report³³ found that following a demerger, where the resulting entities are relatively similar in size, both entities generally underperform the market for a period of

²⁶ See for example: J. Wyatt, "Why Spinoffs Work for Investors", Fortune, October 16 1995, p72; P.J. Cusatis, J.A. Miles and J.R. Woolridge, "Restructuring Through Spin-outs, The Stock Market Evidence", Journal of Financial Economics, Volume 33 No. 3, June 1993, T.A. John, "Optimality of Spin-outs and Allocation of Debt" Journal of Financial and Quantitative Analysis, 1993, B.J. Hollowell, "The Long-Term Performance of Parent Firms and their Spin-offs", The International Journal of Business and Finance research, Volume 3, No.1, 2009.

²⁷ Thomas Kirchmaier, "The Performance Effects of European Restructures", Centre for Economic Performance, London School of Economics and Political Science, May 2003.

²⁸ Roger Rüdisüli, "Value Creation of Spin-offs and Carve-outs", Doctoral Dissertation, University of Basel (Switzerland), May 2005.

²⁹ P.J. Cusatis, J.A. Miles and J.R. Woolridge, "Restructuring Through Spin-outs, The Stock Market Evidence", Journal of Financial Economics, Volume 33 No. 3, June 1993.

³⁰ S. Krishnaswami and V Subramaniam, "Information asymmetry, valuation and the corporate spin-out decision" Journal of Financial Economics, Volume 53, No. 1, July 1999.

³¹ See for example: H. Desai and P.C. Jain, "Firm performance and focus: long-run stock market performance following spin-outs", Journal of Financial Economics, Volume 54, No. 1, October 1999 and L. Daley, V. Mehrotra and R. Sivarenmar, "Corporate Focus and Value Creation: Evidence from Spinoffs", Journal of Financial Economics, Volume 45, 1997.

³² R. Gertner, E. Powers and D. Scharfstein, "Learning About Internal Capital Markets From Corporate Spinoffs", November 2000.

³³ Macquarie Research Equities, "Australian Gas Light: Acquisitions, Restructures and Au Revoirs", 1 November 2005.

approximately six months. In the long term, however, both stocks tend to outperform the market (implying that the market awaits a reporting period before committing to the new entities). In comparison, where the subsidiary is much smaller than the parent, the demerged entity is typically a strong outperformer while the parent moves with the market.

While an admittedly imperfect basis of analysis and somewhat crude (given the wide range of factors that influence share prices) studies of the relative performance of some of the ASX or LSE-traded companies that undertook demergers tends to support the thesis that demergers enhance shareholder value, particularly having regard to sharemarket performance one to two years after the demerger. The following graphs summarise the combined share price performance of the parent company and the demerged entity relative to the most relevant industry share market benchmark index, for various periods starting on the day prior to the announcement of the demerger:



Source: IRESS

- Notes: (1) Certain parent or demerged entities were acquired within three months, one year or two years of the demerger. For the related demergers, the latest available return was calculated to the day the shares in the acquired entity were suspended from quotation. No returns are shown for the following periods. This applies to:
 - Arrow Energy/Dart Energy as Arrow Energy was acquired by PetroChina Co. Ltd and Royal Dutch Shell plc upon implementation of the demerger;
 - Foster's Group/Treasury Wine Estates as Foster's Group was acquired by SABMiller plc within one year of the demerger;
 - Intoll/Sydney Roads Group as Sydney Roads Group was acquired by Transurban Group in April 2007 within one year of the demerger;
 - Intoll Group/Macquarie Atlas Roads as Intoll Group was acquired by Canadian Pension Plan Investment Board within one year of the demerger; and
 - Symbion/Mayne Pharma as Mayne Pharma was acquired by Hospira Inc within two years of the demerger.
 - (2) No two year return is shown in the chart for:
 - Brambles/Recall commenced trading separately on 10 December 2013;
 - Amcor/Orora commenced trading separately on 18 December 2013; and
 Tower/Australian Wealth Management as Tower demerged a second entity (Tower Australia) within two years of the demerger.
 - (3) Where possible, the returns are calculated with respect to the relevant ASX 200 sector index. If no sector index is appropriate, the returns have been calculated with reference to the S&P/ASX 200 Index.





Source: Bloomberg

Notes: (1) Certain parent or demerged entities were acquired within two years of the demerger. For the related demergers, the two year return was calculated to the day the shares in the acquired entity stopped trading. This applies to:

- Severn Trent/Biffa as Biffa was acquired by a consortium in April 2008 (18 months after demerger); and
- Cadbury/Dr Pepper Snapple as Cadbury was acquired by Kraft Foods Group Inc. (renamed Mondelez International) in March 2010 (22 months after demerger).
- (2) Where possible, the returns are calculated with respect to the relevant FTSE 350 sector index. If no sector index is appropriate, the returns have been calculated with reference to the FTSE 100 Index.

The February 2013 demerger of Sibanye Gold Limited ("Sibanye") from Gold Fields Limited ("Gold Fields") is a recent example of a demerger involving a major South African company. In this case, the combined entity underperformed the S&P/TSX Global Gold Index by 33% and 13% respectively over the three months and one year following announcement of the demerger and outperformed the index by 35% over the two year period following the announcement of the demerger, which was in large part a reflection of operational matters.

The above analysis indicates that the combined performance of demerged entities within two years of listing of the demerger entity has been positive, although there are cases of strong underperformance. The evidence suggests that demerged entities in Australia and the United Kingdom have generally outperformed the market over the two year period following the relevant demerger announcement³⁴.

The analysis must be treated with some caution. It provides at best only a partial analysis of the market value consequences of demergers. Moreover, in many cases, significant underperformance or over performance reflects factors specific to the demerging companies and for the industries within which they operate and may not be attributable to the demerger themselves. For example:

- Tower/Tower Australia was affected by the underperformance of the insurance sector relative to the market during 2007;
- Consolidated Media/Crown was affected by the underperformance of the media industry relative to the market following the global financial crisis in 2008/2009;

³⁴ This is supported by analysis by Goldman Sachs & Partners Australia in "Equity Strategy: Reviewing Large Cap Demerger Strategies", 15 February 2011; Bank of America Merrill Lynch in "Delivering Returns in Tough Times", 29 May 2013, Macquarie Securities (Australia) Limited in "Demergers: Breaking Up is Hard to Do", 14 June 2013 and CIMB Securities (Australia) Ltd in "Spin-off Candidates", 3 September 2013.

- Toll/Asciano was affected by Asciano's need to reduce high gearing levels following the global financial crisis in 2008/2009;
- Tabcorp/Echo was affected by various legal and regulatory decisions relating to gambling and casino operations as well as competitive concerns;
- C&W Communications/C&W Worldwide was affected by soft trading in key markets, UK government spending cuts, price erosion on contract renewals and a shift from fixed line to wireless telecommunications. In particular, C&W Worldwide underperformed over the period despite the February 2012 announcement by Vodafone Group that it was considering a potential offer (a recommended offer was announced on 23 April 2012);
- Kingfisher/Darty was affected by a slump in the home improvement market;
- Sibayne/Gold Fields was affected by significant uncertainty in the South African gold mining sector as a result of a labour dispute and disappointing performance at Gold Field's remaining (mainly overseas) mines which led to impairments, losses and deferral of dividends; and
- conversely, the outperformance of the Lundin/EnQuest demerger can be attributed to announcements of large increases in resource estimates and speculation that Lundin was a takeover target.

Furthermore, it should be noted that three of the demerged entities (Sydney Roads Group, Mayne Pharma, Biffa) and four of the parent entities (Arrow Energy, Foster's Group, Intoll Group, Cadbury) were acquired within two years of their demergers while another five of the entities (Tower Australia, Australian Wealth Management, Rinker, WMC Resources, C&W Worldwide) were involved in corporate activity within 3-4 years.

Some studies have found that demergers may negatively affect value and that conglomerates have outperformed the market over some periods³⁵. Conglomerate structures can have benefits including financial size and strength, better liquidity and higher index rating, lower earnings volatility and risk (if business units are not correlated in terms of economic cyclicality), greater depth of management and, potentially, lower cost of capital (depending on other factors).

While the balance of evidence does favour demergers as adding value, the alternative views underline the fact that there is no universal structure for businesses. While some demergers create substantial value, others do not. In the end, the success of demergers depends on the specific circumstances of each case.

³⁵ Boston Consulting Group, "Conglomerates Reports", 2002.



5 Demerger Process

The ownership structure of New BHP Billiton and South32 immediately after the Demerger will be as follows:



Source: BHP Billiton

(2) Australia Petroleum core assets comprise Bass Strait, North West Shelf, Pyrenees and Macedon.

The Demerger process involves two main steps:

- Asset Assembly: as the Demerger Assets are owned by various subsidiaries of BHP Billiton Limited and BHP Billiton Plc, they need to be assembled under a common ownership structure before being demerged. The Demerger Assets will be consolidated in South32, a BHP Billiton Limited subsidiary formerly named BHP Coal Holdings Pty Limited. South32 is the entity that is to be spun out to BHP Billiton shareholders; and
- Separation: BHP Billiton Plc will subscribe for shares representing approximately 40% of the South32 shares on issue, representing an interest proportionate to BHP Billiton Plc's share of the total number of BHP Billiton shares on issue. BHP Billiton Limited and BHP Billiton Plc will transfer their shares in South32 to their shareholders by way of in specie dividend distributions. The result will be the spin-off of South32 as a separate legal entity. South32 will have a primary listing on the ASX with its shares also traded on the LSE and the JSE, and will participate in an over the counter ADS program on the NYSE:
 - each BHP Billiton shareholder, other than ineligible shareholders, will receive one South32 share for every BHP Billiton Limited or BHP Billiton Plc share held on the record date for the Demerger;
 - holders of ADSs in either BHP Billiton Limited or BHP Billiton Plc will receive 0.4 South32 ADS for every ADS they hold on the record date for the Demerger (each BHP Billiton ADS represents two underlying BHP Billiton Shares and each South32 ADS will represent five underlying South32 shares); and

Notes: (1) Gulf of Mexico core assets comprise Atlantis, Mad Dog and Shenzi.

 holders of unvested BHP Billiton share awards will either receive additional awards to reflect the dilution in the value of the awards following the Demerger of South32, receive awards in South32 of equivalent value and terms in place of their BHP Billiton awards or have their awards vest after approval of the demerger by BHP Billiton shareholders and participate in the Demerger as ordinary shareholders. The treatment of each holder's awards will largely depend on the holder's employment following the Demerger.

A share sale facility will be offered to eligible BHP Billiton shareholders who have registered addresses in certain countries, including in Australia, the United Kingdom and South Africa³⁶, and hold 10,000 or fewer BHP Billiton shares as at the record date. Such shareholders may elect to have all the South32 shares that they receive under the Demerger sold by a sale agent, with the cash proceeds remitted to them free of any brokerage costs or stamp duty.

Certain ineligible shareholders will not receive South32 shares. The South32 shares to which these shareholders would otherwise have been entitled will be transferred to a sale agent and sold on the ASX. The cash proceeds from the sale of those shares will be remitted to the relevant shareholders free of any brokerage costs or stamp duty.

BHP Billiton has received all the principal regulatory approvals, waivers or confirmations required for the Demerger.

BHP Billiton has received "demerger relief" from the Australian Taxation Office ("ATO"), confirming that the Demerger will not result in any capital gains tax consequences for BHP Billiton Limited. BHP Billiton has also received a draft class ruling from the ATO confirming that, in relation to Australian resident shareholders of BHP Billiton Limited, the Demerger Dividend will not be subject to income tax. The tax consequences of the Demerger for other BHP Billiton shareholders will depend upon their particular circumstances.

The total one-off transaction costs associated with the Demerger have been estimated at approximately US\$738 million, of which approximately US\$274 million will already have been incurred by the time BHP Billiton shareholders vote on the Demerger. Of the total transaction costs, approximately US\$339 million relate to stamp duty and tax payable as a result of the Demerger (essentially relating to the asset transfers that form part of the pre-separation internal restructuring). The balance relates to separation and establishment costs, adviser fees and compliance costs. If the Demerger does not proceed, BHP Billiton will incur an estimated US\$30 million of costs in addition to the US\$274 million that it will have incurred by the time shareholders vote on the Demerger.

The BHP Billiton board has elected to seek shareholder approval for the Demerger, although there is no legal requirement for such approval. BHP Billiton Limited and BHP Billiton Plc shareholders will vote on a joint electorate basis (that is, as a single body of shareholders), with the resolution to approve the Demerger requiring a simple majority (50%).

³⁶ The share sale facility is not available to shareholders who are acting for the account or benefit of persons resident in the United States.

Impact of the Demerger 6

South32 6.1

6.1.1 Operations and Strategy³⁷

South32 will be a globally significant and well diversified mining company, with approximately 27,000 employees and contractors on inception, and interests in 11 operated assets and one joint venture across several countries and commodities:



Aluminium, alum	lina, bauxite
Worsley	Integrated low cost bauxite mine and alumina refinery
Western Australia 86% and operator	With a nameplate capacity of 4.6mtpa and operating costs in the first quartile, the Worsley alumina refinery is one of the largest and lowest cost refineries in the world. It is supplied by a dedicated open cut bauxite mine with a reserve life of 17 years, although extensive resources should underpin a much longer operating life. Worsley exports alumina to, among others, BHP Billiton's Hillside smelter in South Africa and Mozal smelter in Mozambique (both of which will be operated by South32).
Aluminium South	Hillside and Bayside aluminium smelters
Africa	Hillside, which produces standard aluminium ingots from alumina sourced from
Richards Bay, South Africa 100% and operator	Worsley, is the largest aluminium smelter in the southern hemisphere. The Bayside smelting operations were closed down in June 2014 although the casthouse remains in operation to produce primary aluminium slab products from liquid metal sourced from Hillside. FY14 aluminium production was 715kt at Hillside and 89kt at Bayside.
Mozal	Low cost aluminium smelter
Mozambique 47.1% and operator	Mozal produced 565kt of standard aluminium ingots in FY14 from alumina sourced from Worsley. Most of the aluminium produced is exported to Europe.
Mineração Rio do	Bauxite mine
Norte ("MRN")	MRN is an open cut strip mining operation with a production capacity of 18mtpa, a
Brazil 14.8%	reserve life of 6 years as at 30 June 2014 and the potential to extend the life of the mine to 2043. BHP Billiton's share of production is sold to the Alumar operations.
Alumar	Alumina refinery (36%) and aluminium smelter (40%)
Brazil 36%/40%	FY14 production totalled 3.5mt of alumina (16% of which was used to feed the smelter) and 260kt of aluminium. However, production has been suspended at two of the three pot lines in response to challenging market conditions, thereby reducing the aluminium production capacity of the smelter to 124ktpa.

³⁷ All production capacity or production data in this section is on a 100% basis unless otherwise specified. All production and cost quartile data is based on CY13 financial information.

Manganese

South32 will be the largest producer of manganese ore and one of the largest producers of manganese alloys in the world.

Hotazel Kalahari Basin, South Africa 44.4% and operator	Mamatwan open cut mine and Wessels underground mine Mamatwan, which was commissioned in 1964, has a production capacity of 3.5mtpa, relatively high costs and a reserve life of 18 years. Wessels, which was commissioned in 1973, has a production capacity of 1mtpa expected to increase to 1.5mtpa following the completion of an expansion currently under way, competitive cash costs and a reserve life of 46 years. Approximately 25% of the mine's production is sold to the Metalloys plant for beneficiation and the balance is exported. The mines yielded a combined 3,526kt of manganese ore in FY14.
GEMCO	Large, high grade, open-cut, low cost manganese mine
Northern Territory, Australia 60% and operator	With production of 4.776mt of lump and fines products in FY14, GEMCO accounted for more than 15% of the world's high-grade manganese ore production. The completion of a US\$279 million (100%) expansion project in 2013 lifted mine production capacity from 4.2mtpa to 4.8mtpa and associated road and port capacity

The completion of a US\$279 million (100%) expansion project in 2013 lifted mine production capacity from 4.2mtpa to 4.8mtpa and associated road and port capacity to 5.9mtpa. The mine benefits from low cash costs (first quartile) and its proximity to company-owned port facilities. In August 2014, the joint venture approved the construction of a standalone Premium Concentrate plant at a cost of US\$139 million (100%) to increase production capacity by 0.5mtpa. The plant is expected to be completed in the December 2015 quarter and to achieve full production by the 2017 financial year. Commissioned in 1965, the mine had a reserve life of 11 years as at 30 June 2014.

Metalloys Large manganese alloy plant

South Africa 60% and operator

Metalloys is one of the largest producers of manganese alloys in the world. It operates four electric arc furnaces and has the capacity to produce 450kt of high-carbon ferromanganese per annum from ore sourced from the Hotazel mines. Metalloys can also process a portion of the high-carbon ferromanganese to produce up to 116ktpa of medium-carbon ferromanganese. FY14 production was 377kt of manganese alloys.

ТЕМСО	Low cost manganese alloy plant
Tasmania, Australia 60% and operator	TEMCO sources manganese ore from GEMCO and has a production capacity of 150ktpa of high-carbon ferromanganese, 120ktpa of silico-manganese and 325ktpa of sinter. 269kt of manganese alloys were produced at TEMCO in FY14.

Silver/Lead/Zinc			
Cannington mine	Large, low cost underground mine and 3.4mtpa flotation plant		
Queensland, Australia 100% and operator	With FY14 production of 25.2moz of silver, 186.5kt of lead and 57.9kt of zinc in concentrates, Cannington is one of the world's largest and lowest cost producers of silver and lead. Cannington had a reserve life of nine years as at 30 June 2014.		

Nickel Cerro Matoso Open cut mine and ferronickel smelter and refinery Colombia FY14 production was 44.3kt of nickel in the form of high quality

ColombiaFY14 production was 44.3kt of nickel in the form of high quality ferronickel99.94% and operatorgranules. Cerro Matoso had an estimated reserve life of 15 years as at 30 June 2014.

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Coal

Illawarra Coal	Appin, Dendrobium and West Cliff underground metallurgical coal mines
New South Wales,	West Cliff and Dendrobium coal preparation plants
Australia 100% and operator	Illawarra Coal produces a premium quality hard coking coal and some thermal coal (approximately 20% of production) from the Appin, West Cliff and Dendrobium mines. Appin, in operation since 1962, is currently being expanded to provide an additional source of coal to offset the loss of production following the planned closure of the West Cliff mine. The 3.5mtpa expansion, expected to be operational in the 2016 calendar year and to cost US\$845 million, was 77% complete as at 31 December 2014. Dendrobium was opened in 2005 and had a remaining reserve life of 9 years as at 30 June 2014. The coal is transported to BlueScope Steel Limited's Port Kembla steelworks and to the Port Kembla Coal Terminal (operated and owned as to 16.67% by South32) for sale on domestic and export markets. Total production in FY14 was 7.5mt.
Energy Coal South	Khutala, Middelburg/Wolvekrans and Klipspruit energy coal mines
Africa (" BECSA ") 90% and operator	In FY14, BECSA yielded a total of 30.4mt of energy coal. 55% of the production was supplied to Eskom, the South African government-owned electricity company, with the balance exported via the Richards Bay Coal Terminal, in which South32 will own a 21% stake:
	• Khutala is an open cut and underground mine in production since 1984. It supplies medium rank energy coal to Eskom. Production in FY14 was 9.7mt. The mine had a reserve life of six years as at June 2014;
	• Middleburg and Wolvekrans have been in production since 1982 and were split into separate open cut mines in 2011. They supply medium rank energy coal to a local power station owned by Eskom and to export markets via the Richards Bay Coal Terminal. Production in FY14 was 13.4mt. The mines had reserve lives of more than 20 years as at June 2014; and
	• Klipspruit, operating since 2003 and expanded in 2010, consists of an open cut mine and the Phola coal processing plant (50%). It supplies medium rank energy coal to export markets via the Richards Bay Coal Terminal. Production in FY14 was 7.3mt. The mine had a reserve life of six years as at June 2014, although there is potential to extend the mine life.

More detailed descriptions of South32's assets are set out in the Appendix.





Notes: (1) The position of each asset on the production and cost axes denotes its production and cost percentiles within each industry. The production ranks of Aluminium South Africa, Hotazel, BECSA and Illawarra are based on the weighted average production rank of individual mines or operations. Bubble areas denote South32's equity share of FY14 EBITDA³⁹.

(2) MRN, Metalloys and TEMCO are not represented.

South32 will be well diversified on both a commodity and geographic basis:



Source: BHP Billiton

(1) Excludes contribution from the sale of third party products and group and unallocated items. Notes:

(2) Manganese revenue and EBITDA are reflected on a proportional basis (60%).

(3) EBITDA is based on South32's definition of EBITDA.

³⁸ The production and cost positions are based on the analysis of the following number of operations in each industry: Alumina: 74; Aluminium: 164; Energy coal: 319; Manganese ore: 34; Metallurgical coal: 214; Nickel: 81; Silver: 201.

³⁹ South32's equity shares of FY14 EBITDA reflect South32's accounting policies and are as follows: Alumar refinery: US\$73m; Alumar smelter: US\$54m; Aluminium South Africa: US\$190m; BECSA: US\$197m; Cannington: US\$460m; Cerro Matoso: US\$87m; GEMCO: US\$290m; Hotazel: US\$74m; Illawarra Coal: US\$135m; Mozal: US\$52m; Worsley: US\$162m.

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Fluctuations in South32's EBITDA over the 10 years to 30 June 2014 can largely be attributed to the volatility in commodity prices over the period:

Source: BHP Billiton and Grant Samuel analysis

Notes:

- (1) Excludes contribution from the sale of third party products and group and unallocated items.
- (2) Manganese EBITDA is presented on a full consolidation (100%) basis.
- (3) EBITDA is based on BHP Billiton's definition of EBITDA for the 2005 to 2011 period and on South32's definition of EBITDA for 2012, 2013 and 2014.
- (4) The commodity price index was derived by applying movements in commodity prices to each commodity's FY14 revenue contribution. It implicitly assumes that production and other factors impacting revenue are at FY14 levels throughout the period.

South32's operations are relatively mature. For some of the assets, there are limited opportunities for significant life extensions or project expansions. On the other hand, South32's assets offer significant leverage to a recovery in commodity prices.

South32 will seek to maximise shareholder value by improving the productivity of its operations and optimising its management structure, pursuing embedded low-cost organic brownfield investment opportunities and optimising its asset portfolio over time.
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6.1.2 Summary Financial Information

The pro forma income statement of South32 for the three years to 30 June 2014 and the six months to 31 December 2014 is summarised as follows:

South32 – Pro Forma Income Statement (US\$ million)					
	Year ended 30 June			Six months ended 31 December	
	2012	2013	2014	2014	
Revenue	11,683	9,926	8,344	4,089	
Other income	33	136	269	150	
Share of operating profit/(loss) of equity accounted investments	(88)	88	62	35	
EBITDA	2,483	1,611	1,483	1,065	
Depreciation and amortisation	(806)	(848)	(823)	(417)	
EBIT	1,677	763	660	648	
Statistics					
Revenue growth (%)	n.a.	(15)	(16)	n.a.	
EBITDA growth (%)	n.a.	(35)	(8)	n.a.	
EBIT growth (%)	n.a.	(55)	(13)	n.a.	
EBITDA margin (%) ⁴⁰	21	16	18	26	
EBIT margin $(\%)^{40}$	14	8	8	16	

Source: BHP Billiton and Grant Samuel analysis

Note: The pro forma income statement reflects South32's accounting policies which differ from BHP Billiton's policies.

The pro forma income statement for South32 has been prepared by BHP Billiton by aggregating historical financial information relating to the South32 assets. It reflects revenue and expense items clearly attributable to the South32 businesses but excludes certain head office costs that were fully allocated to New BHP Billiton. Furthermore:

- the Demerger is assumed to have been effected on 1 July 2011;
- the pro forma income statement reflects transactions between South32 and New BHP Billiton that were eliminated on consolidation and were therefore not disclosed in the BHP Billiton consolidated accounts;
- the manganese business, which was previously reported on a consolidated basis, with recognition of a non-controlling interest, has been equity accounted. The reported pro forma income statement assumes that control of the business was lost on 1 July 2011; and
- the pro forma income statement does not reflect the following adjustments:
 - additional corporate overhead and financing costs of approximately US\$60 million per annum that South32 expects to incur as a separate listed entity. These costs relate to listing fees, board fees, compliance costs, corporate legal/finance/HR costs and other corporate costs, and to incremental financing costs resulting from South32 securing funding independently of BHP Billiton at higher interest rates than it would benefit from under BHP Billiton ownership;
 - the impact on South32's cost base of the adoption of a new regional organisational structure; and

⁴⁰ The EBITDA and EBIT margins are based on EBITDA and EBIT including the contribution from the sale of third party products, other income and the share of operating profit/(loss) of equity accounted investments divided by revenue plus other income.

• one-off transaction costs (although they are reflected in the pro forma balance sheet set out below).

The level of future dividend payments is a matter for the board of South32 and may change over time having regard to South32's growth strategy and investment options. South32 will seek to distribute a minimum of 40% of underlying earnings as dividends provided that it has an appropriate level of liquidity to retain its investment grade rating. South32 does not intend to pay a dividend for the period ending 30 June 2015.

South32 intends to pay franked dividends to the maximum extent possible. However, South32 and its wholly-owned subsidiaries will have no accumulated franking credits on implementation of the Demerger. Accordingly, the company's ability to frank its dividends will largely depend on the amount of Australian income tax the company pays in the future and the proportion of its earnings that are Australian sourced.

The following table sets out a summarised pro forma balance sheet for South32 as at 31 December 2014:

South32 - Pro Forma Balance Sheet (US\$ millions)				
	31 December 2014			
Debtors	1,019			
Inventories	1,024			
Creditors, accruals and provisions	(1,368)			
Net operating working capital	675			
Property, plant and equipment	10,353			
Investments accounted for using the equity method	3,040			
Non-current provisions	(1,532)			
Intangible assets	306			
Current tax assets / (liabilities) (net)	28			
Deferred tax assets / (liabilities) (net)	(86)			
Other assets / (liabilities) (net)	826			
Total funds employed	13,610			
Cash and deposits	364			
Interest bearing liabilities	(1,024)			
Net cash /(debt)	(660)			
Net assets	12,950			
Non-controlling interests	-			
Equity attributable to South32 shareholders	12,950			
Statistics				
Shares on issue at period end (million)	5,324			
Net assets per share ⁴¹	2.43			
NTA per share ⁴¹	2.37			

Source: BHP Billiton and Grant Samuel analysis

The pro forma balance sheet incorporates the following key assumptions:

- the Demerger was effected on 31 December 2014;
- the relevant assets and liabilities are stated at their historical book values;

⁴¹ Relate to net assets and net tangible assets attributable to South32 shareholders.

- transaction costs already incurred as at the Demerger date have been allocated to New BHP Billiton; and
- intercompany balances between South32 and New BHP Billiton have been settled.

It also reflects the following assumptions:

- the manganese business has been equity accounted;
- the deferred tax balances include an adjustment relating to the resetting of the tax bases of certain assets;
- South32's pro forma cash balance reflects US\$416 million of cash held within South32, the drawdown of US\$150 million under South32's new debt facility⁴², transaction costs to be incurred by South32 after the Demerger of US\$111 million pretax, transaction adjustments and other items; and
- South32's pro forma debt balance of US\$1,024 million comprises bank loans, other loans and finance leases. Bank debt accounts for approximately US\$271 million of the total and a finance lease relating to a long-term electricity supply agreement for the Worsley Alumina refinery for most of the balance.

A syndicate of international financial institutions has signed an agreement to provide a US\$1.5 billion multi-currency revolving loan facility to South32, which is subject to the implementation of the Demerger.

South32 is targeting an investment grade credit rating.

Following the Demerger, South32 will become the head company for a new consolidated group under the Australian tax consolidation regime. South32 will have minimal carried forward income and capital tax losses, all relating to South32's non-Australian assets.

A detailed pro forma income statement and pro forma balance sheet for South32 (including a description of the assumptions and adjustments made) are set out in Section 6 of the Shareholder Circular. The pro forma financial statements have been prepared by BHP Billiton and reviewed by KPMG. KPMG's Independent Accountant's Report is set out in Section 9 of the Shareholder Circular.

6.1.3 Board and Management

Mr David Crawford, formerly an independent director of BHP Billiton, has been appointed the Chairman-elect of South32. Mr Keith Rumble, currently an independent director of BHP Billiton, will be appointed independent non-executive director of South32 if the Demerger proceeds and will retire from the BHP Billiton board. Dr Xolani Mkhwanazi, currently Chairman of BHP Billiton in South Africa, will be appointed non-executive director of South32 if the Demerger proceeds. Mr Graham Kerr, formerly Chief Financial Officer of BHP Billiton, has been appointed South32's Chief Executive Officer-elect (and executive director), and Mr Brendan Harris, formerly the Head of Investor Relations of BHP Billiton, is South32's Chief Financial Officer-elect. The South32 leadership team will include a number of South Africa based board members and executives, reflecting the company's strong focus on the region. The organisational structure of South32 is expected to be tailored to reflect the much smaller scale of the company and its strong focus on two main regions, Australia and Southern Africa.

⁴² The actual amount drawn down against South32's debt facility upon implementation of the Demerger (if any) will vary according to a number of factors, including trading conditions at the time, working capital requirements and other matters.

6.2 New BHP Billiton

6.2.1 Operations and Strategy

New BHP Billiton will remain a leading global resources company. Its core asset portfolio will consist of 19⁴³ large, long life, low cost and expandable iron ore, copper, coal, petroleum and potash assets, located across Australia and the Americas. In FY14, these assets generated (in aggregate) revenue of US\$55.6 billion and EBITDA of US\$31.6 billion. New BHP Billiton will also retain ownership of several non-core assets that are currently under review: Nickel West, New Mexico Coal and some small petroleum assets.

The core asset portfolio of New BHP Billiton will comprise:

- Petroleum and Potash: New BHP Billiton will remain the largest overseas investor in US shale oil and gas projects and will retain its interests in large oil and gas projects in Australia (e.g. North West Shelf, Bass Strait) and in offshore oil assets in the Gulf of Mexico. New BHP Billiton will also retain ownership of the Jansen potash project in Canada. Jansen has the potential to become one of the world's premier potash mines. BHP Billiton has already approved US\$3.8 billion of spending for the excavation of production and service shafts and the installation of essential surface infrastructure and utilities. Jansen has the potential to produce around 10mtpa of agricultural grade potassium chloride in the years following 2020;
- Copper: New BHP Billiton will retain its interests in its copper assets, including Escondida, the world's largest copper mine. At Escondida, a new leach pad and handling system were completed during the December 2014 quarter and construction of a new concentrator is expected to be completed by June 2015, at a total cost of US\$3.8 billion (100%). A new water desalination plant is expected to be commissioned in 2017 at a total cost of US\$3.4 billion;
- **Iron Ore**: New BHP Billiton is considering options to expand the production capacity of its Western Australia Iron Ore operations to 290mtpa by 2017 (from 225mtpa in FY14) and to further reduce costs to less than US\$20 per tonne (before royalties and shipping costs). New BHP Billiton will also retain its interest in the long life Samarco operations; and
- **Coal**: New BHP Billiton will hold its interests in the long life Queensland Coal, New South Wales Energy Coal and Cerrejon assets. A number of expansion projects have either recently been completed or are expected to be completed within the next few months.

⁴³ 12 operated assets and seven stakes in joint ventures.



The following map shows the location of the core assets of New BHP Billiton:

Source: BHP Billiton

Note: Bubble areas denote FY14 EBITDA⁴⁴. Exploration, appraisal and early stage development assets are not represented.

The chart below, which shows the FY14 EBITDA, EBITDA margin and resource life of New BHP Billiton's core assets, illustrates the high quality of the core asset portfolio:



Source: BHP Billiton

Notes: (1) The chart does not include Angostura and Jansen.

(2) Escondida is reported on a 100% basis. Samarco, Antamina and Cerrejon are reported on a proportionate consolidation basis.

(3) The resource life data represent indicative estimates based on most recent reported resources, resource to reserve conversion assumptions based on historical conversion rates and FY14 production.

(4) Bubble areas denote $FY14 EBITDA^{44}$.

⁴⁴ The following FY14 EBITDA were used to derive the area of the bubbles: WAIO: US\$12,988m; Escondida: US\$4,754m; Atlantis: US\$1,407m; Shenzi: US\$1,281m; Onshore US: US\$2,270m; North West Shelf: US\$1,599m; Bass Strait: US\$1,555m; Queensland Coal: US\$949m; Samarco: US\$846m; Antamina: US\$818m; Pyrenees US\$806m; Pampa Norte: US\$785m; Angostura: US\$375m; NSWC: US\$324m; Cerrejon: US\$305m; Olympic Dam: US\$299m; Macedon: US\$236m; Mad Dog: US\$171m.

Iron Ore (mostly the Western Australian operations) generated approximately 40% of New BHP Billiton's FY14 pro forma revenues from its core assets, Copper and Petroleum slightly less than 25% each and Coal (principally the Queensland metallurgical coal operations) the balance. More than half of the revenue was generated by Australian operations, with North America (shale and offshore oil and gas) and South America (copper and some iron ore and thermal coal) contributing the balance in roughly equal shares. With an approximate 40% share of revenue, China was New BHP Billiton's largest export market:



Source: BHP Billiton

Note: Revenue by commodity and geography (i.e. location of assets) excludes revenue from sales of third party product and statutory adjustments. Revenue by market (i.e. location of the customers) includes revenue from the sale of third party products and statutory adjustments.

The portfolio of core assets has generated stronger growth and margins than the broader BHP Billiton portfolio over the period FY04 to FY14. Production⁴⁵ and EBIT have grown at an average of 7% and 21% per annum respectively compared to 4% and 15% for the broader portfolio, and EBIT margins have consistently been higher (48% versus 41% for the broader portfolio)⁴⁶.

New BHP Billiton will continue to focus on operating its existing large, long life, low cost and expandable upstream assets across various commodities, geographies and markets with a view to maximising returns on investment through volume enhancement and cost efficiencies. New BHP Billiton will maintain strict financial discipline in relation to capital allocation with a view to retaining its solid A credit rating.

⁴⁵ Calculated on a copper equivalent basis. The copper equivalent production for each commodity is derived by multiplying the production of that commodity by the commodity price and dividing it by the copper price.

⁴⁶ Sourced from the 19 August 2014 "Unlocking shareholder value" presentation. EBIT includes the contribution from sales of third party product and was calculated on the basis of IFRS 10, IFRS 11 and IFRIC 20 in FY13 and FY14.

6.2.2 Summary Financial Information

The pro forma income statement of New BHP Billiton for the three years to 30 June 2014 and the six months to 31 December 2014 is summarised as follows:

		1 1 20 1		Six months ended
	•	ear ended 30 Ju		31 December
_	2012	2013	2014	2014
Revenue	56,642	53,860	56,762	24,860
Other income	858	3,804	1,225	284
Share of operating profit/(loss) of equity accounted investments	1,869	1,142	1,185	335
EBITDA	31,511	28,109	30,292	13,101
Depreciation and amortisation	(5,526)	(6,067)	(7,716)	(4,401)
Net impairment losses	(79)	(362)	(478)	(361)
EBIT	25,906	21,680	22,098	8,339
Statistics				
Revenue growth (%)	n.a.	(5)	5	n.a.
EBITDA growth (%)	n.a.	(11)	8	n.a.
EBIT growth (%)	n.a.	(16)	2	n.a.
EBITDA margin $(\%)^{47}$	55	49	52	52
EBIT margin $(\%)^{47}$	45	38	38	33

Source: BHP Billiton and Grant Samuel analysis

The pro forma income statement of New BHP Billiton reflects historically reported BHP Billiton results from which revenue and expense items relating to the South32 businesses have been carved out (certain head office costs were fully allocated to New BHP Billiton).

Furthermore:

- the Demerger is assumed to have been effected on 1 July 2011;
- the pro forma income statement reflects transactions between South32 and New BHP Billiton which were eliminated on consolidation and were therefore not disclosed in the BHP Billiton consolidated accounts; and
- the pro forma income statement does not reflect the impact of the Demerger on ongoing costs, including in relation to changes to New BHP Billiton's management structure, or one-off transaction costs.

BHP Billiton has announced that it will seek to steadily increase (but at least maintain) its dividend per share (in US dollar terms). The Demerger is not expected to have any significant effect on the ability of BHP Billiton to pay dividends (and in the case of BHP Billiton Limited, the extent to which dividends will be franked).

⁴⁷ The EBITDA and EBIT margins are based on EBITDA and EBIT, including the contribution from the sale of third party products, other income and the share of operating profit/(loss) of equity accounted investments, divided by revenue plus other income.

New BHP Billiton – Pro Forma Balance Sheet (US\$ millions)				
	31 December 2014			
Debtors	4,486			
Inventories	4,743			
Creditors, accruals and provisions	(8,821)			
Net operating working capital	408			
Property, plant and equipment	96,551			
Investments	3,537			
Non-current provisions	(7,457)			
Intangible assets	4,909			
Current tax assets / (liabilities) (net)	260			
Deferred tax assets / (liabilities) (net)	(2,645)			
Other assets / (liabilities) (net)	3,214			
Total funds employed	98,777			
Cash and deposits	5,295			
Interest bearing liabilities	(30,056)			
Net cash /(debt)	(24,761)			
Net assets	74,016			
Non-controlling interests	(5,568)			
Equity attributable to New BHP Billiton shareholders	68,448			
Statistics				
Shares on issue at period end (million)	5,324			
Net assets per share ⁴⁸	12.86			
NTA per share	11.93			

The following table sets out a pro forma balance sheet for New BHP Billiton as at 31 December 2014:

Source: BHP Billiton and Grant Samuel analysis

The summarised pro forma balance sheet for New BHP Billiton incorporates a reduction in assets and liabilities corresponding to the South32 businesses and a corresponding reduction in retained earnings of US\$11.3 billion reflecting the Demerger Dividend and the gain or loss on demerger, net of associated one-off costs.

Following the announcement of BHP Billiton's intention to pursue the Demerger, S&P and Moody's reaffirmed BHP Billiton's credit ratings. There will be no material changes to BHP Billiton's existing debt facilities.

New BHP Billiton will preserve its income and capital tax losses and its tax credits, with the exception of minimal amounts which will be transferred to South32.

Detailed pro forma income statements and balance sheets for New BHP Billiton (including a description of the assumptions and adjustments made) are set out in Section 5 of the Shareholder Circular. The pro forma financial statements have been prepared by BHP Billiton and reviewed by KPMG. KPMG's Independent Accountant's Report is set out in Section 9 of the Shareholder Circular.

⁴⁸ Relate to net assets attributable to New BHP Billiton shareholders.

6.2.3 Board and Management

The board of directors of New BHP Billiton will comprise the current directors of BHP Billiton other than Mr Keith Rumble, who will retire from the BHP Billiton board and become an independent non-executive director of South32 if the Demerger proceeds. Mr David Crawford has recently retired from the BHP Billiton board and has been appointed Chairman-elect of South32. Mr Jac Nasser and Mr Andrew Mackenzie will continue as Chairman and Chief Executive Officer of New BHP Billiton. Mr Peter Beaven, previously President of the Copper business, has been appointed Chief Financial Officer of New BHP Billiton to replace Mr Graham Kerr, who has been appointed Chief Executive Officer-elect of South32.

7 Evaluation of the Proposed Demerger

7.1 Summary

BHP Billiton has been engaged for some time in a process to simplify its business, reduce costs and focus its capital and management on a limited number of higher quality assets, reflecting its strategy of owning and operating very large, long life, low cost and expandable assets that are diversified by commodity, geography and market. By comparison with BHP Billiton's core iron ore, copper, coal, petroleum and potash assets, the Demerger Assets are generally smaller, with shorter lives, lower margins and fewer growth options. They contribute only a small part of the earnings and value of BHP Billiton. Accordingly, they provide no meaningful diversification benefits. However, they add materially to the complexity involved in managing BHP Billiton. The Demerger will deliver, in a single step, a radically simplified BHP Billiton with a clear focus on the world class assets in its iron ore, copper, coal, and petroleum businesses.

Following the Demerger, shareholders will retain their current investment exposure to BHP Billiton's assets, but this exposure will be split across New BHP Billiton and South32. BHP Billiton shareholders will benefit from the Demerger if it has the effect over time of either increasing the cash flows from the assets of New BHP Billiton and South32 or improving the market rating of those assets. For the Demerger to be in shareholders' best interests, these benefits must outweigh the disadvantages of the Demerger, including the one-off transaction costs and any incremental costs associated with the operation of two public companies rather than one.

There are strong grounds to conclude that South32's assets are likely be more valuable within South32 than if they were to continue to be held by BHP Billiton. South32's asset portfolio will have access to growth capital unlikely to be available within the current BHP Billiton structure, which should allow South32 to capture valuable asset expansion or life extension opportunities that could otherwise be lost. The Demerger will allow South32 to bring to bear a more focussed, appropriate and accountable approach to the management of the Demerger Assets. South32 will adopt a new regionally based management structure that should result in a significant reduction in costs relative to the existing BHP Billiton management structure, and allow it to focus on addressing the particular issues associated with its significant South Africa asset base. In Grant Samuel's view, all these factors could reasonably be expected to result over time in an improvement in the underlying cash flows from the Demerger Assets.

Moreover, there are arguments that suggest that the Demerger will have the additional benefit of promoting a positive market re-rating of the Demerger Assets. The Demerger will effectively allow investors to make active investment choices as between BHP Billiton's core assets and the Demerger Assets in South32, rather than having their investment choice essentially dictated by the BHP Billiton asset portfolio. The Demerger will allow the natural investors in the Demerger Assets to be the price setting investors for those assets, which over time should tend to maximise their market value. Moreover, the Demerger should ensure that the market is better informed in relation to the Demerger Assets and able to price those assets with more confidence. While the impact of reduced pricing uncertainty is difficult to assess, on balance it appears likely to support higher market values for the Demerger Assets.

The Demerger is expected to deliver benefits to New BHP Billiton at two levels. BHP Billiton has identified cost savings that are expected to be realised in the short to medium term as a direct result of the Demerger, through the rationalisation of the organisational structure of New BHP Billiton and the consolidation of functional support activities.

In addition, the Demerger has the potential to deliver indirect benefits through facilitating an improvement in New BHP Billiton's operational performance. The substantial simplification of the business resulting from the Demerger will mean that the board and senior management of New BHP Billiton will be able to focus on a much smaller portfolio of core assets, free of the distractions currently constituted by the Demerger Assets. There will be a consistent emphasis across the organisation on maximising volumes and driving out costs through standardisation,

productivity and utilisation improvements and other efficiencies. Operational improvements achieved by individual businesses will be able to be quickly implemented across the group.

The indirect benefits of organisational simplification and focus, particularly at an operational level, are inherently difficult to quantify. However, at a minimum, the Demerger should act as a catalyst for or accelerate the achievement of benefits that might otherwise only be realised over time. Given the scale of the asset base of New BHP Billiton, the direct and indirect benefits of the organisational simplicity and focus that will result from the Demerger have the potential to deliver material value.

The separation of the Demerger Assets and the resulting organisational simplification could, at least in theory, be achieved through some alternative form of transaction. However, the alternatives have significant disadvantages relative to the Demerger, whether in terms of certainty and speed of completion, value maximisation, minimisation of transaction costs or capacity to immediately deliver organisational simplicity.

The most obvious disadvantages of the Demerger relate to the transaction costs and the ongoing incremental costs associated with the operation of an additional public company in South32. BHP Billiton has estimated that the one-off transaction costs associated with the Demerger will total around US\$738 million. Of these, approximately US\$339 million reflect taxation imposts, principally related to stamp duty payable on the transfer of various Australian properties required as part of the Demerger. While the quantum of the one-off transaction costs is large in absolute terms, it is not material relative to BHP Billiton's market capitalisation and earnings. The transaction costs are not significant having regard to the potential scale of the benefits of the Demerger. BHP Billiton has already identified Demerger benefits (principally relating to investment opportunities in South32 that would not be funded in BHP Billiton and to cost savings) that should at least offset the transaction costs and the incremental costs associated with the operation of an additional public company.

The tax consequences of the Demerger for shareholders will depend (amongst other matters) on whether they are shareholders in BHP Billiton Limited or BHP Billiton Plc and on their domicile for tax purposes. BHP Billiton has received a draft ruling from the Australian Taxation Office confirming that, in relation to Australian resident shareholders of BHP Billiton Limited, the Demerger Dividend (i.e. the distribution of shares in South32) will generally not be subject to Australian income tax. The Demerger Dividend is expected to be generally tax free for UK-based institutional investors in BHP Billiton Plc. The tax consequences of the Demerger for other shareholders of BHP Billiton will depend upon their particular circumstances. To the extent that the Demerger results in a cash tax obligation or other significant tax consequence for BHP Billiton shareholders, the benefits of the Demerger for those shareholders will be reduced.

Overall, in Grant Samuel's view the benefits of the Demerger are likely to be significant. The Demerger should promote an improvement in the underlying performance of the Demerger Assets and, potentially, a market re-rating of those assets. In addition, the simplified structure of New BHP Billiton should over time allow the realisation of greater efficiencies, improved productivity and other benefits in relation to New BHP Billiton's asset portfolio. Even relatively modest improvements in New BHP Billiton's operating performance would have a meaningful impact on value. By contrast, the costs and disadvantages of the Demerger are not significant.

In Grant Samuel's opinion the benefits of the Demerger clearly outweigh the disadvantages. BHP Billiton shareholders are likely to be better off if the Demerger proceeds. Accordingly, in Grant Samuel's view, the Demerger is in the best interests of the shareholders of BHP Billiton.

7.2 Rationale for the Demerger

The history of BHP Billiton and its antecedent companies has been one of constant change and reinvention, reflecting the development, exploitation and exhaustion of great ore bodies, massive shifts in commodity demand, and the rise and fall of whole industries. For example:

- the silver/lead/zinc operations in Broken Hill that were the foundations of BHP were first discovered in 1885. They were mined for over fifty years before being closed in 1939;
- BHP began making steel (in Newcastle) in 1915. By the early 1960's, BHP was predominantly a steel (and steel products) manufacturer and distributor with significant iron ore and coal mining assets. BHP exited the steel business in 2000 and 2002 by way of demergers;
- Billiton's initial businesses of tin and lead smelting in The Netherlands closed in the 1990s;
- BHP first entered the gold mining industry in 1977 and then divested most of its gold assets in 1990 through the merger of its subsidiary BHP Gold Mines Limited with Newmont Australia (to become Newcrest Mining Limited); and
- commencing with Bass Strait oil and gas exploration (in joint venture with Esso) in 1963, BHP entered the oil and gas sector. It then pursued a strategy of increasing diversification, adding copper, nickel and aluminium assets over the next 30 years.

This diversification strategy underpinned the rationale for the 2001 merger between BHP and Billiton. The merger:

- combined BHP's iron ore, coal, steel, petroleum, copper and silver/lead/zinc interests with Billiton's significant exposures to aluminium, manganese, nickel and coal;
- combined BHP's significant development pipeline with Billiton's portfolio of mature, cash producing assets;
- created a much stronger combined cash flow base to fund the development program; and
- enhanced access to global capital markets, creating (at that time) the world's second largest mining company.

Operating as a diversified resources company provides significant strategic benefits. In particular, diversification:

- smooths operating cash flows as demand patterns and price movements of individual commodities are not highly correlated. In addition, a broad portfolio means individual assets are usually at different points in their lifecycles. The more stable cash flows allow the company to invest across the cycle and avoid the need to make investment decisions compromised by short term dynamics; and
- allows the company to shift its investment focus over the longer term to reflect underlying changes in demand for particular commodities.

However, the inherent nature of a diversified resources business is that the portfolio of assets needs to be constantly reviewed and adapted to reflect:

- changing supply and demand profiles for individual commodities;
- commodity price trends and outlook;
- positions on the cost curve and general cost competitiveness;
- asset lifecycles as they move from development to ramp up, maturity and decline; and
- asset returns and portfolio mix.

In the case of BHP Billiton, there have been dramatic economic developments since the 2001 merger, primarily the emergence of China and the consequential impact on the demand for and pricing of various commodities, in particular iron ore, coal and copper.

These developments have fundamentally changed BHP Billiton's earnings mix and underlying drivers of performance. Two key outcomes have been:

• an enormous growth in the scale and contribution of the iron ore, copper and petroleum businesses:



Source: BHP Billiton

- Notes: (1) EBIT estimates for 2000 and 2014 have not necessarily been compiled on a consistent basis. CY2000 EBIT is based on UK GAAP and a A\$:US\$ exchange rate of A\$1.00=US\$0.5655. FY14 EBIT includes the contribution from the sale of third party products and statutory adjustments.
 - (2) FY14 Iron Ore production has been adjusted to exclude the contribution from the 15% share in Jimblebar BHP Billiton does not own but no corresponding adjustment has been made to EBIT. FY14 Copper production and EBIT have been adjusted to exclude the contribution from the 42.5% share in Escondida BHP Billiton does not own. FY14 Petroleum EBIT excludes the contribution from the Potash business.
- the consequential impact on the relative contributions of the various components of BHP Billiton's portfolio. The iron ore, copper and petroleum businesses together with coal contributed 89% of revenue and 97% of EBITDA for the year ended 30 June 2014, while the contribution of other commodities is now marginal. This situation contrasts strongly with the broadly diversified mix at the time of the 2001 merger:

⁴⁹ Production data for the year ended 30 June 2001, as sourced from the 2002 Form 20-F. EBIT for the year ended 31 December 2000, as estimated from data sourced from the 19 March 2001 BHP Billiton Merger presentation.

⁵⁰ Iron Ore production excludes the contribution from Whyalla, which was spun off as part of OneSteel Limited in October 2000. Copper production excludes the contribution from OK Tedi (BHP Billiton withdrew from the operations in February 2002).

⁵¹ Year ended 30 June 2014.



Source: BHP Billiton

- Notes: (1) EBIT estimates for 2000 and 2014 have not necessarily been compiled on a consistent basis. CY2000 EBIT is based on UK GAAP. FY14 EBIT includes the contribution from sales of third party product and statutory adjustments.
 - (2) AMN stands for Aluminium, Manganese and Nickel

The net result is that businesses such as aluminium, manganese and nickel now provide only limited diversification benefits for BHP Billiton. At the same time, they add considerably to the overall complexity of the organisation, significantly increasing the number of individual assets to be managed and the number of individual commodities in which the business is actively engaged. Inevitably, despite their minor profit contribution, the span of activities and the number of individual assets mean that they take up a disproportionate amount of senior management attention.

Accordingly, the company has been considering its options in relation to its non-core assets. It has sold a number of assets (such as its interests in the Richards Bay Minerals titanium minerals operation, the diamonds business, the Pinto Valley copper operations, the Yeelirrie uranium deposit and the Browse LNG project). After evaluation of various alternatives, the board of BHP Billiton has settled on the Demerger as likely to achieve the best longer term outcome for shareholders.

The Demerger provides an immediate, clean solution that preserves shareholder value (as shareholders⁵⁴ retain the same economic interest in the assets) and provides the opportunity to capture upside from improved management of the assets, realisation of expansion potential, any upturn in the commodity price cycle and, possibly, corporate activity.

7.3 Approach to Evaluation

ASIC has established guidelines for the preparation of independent expert's reports in its Regulatory Guide 111. ASIC Regulatory Guide 111 states that an expert, in assessing a demerger, should provide an opinion as to whether the advantages of the demerger outweigh the disadvantages. If the advantages outweigh the disadvantages, the demerger will be in the best interests of shareholders.

The Demerger will have no direct impact on the assets and liabilities of BHP Billiton⁵³, other than to divide them into separate companies. BHP Billiton shareholders⁵⁴ will retain the same aggregate investment exposures as before the Demerger, although their investment exposures post-

⁵² Years ended 31 December 2000 and 30 June 2014.

⁵³ Except insofar as BHP Billiton will incur one-off transaction costs and some minor potential tax impacts in relation to the Demerger.

⁵⁴ Other than certain shareholders ineligible or unable to hold shares in South32.

Demerger will be split between New BHP Billiton and South32. For the Demerger to benefit BHP Billiton shareholders, it must over time result in an increase in the value of the assets held by New BHP Billiton and South32. This will be achieved if the Demerger has the effect of:

- improving the underlying performance of the assets of New BHP Billiton and/or South32 (i.e. increasing the cash flows attributable to the assets); or
- for a given set of cash flows, promoting a positive market re-rating of the assets (i.e. reducing the cost of capital for the assets).

The Demerger will only be in shareholders' best interests if these and any other benefits outweigh the costs, risks and other disadvantages of the Demerger.

Accordingly, Grant Samuel has evaluated the Demerger by assessing whether, for each of South32 and New BHP Billiton, the Demerger is likely either to improve the underlying performance of its assets or to promote a positive market re-rating of the assets. Grant Samuel has considered the costs, risks and other disadvantages of the Demerger (including transaction costs and tax consequences). To the extent possible, Grant Samuel has compared quantifiable benefits with estimates of Demerger costs and other quantifiable disadvantages. However, many of the potential Demerger benefits are by their very nature difficult or even impossible to quantify. In this context, the overall conclusion as to whether the advantages of the Demerger outweigh the disadvantages is to some extent subjective.

7.4 South32

7.4.1 Impact on Business Operations

Funding of growth projects

As part of its strategic re-positioning in the lower growth post-GFC world, BHP Billiton has moved to limit aggregate capital expenditure on growth projects and to apply rigorous criteria to assess and select those growth projects that are to receive funding. In the context of BHP Billiton in its current form, it is likely that capital expenditure on growth projects would be prioritised to expenditure on the core assets of the iron ore, petroleum and potash, copper and coal businesses. Relative to the Demerger Assets, these assets typically have far more attractive investment characteristics.

A number of potential project expansion or life extension opportunities have been identified amongst the Demerger Assets. In particular, there are project expansion or life extension opportunities for a number of the coal assets within BECSA and for the Cannington silver/lead/zinc mine. These investment opportunities offer potentially attractive investment returns and are likely to receive careful consideration within South32. Given South32's strong balance sheet and the absence of competing investment opportunities, there are good grounds to expect that at least some of these potential growth initiatives will receive funding. By contrast, these initiatives would almost certainly not be funded within BHP Billiton in its current form.

The consequence will be that South32 will have an opportunity to capture value that is likely otherwise to have been lost within BHP Billiton in its current form. Moreover, to the extent that the investments have the result of extending project lives, they will increase project optionality and the opportunity to generate further value in the future. The quantum of the value that stands to be captured by South32 (and would otherwise likely be lost within BHP Billiton in its current form) will depend on various uncertain factors including future commodity prices. However, it could potentially be significant relative to the value of South32's asset portfolio.

Operating and other costs

Considerable work has already been completed on designing the new regional organisational structure for South32. The organisational structure will involve significant simplification relative to the structure under which the South32 businesses would be managed as part of the BHP Billiton group and a major rationalisation of the various support functions. As a result, there are expected to be meaningful reductions in the cost of managing South32's assets.

South32 will incur incremental corporate and listed company costs as a separate publicly listed company. These include costs associated with the senior management team, a separate board of directors and other public company costs. In addition, South32 is expected to incur debt funding costs that would not apply if the Demerger Assets were to continue as part of BHP Billiton. The aggregate incremental costs are estimated at approximately US\$60 million per annum but are expected to be offset by the cost reductions stemming from the implementation of the new regional model.

The extent to which these cost reductions are attributable exclusively to the Demerger is not clear. It is likely that at least some of these cost reductions could be achieved within BHP Billiton. However, at a minimum, the Demerger will facilitate or accelerate the achievement of the cost reductions. On balance, it appears reasonable to conclude that on a net basis the Demerger will result in a direct reduction in the cost of managing the South32 assets.

Management structure and focus

The BHP Billiton management structure and approach has evolved over time with a view to maximising the value of a portfolio of high value, long life assets within a very large and complex multinational business. The management structure and overall philosophy are unlikely to deliver optimal outcomes for the Demerger Assets:

- the management structure is organised along commodity lines and does not easily accommodate the geographic spread of smaller assets in the BHP Billiton portfolio. For example, it is to be expected that the BECSA coal assets in South Africa will receive only limited attention within BHP Billiton's coal business, given their relatively modest value and distance from Australia;
- the BHP Billiton management philosophy and processes are appropriate for very large, high value, high margin, long life assets, which are generally based on vast resource endowments and, in the case of the mining assets, high volume bulk earth moving operations. The management approach for these assets aims to maximise value through volume growth and cost reductions via standardisation, automation and utilisation efficiencies. It is less appropriate for the diverse range of relatively complex mining operations and downstream processing assets that constitute the Demerger Assets; and
- given the Demerger Assets' modest contribution to earnings and cash flows, they will inevitably receive only limited attention from the senior management and board of BHP Billiton in its current form.

The Demerger will comprehensively address these issues and should facilitate an improvement in the management of the Demerger Assets:

- South32's regional management structure will ensure that appropriate management attention is directed towards, in particular, the South African assets;
- South32 expects to develop a management approach appropriate for the particular characteristics of the Demerger Assets. The South32 assets include mature and/or short life operations, underground mines and a number of downstream processing plants (alumina refineries and aluminium smelters, ferro-nickel smelting and

refining and manganese alloying operations), all of which require management skills very different from those required for BHP Billiton's large scale extraction assets. South32 will be able to develop unique management approaches tailored to the requirements of each of the operations. Optimisation of the asset base will involve a focus on cost minimisation, resource management and life extension. South32 will be able to bring to bear a more nimble and entrepreneurial approach to the management of its assets. There will be an opportunity through small incremental improvements to reduce the operating costs and extend the operating lives of the assets. Given the operational leverage inherent in the lower margins of many of the Demerger Assets, such improvements have the potential to deliver significant additional value; and

• the Demerger will ensure that the full range of Demerger Assets receives the concentrated attention of the board and senior management of South32.

Given that the Demerger Assets contribute only a small proportion of the earnings and value of BHP Billiton, the performance of the Demerger Assets is unlikely to be reflected to any meaningful degree in the BHP Billiton share price. By contrast, following the Demerger, the share price of South32 will be a transparent indicator of the performance and prospects of the Demerger Assets. Continuous market assessment of the value of the Demerger Assets will promote greater board and management accountability for performance. It will provide an opportunity to set up incentive structures that directly link management remuneration to the performance of the Demerger Assets.

The improvements in management structure, approach and focus that will result from the Demerger are likely over time to deliver significant increases in the value of the Demerger Assets. These improvements cannot be quantified and it may be the case that they could be achieved to some extent within the current BHP Billiton structure. Nonetheless, in Grant Samuel's view, the management empowerment and sharper focus that will flow from the Demerger represent significant benefits.

South African investments

A significant proportion of the Demerger Assets are located in South Africa. The South African manganese assets, BECSA coal assets and South African aluminium smelting assets collectively contributed around 37% of the total revenue⁵⁵ generated by the Demerger Assets for the year ended 30 June 2014. Maximisation of the value of these assets requires close engagement with a range of South African stakeholders, including various tiers of government, key participants in the South African political process, community and labour groups and significant customers and suppliers.

The South African assets are not significant within BHP Billiton in its current form and as a result have received only limited senior management attention. Moreover, the various operations report through different business groups within BHP Billiton. In South32, however, the board and senior management will be able to devote the time and attention required to develop a detailed understanding of the South African business environment and to foster the required relationships with the relevant stakeholders. South32 will have South African nationals on its board and senior management team. South32's regional management structure will mean that there will be a South African country head and management team who will be focussed exclusively on the South African assets and the broader issues involved in doing business in South Africa.

Over time, it appears likely that the Demerger will allow South32 to achieve greater value for the South African assets than would have been the case in BHP Billiton in its current form. In addition, the Demerger will potentially allow South32 to identify and pursue

⁵⁵ Based on revenues including inter-segment revenue and reflecting the manganese business on a proportional basis (60%).

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growth opportunities in South Africa that would not have been available to or recognised by BHP Billiton.

Strategic flexibility

BHP Billiton's strategic priorities are directed towards the ongoing development and optimisation of the core assets in its iron ore, petroleum, copper and coal businesses. In this context, the Demerger Assets are unlikely to receive any strategic focus as part of BHP Billiton.

For South32, however, the development of appropriate strategies to optimise its asset portfolio will be critical. In particular, South32 will have to address the reality that a number of its assets have relatively limited remaining lives. It appears likely that South32 will consider merger, acquisition and other portfolio management opportunities, both to regenerate its asset portfolio and on an opportunistic basis. South32 will enjoy considerable strategic flexibility. It will be able to address opportunities across a range of commodities and geographies. Its strong financial position, relatively flexible approach to capital management and (potentially) willingness to use its scrip will provide South32 with significant transactional capacity. Overall, in Grant Samuel's view, the strategic flexibility made possible by the Demerger should assist over time in maximising the value realised by shareholders for the Demerger Assets.

Size

South32 will be significantly smaller than BHP Billiton. It will be less able to absorb the impact of material adverse events, whether external (e.g. falls in commodity prices, manifestation of sovereign risk) or internal (e.g. disruptions at the operations).

With 37% of its revenue generated in South Africa and an additional 19% generated in Mozambique, Colombia and Brazil⁵⁶, South32 will be more vulnerable to manifestations of sovereign risk in these countries than would the broader BHP Billiton. On the other hand, the Demerger will not change these risks. In fact it may reduce their potential impact, because South32 will be incentivised to address the risks and, given its proposed management structure, should be better equipped to manage them.

7.4.2 Impact on Market Rating

Investor focus and information

For many shareholders in BHP Billiton, their investment exposure to the Demerger Assets is essentially a by-product or unintended consequence of their decision to invest in BHP Billiton. It appears likely that the vast majority of shareholders in BHP Billiton hold their shares to gain exposure to BHP Billiton's core iron ore, copper, coal, petroleum and potash assets. Many BHP Billiton shareholders will have limited interest in, or understanding of, the Demerger Assets. In these circumstances, shareholders are unlikely to attribute significant value to the Demerger Assets. By contrast, following the Demerger, shareholders in South32 will have made an active decision to retain or gain investment exposure to the Demerger Assets through holding or acquiring shares in South32. Over time, the price-setting investors in South32 will be the natural investors in the Demerger Assets (i.e. the investors who attribute most value to the Demerger Assets).

Moreover, the Demerger will result in the market becoming far better informed regarding the Demerger Assets. Analysts and other market commentators who follow BHP Billiton focus almost exclusively on its core iron ore, copper, coal, petroleum and potash assets and hold a very wide range of views as to the value of the Demerger assets. In part, the

⁵⁶ Based on FY14 results.

market's limited understanding of the Demerger Assets is a function of BHP Billiton's investor relations activities, which are understandably focussed on its key high value assets. In recent years, there have been no investor relations presentations or site tours for the Demerger Assets. The Demerger will completely change this position. South32's management will have as a primary objective to ensure that the market is comprehensively informed regarding the Demerger Assets. The availability of extensive information regarding the Demerger Assets and the consequent improvement in investor understanding should allow investors to price the assets with more confidence. In turn, this reduction in investment uncertainty should tend to drive down the cost of capital for the Demerger Assets and improve their market rating.

Index weighting and liquidity

The market rating of the Demerger Assets could also be affected by factors relating to the market capitalisation, liquidity and index ranking of South32:

- South32 will have a far smaller market capitalisation than either BHP Billiton Limited or BHP Billiton Plc. Nonetheless, it will be a significant public company, with what is likely to be a widely held and reasonably liquid share register;
- in the Australian market at least, South32 is likely to represent an attractive mid-cap resources investment opportunity, given the limited number of mid-cap resources stocks in the gap between market leaders such as BHP Billiton and Rio Tinto and the large number of very small resources stocks;
- based on a range of values ascribed by brokers to the Demerger Assets (US\$13.4-22.2 billion with a median of US\$18.1 billion), South32 would be in the top 20 listed mining companies in the world and the top 30 Australian listed companies⁵⁷:



Source: Bloomberg, brokers and Grant Samuel Analysis

• South32 should qualify for inclusion in the Australian S&P/ASX 50 index and potentially the S&P/ASX 20 index, but in any case it will be included in the S&P/ASX 200 Index, which is the key index for Australian institutional and index based investors. South32 will not qualify for inclusion in the FTSE 100 index, which might

⁵⁷ This analysis should be viewed as indicative only. It does not represent an estimate or forecast by Grant Samuel of the possible future market value of South32. The future market value of South32 will vary depending on a number of factors, including future commodity prices, exchange rates and operational performance of South32's assets, and could be less than or greater than the identified range.

prevent some LSE-based investors from owning the stock, but it should remain attractive to LSE-based investors as one of only a few mining companies of its size listed on the exchange; and

• with listings on three exchanges and an ADS program, investing in South32 should be convenient and cost effective for a broad range of investors globally.

Other issues

Although South32 will arguably be less diversified than BHP Billiton in its current form, it will still enjoy considerable asset diversification. In any event, there should be little impact from a shareholder perspective. Shareholders⁵⁸ can continue to enjoy the full diversification benefits of the current BHP Billiton structure by continuing to hold shares in both New BHP Billiton and South32 following the Demerger.

Share market ratings can also reflect expectations of corporate activity. Takeovers are an important mechanism by which shareholders can realise value in excess of share market prices as bidders typically pay a premium to acquire control. Impediments to a takeover are generally negative for shareholders. In the case of BHP Billiton, its very size is a material impediment to a takeover, and its shares are presumably priced on that basis. By contrast, while South32 may not be an obvious takeover target (given its size and spread of assets there are unlikely to be many natural acquirers of South32), some form of value accretive corporate transaction in the future cannot be ruled out.

Short term trading

In the short term, South32's market rating may be affected by the relatively high levels of buying and selling activity that commonly follow demergers. These trading volumes reflect investors' decisions to adjust their exposures to the demerged companies, either because of their investment mandates (e.g. index investors) or their desire to adjust their exposures to certain geographies, sectors, growth profiles or other investment characteristics. This can lead to a period of share price weakness following a demerger.

In the case of South32, there may be short term selling pressure:

- South32's risk/return profile will be substantially different to that of BHP Billiton. In particular, South32 will provide much more direct exposure to commodities (e.g. alumina/aluminium, manganese) and geographies (e.g. South Africa) that are not significant in BHP Billiton;
- South32 will not be a constituent of the FTSE, LSE's main index for fund managers, which might restrict some investors' ability to hold the stock; and
- as the Demerger might trigger a cash tax liability for some investors, there is a possibility that investors will sell South32 shares to pay the tax owed.

On the other hand, there are prospects of new sources of demand for South32 shares:

- South32 will be one of a handful of mining companies of its size and diversity traded on the ASX, LSE and JSE;
- as 100% of the market value of South32 will be reflected in the ASX indices, as opposed to 60% for BHP Billiton, some ASX-index investors may have to increase their shareholdings in South32 to match the company's weightings in these indices; and
- some investors may seek specific exposure to the commodities in which South32 operates. For example, South32 would be one of the few options available to investors seeking material exposure to the manganese sector.

⁵⁸ Other than certain shareholders ineligible or unable to hold shares in South32.



7.4.3 Conclusion

BHP Billiton's analysis suggests that the Demerger will have significant quantifiable benefits for the Demerger Assets, particularly as a result of a reduction in management and other non-operational costs and through the facilitation of valuable project expansion or extension opportunities that might otherwise be lost within BHP Billiton. In Grant Samuel's view, the non-quantifiable benefits of the Demerger are likely to be equally important. South32's more flexible and focussed management will be concentrated exclusively on the Demerger Assets and will have the structure and capacity to pay particular attention to South32's South African operations. It is reasonable to expect that over time this focus will result in the realisation of more value from the Demerger Assets than would the case if the assets continued to be part of BHP Billiton. In Grant Samuel's view, there are good grounds to conclude that the Demerger will have a strong positive impact on the underlying business of South32.

It is not possible to make definitive judgements regarding the impact of the Demerger on the market rating of the Demerger Assets, in part because it is not clear what value is currently attributed to those assets by the market. On balance, however, Grant Samuel believes that the additional information disclosure and the enhanced investor understanding that will result from the Demerger are likely over time to have a positive effect on the market's assessment of the value of the Demerger Assets.

Overall, in Grant Samuel's view, although the positive effects of the Demerger on the Demerger Assets may only become apparent over time, it is reasonable to conclude with some confidence that the Demerger should "liberate" value for the Demerger Assets that is not realisable or apparent in the current BHP Billiton structure.

7.5 New BHP Billiton

7.5.1 Impact on Business Operations

The Demerger will result in the simplification of BHP Billiton at a number of levels:

- New BHP Billiton will own and manage far fewer assets than BHP Billiton in its current form, with the number of assets reduced from 41 to 19 core assets and a further 10 non-core assets;
- New BHP Billiton's geographic exposures will be less diverse: its assets will be concentrated in Australia and the Americas;
- New BHP Billiton will have no exposure to the alumina/aluminium and manganese markets. Subject to resolving the future of Nickel West, it will also exit the nickel market. New BHP Billiton will be focussed on iron ore, copper, coal, petroleum and potash;
- with the transfer to South32 of the aluminium smelter interests, alumina refineries and manganese alloying plants, New BHP Billiton will have little exposure to downstream processing operations; and
- there will be far more commonality across the residual New BHP Billiton assets than there is in the current BHP Billiton asset portfolio. With the exception of the petroleum assets, New BHP Billiton's asset portfolio will essentially consist of long life, large volume material movement operations, with opportunities to apply common standards in terms of equipment, processes, management and operating procedures.



The consequences of this simplification are expected to be twofold.

- there will be an immediate opportunity for New BHP Billiton to simplify its organisational structure and reduce the layers of management and functional support for the operations, resulting in direct cost reductions; and
- as a result of the greater management focus, improved communications and more effective management expected to result from the simplified organisational and management structure in New BHP Billiton, there should be opportunities over time to enhance performance at an operational level.

Following the Demerger, New BHP Billiton intends to implement a revised organisational and management structure that will involve the rationalisation of functional support activities (e.g. indirect costs such as supply, human resources and financial management). BHP Billiton has estimated that this will result in annual cost savings of approximately US\$100 million (pre-tax), in addition to the reduction in BHP Billiton's cost base relating to the carve-out of the South32 businesses.

The Demerger will remove the distraction of the Demerger Assets and allow New BHP Billiton's board and senior management to focus on the core asset portfolio. BHP Billiton believes that this focus has the potential to unlock significant additional value across the organisation. Quantification of the benefits of greater management focus is not straightforward and BHP Billiton has not attempted an estimate. However:

- although the core assets to remain in New BHP Billiton are already the priority of BHP Billiton's board and senior management team, the simplification of the business that will result from the Demerger should allow for an even sharper focus on the remaining assets;
- it appears intuitively obvious that the enhanced focus of the board and senior management, the improved communications that should result from a simpler structure, and the capacity to provide greater support to operational management, should over time deliver benefits in terms of improved operational performance; and
- the benefits of increased focus should be enhanced by the strong commonality of the assets to remain in New BHP Billiton. With the exception of the petroleum assets, the New BHP Billiton asset portfolio will essentially consist of very large, long life, high volume material movement operations. There will be a consistent focus across the organisation on maximising volumes and driving out costs through standardisation, productivity and utilisation improvements and other efficiencies. Operational improvements achieved by individual businesses will be able to be adopted more rapidly across the broader group.

It is to be expected that BHP Billiton would be able to improve operational performance over time regardless of whether the Demerger proceeded. BHP Billiton has announced that it expects to be able to achieve productivity-led gains at its core assets yielding additional pre-tax earnings of at least US\$4.0 billion per annum by the end of the 2017 financial year. Similarly, it is likely that at least some of the direct cost reductions resulting from a simplified organisational and management structure could be achieved by BHP Billiton in its current form, as BHP Billiton's focus continues to transition from growth to the maximisation of returns from its asset base.

Nonetheless, it appears reasonable to expect that the Demerger will yield real benefits, including the acceleration of improvements which might otherwise only be achieved at some later point in time. Given the scale of the businesses to be retained within New BHP Billiton, even small productivity or efficiency improvements have the potential to deliver meaningful benefits in absolute terms. For example, given the annual cost base for the

assets to be retained by New BHP Billiton of US\$26 billion⁵⁹ in FY14, a 1% reduction in costs would deliver incremental annual pre-tax earnings of US\$260 million.

The Demerger benefits of improved management focus applied to a simplified organisation will only be realised progressively, and in practice it will not be possible to differentiate such benefits from the "business as usual" improvements that BHP Billiton would expect to achieve in any event. Assessment of these Demerger benefits is subjective. In Grant Samuel's view, however, it is reasonable to expect that the enhanced focus made possible by the Demerger will over time deliver meaningful benefits in terms of reducing management cost and enhancing the operational performance of New BHP Billiton.

7.5.2 Impact on Market Rating

Although New BHP Billiton will be slightly smaller than BHP Billiton in its current form, it will remain the largest mining company in the world by market capitalisation by a wide margin (based on the aggregate market capitalisations of BHP Billiton Limited and BHP Billiton Plc). It will continue to be amongst the top five companies by market capitalisation listed on the ASX (based on BHP Billiton Limited's market capitalisation only) and in the top 30 companies traded on the LSE (based on BHP Billiton Plc's market capitalisation only). While its weighting in the indices will be reduced (although not materially), New BHP Billiton should remain a constituent of all the main indices of which it is currently a member. Its shares should remain highly liquid and there is no reason to expect any significant change in its share register.

Notwithstanding the simplification that will result from the Demerger, New BHP Billiton will retain a high level of diversification, with interests in 19 core assets located in eight countries and exposure to five commodity groups (iron ore, coal, copper, petroleum and potash). As the Demerger Assets only account for a modest proportion of the earnings of the broader BHP Billiton, the diversification benefits they brought were no longer material. Overall, the impact of the reduction in diversity of New BHP Billiton is unlikely to be significant. In any event, BHP Billiton shareholders seeking to maintain their current level of diversification can achieve this by continuing to hold the South32 shares they will receive through the Demerger.

BHP Billiton is followed by numerous analysts and other commentators and extensive information regarding its core assets is available to the market. The Demerger is unlikely to affect the market's understanding of New BHP Billiton's asset portfolio.

Overall, in Grant Samuel's view, the Demerger is unlikely to have any significant impact on the market rating of New BHP Billiton.

7.5.3 Conclusion

The Demerger will allow New BHP Billiton to reduce management and other indirect costs, through rationalising functional support for its operating businesses. It will allow New BHP Billiton's board and senior management team to bring to bear a much sharper focus on a substantially simpler business, freed of the distractions of the Demerger Assets. While the potential benefits in terms of operational improvements are not easily quantified, in Grant Samuel's opinion they are likely to be meaningful. In Grant Samuel's view, the Demerger can reasonably be expected to result in an improvement in the performance of New BHP Billiton's assets. Although there is no basis to expect any meaningful change in the market rating of the assets, the consequence of this improved performance should be to deliver additional value that would not be available in the absence of the Demerger.

⁵⁹ Before depreciation, amortisation, interest and tax.

7.6 Costs, Disadvantages and Risks

7.6.1 One-Off Transaction Costs

BHP Billiton has estimated that the total one-off transaction costs of the Demerger will be approximately US\$738 million before tax, of which approximately US\$274 million will already have been incurred by the time that BHP Billiton shareholders vote on the Demerger. Of the total costs, stamp duty and cash tax resulting from the transfer of assets within the BHP Billiton group as part of the Demerger are estimated to total approximately US\$339 million. Other costs include separation and establishment costs (relating mostly to information technology, human resources and facilities) and one-off transaction execution costs (mostly adviser and compliance fees). If the Demerger does not proceed, BHP Billiton will incur an estimated US\$30 million of costs in addition to the US\$274 million that it will have incurred by the time shareholders vote on the Demerger.

While the transaction costs are large in absolute terms, they are not significant in relative terms, representing around 0.6% of BHP Billiton's current market capitalisation. They are not material having regard to the scale of the potential benefits of the Demerger.

7.6.2 Transaction Implementation and Other Risks

The Demerger is a complex transaction, involving assets held by numerous entities across several jurisdictions and requiring multiple approvals, waivers and consents. It requires the establishment of a new corporate identity and culture for South32, together with new management structures and systems. In these circumstances, there is inevitably some degree of transaction risk. Given the maturity of BHP Billiton's systems and processes and the planning and preparation undertaken in relation to the Demerger, there is no reason to believe that these implementation risks are significant.

7.6.3 Non-participating Shareholders

Shareholders in certain jurisdictions will not be eligible to participate in the Demerger. The South32 shares that they would otherwise have received will be sold and the proceeds remitted to them, free of any brokerage costs or stamp duty. Some index-based investors may be precluded from holding South32 shares because, for example, South32 will not be included in the FTSE 100 index. For both these groups of shareholders, the consequence of the Demerger will effectively be the involuntary divestment of their interests in the Demerger Assets. For the vast majority of these shareholders, however, it is unlikely that the Demerger Assets were the focus of their investment in BHP Billiton. They will in any event receive the current market value of their interests in the Demerger Assets.

7.7 Taxation

7.7.1 Corporate Taxation

Neither BHP Billiton Limited nor BHP Billiton Plc is expected to incur any capital gains tax liability as a result of the Demerger. BHP Billiton may incur a modest Australian income tax liability in relation to the transfer of certain assets to South32. This tax liability is included in the transaction costs outlined above.

7.7.2 Tax Consequences for Shareholders in BHP Billiton Limited

BHP Billiton has received a draft tax ruling from the ATO confirming that the Demerger Dividend will not constitute assessable income for BHP Billiton Limited shareholders who are Australian residents for tax purposes. Assuming that the ATO issues a final tax ruling consistent with the draft, Australian resident shareholders in BHP Billiton Limited can elect for demerger tax relief, which will have the following impact:

- a) shareholders who acquired their BHP Billiton Limited shares "post-CGT" (i.e. after 19 September 1985) will be required to apportion the cost base of their existing BHP Billiton Limited shares between their BHP Billiton Limited shares and South32 shares in proportion to their market values just after the Demerger. The future disposal of South32 shares will give rise to a taxable gain or loss; and
- b) the South32 shares received by pre-CGT shareholders will be treated as pre-CGT shares. Any gain arising on a future disposal of pre-CGT shares will generally not be taxable.

The tax implications of the Demerger Dividend for shareholders in BHP Billiton Limited who are not Australian residents for tax purposes will depend on their country of domicile and their individual circumstances. Such shareholders should seek their own taxation advice in relation to the taxation impact of the Demerger.

7.7.3 Tax Consequences for Shareholders in BHP Billiton Plc

The tax implications in relation to the Demerger Dividend for shareholders in BHP Billiton Plc will vary, depending on their country of domicile, their individual situation and other circumstances. Generally speaking, the Demerger Dividend will be treated for tax purposes in the same way as a cash dividend. Accordingly, UK institutional shareholders will generally not be taxed on the Demerger Dividend. To the extent that the Demerger Dividend is assessable in the hands of other shareholders and results in a cash tax liability, the net benefits of the Demerger for those shareholders will be reduced. For UK shareholders, the cost base of the South32 shares acquired pursuant to the Demerger will generally be the market value of the shares on the distribution date.

7.7.4 Shareholder Information regarding Tax Consequences

This report does not purport to provide advice regarding the tax consequences of the Demerger for individual shareholders and should not be construed as such. Shareholders should carefully read the information regarding the tax consequences of the Demerger set out in Section 8 of the Shareholder Circular. Shareholders who are in any doubt as to the tax consequences of the Demerger should consult their own professional adviser.

7.8 Alternatives

BHP Billiton has considered various alternative approaches to achieving the organisational simplification that it is seeking. An obvious alternative is an asset disposal program. However, such a sale program would:

- likely be piecemeal, involving separate sales of individual assets or, at best, groups of assets;
- likely take a number of years to complete (and entail the risk that BHP Billiton would still be left with some residual assets unable to be sold at an acceptable price). In any event, resources asset sales in the current climate are difficult;
- divert management time and resources and hamper BHP Billiton's efforts to simplify its management structure in an efficient and timely manner;
- potentially require additional third party approvals (pre-emptive rights and regulatory approvals);
- crystallise value at what may be a low point in the cycle; and
- incur significant additional transaction costs (principally stamp duty and capital gains tax) relative to the Demerger.

BHP Billiton has also assessed the potential to undertake an IPO of the South32 business. Whilst this would in theory achieve a relatively rapid separation:

- there is significant uncertainty as to whether the market has the capacity to absorb an IPO of the size contemplated and allow BHP Billiton to achieve a complete exit;
- an IPO would crystallise a value for the South32 assets at a low point in the cycle; and
- a partial sell down with BHP Billiton retaining a shareholding in a separate publicly listed company would add further layers of market complexity and have other disadvantages.

The Demerger provides an immediate, clean solution that preserves shareholder value (as shareholders retain the same economic interest in the assets) and provides the opportunity to capture upside from improved management of the assets, realisation of expansion potential, any upturn in the commodity price cycle and, possibly, corporate activity.

7.9 Shareholder Decision

Grant Samuel has been engaged to prepare an independent expert's report setting out whether in its opinion the Demerger is in the best interests of BHP Billiton shareholders and to state reasons for that opinion. Grant Samuel has not been engaged to provide a recommendation to shareholders in relation to the Demerger, the responsibility for which lies with the directors of BHP Billiton.

In any event, the decision whether to vote for or against the Demerger is a matter for individual shareholders based on each shareholder's views as to value, expectations about future market conditions and particular circumstances including risk profile, liquidity preference, investment strategy, portfolio structure and tax position. In particular, taxation consequences may vary from shareholder to shareholder. If in any doubt as to the action they should take in relation to the Demerger, shareholders should consult their own professional adviser.

Similarly, it is a matter for individual shareholders as to whether to buy, hold or sell shares in BHP Billiton, or in New BHP Billiton or South32 following the Demerger. These are investment decisions upon which Grant Samuel does not offer an opinion and are independent of a decision on whether to vote in favour of the Demerger. Shareholders should consult their own professional adviser in this regard.

8 Impact on BHP Billiton's Ability to Pay its Creditors

Under the Demerger, BHP Billiton will be split into two separate entities⁶⁰. Existing creditors of BHP Billiton (and its subsidiaries) will become creditors of either New BHP Billiton (and its subsidiaries) or South32 (and its subsidiaries).

If the Demerger is approved, BHP Billiton will undertake an in-specie distribution of shares in South32 that will result in a reduction in BHP Billiton's shareholders' funds, and future earnings will be reduced by the removal of the contribution from the South32 businesses.

By definition, any reduction in the equity base of a company reduces the company's capacity to meet the claims of its creditors. In the case of the Demerger, the issue is whether the reduction in the capacity of BHP Billiton to pay its creditors is material. Analysis of this issue requires a comparison of the position of BHP Billiton prior to the Demerger with the position of New BHP Billiton if the Demerger is implemented.

In Grant Samuel's opinion, the Demerger will not have a material impact on BHP Billiton's ability to pay its existing creditors for the following reasons:

as evidenced by the pro forma financial statements summarised below and set out in more detail in Section 6.2.2 of this report and in Section 5.5 of the Shareholder Circular, New BHP Billiton will remain a very large and profitable company⁶¹. Its overall financial robustness and risk profile will not be materially affected by the Demerger:

	Year ende	d 30 June 2014	Six months ended 31 December 2014		
	BHP Billiton actual	New BHP Billiton pro forma ⁶²	BHP Billiton actual	New BHP Billitor pro forma	
Financial Performance					
Revenue	67,206	56,762	29,900	24,860	
EBITDA	32,359	30,292	14,494	13,101	
EBIT	22,861	22,098	9,226	8,339	
Net interest	680	606	225	205	
Operating cash flows after capital expenditure ⁶³	16,675	15,316	6,655	5,931	
Financial Position at period end					
Current assets	22,296	n.a.	18,901	15,403	
Current liabilities	18,064	n.a.	13,350	11,415	
Total assets	151,413	n.a.	146,081	128,400	
Net debt	25,786	n.a.	24,939	24,761	
Net assets	85,382	n.a.	86,250	74,016	
Liquidity and Gearing Metrics ⁶⁴					
Current ratio	1.23x	n.a.	1.42	1.35	
Gearing	23%	n.a.	22%	25%	
Leverage ratio	0.80x	n.a.	0.86	0.95	
Interest cover	48x	50x	64x	64x	

Source: BHP Billiton and Grant Samuel analysis

⁶² New BHP Billiton's pro forma financial position as at 30 June 2014 is not available.

⁶³ Net operating cash flows after capital expenditure, before financing activities and tax.

⁶⁰ New BHP Billiton will continue to comprise BHP Billiton Limited and BHP Billiton Plc but is treated for the purposes of this analysis as a single entity.

⁶¹ New BHP Billiton's future financial performance and position will be affected by a variety of factors, including by changes in prices for its major commodities and by changes in exchange rates. Commodity prices and exchange rates have changed materially since 30 June 2014 and can be expected to continue to change over time. Accordingly, the historical pro forma financial performance of New BHP Billiton should not be construed as representative of the company's future financial performance.

⁶⁴ Current ratio is current assets divided by current liabilities. Leverage ratio has been calculated as net debt divided by EBITDA. For the six months ended 31 December 2014, EBITDA has been multiplied by two to provide a proxy full year EBITDA. Interest cover has been calculated as EBITDA divided by net interest.

As the Demerger Dividend consists of an in-specie distribution of South32 shares, there is no net cash outflow from the BHP Billiton group as a whole as a consequence of the Demerger (except for transaction costs which are reflected in the pro forma balance sheet set out above). The Demerger will result in the transfer of an estimated US\$1,013 million of interest bearing liabilities and US\$368 million of cash to South32, and an additional reduction in cash of US\$467 million relating to Demerger costs. While this will result in a reduction in BHP Billiton's cash balance from US\$6,130 million to US\$5,295 million, this reduction will be more than offset by the reduction in interest bearing liabilities from US\$31,069 million to US\$30,056 million. Overall, the Demerger will result in a modest reduction in New BHP Billiton's net debt. Furthermore, New BHP Billiton will continue to have access to undrawn facilities of US\$6.0 billion.

While the Demerger would have resulted in a reduction in New BHP Billiton's revenue base of approximately 16% for the year ended 30 June 2014 and 17% for the six months ended 31 December 2014, the impact of the Demerger on New BHP Billiton's capacity to generate earnings and free cash flows is less significant. For the year ended 30 June 2014, New BHP Billiton's pro forma EBITDA, EBIT and operating cash flows after capital expenditure were, respectively, approximately 6%, 3% and 8% lower than for the broader BHP Billiton. For the six months ended 31 December 2014, New BHP Billiton's pro forma EBITDA, EBIT and operating cash flows after capital expenditure were, respectively, 10%, 10% and 11% lower than for the broader BHP Billiton.

On a pro forma basis, New BHP Billiton would have generated net operating cash flows after capital expenditure (before financing activities and tax) of US\$5.9 billion for the six months ended 31 December 2014, against net debt of US\$24.8 billion as at 31 December 2014.

While New BHP Billiton's pro forma liquidity and gearing metrics are less favourable than those for BHP Billiton, they are only marginally so, and would generally be considered as strong.

The analysis set out above does not reflect the upside in earnings and cash flows relating to initiatives made possible by the Demerger, such as the simplification of New BHP Billiton's organisational structure.

- BHP Billiton has credit ratings of A+/A-1/Stable from S&P and A1/P-1/Stable from Moody's. Following the announcement of the intention to pursue the Demerger, S&P and Moody's have reaffirmed BHP Billiton's credit ratings. The Demerger should therefore not have any material adverse impact on New BHP Billiton's ability to refinance its existing debt facilities or raise further debt capital;
- BHP Billiton's existing bank facilities (other than the facilities at the South32 asset level) will remain in place and available to New BHP Billiton;
- New BHP Billiton will remain one of the largest resources companies globally (by market capitalisation) and will continue to have access to the public equity markets to raise additional funding to meet creditor payments should that ever be necessary (although there is absolutely no indication that this might be required); and
- trade creditors are generally exposed to the credit risk of the individual subsidiary companies within the BHP Billiton group with which they trade (i.e. the debts due to them are not obligations of either BHP Billiton Limited or BHP Billiton Plc, but only of the relevant subsidiary company). The Demerger has no financial impact on most of these subsidiary companies and creditors will remain exposed to those particular entities. To the extent creditors also depend on the overall financial health of the group, the matters discussed above concerning the overall position of New BHP Billiton will apply.

Grant Samuel makes no warranty, express or implied, as to the potential recoverability of existing or contingent debts owed by BHP Billiton or any of its subsidiaries at the date of this report or at any subsequent time. Grant Samuel's opinion relates only to the impact of the Demerger on BHP Billiton's ability to pay its existing creditors. Future creditors must rely on their own investigations of the financial position of New BHP Billiton.

9 Qualifications, Declarations and Consents

9.1 Qualifications

The Grant Samuel group of companies provides corporate advisory services (in relation to mergers and acquisitions, capital raisings, debt raisings, corporate restructurings and financial matters generally) and provides marketing and distribution services to fund managers. The primary activity of Grant Samuel & Associates Pty Limited is the preparation of corporate and business valuations and the provision of independent advice and expert's reports in connection with mergers and acquisitions, takeovers and capital reconstructions. Since its inception in 1988, Grant Samuel and its related companies have prepared more than 500 public independent expert's and appraisal reports.

The persons responsible for preparing this report on behalf of Grant Samuel are Stephen Cooper BCom (Hons) ACA and Stephen Wilson BCom MCom(Hons) CA(NZ) SF Fin. Each has a significant number of years of experience in relevant corporate advisory matters. Matt Leroux MEng MBA, Shakeel Mohammed MS MBA, Caleena Stilwell BBus FCA F Fin, Ben Sweeney BCom MBL and David Szeleczky BCom (Hons) LLB (Hons) GCertAppFin assisted in the preparation of the report. Each of the above persons is a representative of Grant Samuel pursuant to its Australian Financial Services Licence under Part 7.6 of the Corporations Act.

9.2 Disclaimers

It is not intended that this report should be used or relied upon for any purpose other than as an expression of Grant Samuel's opinion as to whether the Demerger is in the best interests of shareholders and whether the Demerger Dividend will materially prejudice BHP Billiton's ability to pay its creditors. Grant Samuel expressly disclaims any liability to any BHP Billiton shareholder who relies or purports to rely on the report for any other purpose and to any other party who relies or purports to rely on the report for any purpose whatsoever.

Grant Samuel has had no involvement in the preparation of the Shareholder Circular and South32 Listing Document issued by BHP Billiton and has not verified or approved any of the contents of the Shareholder Circular and South32 Listing Document. Grant Samuel does not accept any responsibility for the contents of the Shareholder Circular and South32 Listing Document (except for the concise version this report which accompanies the Shareholder Circular).

9.3 Independence

Grant Samuel and its related entities do not have at the date of this report, and have not had within the previous two years, any business or professional relationship with BHP Billiton or any financial or other interest that could reasonably be regarded as capable of affecting its ability to provide an unbiased opinion in relation to the Demerger.

Grant Samuel had no part in the formulation of the Demerger proposal. Its only role has been the preparation of this report.

Grant Samuel will receive a fixed fee of US\$1.95 million for the preparation and publication of this report. This fee is not contingent on the conclusions reached or the outcome of the Demerger Proposal. Grant Samuel's out of pocket expenses in relation to the preparation of the report will be reimbursed. Grant Samuel will receive no other benefit for the preparation of this report.

Grant Samuel considers itself to be independent in terms of Regulatory Guide 112 issued by the ASIC on 30 March 2011.

9.4 Declarations

BHP Billiton has agreed that it will indemnify Grant Samuel and its related bodies corporate in respect of any liability suffered or incurred as a result of or in connection with the preparation of

the report. This indemnity will not apply in respect of the proportion of any liability found by a court to be primarily caused by a breach of contract, negligence or misconduct by Grant Samuel and its related bodies corporate, its officers or its employees. BHP Billiton has also agreed to indemnify Grant Samuel and related bodies corporate for time spent and reasonable legal costs and expenses incurred in relation to any inquiry or proceeding initiated by any person as a result of, or in connection with, the preparation of the report. Any claims by BHP Billiton are limited to an amount equal to the fees paid to Grant Samuel. Where Grant Samuel, its related bodies corporate, its officers or its employees are found to have been in breach of contract, negligent or to have engaged in misconduct Grant Samuel shall bear the proportion of such costs caused by its action.

Advance drafts of this report were provided to BHP Billiton and its advisers. Certain changes were made to the drafting of the report as a result of the circulation of the draft report. There was no alteration to the methodology, evaluation or conclusions as a result of issuing the drafts.

9.5 Consents

Grant Samuel consents to the issuing of the concise version of this report in the form and context in which it is to accompany the Shareholder Circular to be sent to shareholders of BHP Billiton. Grant Samuel consents to the publication of this report on the BHP Billiton website and to BHP Billiton's provision of copies of this report to shareholders who request it. Neither the whole nor any part of this report or the concise version of this report nor any reference thereto may be included in any other document without the prior written consent of Grant Samuel as to the form and context in which it appears.

9.6 Other

The accompanying Appendix forms part of this report.

Grant Samuel has prepared a Financial Services Guide as required by the Corporations Act. The Financial Services Guide is set out at the beginning of this report.

GRANT SAMUEL & ASSOCIATES PTY LIMITED 13 March 2015

Great Samel & Associates



Appendix

Profile of BHP Billiton Assets

1 Petroleum and Potash

BHP Billiton has interests in onshore shale oil and gas assets in the United States and onshore and offshore conventional assets in the Gulf of Mexico, Australia and other regions. BHP Billiton's share of production was 246.0 million barrels of oil equivalent ("MMboe") in FY14 and its share of proved reserves was 2,443 MMboe as at 30 June 2014. The breakdown of net interest production and reserves by product and region is as follows:



Source: BHP Billiton

Note: The reserve estimates include 100 MMboe of natural gas expected to be consumed in operations.

BHP Billiton also owns the Jansen potash development project in Canada.



1.1 United States

BHP Billiton's Petroleum business in the United States consists of extensive unconventional hydrocarbon assets onshore and conventional oil operations in the Gulf of Mexico:



Source: BHP Billiton

Onshore US

BHP Billiton's onshore US operations have their origins in the acquisition of the Fayetteville shale assets from Chesapeake Energy Corporation in February 2011 and the acquisition of Petrohawk Energy Corporation in August 2011. BHP Billiton holds interests ranging from less than one percent to 100% in various leases across the Eagle Ford, Permian, Haynesville and Fayetteville shale areas, giving BHP Billiton interests in a combined leasehold acreage of approximately 1.2 million net acres. At 30 June 2014, BHP Billiton held an interest in approximately 7,700 gross wells, or 2,600 net wells, and acted as joint venture operator for approximately 32% of the gross wells. In FY14, BHP Billiton's share of production across all areas was 108.1MMboe of oil, condensate, natural gas liquids ("NGLs") and natural gas. The liquids and gas produced are sold domestically at prices based on US regional price indices.

Reservoirs in the Eagle Ford area in South Texas and Permian area in West Texas are liquids rich and yield oil, condensate, NGLs and natural gas. BHP Billiton's share of production from these areas was 51.9 MMboe in FY14, of which approximately 42% was crude oil and condensate, 36% natural gas and 22% NGLs. Reservoirs in the Haynesville area in north-west Louisiana and Fayetteville area in north-central Arkansas contain mainly natural gas. In FY14, BHP Billiton's share of production from the Haynesville and Fayetteville areas was 56.2 MMboe of natural gas.

BHP Billiton's onshore US drilling and development investment during FY14 was US\$4.2 billion, of which US\$3.6 billion was directed towards the liquids rich Eagle Ford and Permian areas. This resulted in the development of 413 net wells. Capital investment is expected to total approximately US\$3.4 billion in FY15, with a continued focus on liquids rich acreage, particularly in the Eagle Ford area.

Gulf of Mexico

BHP Billiton operates the Shenzi and Neptune fields and has non-operating interests in the Atlantis, Mad Dog and Genesis fields. The fields are located in the Green Canyon area 155km to 210km off the coast of Louisiana. BHP Billiton's interests in these fields are summarised as follows:

BHP Billiton Petroleum – Gulf of Mexico				
Field	Ownership / Operator	Facilities		
Neptune (Green Canyon 613)	BHP Billiton (35%, operator) Marathon Oil (30%) Woodside Energy (20%) Maxus US Exploration (15%)	Permanently moored tension leg platform ("TLP")		
Shenzi (Green Canyon 653)	BHP Billiton (44%, operator) Hess Corporation (28%) Repsol (28%)	Stand-alone TLP, Genghis Khan field tied back to Marco Polo TLP		
Atlantis (Green Canyon 743)	BHP Billiton (44%) BP (56%, operator <u>)</u>	Permanently moored semi-submersible platform		
Mad Dog (Green Canyon 782)	BHP Billiton (23.9%) BP (60.5%, operator) Chevron (15.6%)	Permanently moored integrated truss spar, facilities for simultaneous production and drilling operations		
Genesis (Green Canyon 205)	BHP Billiton (4.95%) Chevron (56.67%, operator) ExxonMobil (38.38%)	Floating cylindrical hull (spar) moored to seabed with integrated drilling facilities		

Source: BHP Billiton

BHP Billiton also has interests in the Caesar oil pipeline and the Cleopatra gas pipeline, which transport oil and gas produced at the fields in the Green Canyon area to shore.

During FY14, BHP Billiton's share of production from its Gulf of Mexico assets was 36.1MMboe. All the oil produced is sold to refineries located onshore along the Gulf Coast in the United States. The gas is sold on the US domestic market.

BHP Billiton has an ongoing drilling program at the fields. During the 2013 calendar year, BHP Billiton completed a US\$375 million (BHP Billiton's share) water injection program at the Shenzi field and a US\$242 million (BHP Billiton's share) water injection program at the Atlantis field.

Reserves

Proved Reserves for the US onshore and offshore fields in which BHP Billiton has an interest are summarised below:

BHP Billiton Petrol	eum United States - I	Reserves as at 30) June 2014 (BHF	Billiton Share)
Proved Reserves	Oil and Condensate (MMbbl)	NGL (MMbbl)	Natural gas (Bcf)	Oil Equivalent (MMboe)
Developed	237.8	75.0	3,208.3	847.6
Undeveloped	216.4	81.5	2,415.2	700.4
Total	454.2	156.6 ¹	5,623.5 ²	1,548.0 ³

Source: BHP Billiton

Note: The Reserves set out above reflect BHP Billiton's economic interests and are net of royalties.

¹ Includes 3.9MMbbl expected to be consumed in operations.

² Includes 185Bcf expected to be consumed in operations.

³ Includes 35MMboe expected to be consumed in operations.

Production

The operating performance of BHP Billiton's Petroleum business in the United States over the five years ended 30 June 2014 is summarised below. The volumes reflect BHP Billiton's share of marketable production and are net of royalties, fuel and flare:

BHP Billiton Petroleum Unit	ed States – I	Production S	Statistics (B	HP Billiton	Share)	
	Year ended 30 June					
	2010 actual	2011 actual	2012 actual	2013 actual	2014 actual	
Production						
- Crude oil and condensate (MMbbl)	41.5	30.2	30.8	38.7	54.0	
- Natural gas (Bcf)	17.7	49.1	456.7	489.0	460.2	
- Natural Gas Liquids (MMbbl)	2.5	2.0	5.7	9.6	13.6	
Total production (MMboe) ⁴	47.0	40.3	112.7	129.8	144.3	
Average sale price						
- Crude oil and condensate (US\$/bbl)	71.55	90.01	106.22	102.33	97.57	
- Natural gas (US\$/Mcf)	4.80	3.48	2.82	3.29	4.10	
- Natural Gas Liquids (US\$/bbl)	39.51	49.79	45.72	30.41	30.28	
Average production cost (US\$/boe)	5.62	6.45	5.91	6.27	7.80	

Source: BHP Billiton

1.2 Australia

In Australia, BHP Billiton has oil and gas interests offshore Victoria (Bass Strait and Minerva) and offshore Western Australia (North West Shelf, Pyrenees, Macedon and Stybarrow):



Source: BHP Billiton

Bass Strait

BHP Billiton holds interests in the Bass Strait oil and gas fields through its 50% interest in the Gippsland Basin Joint Venture (ExxonMobil holds the remaining 50%) and a 32.5% interest in the Kipper Joint Venture (ExxonMobil holds 32.5% and Santos the remaining 35%). ExxonMobil operates both joint ventures. The operations consist of 20 producing fields and associated offshore facilities located between 25 and 80km off the south-eastern coast of Australia, the onshore Longford facility, consisting of three gas plants and liquids processing facilities, the Long Island Point LPG and oil storage facilities and pipelines owned by the Gippsland Basin Joint Venture.

The Bass Strait field has been producing oil and gas for over four decades. The majority of the crude oil and condensate produced is sold to refineries along the east coast of Australia, under annual contracts linked to the average Dated Brent price. BHP Billiton sells its share of gas production to domestic distributors. In FY14, BHP Billiton's share of production from the Bass Strait operations was 34.0MMboe of oil and gas.

⁴ Reported production represents BHP Billiton's interest.

The Gippsland Basin Joint Venture is developing the Turrum oil and gas field, located 42km offshore in approximately 60m of water. The development, with budgeted costs of US\$1.4 billion (BHP Billiton's share), includes four production and two injection wells and a new platform, Marlin B, linked by a bridge to the existing Marlin A platform. The field will have an initial production capacity of 11Mbbl/d of oil and 200MMcf/d of gas. The joint venture will also construct the Longford Gas Conditioning Plant ("LGCP") Project, which will treat hydrocarbons with a high carbon dioxide content, including those from the Turrum and Kipper fields. BHP Billiton's share of development costs is US\$520m and the project was 45% complete as at 31 December 2014. Production of low carbon dioxide gas from the Turrum field commenced in June 2013. Production of high carbon dioxide gas will commence following the completion of the LGCP Project which is expected during the 2016 calendar year.

The Kipper Unit Joint Venture and the Gippsland Basin Joint Venture are pursuing the development of the Kipper gas field. Whilst the first phase of the project, which is planned to supply 10 Mbbl/d of condensate and 80 MMcf/d of gas, was completed in September 2012, production will only commence after the installation of mercury treatment facilities, which are expected to be completed at a cost of US\$120 million during the 2016 calendar year.

North West Shelf

The North West Shelf Project, which is centred around several large gas and condensate fields and smaller oil fields located in the Carnarvon Basin offshore Western Australia, is the largest oil and gas project in Australia. It accounts for around 40% of Australia's total oil and gas production, ranks among the world's largest LNG export projects and accounts for the majority of Western Australia's domestic gas production. BHP Billiton's share of production was 28.8MMboe in FY14.

The fields are located approximately 125km north-west of Karratha in Western Australia. Petroleum products from the North Rankin, Goodwyn, Perseus, Angel and Searipple oil and gas fields are processed in offshore treatment facilities and the resulting gas is piped to the onshore gas plant in Karratha where it is processed into LNG, domestic gas, condensate or LPG. Oil from the Cossack, Wanaea, Lambert and Hermes oil fields is processed through a floating production, storage and offtake vessel. The resulting crude oil is loaded onto shuttle tankers for export while the LPG-rich gas is piped to the Karratha plant for processing.

Facilities have been dramatically expanded since domestic gas was first produced in 1984 and LNG first exported in 1989. The facilities now comprise:

- the 2,500 MMcf/d gas and 60 Mbbl/d condensate North Rankin complex, which consists of the interconnected North Rankin A platform and the recently completed North Rankin B compression plant and processes production from the North Rankin and Perseus fields;
- the 1,450 MMcf/d gas and 110 Mbbl/d condensate Goodwyn A platform, which processes production from the Goodwyn, Perseus and Searipple fields;
- the 960 MMcf/d gas and 50 Mbbl/d condensate Angel platform, which processes production from the Angel field; and
- the gas plant complex located in Karratha, consisting of a five-train 16.3 mtpa LNG plant, a 630 TJ/d domestic gas plant and an LPG plant.

In November 2011, BHP Billiton approved the North West Shelf Greater Western Flank–A gas project to recover gas from the Goodwyn H and Tidepole fields through a tie-back to the existing Goodwyn A platform. BHP Billiton's share of development costs is US\$400m and the project was 85% complete as at 31 December 2014. First gas production is expected in calendar year 2016. Studies are also underway to consider the second phase development of the core Greater Western Flank fields.

The bulk of the gas is sold as LNG to customers in Japan, South Korea and China under a series of long-term contracts. The balance is sold to Western Australian utility companies and industrial

customers for household use or power generation. The condensate and LPG are sold to export customers.

The project is owned by various joint ventures, reflecting its staged development. All joint ventures are operated by Woodside. BHP Billiton's interests in the project's main joint ventures are as follows:

- a 16.67% interest in the original LNG JV. The JV owns the offshore processing facilities associated with the oil and gas fields and the onshore domestic gas, LNG and LPG plants, and is entitled to the LNG production not sold by the China LNG JV;
- a 12.5% interest in the China LNG JV, which is entitled to a portion of the LNG production from the fields;
- a 8.33% stake in the original domestic gas JV, which is entitled to a share of daily domestic gas production subject to a total production cap;
- a 16.67% interest in the incremental pipeline gas JV, which is entitled to all the domestic gas production above certain production caps;
- a 16.67% interest in the LPG JV, which commercialises LPG production from the fields; and
- a 16.67% stake in the joint venture that owns and operates the oil fields.

The other participants in the joint ventures are Woodside, Chevron, BP, Shell, Mitsubishi/Mitsui and China National Offshore Oil Corporation (China LNG JV only).

Pyrenees

BHP Billiton is the operator of the Pyrenees project, which is underpinned by five offshore oil fields (Crosby, Moondyne, Wild Bull, Tanglehead Stickle and Ravensworth) located approximately 23km northwest of the Northwest Cape in Western Australia. The fields are located within two permits in which BHP Billiton has operating interests of 71.43% and 40%, resulting in an average share of production from the Pyrenees fields from inception to 30 June 2014 of 62%. The project uses a floating production, storage and off-take facility and produces crude oil which is sold internationally on the spot market. BHP Billiton's share of FY14 production was 7.5MMboe.

Minerva

BHP Billiton has a 90% interest and is the operator of the offshore Minerva gas and condensate field located 11km south-south-west of Port Campbell in western Victoria. The operation consists of two subsea wells, with gas piped onshore to a processing plant located approximately 4km inland from Port Campbell. After processing, the gas is delivered into a pipeline and sold domestically under long-term contracts.

Macedon

BHP Billiton has a 71.43% interest in and is the operator of the Macedon domestic gas development located close to Onslow in Western Australia. Apache PVG holds the remaining 28.57%. Gas production from Macedon commenced in August 2013. The operation consists of four subsea production wells, a gas pipeline to shore and a stand-alone 200MMcf/d onshore processing facility located 17km south-west of Onslow. After processing, the gas is delivered into a pipeline and sold domestically under long term contracts. In FY14, BHP Billiton's share of costs associated with the Macedon development was approximately US\$1.2 billion, while its share of production was 5.5MMboe of gas.
Stybarrow

BHP Billiton has a 50% interest in and is the operator of the offshore Stybarrow and Eskdale oil fields located 55km west-north-west of Exmouth in Western Australia. Woodside owns the balance. The crude oil produced is sold on the spot market and the gas is reinjected.

Reserves

Proved Reserves for the Australian operations in which BHP Billiton has an interest are summarised as follows:

BHP Billiton	Petroleum Australia -	- Reserves as a	t 30 June 2014 (BH	IP Billiton Share)
Proved Reserves	Oil and Condensate (MMbbl)	NGL (MMbbl)	Natural gas (Bcf)	Oil Equivalent (MMboe)
Developed	96.5	46.0	2,553.7	568.1
Undeveloped	39.7	36.1	941.7	232.8
Total	136.2	82.1	3,495.4 ⁵	800.9 ⁶

Source: BHP Billiton

Note: The Reserves set out above reflect BHP Billiton's economic interests and are net of royalties.

Production

The operating performance of BHP Billiton's Australian Petroleum business over the five years ended 30 June 2014 is summarised below. The volumes reflect BHP Billiton's share of marketable production and are net of royalties, fuel and flare:

BHP Billiton Petroleum A	ustralia – Pro	oduction Sta	atistics (BH	P Billiton Sł	nare)
		Ye	ar ended 30 J	une	
	2010 actual	2011 actual	2012 actual	2013 actual	2014 actual
Production volumes					
- Crude oil and condensate (MMbbl)	31.5	40.5	31.1	25.9	23.6
- Natural gas (Bcf)	259.7	274.7	250.0	276.1	287.5
- Natural Gas Liquids (MMbbl)	8.7	8.0	7.9	7.9	8.4
Total production (MMboe)	83.5	94.2	80.8	79.9	80.0
Average sales price					
- Crude oil and condensate (US\$/bbl)	74.12	96.32	114.33	110.83	111.88
- Natural gas (US\$/Mcf)	3.52	4.21	4.62	4.73	5.20
- Natural Gas Liquids (US\$/boe)	48.20	58.05	61.61	63.13	63.12
Average production cost (US\$/boe)	5.59	5.75	7.95	8.23	8.18

Source: BHP Billiton

1.3 Other Areas

Trinidad and Tobago

BHP Billiton has a 45% interest in and is the operator of the Greater Angostura oil and gas field located offshore, 40km east of Trinidad. The National Gas Company of Trinidad and Tobago holds a 30% stake and the Chinese firm Chaoyang holds the balance. The gas and liquids are processed offshore before being piped to shore for sale. The oil is sold on a spot basis to international markets, while the gas is sold domestically under term contracts. In FY14, BHP Billiton's share of production from the operation was 7.5MMboe.

⁵ Includes 360Bcf that is anticipated to be consumed in operations

⁶ Includes 60MMboe that is anticipated to be consumed in operations

- -

Algeria

BHP Billiton has a 38% non-operating interest in the ROD Integrated Development, which targets six oil fields located in the onshore Berkine Basin, 900 km southeast of Algiers in Algeria. The Italian oil and gas group ENI has an effective 62% interest and operates the development with Sonatrach, the Algerian government owned oil and gas company. The oil is pumped to a dedicated processing train and sold on a spot basis to international markets.

United Kingdom

BHP Billiton's petroleum business in the United Kingdom consists of a 16% non-operating interest in the Bruce oil and gas fields and a 31.83% operating interest in the Keith oil and gas fields in the North Sea. Production from both fields is processed through the Bruce facilities. BP, Total and the Japanese trading company Marubeni hold the remaining interests in the project.

Pakistan

BHP Billiton has a 38.5% interest in and is the operator of the Zamzama gas project in the Sindh province of Pakistan. The operation produces gas and condensate that is sold domestically under term contracts. The Pakistani government owns a 25% stake, a subsidiary of the Italian oil and gas group ENI owns a 17.75% stake, and two subsidiaries of the Kuwait Foreign Petroleum Exploration Company each owns a 9.375% stake in the project.

Reserves

The table below summarises the Proved Reserves of the fields in which BHP Billiton has an interest outside the United States and Australia:

BHP Billiton Petroleum Other – Reserves as at 30 June 2014 (BHP Billiton Share)								
	Oil and Condensate		Oil Equivalent					
Proved Reserves	(MMbbl)	Natural gas (Bcf)	(MMboe)					
Developed	14.7	315.5	67.3					
Undeveloped	5.4	127.1	26.6					
Total	20.1	442.6 ⁷	93.9 ⁸					

Source: BHP Billiton

Note: The Reserves set out above reflect BHP Billiton's economic interests and are net of royalties.

Production

The operating performance of BHP Billiton's Petroleum business outside the United States and Australia over the five years ended 30 June 2014 is summarised below. The volumes reflect BHP Billiton's share of marketable production and are net of royalties, fuel and flare:

⁷ Includes 30Bcf that is anticipated to be consumed in operations

⁸ Includes 5MMboe that is anticipated to be consumed in operations

BHP Billiton Petroleum	Other – Prod	luction Stat	istics (BHP	Billiton Sha	re)
		Ye	ar ended 30 J	une	
	2010 actual	2011 actual	2012 actual	2013 actual	2014 actual
Production volumes					
- Crude oil and condensate (MMbbl)	11.3	10.0	9.2	7.9	6.5
- Natural gas (Bcf)	91.2	81.2	115.6	109.1	91.6
- Natural Gas Liquids (MMbbl)	1.6	1.3	0.4	0.0	0.0
Total production (MMboe) ⁹	28.1	24.9	28.9	26.1	21.7
Average sales price					
- Crude oil and condensate (US\$/bbl)	75.57	90.69	113.26	107.46	108.13
- Natural gas (US\$/Mcf)	3.05	3.92	4.13	4.42	3.92
- Natural Gas Liquids (US\$/bbl)	49.40	59.54	55.06	28.61	32.00
Average production cost (US\$/boe)	7.48	8.39	7.84	8.45	9.58

Source: BHP Billiton

1.4 **Production and Financial Performance**

The production and financial performance of BHP Billiton's Petroleum Business over the last five years is summarised below:

Petroleum Busine	ess – Product	ion and Fina	ancial Perfo	rmance	
		Ye	ar ended 30 J	une	
	2010 actual	2011 actual	2012 actual	2013 actual	2014 actual
Production					
- Crude oil and condensate (MMbbl)	84.4	80.6	71.2	72.5	84.1
- Natural gas (Bcf)	368.6	405.1	822.3	874.3	839.3
- Natural Gas Liquids (MMbbl)	12.7	11.3	14.1	17.5	22.1
Total production (MMboe)9	158.6	159.4	222.3	235.8	246.0
Revenue					
- Crude Oil	6,171	7,486	7,804	7,604	8,645
- Natural gas	874	1,142	2,426	2,842	3,119
- LNG	1,036	1,319	1,483	1,686	1,614
- NGL	594	635	780	823	916
- Other	21	28	214	76	102
Total revenue	8,696	10,610	12,707	13,038	14,410
EBITDA ¹⁰	6,568	8,314	9,412	9,226	10,124
EBIT ¹¹	4,570	6,325	6,345	5,974	5,867
Capital expenditure	1,951	1,984	5,830	7,067	5,879
Net operating assets	9,558	14,145	32,698	36,480	38,268

Source: BHP Billiton

Notes: (1) Liverpool Bay (March 2014), West Cameron 76 and Starlifter (May 2012) were divested during the last five years.

(2) Fayetteville (March 2011) and Petrohawk Energy Corporation (August 2011) were acquired during the last five years.

(3) The financial performance excludes the contribution from sales of third party product and the Potash business and does not reflect statutory adjustments.

(4) Revenue includes inter-segment revenue.

⁹ Reported production represents BHP Billiton's interest.

¹⁰ Underlying EBITDA is earnings before net finance costs, taxation, depreciation, amortisation, impairments and exceptional items.

¹¹ Underlying EBIT is earnings before net finance costs, taxation and exceptional items.



1.5 Potash Business

BHP Billiton holds exploration permits and mining leases covering more than $14,000 \text{ km}^2$ of highly prospective ground in the Saskatchewan potash basin in Canada. The wholly-owned greenfield Jansen Project, located 140km east of Saskatoon, is the most advanced project and is in feasibility study stage. It is underpinned by what BHP Billiton believes to be the world's best undeveloped potash resource and has the potential to produce 10mtpa of agricultural grade potassium chloride over a mine life of more than 50 years. BHP Billiton continues to evaluate other areas for which it has exploration permits in the Saskatchewan potash basin.

Development of the project is progressing. As at 20 August 2013, BHP Billiton had approved US\$3.8 billion of spending to progress excavation and lining of production and service shafts, and the installation of essential surface infrastructure and utilities. BHP Billiton spent US\$596m on project development in FY14. First production is not expected before the next decade.

	Jansen – Mineral Resources as at 30 June 2014											
	N	Aeasure	d		Indicate	d		Inferred	l <u> </u>		Total	
Ore		%	%		%	%		%	%		%	%
Туре	Mt	K_2O	MgO	Mt	K_2O	MgO	Mt	K_2O	MgO	Mt	K_2O	MgO
LPL	5,350	25.6	0.29	-	-	-	1,270	25.6	0.29	6,620	25.7	0.29

The table below summarises the Mineral Resources at the Jansen Potash Project:

2 Copper

BHP Billiton is one of the world's largest producers of copper, silver, lead, uranium and zinc. It holds a 57.5% interest in the Escondida copper mine in Chile, a 33.75% stake in the Antamina copper/zinc mine in Peru, 100% of the Pampa Norte Spence and Cerro Colorado copper operations in Chile, 100% of the silver/lead/zinc Cannington mine in Queensland and 100% of the Olympic Dam copper/uranium/gold mine in South Australia.

2.1 Escondida

Operations

Escondida is the world's largest copper mine. It is located in the Atacama desert in northern Chile, 170km south-east of Antofagasta. The remaining interests in Escondida are held by Rio Tinto (30%) and various other parties. Oxide and sulphide ores are sourced from two open pits mining two adjacent supergene enriched porphyry deposits. Ore amenable to leaching is processed into copper cathodes which are railed to port for export. Sulphide ore not amenable to leaching is concentrated and piped through two 168km concentrate pipelines to Escondida-owned port facilities for export. The nominal production capacity of the facilities is 330ktpa of copper cathode (nominal capacity of tank house) and the concentrate production capacity is 85.6mtpa (nominal milling capacity). Based on FY14 production and reserves as at 30 June 2014, Escondida has a 52 year reserve life.

Mineral Resources and Ore Reserves

The Mineral Resources and Ore Reserves for Escondida and the other deposits located in the Escondida district as at 30 June 2014 are set out below:

Escondida – Min	eral Res	ources an	nd Ore F	Reserves a	as at 30 .	June 2014	4 (100%)
	Mea	sured	Indie	cated	Infe	erred	Total	
Mineral Resources	Mt	%TCu	Mt	%TCu	Mt	%TCu	Mt	%TCu
Escondida – Oxide	117	0.80	62	0.65	36	0.58	215	0.72
- Mixed	84	0.74	47	0.50	75	0.44	206	0.58
- Sulphide	5,150	0.65	2,580	0.52	10,200	0.51	17,900	0.55
Pampa Escondida - Sulphide	294	0.53	1.150	0.55	6,000	0.43	7,440	0.45
Pinta Verde - Oxide	109	0.56	64	0.53	15	0.54	188	0.57
- Sulphide	-	-	23	0.50	37	0.45	60	0.47
Chimborazo – Sulphide Leach	-	-	139	0.50	84	0.60	223	0.54
			Pro	ved	Pro	bable	То	otal
Ore Reserves			Mt	%TCu	Mt	%TCu	Mt	%TCu
Escondida – Oxide			92	0.88	53	0.67	145	0.80
- Sulphide			3,540	0.75	1,610	0.59	5,150	0.70
- Sulphide leach			1,650	0.46	610	0.40	2,260	0.44

Production and Financial Performance

The operating and financial performance of Escondida for the five years ended 30 June 2014 is summarised below:

Escon	dida – Operat	ing and Fina	ncial Perform	ance	
		Y	ear ended 30 Ju	ne	
	2010	2011	2012	2013	2014
Material mined (mt)	416.6	400.7	378.2	392.7	378.7
Sulphide ore milled (mt)	71.9	70.9	65.8	73.9	80.3
Copper grade (%)	1.37	1.18	1.13	1.40	1.28
Payable metals in concentrate					
- Copper (kt)	448.1	390.5	333.8	831.5	844.7
- Gold (koz)	76.4	84.7	50.9	71.5	72.9
- Silver (koz)	2,874	2,849	1,921	2,960	4,271
Copper cathode (kt)	174.2	179.1	172.0	297.9	308.0
Revenue (US\$m)	4,527	5,614	4,002	8,596	8,085
EBITDA (US\$m)	3,008	3,814	2,101	5,175	4,754
EBIT (US\$m)	2,718	3,564	1,828	4,526	3,994
Capex (US\$m)	355	604	1,173	2,859	3,186
Net operating assets (US\$m)	3,709	3,953	4,792	9,450	11,779

Source: BHP Billiton

Notes: (1) Material mined and ore milled reported on a 100% basis.

(2) The production and financial performance have been reported on a 57.5% basis in FY10, FY11 and FY12 and on a 100% basis in FY13 and FY14 as per the BHP Billiton accounts.

Escondida's head grade had been trending down for much of the last decade. However, the relocation of two existing in-pit crushing stations has improved access to higher grade ore zones. Further, the completion of a debottlenecking project at one of the concentrators in September 2012 resulted in an increase in production capacity. BHP Billiton has stated that cash costs have declined 22% in the two years to 30 June 2014 and the company is targeting a further reduction of 5% in FY15.

Expansions

The US\$933 million (100%) Oxide Leach Area Project, which consists of the development of a new leach pad and ore handling system was completed in the December 2014 quarter and is expected to maintain Escondida's leaching capacity for oxide ore.

The US\$4.2 billion (100%) Organic Growth Project 1, which involves the replacement of one of the concentrators, should result in an increase in processing capacity and allow access to higher grade ore. The project was 94% complete as at 31 December 2014 and is expected to be completed in the first half of the 2015 calendar year.

Escondida is also undertaking expansions of its water and power infrastructure to ensure that its power and water supplies are sustainable and can meet the additional demand that will result from increased production following completion of the expansion projects. A combined cycle gas-fired power plant is expected to be completed in the second half of the 2016 calendar year and a 2,500 litres per second desalination plant is expected to be completed in 2017 at a cost of US\$3.4 billion (100%).

2.2 Pampa Norte

Operations

BHP Billiton owns 100% of Pampa Norte, which consists of the Spence and Cerro Colorado operations located in the Atacama Desert in Chile. Spence is located 162km northeast of

Antofagasta while Cerro Colorado is located 120km east of Iquique. Both operations are based on open cut mining of oxide ores, leaching, solvent extraction and electrowinning to produce copper cathode.

Mineral Resources and Ore Reserves

The Mineral Resources and Ore Reserves at Pampa Norte as at 30 June 2014 were as follows:

Pampa Norte – Mi	inera	l Reso	urces a	and (Ore Re	serves	s as a	t 30 Jı	ine 20	14 (1	00%)	
	Measured Indicated Inferred					Total						
Mineral Resources	Mt	%TCu	%SCu	Mt	%TCu	%SCu	Mt	%TCu	%SCu	Mt	%TCu	%SCu
Cerro Colorado - Oxide	67	0.61	0.43	140	0.59	0.39	30	0.60	0.37	237	0.60	0.40
- Sulphide	53	0.68	0.12	82	0.62	0.11	28	0.60	0.12	163	0.64	0.11
Spence - Oxide	49	0.85	0.53	6.7	0.73	0.51	-	-	-	56	0.84	0.53
- Low grade oxide	7.0	0.26	-	56	0.24	-	26	0.17	-	89	0.22	-
- Supergene sulphides	145	0.92	-	50	0.59	-	4.0	0.49	-	199	0.83	-
- Transitional sulphides	24	0.75	-	3.5	0.51	-	-	-	-	28	0.72	-
- Sulphide	515	0.47	-	795	0.45	-	1,010	0.39	-	2,320	0.43	-
					Proved		Probable			Total		
Ore Reserves				Mt	%TCu	%SCu	Mt	%TCu	%SCu	Mt	%TCu	%SCu
Cerro Colorado - Oxide				30	0.59	0.42	73	0.55	0.37	103	0.56	0.38
- Sulphide				33	0.65	0.13	29	0.66	0.11	62	0.65	0.12
Spence - Oxide				34	0.76	0.53	2.8	0.77	0.63	37	0.76	0.54
- Oxide low solubility				21	0.96	0.44	12	0.57	0.22	33	0.82	0.36
- Sulphide				121	0.96	0.12	32	0.64	0.11	153	0.90	0.12
- ROM				-	-	-	61	0.39	0.09	61	0.39	0.09

Source: BHP Billiton

Production and Financial Performance

The operating and financial performance of Pampa Norte for the five years ended 30 June 2014 is summarised below:

Pampa Norte	– Operating a	Pampa Norte – Operating and Financial Performance (100%)											
		Year	ended 30 June										
-	2010	2011	2012	2013	2014								
Cerro Colorado													
- Ore milled (mt)	17.1	18.2	17.9	17.4	17.2								
- Copper grade (%)	0.73	0.74	0.69	0.67	0.76								
- Copper cathode (kt)	85.2	92.4	83.4	71.5	80.3								
Spence													
- Ore milled (mt)	15.2	18.4	16.7	16.1	18.2								
- Copper grade (%)	1.38	1.24	1.32	1.25	1.22								
- Copper cathode (kt)	159.6	179.8	180.3	161.1	152.8								
Total Copper cathode (kt)	244.8	272.2	263.7	232.6	233.1								
Revenue (US\$m)	1,689	2,484	2,152	1,913	1,796								
EBITDA (US\$m)	1,012	1,415	1,037	841	785								
EBIT (US\$m)	831	1,221	837	550	356								
Capital expenditure (US\$m)	98	131	242	348	336								
Net operating assets (US\$m)	2,385	2,373	2,332	2,643	2,575								



Higher grades and recoveries at Spence have offset lower grades and recoveries at Cerro Colorado. FY15 production at the Pampa Norte operations is expected to be in line with FY14 production.

Expansions

The Spence mine is currently planned for closure in 2025. There is an opportunity to substantially extend the mine life through the mining and processing of the hypogene sulphide resource that underlies the supergene mineralisation currently being mined. This would require the construction of a concentrator but would involve only limited pre-stripping. Consideration of this extension is at pre-feasibility stage. BHP Billiton is also investigating the potential to use the existing solvent extraction and electrowinning facilities to produce copper from chalcopyrite ores.

2.3 Antamina

Operations

BHP Billiton holds a 33.75% interest in the Antamina mine, a large low cost copper and zinc mine located in the Andes mountain range, 270km north of Lima in north central Peru. The balance is held by Glencore Xstrata (33.75%), Teck (22.5%) and Mitsubishi (10%). The Antamina operations consist of an open cut mine, copper and zinc flotation circuits, port facilities and a 300km concentrate pipeline linking the mine to the port. Antamina produces copper and zinc concentrates as well as a molybdenum and lead/bismuth concentrate and small amounts of silver.

Mineral Resources and Ore Reserves

The Mineral Resources and Ore Reserves at Antamina as at 30 June 2014 were as follows:

lineral I	Resour	rces ar	ıd Or	e Rese	erves a	ns at 3	30 Jun	e 2014	4 (100	%)	
1	Measure	d]	Indicate	d		Inferred	1		Total	
Mt	%Cu	%Zn	Mt	%Cu	%Zn	Mt	%Cu	%Zn	Mt	%Cu	%Zn
171	0.89	0.14	518	0.86	0.15	620	0.70	0.10	1,310	0.79	0.13
68	0.97	1.77	309	0.92	1.74	400	1.00	1.40	777	0.97	1.57
				Proved			Probabl	e		Total	
			Mt	%Cu	%Zn	Mt	%Cu	%Zn	Mt	%Cu	%Zn
			136	1.00	0.14	277	0.98	0.17	413	0.99	0.16
			53	1.12	2.02	207	0.91	1.86	260	0.95	1.89
	171	Measure Mt %Cu 171 0.89	Measured Mt %Cu %Zn 171 0.89 0.14	Measured Mail Mt %Cu %Zn Mt 171 0.89 0.14 518 68 0.97 1.77 309	Measured Indicate Mt %Cu %Zn Mt %Cu 171 0.89 0.14 518 0.86 68 0.97 1.77 309 0.92 Proved Mt %Cu Indicate %Cu 171 0.89 0.14 518 0.86 68 0.97 1.77 309 0.92 Mt %Cu Mt %Cu 136 1.00 1.00 1.00 0.01	Herasured Indicate Mt %Cu %Zn Mt %Cu %Zn 171 0.89 0.14 518 0.86 0.15 68 0.97 1.77 309 0.92 1.74 Frower Proved Mt %Cu %Zn 111 1.77 1.77 309 0.92 1.74 111 1.77 1.77 309 0.92 1.74 111 1.77 1.77 1.77 1.77 1.77 1.77	Heasured Indicated Mt %Cu %Zn Mt %Cu %Zn Mt 171 0.89 0.14 518 0.86 0.15 620 68 0.97 1.77 309 0.92 1.74 400 Proved Mt %Cu %Zn Mt 171 1.77 1.77 309 0.92 1.74 400 Proved Mt %Cu %Zn Mt 136 1.00 0.14 277	Heasured Indicated Inference Mt %Cu %Zn Mt %Cu %Zn 171 0.89 0.14 518 0.86 0.15 620 0.70 68 0.97 1.77 309 0.92 1.74 400 1.00 End Constraint Frowed Mt %Cu %Cu %Cu %Cu 18 0.86 0.15 620 0.70 0.93 1.00 1.00 1.00	Heasured Indicated Inferred Mt %Cu %Cn %Cn	Measured Indicated Inferred M Mt %Cu %Zn Mt %Cu %Zn Mt %Cu %Zn Mt 171 0.89 0.14 518 0.86 0.15 620 0.70 0.10 1,310 68 0.97 1.77 309 0.92 1.74 400 1.00 1.40 777 Proved Probable Probable Mt %Cu %Zn Mt 18 1.00 0.14 277 0.98 0.17 413	Mt %Cu %Zn Mt %Cu %Cu %Zn Mt %Cu %Zn Mt <t< td=""></t<>

Production and Financial Performance

The operating and financial performance of Antamina for the five years ended 30 June 2014 is summarised below:

		Ye	ar ended 30 Ju	ne	
	2010	2011	2012	2013	2014
Material mined (mt)	113.8	138.1	172.7	208.0	202.9
Sulphide ore milled (mt)	35.4	36.9	41.5	46.8	48.8
Copper grade (%)	1.06	0.97	1.09	1.06	1.03
Zinc grade (%)	1.70	1.16	0.76	0.81	0.60
Payable metals in concentrate					
- Copper (kt)	292.1	289.8	376.3	413.9	425.2
- Zinc (kt)	401.7	271.1	170.5	213.0	154.2
- Silver (koz)	13,961	10,667	12,658	11,710	12,916
- Lead (t)	9,010	3,556	2,335	2,984	4,439
- Molybdenum (t)	2,409	4,281	6,951	4,625	3,559
Revenue (US\$m)			1,229	1,295	1,261
EBITDA (US\$m)			824	901	818
EBIT (US\$m)			784	821	734
Capital expenditure (US\$m)			256	326	262
Net operating assets (US\$m)			1,088	1,311	1,341

Note: Material milled and production reported on a 100% basis. Financials represent BHP Billiton's interest.

2.4 Olympic Dam

Operations

BHP Billiton owns 100% of the Olympic Dam mine in South Australia. The Olympic Dam operation is based on a very large polymetallic deposit of iron oxide-copper-uranium-gold mineralisation. It has been in production since 1988 and has a mine life of 47 years based on current reserves. A number of expansions have lifted its capacity to 10.3mtpa (nominal milling capacity). The operations consist of an underground mine, flotation circuit and an integrated metallurgical plant, which produces copper cathode, uranium oxide and refined gold and silver bullion. The copper cathode and uranium oxide are transported by road to ports for export.

Mineral Resources and Ore Reserves

The Mineral Resources and Ore Reserves at Olympic Dam as at 30 June 2014 were as follows:

Olympic Dam –	Mineral Resour	rces and Ore	Reserves as at 3	30 June 2014	(100%)
Mineral Resources	Mt	Cu (%)	U ₃ O ₈ (kg/t)	Au (g/t)	Ag (g/t)
Non-sulphide					
Measured	52	-	-	0.97	-
Indicated	195	-	-	0.81	-
Inferred	36	-	-	0.79	-
Total	283	-	-	0.84	-
Sulphide					
Measured	1,220	0.99	0.30	0.38	2
Indicated	4,480	0.82	0.25	0.30	2
Inferred	3,850	0.73	0.25	0.24	1
Total	9,550	0.81	0.26	0.29	2
Ore Reserves	Mt	Cu (%)	U ₃ O ₈ (kg/t)	Au (g/t)	Ag (g/t)
Sulphide					
Proved	129	1.97	0.59	0.72	4
Probable	389	1.82	0.56	0.72	4
Total	518	1.86	0.57	0.72	4

Source: BHP Billiton

Production and Financial Performance

The production and financial performance of Olympic Dam for the five years ended 30 June 2014 is summarised below:

Olympic Dam – Operating and Financial Performance (100%)								
	Year ended 30 June							
_	2010	2011	2012	2013	2014			
Ore milled (mt)	5.1	10.3	9.6	9.9	10.1			
Copper grade (%)	1.85	1.86	1.98	1.80	1.88			
Uranium grade (kg/t)	0.58	0.53	0.54	0.53	0.52			
Copper cathode (kt)	103.3	194.1	192.6	166.2	184.4			
Uranium oxide concentrate (t)	2,279	4,045	3,988	4,066	3,988			
Refined gold (koz)	65.5	111.4	117.8	113.3	121.3			
Refined silver (koz)	500	982	907	880	972			
Revenue (US\$m)	887	2,210	2,146	1,873	1,777			
EBITDA (US\$m)	238	742	434	245	299			
EBIT (US\$m)	20	532	214	(4)	34			
Capital expenditure (US\$m)	208	440	394	399	167			
Net operating assets (US\$m)	6,156	6,207	6,404	6,418	6,320			

Source: BHP Billiton

Production at Olympic Dam has been relatively stable over the period, except in FY10 when it was impacted by damage to a haulage system. FY15 production is expected to be in line with FY14 as a loss of production from a scheduled maintenance programme of the smelter is expected to offset gains in mining rates.



Expansions

BHP Billiton is currently undertaking a pre-feasibility study to assess various expansion opportunities, with a focus on less capital intensive development options. An application has been lodged with the Australian and South Australian Governments to construct and operate a demonstration plant which will enable heap leach trials. The company hopes to be able to progress to a larger scale 36-month trial in late 2016.

2.5 Cannington

Operations

BHP Billiton's wholly-owned Cannington silver-lead-zinc mine, located approximately 200km south-east of Mt Isa in northern Queensland, Australia, is one of the world's largest producers of silver and lead. The deposit was discovered by BHP Billiton in 1990 and the construction of the mine infrastructure and processing plant was completed in 1997. Ore is sourced from an underground mine and fed to a flotation plant, which has a milling capacity of 3.7mtpa, to produce silver/lead and zinc concentrates. The concentrates are transported approximately 800km by road and rail to the Port of Townsville for export. In FY14, Cannington produced 25.2moz of silver, 187kt of lead and 58kt of zinc in concentrates.

Mineral Resources and Ore Reserves

The Mineral Resources and Ore Reserves for Cannington as at 30 June 2014 were as follows:

Cannington – Mineral Resources and Ore Reserves as at 30 June 2014 (100%)						
	Mt	Ag (g/t)	Pb (%)	Zn (%)		
Mineral Resources						
Open cut sulphide						
Measured	15	70	3.04	2.12		
Indicated	1.2	67	2.64	1.32		
Inferred	-	-	-	-		
Underground sulphide						
Measured	42	226	6.18	3.86		
Indicated	11	147	4.51	3.04		
Inferred	6.7	98	3.52	2.00		
Total Mineral Resources	76	170	5.03	3.20		
Ore Reserves						
Underground sulphide						
Proved	18	239	6.38	3.92		
Probable	2.7	240	6.15	4.01		
Total Ore Reserves	21	239	6.35	3.93		

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Production and Financial Performance

The operating and financial performance of Cannington for the five years ended 30 June 2014 is summarised below:

Cannington – Operating and Financial Performance (100%) ¹²								
	Year ended 30 June							
	2010	2011	2012	2013	2014			
Ore milled (mt)	3.1	3.1	3.3	3.1	3.2			
Silver grade (g/t)	437	417	372	360	296			
Lead grade (%)	9.2	9.2	8.3	7.9	7.1			
Zinc grade (%)	3.3	3.2	2.8	3.0	3.0			
Silver (koz)	37,276	35,225	34,208	31,062	25,161			
Lead (kt)	245	243	239	213	187			
Zinc (kt)	63	61	55	56	58			
Revenue (US\$m)	1,317	1,889	1,590	1,365	1,079			
EBITDA (US\$m)	814	1,232	908	646	459			
EBIT (US\$m)	780	1,197	855	606	412			
Capital expenditure (US\$m)	40	49	96	39	60			
Net operating assets (US\$m)	200	202	194	206	234			

Source: BHP Billiton

Cannington production has fallen over the period as declining grades have been only partially offset by increasing milling rates.

Expansions

Cannington has a mine life of nine years based on reserves as at 30 June 2014. There is an opportunity to extend the mine life through an open pit expansion.

2.6 Other

BHP Billiton has a 45% interest in Resolution Copper, a large undeveloped copper deposit located in Arizona, in the United States. Rio Tinto holds the remaining 55% and is the operator. A pre-feasibility study contemplating a 120ktpd underground panel cave and associated processing facility was completed in FY14 and is currently being optimised. Resolution Copper is progressing with the sinking of a shaft to access the orebody.

BHP Billiton also holds various early exploration interests in Peru and Chile.

¹² The financial information relating to the South32 assets disclosed in this appendix reflects BHP Billiton's accounting policies, not South32's.

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2.7 **Production and Financial Performance**

Summarised below is the production and financial performance of BHP Billiton's Copper Business over the last five years:

BHP Billiton Copper – Production and Financial Performance							
		Yea	r ended 30 June				
_	2010	2011	2012	2013	2014		
Production							
- Copper (kt)	1,075	1,139	1,094	1,689	1,727		
- Lead (kt)	248.4	244.6	239.9	214.4	188.0		
- Zinc (kt)	198.3	152.2	112.2	128.2	109.9		
- Gold (koz)	141.9	196.1	168.7	184.8	194.3		
- Silver (koz)	45,362	42,656	41,308	38,913	34,804		
- Uranium (t)	2,279	4,045	3,853	4,066	3,988		
- Molybdenum (t)	813	1,445	2,346	1,561	1,201		
Revenue (US\$m)	9,528	13,550	11,162	15,132	14,099		
EBITDA (US\$m)	5,400	7,531	4,704	7,254	6,922		
EBIT (US\$m)	4,639	6,796	3,982	5,926	5,330		
Capital expenditure (US\$m)	763	1,404	2,650	4,260	4,024		
Net operating assets (US\$m)	12,349	12,855	14,011	20,074	22,231		

Source: BHP Billiton

Notes: (1) The information set out above represents BHP Billiton's share of production and earnings in FY10, FY11 and FY12 but reflects 100%, rather than BHP Billiton's 57.5% share, of Escondida's production, revenue and earnings in FY13 and FY14. Escondida accounted for US\$8.6 billion and US\$8.1 billion of total revenue for the copper business in FY13 and FY14 respectively.

(2) The production and financial performance information includes the contribution from Pinto Valley, which BHP Billiton sold in October 2013.

(3) The financial performance information excludes the contribution from sales of third party product and does not reflect statutory adjustments.

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3 Iron Ore

BHP Billiton is one of the world's leading producers of iron ore. It holds an 85% interest in the Western Australia Iron Ore operations ("WAIO") in Australia and a 50% interest in the Samarco joint venture in Brazil.

3.1 WAIO

Overview

BHP's Western Australian iron ore operations consist of an integrated system of mining operations and ore processing hubs, largely located in the Central Pilbara, port facilities located at Port Hedland and a railway system linking the mines and hubs to the port.



First production from the BHP Billiton Pilbara assets occurred in 1966. In FY14, the operations yielded 225mt of iron ore (100%). BHP Billiton expects to produce 245mt in FY15 and has set an aspirational production target of 290mt per annum by the end of FY17.



Operations and Ownership

The assets are held by four main joint ventures. BHP Billiton has an 85% interest in each, with the balance held by Mitsui and Itochu:

- the Mt Newman joint venture holds the rights to mine the Mt Whaleback and other adjacent ore bodies and owns the crushing, screening and beneficiation facilities and associated conveyors and rail spur lines at the Mt Whaleback hub. It also owns the Port Hedland to Newman rail line and the Nelson Point port facilities at Port Hedland. Ore was first produced at Mt Whaleback in 1969;
- the Yandi joint venture comprises the Yandi mine and the processing, crushing and associated facilities at the Yandi hub. The development of Yandi began in 1991 and the first shipment of iron ore occurred in 1992. Ore from the Yandi JV is transported to Port Hedland using the Mt Newman JV-owned rail facilities;
- the Mt Goldsworthy joint venture operates the Area C mine and associated processing facilities. Ore is transported to Port Hedland using the Mt Newman rail line. Production at Area C commenced in 2003. The Mt Goldsworthy joint venture also owns the Yarrie mine, which is located in the northern Pilbara region, approximately 200km east of Port Hedland, and the Goldsworthy rail line, which links Yarrie to Port Hedland. Production from Yarrie was suspended in February 2014; and
- the Jimblebar joint venture operates the Jimblebar mine and the supporting hub infrastructure, which delivered first production during the September 2013 quarter.

In addition, BHP Billiton, Mitsui and Itochu have entered into joint venture agreements with certain customers on parts of the tenements. Ore sourced from these joint ventures is sold to the four main joint ventures on terms that result in BHP Billiton having an 85% share in production.

The rail infrastructure consists of approximately 1,300 kilometres of track linking the processing hubs to WAIO's port facilities at Port Hedland. The completion of double tracking between the Yandi junction and Port Hedland and of the Mooka staging facility means that only a modest investment will be required to lift the capacity of the rail system to 300mtpa.

Port Hedland is a public port, managed by the Port Hedland Port Authority. WAIO has facilities at Nelson Point and Finucane Island, located on either side of the inner harbour.

WAIO produces a suite of high quality and high grade fines and lump products. These are sold to steel mills in China, South Korea, Japan and other countries under both long and short term contracts at prices generally linked to market indices.

Mineral Resources and Ore Reserves

The WAIO Mineral Resources and Ore Reserves as at 30 June 2014 were as follows:

WAIO – Mineral Resources and Ore Reserves as at 30 June 2014 (100%)								
	Meas	sured	Indicated		Infe	rred	Total	
Mineral Resources	Mt	%Fe	Mt	%Fe	Mt	%Fe	Mt	%Fe
Brockman	1,300	62.2	4,200	59.9	9,200	59.0	15,000	59.5
Channel Iron Deposits	960	56.1	430	56.7	790	54.9	2,200	55.8
Marra Mamba	360	61.9	870	60.7	5,100	59.6	6,400	59.9
Nimingarra	10	59.0	120	61.6	70	60.5	200	61.1
			Pro	ved	Probable		Total	
Ore Reserves			Mt	%Fe	Mt	%Fe	Mt	%Fe
Brockman			700	63.7	1,400	61.5	2,100	62.2
Brockman beneficiated			90	61.3	80	60.0	170	60.7
Channel Iron Deposits			650	56.3	190	57.3	840	56.5
Marra Mamba			220	62.1	310	61.0	530	61.5
Nimingarra			10	59.6	20	60.0	30	59.8

Source: BHP Billiton

WAIO ores are generally high grade and contain low levels of impurities, thus requiring little or no beneficiation.

Ore Reserves account for only approximately 15% of Mineral Resources, reflecting the fact that drilling to convert Mineral Resources to Ore Reserves is only undertaken when required. Consequently, WAIO's Mineral Resources should underpin the operations far beyond the 16 year mine life based on Ore Reserves and FY14 production.

Production and Financial Performance

Production by WAIO has increased substantially over the last decade, reflecting substantial growth in Chinese demand for iron ore. Over the period, WAIO has invested US\$25 billion and increased production from 105mt in FY05 to 225mt in FY14. Production in FY14 benefited from the early commissioning of the Jimblebar mine in the September 2013 quarter. Production for FY15 is expected to reach 245mt, with additional production coming from Jimblebar, Newman and Mining Area C.

WAIO benefits from the relative proximity of its operations to one another, low strip ratios and high quality ores that require low levels of beneficiation. Recent improvement initiatives include the transition to owner mining and the implementation of a remote operations centre for the rail infrastructure. Cash costs were US\$27.53 per tonne in FY14, down from US\$29.42 in the previous year. They were US\$20.35 per tonne in the December 2014 half.

The production and financial performance of the WAIO operations for the five years ended 30 June 2014 are summarised below:

WAIO – Production and Financial Performance								
		Yea	r ended 30 Jun	e				
	2010	2011	2012	2013	2014			
Newman (kt)	32,097	45,245	39,988	44,620	56,915			
Yarrie (kt)	1,688	1,198	768	1,106	836			
Area C JV (kt)	38,687	39,794	42,425	44,717	46,960			
Yandi JV (kt)	41,396	36,460	53,536	60,054	68,518			
Jimblebar (kt)	-	-	-	-	8,863			
Wheelarra (kt)	-	-	11,338	8,377	10,553			
WAIO production (kt)	113,868	122,697	148,055	158,874	192,645			
Cash costs (US\$/t)	n.a.	28.55	29.80	29.42	27.53			
Revenue (US\$m)	9,884	18,131	20,480	18,452	21,013			
EBITDA (US\$m)	6,002	12,844	14,025	11,668	12,988			
EBIT (US\$m)	5,568	12,276	13,262	10,664	11,559			
Capital expenditure (US\$m)	3,803	3,428	4,974	5,979	2,947			
Net operating assets (US\$m)	9,988	12,825	16,994	21,074	22,278			

Source: BHP Billiton

Notes: (1) The information set out above represents BHP Billiton's share of production and earnings except in relation to Jimblebar, which is reported on a 100% basis although BHP Billiton's interest is 85%.

(2) Revenue includes inter-segment revenue.

Expansions

BHP Billiton has announced an aspirational production target for WAIO of 290mtpa by the end of FY17. Optimisations at the existing mines (largely Mining Area C and Newman), upgrades to the rail and port infrastructure and the completion of the Jimblebar Phase 1 project could result in total production capacity increasing to 270mtpa from 225mtpa in FY14. A further increase to 290mtpa will revolve around the debottlenecking of the inner harbour and an increase in production at Jimblebar to 60 mtpa. These expansions are expected to be completed at a cost of less than US\$30 per tonne of annual production capacity and should contribute to a reduction in cash costs to less than US\$20 per tonne in the medium term from US\$27.53 per tonne in FY14. Increasing production capacity beyond 290mtpa will require further debottlenecking at Port Hedland and the expansion of processing hubs.

There is substantial additional mineralisation within 250km of the existing infrastructure. However, the current focus of the exploration effort is on resource definition at the existing hubs. BHP Billiton expects that no new mines will be required to replace existing production for at least eight years and that no new mining hub will be required for at least 30 years.

3.2 Samarco

Operations

Samarco is a long life, high margin integrated iron ore pellet producer located in the state of Minas Gerais in Brazil. It is held in a 50:50 joint venture between BHP Billiton and Vale. Ore from the mine is concentrated at the beneficiation plant at the Germano complex. The concentrate is then transported 400km through slurry pipelines to the pellet plants and port facilities located at Porta Ubu on the Atlantic coast.

A US\$3.5 billion expansion, which included the addition of a third concentrator, a third slurry pipeline and a fourth pellet plant, was completed in the March 2014 quarter and should lift pellet production capacity from 22.3mtpa to 30.5mtpa.



Mineral Resources and Ore Reserves

The Mineral Resources and Ore Reserves at Samarco as at 30 June 2014 were as follows:

Samarco – Mineral Resources and Ore Reserves as at 30 June 2014 (100%)								
	Meas	Measured Indicated			Infe	rred	То	tal
Mineral Resources	Mt	%Fe	Mt	%Fe	Mt	%Fe	Mt	%Fe
Samarco	3,000	39.3	2,800	37.2	1,700	36.2	7,500	37.8
			Pro	Proved Probable		able	Total	
Ore Reserves			Mt	%Fe	Mt	%Fe	Mt	%Fe
Samarco			1,800	40.1	1,100	38.8	2,900	39.6

Source: BHP Billiton

Samarco's Mineral Resources should underpin the operation far beyond the current 39 year mine life based on Ore Reserves and FY14 production.

Production and Financial Performance

BHP Billiton's share of Samarco production, revenue and earnings for the five years ended 30 June 2014 is set out below:

Samarco – Opera	ting and Fina	ncial Perforn	nance (BHP H	Billiton interes	st)
		Yea	ar ended 30 Jun	e	
	2010	2011	2012	2013	2014
Production (kt)	11,094	11,709	11,423	10,982	10,919
Revenue (US\$m)	1,149	2,149	1,996	1,622	1,634
EBITDA (US\$m)	595	1,243	1,106	811	846
EBIT (US\$m)	536	1,203	1,051	750	790
Capital expenditure (US\$m)	35	172	602	772	424
Net operating assets (US\$m)	1,252	1,327	1,788	1,037	1,072

Source: BHP Billiton

Note: Revenue includes inter-segment revenue.

4 Coal Business

BHP Billiton is the world's largest supplier of seaborne metallurgical coal and one of the largest suppliers of seaborne energy coal. Its coal operations are located in Australia, South Africa, Colombia and United States and include both open-cut and underground mines. Metallurgical coal is exported to steel producers, principally in China, India, Japan and Europe, mainly under sale contracts with prices referenced to index or spot prices. Energy coal is exported to power generators and industrial users in China, India, Japan, Europe and the Middle East under index linked or short-term fixed contracts.

4.1 Queensland Coal

Operations

Queensland Coal consists of assets held by the BHP Billiton Mitsubishi Alliance ("BMA") and the BHP Billiton Mitsui Coal ("BMC") joint ventures. The mines are located in the Bowen Basin of Central Queensland in Australia, in close proximity to rail and port infrastructure. The location of Queensland Coal's mines and the key transport infrastructure is shown on the map below:



Source: BHP Billiton

BMA comprises two unincorporated 50:50 joint ventures between BHP Billiton and Mitsubishi Development: the Central Queensland Coal Associates Joint Venture ("CQCA") and the Gregory Joint Venture. BMA owns and operates a number of open-cut and underground metallurgical mines in the Bowen Basin, including the Blackwater, Goonyella Riverside, Peak Downs, Saraji, Broadmeadow, Daunia, Caval Ridge and Gregory Crinum mines. Other than the Broadmeadow, Daunia and Caval Ridge mines, which only commenced operations within the last 10 years, all mines have been in production for over 25 years. Mined coal is washed and processed onsite at coal preparation plants, which have a combined nominal capacity of more than 67mtpa. The coal produced by CQCA includes premium quality low volatility high vitrinite hard coking coal, medium volatility hard coking coal and weak coking coal suitable for blending. Some pulverised coal injection ("PCI") coal and medium ash thermal coal is also produced as secondary products. The coal produced by the Gregory Joint Venture is highly volatile low ash hard coking coal. This coal is transported by rail to either the BMA owned and operated Hay Point Coal terminal or the Gladstone or Abbot Point ports.

BMC is a joint venture owned by BHP Billiton (80%) and Mitsui and Co (20%). BMC operates the South Walker Creek and Poitrel open-cut metallurgical coal mines in the Bowen Basin. The coal mined from the South Walker Creek mine is processed at an onsite coal preparation plant with a nominal capacity of more than 5mtpa. The Poitrel mine is adjacent to the Peabody owned Millennium coal mine and BMC and Peabody have an agreement to share processing and rail loading facilities. The shared beneficiation facilities have a nominal capacity of more than 3mtpa. The coal produced by BMC includes a range of coking coal, PCI coal and thermal coal with medium to high phosphorous and ash properties. The products are transported by rail to either the Hay Point or Dalrymple ports.

Coal Resources and Coal Reserves

The following tables summarise the Coal Resources and Coal Reserves for the Queensland Coal mines as at 30 June 2014 (100%):

Queensla	and Coal – Coal F	lesources as at 30 .	June 2014 (100%)	
Mineral Resources (Mt)	Measured	Indicated	Inferred	Total
CQCA JV				
Goonyella Riverside Broadmeadow	580	932	179	1,691
Peak Downs	649	874	572	2,095
Saraji	739	193	90	1,022
Norwich Park	221	148	138	507
Blackwater	196	683	1,355	2,234
Daunia	99	52	19	170
Red Hill	-	674	547	1,221
Peak Downs East	-	668	104	772
Saraji East	272	435	940	1,647
Gregory JV				
Gregory Crinum	7.9	123.7	0.3	131.9
Liskeard	5.6	-	-	5.6
BMC				
South Walker Creek	234	292	157	683
Poitrel-Winchester	39	48	57	144
Nebo West	-	178	-	178
Bee Creek	-	55	5.1	60.1
Wards Well	-	1,224	149	1,373

Queensland Coal – Coal Reserves as at 30 June 2014 (100%)								
Coal Reserves (Mt)	Proved Marketable	Probable Marketable	Total Marketable					
CQCA JV								
Goonyella Riverside Broadmeadow	279	269	548					
Peak Downs	296	317	613					
Saraji	240	87	327					
Norwich Park	112	52	164					
Blackwater	126	333	459					
Daunia	72	40	112					
Gregory JV								
Gregory Crinum	5.4	11.2	16.6					
BMC								
South Walker Creek	50	15	65					
Poitrel-Winchester	23	26	49					

Source: BHP Billiton

Production and Financial Performance

The production and financial performance of the Queensland Coal operations (BHP Billiton's share) over the five years ended 30 June 2014 is summarised below:

Queenslan	d Coal – Pro	duction and	Financial Per	formance			
	Year ended 30 June						
	2010	2011	2012	2013	2014		
Blackwater (kt)	5,733	4,589	4,435	5,432	6,730		
Goonyella Riverside (kt)	6,668	5,359	5,003	6,221	7,330		
Peak Downs (kt)	4,332	3,402	3,534	4,545	4,909		
Saraji (kt)	3,402	2,779	3,053	3,449	4,558		
Gregory Joint Venture (kt)	2,398	2,717	1,411	2,523	2,965		
Daunia (kt)	-	-	-	475	2,201		
Caval Ridge (kt)	-	-	-	-	563		
Norwich Park (kt)	1,870	1,055	1,175	-	-		
Total BMA production (kt)	24,403	19,901	18,611	22,645	29,256		
South Walker Creek	3,609	3,134	4,081	4,351	5,246		
Poitrel	2,834	2,759	2,612	2,712	3,063		
Total BMC production (kt)	6,443	5,893	6,693	7,063	8,309		
Total Queensland Coal production (kt)	30,846	25,794	25,304	29,708	37,565		
Revenue (US\$m)	5,041	6,048	5,875	4,452	4,666		
EBITDA (US\$m)	2,063	2,440	1,480	627	949		
EBIT (US\$m)	1,877	2,223	1,220	251	435		
Capital expenditure (US\$m)	452	865	2,465	2,771	1,790		
Net operating assets (US\$m)	3,354	3,717	5,787	7,988	9,115		

Source: BHP Billiton

Notes: (1) Production from the BMA assets includes some thermal coal production (approximately 3% in FY14).

(2) The information set out above represents BHP Billiton's share of production and earnings, except in relation to the BMC assets. The saleable production for South Walker Creek and Poitrel has been reported on a 100% basis although BHP Billiton's interest in saleable production is 80%.

Expansions

In March 2011, BHP Billiton approved the expansion of the Hay Point Coal Terminal, increasing capacity by 11mt (100%) to 55mt. The expansion is expected to cost US\$3.0 billion (100%) and was 95% complete as at 31 December 2014. The first shipment of coal was loaded in January 2015.

4.2 Illawarra Coal

Operations

BHP Billiton's wholly-owned Illawarra Coal consists of the Appin, West Cliff and Dendrobium underground coal mines and the West Cliff and Dendrobium coal preparation plants. The operations are located near the town of Wollongong and between 8km and 38km from Port Kembla in the Illawarra region of New South Wales, Australia. BHP Billiton also has a 16.67% interest in the Port Kembla Coal Terminal through which coal from the Illawarra operations is exported.

Production commenced at the Appin mine in 1962. West Cliff commenced production in 1976 and the Dendrobium mine commenced production in 2005. The mining activities at the three mines are based on the longwall mining method. The mines produce premium quality hard coking coal and some thermal coal (approximately 20% of total production) from the Wongawilli and Bulli seams. The coal produced at the Appin and West Cliff mines is washed at the nearby BHP Billiton owned West Cliff Coal Preparation Plant. The coal produced from the Dendrobium mine is transported via rail to the BHP Billiton owned Dendrobium Coal Preparation Plant, located within the BlueScope Steel steelworks at Port Kembla. The two beneficiation plants have a combined nominal processing capacity of 12.5 mtpa of raw coal. The coal produced is transported by road to domestic customers or by road and rail to Port Kembla for export.

Coal Resources and Coal Reserves

Coal Resources and Coal Reserves for Illawarra Coal as at 30 June 2014 were as follows:

Illawara Coal	- Coal Resources	and Coal Reserve	es as at 30 June 2	014 (100%)
Coal Resources (Mt)	Measured	Indicated	Inferred	Total
Appin	157	256	289	702
West Cliff	21	21	68	110
Dendobrium	86	91	118	295
Cordeaux	5.2	109	85	199
Coal Reserves (Mt)		Proved Marketable	Probable Marketable	Total Marketable
Appin		20	112	132
West Cliff		3.8	0.3	4.1
Dendobrium		13.8	16.2	30

Production and Financial Performance

The production and financial performance of Illawarra Coal over the five years ended 30 June 2014 are summarised below:

Illawara Coal – Production and Financial Performance											
		Y	ear ended 30 Ju	ine							
	2010	2011	2012	2013	2014						
Total production (kt)	6,535	6,884	7,926	7,942	7,513						
Total sales revenue	1,018	1,525	1,701	1,287	886						
EBITDA (US\$m)	369	740	826	311	131						
EBIT (US\$m)	245	603	667	163	(39)						
Capital expenditure	196	307	316	357	309						
Net operating assets	747	924	1,058	1238	1384						

Source: BHP Billiton

Expansions

In June 2012, BHP approved the US\$845 million Appin Area 9 Project, which will sustain Illawara Coal's production capacity at 9mtpa after production ceases at the West Cliff mine. The Appin Area 9 Project will establish a replacement mining area with production capacity of 3.5mtpa. The project includes roadway development, new ventilation infrastructure, new and reconfigured conveyors and other mine services. The project is expected to be operational in calendar year 2016 and was 77% complete as at 31 December 2014.

4.3 Energy Coal South Africa

Operations

Energy Coal South Africa ("BECSA") owns the Khutala, Middelburg, Wolvekrans and Klipspruit thermal coal mines and associated processing plants in the Witbank region, South Africa. BECSA also has a 21% interest in the Richards Bay Coal Terminal ("RBCT"). BHP Billiton holds a 90% interest in BECSA and is the operator. The remaining interest is held by a Broad Based Black Economic Empowerment consortium (8%) and BECSA employees (2%).

In FY14, BECSA produced 30.4mt (100%) of thermal coal. Approximately 55% of the production was sold to Eskom, the South African government owned electricity utility, and the balance was exported, primarily to customers in China and India, through RBCT.

The Khutala colliery is located 100km east of Johannesburg in Gauteng province. The mine commenced production from an underground operation in 1984 and an open-cut operation was established in 1996. Most of the coal production is crushed and transported by an overland conveyor to the nearby Kendal Power Station. During FY14, the Khutala mine produced 9.7mt (100%) of medium rank bituminous coal from the combined open-cut and underground operation. As at 30 June 2014, the Khutala mine had a reserve life of approximately six years but BHP.

The Wolvekrans/Middelburg complex is located 20km southeast of Witbank in Mpumalanga province. The Middelburg open cut operation commenced production in 1982. Coal is currently mined from two active pits at the Middelburg operation and from five pits at the Wolvekrans operation. Beneficiation facilities include tips, crushing plants and two export wash plants and have a nominal capacity in excess of 17mtpa. The Wolvekrans/Middelburg complex produces coal for both export and domestic markets. The export coal is transported approximately 560km by third party rail to RBCT from where it is shipped, predominantly to customers in India, China and Singapore. The coal for domestic consumption is transported by conveyor to the nearby Duvha Power Station. During FY14, the Wolvekrans Middelburg complex produced 13.4mt (100%) of medium rank bituminous coal. As at 30 June 2014, the Middelburg mine had 80mt of

marketable reserves to support a mine life of approximately 23 years, while the Wolvekrans mine had 285mt of marketable reserves to support a mine life of approximately 21 years.

The Klipspruit colliery is located 30km west of Witbank in Mpumalanga province. The colliery includes a combined truck and shovel mini-pit and a single dragline, multi seam open-cut operation. Production from the mini-pit commenced in 2003 and from the dragline in 2005. The coal from the mine is beneficiated at the Phola coal processing plant, in which BHP Billiton has a 50% interest. Beneficiation facilities include a tip and crushing plant and an export wash plant. All the coal produced is transported approximately 610km by third party rail to RBCT and exported predominantly to India, Israel and Singapore. During FY14, Klipspruit produced 7.3mt (100%) of medium rank bituminous coal. As at 30 June 2014, the Klipspruit mine had 36mt of marketable reserves to support a mine life of approximately six years.

Coal Resources and Coal Reserves

BECSA's Coal Resources and Marketable Coal Reserves as at 30 June 2014 were as follows:

		BECSA	-Coal Reso	ources a	s at 30 Jun	e 2014 (100%)		
	Mining	Meas	ured	Indic	cated	Infe	rred	ſ	otal
Deposit	Туре	Mt	Kcal/ kg	Mt	Kcal/ kg	Mt	Kcal/ kg	Mt	Kcal/ kg
Khutala	OC	1,143	4,790	-	-	-	-	1,143	4,790
Khutala	UG	188	4,480	-	-	-	-	188	4,480
Wolvekrans	OC	496	5,600	18	5,100	118	5,100	632	5,490
Middelburg	OC	211	5,410	-	-	7	5,600	218	5,420
Klipspruit	OC	138	5,220	-	-	1	4,950	139	5,220
Leandra North	UG	210	4,990	194	5,030	103	5,060	507	5,020
Naudesbank	OC/ UG	103	5,550	132	5,610	54	5,580	289	5,580
Weltevreden	OC/ UG	192	5,150	212	4,970	143	5,050	547	5,050
Leandra South	UG	10	4,700	132	4,910	938	5,030	1,080	5,010

Source: BHP Billiton

Note: BHP Billiton's interest in the BECSA Coal Resource is 90%

	BECSA – Marketable Coal Reserves as at 30 June 2014 (100%)												
	Mining	Proved Ma	rketable	Probable Ma	arketable	Total Marketable							
Deposit	Туре	Mt	Kcal/ kg	Mt	Kcal/ kg	Mt	Kcal/ kg						
Khutala	OC	1	4,640	-	-	1	4,640						
Khutala	UG	33	4,440	-	-	33	4,440						
Wolvekrans	OC	273	6,010	12	5,950	285	6,010						
Middelburg	OC	80	5,890	-	-	80	5,890						
Klipspruit	OC	36	5,800	-	-	36	5,800						

Source: BHP Billiton

Note: BHP Billiton's interest in the BECSA Marketable Coal Reserves is 90%

Production and Financial Performance

The production and financial performance of BECSA for the five years ended 30 June 2014 are summarised as follows:

BESCA -	– Production	and Financia	l Performanc	e (100%)	
		1	Year ended 30 J	une	
	2010	2011	2012	2013	2014
Middelburg/Wolvekrans (kt)	14,703	14,328	14,848	14,669	13,368
Khutala (kt)	10,868	12,928	10,863	9,554	9,718
Klipspruit (kt)	4,887	7,072	7,568	7,404	7,298
Total production (kt)	30,459	34,328	33,279	31,627	30,384
Revenue (US\$m)	1,143	1,754	1,894	1,457	1,279
EBITDA (US\$m)	222	399	468	177	315
EBIT (US\$m)	141	230	278	(34)	(170)
Capital expenditure (US\$m)	482	276	162	133	65
Net operating assets (US\$m)	1,272	1,335	1,425	1,334	989

Source: BHP Billiton

Note: The production and financial information has been reported on a 100% basis (except for the contribution of the Richards Bay Coal Terminal which has been equity accounted). BHP Billiton has a 90% working interest in the assets. *Expansions*

BECSA has identified life xtension opportunities at Klipspruit and Khutala and is considering the development of the Pegasus, Leandra and Naudesbank deposits.

4.4 New Mexico Coal

BHP Billiton operates the Navajo and San Juan mines in New Mexico in the United States. The Navajo mine, located approximately 40km southwest of Farmington, commenced production in 1963. The mine produces medium rank bituminous thermal coal which is transported by rail to a domestic customer. During FY14, the Navajo mine produced 5.1mt of thermal coal. BHP Billiton transferred ownership of the Navajo mine effective 30 December 2013, although it remains the operator of the mine until 31 December 2016.

The San Juan underground mine is located approximately 25km west of Farmington. The mine produces medium rank bituminous thermal coal which is transported by truck and conveyor to a nearby power plant. During FY14, the San Juan mine produced 5.7mt of thermal coal. As at 30 June 2014, the mine had reserves sufficient to support a mine life of approximately four years.

4.5 New South Wales Energy Coal

BHP Billiton's wholly-owned New South Wales Energy Coal business operates the Mt Arthur coal mine in the Hunter Valley region of New South Wales. The open-cut mine commenced production in 2002 and produces medium rank bituminous thermal coal. In FY14, approximately 7% of the approximately 20mt of coal produced was transported by conveyor to a local power station and the balance was exported through the port of Newcastle predominantly to Japan and China.

NSW Energy Coal also has a 35.5% interest in the Newcastle Coal Infrastructure Group, which operates the Newcastle Third Port export coal loading facility, and a 1.75% interest in Port Waratah Coal Services Limited, which operates two coal loading facilities at the Port of Newcastle. In August 2011, BHP Billiton announced a US\$367m (BHP Billiton share) Newcastle port expansion project to increase the total capacity at the coal terminal from 53mtpa to 66mtpa, which is expected to increase NSW Energy Coal's allocation by 4.6mtpa to 19.2mtpa. As at 30 June 2014, the project was 86% complete, although first ship loading through the new facility was achieved in June 2013.

During FY14, NSW Energy Coal produced 20mt of thermal coal. As at 30 June 2014, the Mt Arthur mine had sufficient reserves to support 33 years of production.

4.6 Cerrejón

BHP Billiton has a 33.33% interest in the Cerrejón Coal Company ("Cerrejón"). The Cerrejón mine, one of the largest open-cut export energy coal mines in the world, is located in the La Guajira province in Colombia. Cerrejón also owns and operates integrated rail and port facilities through which the majority of its coal is exported to international customers. Mining operations at Cerrejón commenced in 1976 although BHP Billiton acquired its interest only in 2000. The operation produces a medium rank bituminous thermal coal which is transported 150km by rail to Puerto Bolivar, from where it is exported to customers in Europe, Middle East, North and South America.

During FY14, BHP Billiton's share of production from Cerrejón was 12.3mt of thermal coal. As at 30 June 2014, the mine had sufficient reserves to support 17 years of production.

In August 2011, BHP Billiton announced an expansion of Cerrejón to increase production by 8mtpa (100%) to 40mtpa (100%). The project, known as the P40 Project, will involve a mine expansion and an increase in the capacity of the port and related infrastructure. BHP Billiton's share of investment for the P40 Project is estimated at US\$437m. As at 30 June 2014, the project was 94% complete.

4.7 **Production and Financial Performance**

The production and financial performance of BHP Billiton's Coal Business over the last five years are summarised below:

BHP Billi	ton Coal – Pr	oduction and	Financial Per	formance							
	Year ended 30 June										
-	2010	2011	2012	2013	2014						
Production											
- Metallurgical coal (kt)	37,381	32,678	33,230	37,650	45,078						
- Energy coal (kt)	66,131	69,500	74,267	72,445	73,492						
Revenue (US\$m)	9,273	12,229	12,742	10,138	9,515						
EBITDA (US\$m)	3,246	4,425	3,502	1,673	1,963						
EBIT (US\$m)	2,695	3,728	2,707	702	511						
Capital expenditure (US\$m)	1,534	1,926	3,701	4,005	2,527						
Net operating assets (US\$m)	7,574	8,361	11,303	13,204	14,281						

Source: BHP Billiton

Notes: (1) Coal production reflected in the table above represents 100% of the production from BMC mines (BHP Billiton's equity interest is 80%) and 100% of the production from BECSA mines (BHP Billiton's equity interest is 90%).

(2) Cerrejon, Newcastle Coal Infrastructure Group, Port Kembla Coal Terminal and Richards Bay Coal Terminal are equity accounted investments and are reported on a proportionate basis (with the exception of net operating assets).

(3) The financial performance excludes the contribution from sales of third party product and does not reflect statutory adjustments.

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5 Aluminium, Manganese, Nickel

5.1 Aluminium

Overview

BHP Billiton's aluminium business has interests in bauxite mining, alumina refining and aluminium smelting. During FY14, the business produced 1.2mt of aluminium and 5.2mt of alumina. Approximately 35% of the alumina production was consumed internally at BHP Billiton's smelters and the rest sold to third party smelters. The business has a diversified customer base with alumina and aluminium customers located mostly in Western Europe and Asia. Alumina and aluminium sales are underpinned by a mixture of LME-linked contracts, index-linked contracts and negotiated spot prices.

Worsley

Worsley is an integrated bauxite mining and alumina refining operation located in Western Australia. It combines the Boddington bauxite mine and the Worsley alumina refinery, one of the largest and lowest cost refineries in the world. BHP Billiton is the operator of and holds an 86% interest in the operation, with the balance held by Sojitz Alumina (4%) and Japan Alumina Associates (10%).

The Boddington open-cut mine, located 123km south-east of Perth, commenced production in 1983. Ore is mined using techniques developed to cater for the discrete, pod like nature of the deposit. The ore is crushed and transported to the Worsley refinery, located 55km north-east of Bunbury, via a 51km conveyor. Alumina production is transported by rail to the Port of Bunbury, from where it is exported overseas. The refinery sources bauxite exclusively from the Boddington mine. Power for the refinery is provided by an onsite coal power station as well as third party onsite gas fired and multi-fuel cogeneration steam and power generation facilities.

The operations have undergone a series of expansions over the years, most recently as part of the Worsley Efficiency and Growth project, which resulted in the expansion of mining operations, an increase in refinery capacity and upgraded facilities at the Port of Bunbury. The project was completed in 2012 at a cost of approximately US\$3.1 billion and resulted in an increase in production capacity from 3.5mtpa to 4.6mtpa of alumina.

As at 30 June 2014, the Boddington mine had reserves to support a mine life of approximately 17 years, although the very large resource should support operations for many years beyond this:

Wors	Worsley – Mineral Resources and Ore Reserves as at 30 June 2014 (100%)												
	Measured			Indicated			Inferred			Total			
Mineral Resources	Mt	%A Al ₂ O ₃	%R SiO ₂	Mt	%A Al ₂ O ₃	%R SiO ₂	Mt	%A Al ₂ O ₃	%R SiO ₂	Mt	%A Al ₂ O ₃	%R SiO ₂	
Laterite	366	31.1	1.5	355	32.0	2.3	418	31.2	2.6	1,140	31.4	2.2	
					Proved		I	Probable			Total		
Ore Reserves				Mt	%A Al ₂ O ₃	%R SiO2	Mt	%A Al ₂ O ₃	%R SiO2	Mt	%A Al ₂ O ₃	%R SiO2	
Laterite				274	31.0	1.6	22	30.2	1.7	295	31.0	1.6	

Source: BHP Billiton

Note: BHP Billiton's interest is 86%

During FY14, the Worsley operations produced 18mt of bauxite which yielded 4.6mt of alumina. BHP Billiton sold its share of production to the company's Hillside and Mozal smelters in southern Africa (42% of total sales) and to third party customers globally.

Aluminium South Africa

Aluminium South Africa operates the wholly owned Hillside and Bayside smelters located at Richards Bay, approximately 200km north of Durban, South Africa.

The Hillside smelter was commissioned in 1995 and has since undergone a series of expansions. Its current nominal capacity of 726ktpa of primary aluminium makes it the largest aluminium smelter in the southern hemisphere. Approximately 80% of the ingot production is exported through Richards Bay principally to Western European and Asian markets. The remaining 20% is transported by road to domestic customers. Hillside also produces liquid metal which is transferred to Bayside for conversion into aluminium slab products. The alumina feed for the smelter operations is imported from BHP Billiton's Worsley refinery. Power is sourced from Eskom, the South Africa state-owned power utility, under long term contracts linked primarily to aluminium prices. In FY14, Hillside produced 715kt of aluminium.

The Bayside smelter is the only South African producer of value-added primary aluminium products for sale into the local market. The smelting operations were ramped down over recent years and the last potline was closed in June 2014. The casthouse is still operational and is used to process liquid metal from Hillside.

Mineração Rio do Norte

Mineração Rio do Norte ("MRN") owns and operates a large bauxite mine, located at Porto Trombetas in the province of Parã, Brazil. MRN is a joint venture between BHP Billiton (14.8%), Alcoa and affiliates (18.2%), Vale (40%), Rio Tinto Alcan (12%), Votorantim (10%) and Hydro (5%). The open-cut mine commenced production in 1979. Bauxite ore is crushed and washed before being transported by sealed road and a 28km rail line to Porto Trombetas, from where it is shipped to customers, with the majority of the bauxite going to the joint venturers and related parties. BHP Billiton's share of the bauxite is supplied to the Alumar Refinery.

As at 30 June 2014, MRN had a mine life of approximately 6 years based on current reserves. However, the joint venture partners is considering extending the mine life to 2043.

M	MRN – Mineral Resources and Ore Reserves as at 30 June 2014 (100%)												
		Measure	i i	Indicated				Inferred			Total		
Mineral Resources	Mt	%A Al ₂ O ₃	%R SiO ₂	Mt	%A Al ₂ O ₃	%R SiO ₂	Mt	%A Al ₂ O ₃	%R SiO ₂	Mt	%A Al ₂ O ₃	%R SiO ₂	
Crude	172	-	-	43	-	-	525	-	-	740	-	-	
Washed	128	50.0	4.0	32	50.5	4.2	367	50.2	4.2	527	50.2	4.2	
					Proved			Probable	e		Total		
Ore Reserves				Mt	%A Al ₂ O ₃	%R SiO ₂	Mt	%A Al ₂ O ₃	%R SiO ₂	Mt	%A Al ₂ O ₃	%R SiO ₂	
Washed				79	49.3	4.6	19	49.8	4.8	98	49.4	4.6	

Source⁻ BHP Billiton

Note: BHP Billiton's interest is 14.8%

Alumar

Alumar consists of an integrated alumina refinery and aluminium smelter with associated port facilities located at São Luís, in the Maranhao province of Brazil. Alcoa is the operator of both the alumina refinery and smelter and has a 60% interest in the smelter and, along with its affiliates, a 54% interest in the refinery. BHP Billiton holds a 40% interest in the smelter and a 36% interest in the refinery. Rio Tinto holds the remaining 10% interest in the refinery. The bauxite feed for the refinery is sourced primarily from the MRN mine. During FY14, approximately 16% of the alumina produced in the refinery was used to feed the smelter and the remainder is exported. Aluminium produced by the smelter is sold entirely into the domestic market. Power for the



operations is sourced from Electronorte (a government controlled utility company) under long term contracts.

A major expansion completed in 2009 increased Alumar's refinery capacity to 3.5mtpa of alumina (100%). The Alumar smelter has a capacity of 447ktpa (100%) but has recently suspended production from pot lines 2 and 3 in response to challenging conditions in the global aluminium market, reducing overall capacity to 124ktpa (100%). During FY14, BHP Billiton's share of saleable alumina production was 1.3mt and share of aluminium production was 104kt.

Mozal

BHP Billiton has a 47.1% interest in the Mozal aluminium smelter, which is located 17km from Maputo, Mozambique. The other joint venture partners are Mitsubishi Corporation (25%), Industrial Development Corporation of South Africa Limited (24%) and the Government of Mozambique (3.9%). The smelter commenced production in 2000 and, following an expansion in 2003, has a capacity of 561ktpa. The smelter sources alumina from BHP Billiton's Worsley refinery and power from the state-owned utility Motraco, under a long term contract, with the contract price linked to the South African producer price index. Aluminium is trucked either to the recently established Midal downstream processing plant or to the port facilities at Maputo for export, principally to Europe. During FY14, BHP Billiton's share of aluminium production from the smelter was 266kt.

Production and Financial Performance

The production and financial performance of BHP Billiton's aluminium business for the five years ended 30 June 2014 are summarised as follows:

BHP Billiton	Aluminium – I	Production a	nd Financial	Performance	
		Y	ear ended 30 Ju	ne	
	2010	2011	2012	2013	2014
Alumina production					
- Worsley (kt)	3,054	2,902	2,917	3,675	3,916
- Paranam (kt) ¹³	78	-	-	-	-
- Alumar (kt)	709	1,108	1,235	1,205	1,262
Total Alumina (kt) ¹⁴	3,841	4,010	4,152	4,880	5,178
Aluminium production					
- Hillside (kt)	710	711	621	665	715
- Bayside (kt)	98	97	98	96	89
- Alumar (kt)	174	174	170	154	104
- Mozal (kt)	259	264	264	264	266
Total Aluminium (kt) ¹⁴	1,241	1,246	1,153	1,179	1,174
Revenue (US\$m)	2,948	3,601	3,279	3,404	3,287
EBITDA (US\$m)	671	605	24	202	395
EBIT (US\$m)	393	275	(292)	(164)	48
Capital expenditure (US\$m)	1,019	1,329	852	184	101
Net operating assets (US\$m)	6,760	7,996	8,560	5,998	6,244

Source: BHP Billiton

Notes: (1) The production and financial information reflect BHP Billiton's interest in the operations.

(2) Revenue includes inter-segment revenue.

(3) The financial performance excludes the contribution from sales of third party product and does not reflect statutory adjustments

¹³ Divested in July 2009.

¹⁴ Represents BHP Billiton's share of production.

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5.2 Manganese

Overview

BHP Billiton is the world's largest manganese miner and one of the leading producers of manganese alloy, with assets located in Australia and South Africa. During FY14, the operations produced 8,302kt of manganese ore and 646kt of manganese alloy. Approximately 83% of the ore produced is sold to external customers, predominantly in Asia, and the remainder is used internally as feedstock for the alloy plants. The alloys are sold to steel mills, primarily in Europe and North America. Both manganese ore and alloys are sold on short term contracts or on a spot basis, with the prices referenced to published indices.

Australia

BHP Billiton's interests in its Australian manganese assets are held through Groote Eylandt Mining Company ("GEMCO"), a joint venture with Anglo American. BHP Billiton has a 60% interest in the joint venture and is the operator. GEMCO operates a high-grade, open-cut mining operation located about 16 kilometres from the company owned port facilities at Milner Bay in the Northern Territory and, through its wholly owned subsidiary Tasmanian Electro Metallurgical Company ("TEMCO"), an alloy plant in Tasmania.

GEMCO is one of the world's lowest cost manganese miners and benefits from its relative proximity to Asian export markets. The US\$279m (100%) GEMCO Expansion Project, completed in December 2013, increased the nominal plant throughput capacity from 4.2mtpa to 4.8mtpa and the associated road and port infrastructure capacity to 5.9mtpa to support future expansions. The beneficiation process includes crushing, screening, washing and dense media separation. The power to the operation is provided by onsite diesel generation. The operation produces lump and fines products. Approximately 90% of the ore production is exported. The remaining ore feeds the Tasmanian alloy plant. In FY14, GEMCO produced 4,776kt (100%) of manganese ore. As at 30 June 2014, the mine had reserves to support approximately 11 years of operations:

		GEN	4CO –	Miner	al Reso	urces a	s at 30 Ju	une 201-	4 (100%	ó)		
Mineral	I	Aeasure	d		Indicated]	Inferred		Total		
Resources	Mt	%Mn	%Yld	Mt	%Mn	%Yld	Mt	%Mn	%Yld	Mt	%Mn	%Yld
Sands	-	-	-	13	20.8	-	2.3	20.0	-	15	20.7	-
ROM	95	46.1	48	46	43.6	47	34	42.7	49	175	44.8	48
Total	95	46.1	48	59	38.6	-	36.3	41.3	-	190	42.9	-
Ore					Proved		I	Probable			Total	
Reserves				Mt	%Mn	%Yld	Mt	%Mn	%Yld	Mt	%Mn	%Yld
ROM				78	45.0	58	16	42.6	57	94	44.6	58

Source: BHP Billiton

Note: BHP Billiton's interest is 60%

In August 2014, the joint venture partners approved the construction of a stand-alone premium concentrate plant at a cost of US\$139m (100%). The Premium Concentrate Project will increase production capacity by 0.5mtpa, with full production expected to be achieved during FY17. The project includes upgrades to the port infrastructure to facilitate blending of the concentrate with the ore fines.

TEMCO operates a medium sized manganese alloy plant located at Bell Bay, Tasmania, Australia. The plant has a nominal capacity of 150ktpa of high-carbon ferromanganese, 120ktpa of silicomanganese and 325ktpa of sinter. TEMCO sources its ore from GEMCO while power needs are primarily met by hydroelectric power.

During FY14, TEMCO produced 269kt (100%) of manganese alloy. Approximately 13% of the alloy produced is sold directly to steel customers in Australia and New Zealand and the remainder is exported further afield.

South Africa

BHP Billiton's South African manganese interests are held through Samancor Manganese ("Samancor"), a joint venture with Anglo American. BHP Billiton has a 60% interest in the joint venture and is the operator. Samancor has a 74% interest in Hotazel Manganese Mines ("Hotazel"), which owns the Mamatwan open-cut mine and the Wessels underground mine located in the Kalahari Basin in South Africa. Accordingly, BHP Billiton has an effective 44.4% interest in the Hotazel operation. The remaining 26% interest in Hotazel is held by a Broad Based Black Economic Empowerment consortium. Samancor also owns Metalloys, a ferro manganese alloy plant located in the Gauteng province in South Africa.

Mamatwan combines an open cut mine and a beneficiation plant consisting of primary, secondary and tertiary crushers, associated screening plants, a dense media separator and a sinter plant to increase the average grade of the ore to 46% Mn. The Mamatwan operation has a capacity of 3.5mtpa ROM.

Wessels is an underground mine. Primary crushing is completed underground and the crushed ore is brought to surface. The ore is then subjected to secondary crushing followed by a washing and screening process. The Wessels mine has a production capacity of 1.2mtpa ROM.

Approximately 25% of the ore mined is railed by the state-owned Transnet to Metalloys for beneficiation into alloy. The remaining ore is trucked and railed to either Port Elizabeth, Durban or Saldanha, all of which are located 900-1,200km from the mines. Power to the mines is provided by Eskom.

During FY14, the combined manganese ore production from the Wessels and Mamatwan mines was 3,526kt (100%). As at 30 June 2014, ore reserves were sufficient to support mine lives of approximately 18 years for Mamatwan and 46 years for Wessels:

South 2	Africa	n Mine	s –Min	ieral 1	Resour	ces as	at 30	June 2	2014 (1	00%)		
]	Measure	d		Indicated			Inferred			Total	
Mine / Ore Type	Mt	% Mn	%Yld	Mt	% Mn	%Yld	Mt	% Mn	%Yld	Mt	% Mn	%Yld
Wessels												
Lower Body - HG	5.8	47.7	12.0	13	48.0	12.2	-	-	-	19	47.9	12.2
Lower Body – LG	9.4	42.1	13.4	20	41.8	13.3	-	-	-	29	41.9	13.3
Upper Body	-	-	-	92	41.4	18.3	-	-	-	92	41.4	18.3
Wessels	15.2	44.2	12.9	125	42.2	16.9	-	-	-	140	42.4	16.4
Mamatwan												
M,C,N Zones	19	37.7	4.4	45	37.2	4.5	5.2	37.4	4.7	69	37.4	4.5
Top Cut (balance I&O)	9.0	30.5	6.6	20	29.9	6.3	5.6	29.1	6.2	34	29.9	6.4
X Zone	2.4	38.0	4.6	4.6	37.0	4.8	0.3	36.2	5.0	7.3	37.3	4.8
Mamatwan	30.4	35.6	5.1	69.6	35.1	5.0	11.1	33.2	5.5	110.3	35.1	5.1

Source: BHP Billiton

Note: BHP Billiton's interest is 44%.

South	South African Mines – Ore Reserves as at 30 June 2014 (100%)											
		Proved			Probable		Total					
Ore Type	Mt	% Mn	% Yld	Mt	% Mn	% Yld	Mt	% Mn	% Yld			
Wessels												
Lower Body - HG	1.2	48.0	12.2	7.2	47.6	12.3	8.4	47.7	12.3			
Lower Body – LG	2.2	41.3	11.9	13	41.8	13.2	15	41.7	13.0			
Upper Body	-	-	-	46	41.4	18.2	46	41.4	18.2			
Wessels	3.4	43.7	12.0	66.2	42.2	16.6	69.4	42.2	16.4			
Mamatwan												
M,C,N Zones	19	37.6	4.4	41	37.1	4.5	60	37.3	4.5			
X Zone	1.6	38.2	4.7	2.4	36.7	4.8	4.0	37.3	4.8			
Mamatwan	20.6	37.6	4.4	43.4	37.1	4.5	64	37.3	4.5			

Source: BHP Billiton

Note: BHP Billiton's interest is 44%.

BHP Billiton is undertaking a phased expansion of the Wessels operation to 1.5mtpa. The first phase was commissioned in December 2013 at a cost of US\$92m (100%) and comprised construction of a ventilation shaft and related ventilation network. The second phase, largely involving the development of mining and equipment infrastructure to complete the facilities required to expand the capacity of the mine to 1.5Mtpa, is estimated to cost US\$31m (100%) and is expected to be completed in September 2016.

Metalloys produces high carbon ferromanganese and refined alloy and is one of the largest ferro manganese alloy producers in the world. The operation comprises four electric arc furnaces with nominal capacity to produce 410ktpa of high-carbon ferromanganese and 90ktpa of medium-carbon ferromanganese. Metalloys sources its ore from Hotazel while power needs are met by a combination of internally generated power from furnace off-gases and electricity from the grid. Alloy production for domestic customers is transported by road, while alloy for export is transported by road and rail to port facilities at Richards Bay and Durban.

Production and Financial Performance

The production and financial performance of BHP Billiton's manganese business for the five years ended 30 June 2014 are summarised as follows:

BHP Billiton Manganese – Production and Financial Performance								
	Year ended 30 June							
	2010	2011	2012	2013	2014			
Manganese Ore								
Hotazel (kt)	2,718	3,007	3,625	3,490	3,526			
GEMCO (kt)	3,406	4,086	4,306	5,027	4,776			
Total ore production (mt)	6,124	7,093	7,931	8,517	8,302			
Alloy								
Metalloys	364	486	404	374	377			
TEMCO	219	267	198	234	269			
Total alloy production (mt)	583	753	602	608	646			
Revenue (US\$m)	2,143	2,423	2,136	2,113	2,096			
EBITDA (US\$m)	789	780	355	623	639			
EBIT (US\$m)	717	697	231	507	476			
Capital expenditure (US\$m)	182	276	418	375	178			
Net operating assets (US\$m)	1,288	1,390	1,456	1,658	1,613			

Source: BHP Billiton

Notes: (1) The production and financial performance information reflects 100% of the operations, although BHP Billiton's interest in GEMCO, TEMCO and Metalloys is 60% and its interest in Hotazel is 44.4%.

(2) Revenue includes inter-segment revenue.

(3) The financial performance excludes the contribution from sales of third party product and does not reflect statutory adjustments.

5.3 Nickel

Cerro Matoso

BHP Billiton has a 99.94% interest in, and is the operator of, the Cerro Matoso operation, one of the world's largest producers of ferronickel and one of the lowest cost producers. The operation is located near the town of Montelíbano in northern Colombia and consists of an open-cut lateritic nickel mine and a ferronickel smelter and refinery. The refinery and smelter are integrated with the mining operation and produce high-purity, low carbon ferronickel granules.

The ore is mined from the open pit using conventional mining methods and blended with ore from stockpiles. It is then crushed in primary and secondary crushers, partially dried, upgraded and then calcined. The calcined ore is transferred to electric furnaces to produce granulated ferronickel. After refining, the ferronickel is transported approximately 260km by road to the port, from where it is exported primarily to customers in Asia, North America and Europe. The beneficiation plant has a nominal capacity of 50ktpa of ferronickel. The power for the operations is sourced from a combination of electricity from the national grid and natural gas.

Cerro Matoso - Mineral Resources and Ore Reserves as at 30 June 2014 (100%) Indicated Measured Inferred Total **Mineral Resources** Mt % Ni Mt % Ni Mt % Ni Mt % Ni Laterite 44 1.2 179 0.9 66 0.8 289 0.9 Stockpiles 51 51 1.11.1 _ MNR Ore 17 0.2 17 0.2 **Mineral Resources** 112 1.0 179 0.9 66 0.8 357 0.9 Proved Probable Total **Ore Reserves** Mt % Ni Mt % Ni Mt % Ni Laterite 16 1.2 7.7 1.0 24 1.1 Stockpiles 24 1.3 24 1.3 _ _ MNR Ore . **Ore Reserves** 40 1.3 7.7 1.0 48 1.2

As at 30 June 2014, the mine had reserves to support approximately 15 years of operations:

Source: BHP Billiton

Note: BHP Billiton's interest is 99.94%

The production and financial performance of the Cerro Matoso operation for the five years ended 30 June 2014 are summarised below:

Cerro Matoso – Production and Financial Performance (100%)							
	Year ended 30 June						
-	2010	2011	2012	2013	2014		
Total production (kt) ¹⁵	49.6	40.0	48.9	50.8	44.3		
Sales revenue (US\$m)	954	988	876	803	595		
EBITDA (US\$m)	506	370	414	235	104		
EBIT (US\$m)	430	289	334	156	10		
Capital expenditure (US\$m)	72	241	105	50	56		
Net operating assets (US\$m)	794	841	1,002	955	860		

Source: BHP Billiton

Note: BHP Billiton has a 99.94% interest in the asset.

Nickel West

BHP Billiton owns 100% of the Nickel West operation, which consists of an integrated system of mines, concentrators, a smelter and a refinery in Western Australia. This includes:

- the Mt Keith, Cliffs and Perseverance nickel sulphide mines located north of Kalgoorlie. Mining operations at Perseverance have been suspended;
- concentrator plants at Mt Keith, Leinster and Kambalda;
- the Kalgoorlie smelter; and
- the Kwinana refinery located about 30km south of Perth and approximately 650km from the Kalgoorlie smelter.

The concentrators process ore sourced from BHP Billiton mines and from third party mines under toll treatment arrangements. A small volume of the concentrate produced is exported but the majority of the concentrate is transported to the Kalgoorlie smelter where it is processed to produce nickel matte. Approximately 30% of the nickel matte is exported and the balance is

¹⁵ Represents BHP Billiton's share of production.

transported to the Kwinana refinery where it 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 – I	Mineral R	lesources	and Ore	Reserve	s as at 30	June 201	4 (100%	
	Measu	red	Indic	ated	Infer	red	Tot	al
Mineral Resources	Mt	%Ni	Mt	%Ni	Mt	%Ni	Mt	%Ni
Leinster								
OC	3.7	1.4	1.8	1.3	1.4	1.2	6.9	1.3
Disseminated sulphide	-	-	67	0.5	105	0.5	172	0.5
UG	12	2.1	3.9	2.5	3.7	1.7	20	2.1
SP	-	-	1.4	1.0	-	-	1.4	1.0
SP Oxidised	-	-	-	-	1.9	1.7	1.9	1.7
Mt Keith								
Disseminated sulphide	176	0.5	107	0.5	35	0.5	318	0.5
SP	11	0.5	-	-	-	-	11	0.5
Cliffs								
Disseminated sulphide	-	-	-	-	2.8	1.3	2.8	1.3
Massive sulphide	1.4	4.2	0.6	3.6	0.9	4.0	2.9	4.0
Yakabindie								
Disseminated sulphide	156	0.6	113	0.6	171	0.6	440	0.6
Jericho								
Disseminated sulphide	-	-	-	-	28	0.6	28	0.6
Venus								
Disseminated sulphide	-	-	0.5	2.4	5.4	1.7	5.9	1.8
Massive sulphide	-	-	-	-	1.5	5.8	1.5	5.8
Pro		oved Proba		able	Tot	Total		
Ore Reserves			Mt	%Ni	Mt	%Ni	Mt	%Ni
Leinster								
OC			2.8	1.3	0.2	0.9	3.0	1.3
Mt Keith								
OC			88	0.6	7.1	0.5	95	0.6
SP			5.7	0.5	5.5	0.5	11	0.5
Cliffs								
UG			0.7	2.6	0.9	2.5	1.6	2.6

The Mineral Resources and Ore Reserves for Nickel West as at 30 June 2014 were as follows:

Source: BHP Billiton

The production and financial performance of Nickel West for the five years ended 30 June 2014 are summarised as follows:

Nickel West – Production and Financial Performance (100%)								
	Year ended 30 June							
	2010	2011	2012	2013	2014			
Nickel (kt)	123.8	112.7	109.0	103.3	98.9			
Revenue (US\$m)	2,282	2,710	2,043	1,773	1,605			
EBITDA (US\$m)	643	674	83	(104)	(91)			
EBIT (US\$m)	307	354	(229)	(314)	(208)			
Capital expenditure (US\$m)	187	329	337	280	163			
Net operating assets (US\$m)	2,558	2,405	1,956	123	534			