

# Uniquely placed to resource the future

Mike Henry

President – HSE, Marketing and Technology 27 October 2014



### **Disclaimer**



#### Forward-looking statements

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

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

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

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

Other factors that may affect the actual construction or production commencement dates, costs or production output and anticipated lives of operations, mines or facilities include our ability to profitably produce and transport the minerals, petroleum and/or metals extracted to applicable markets; the impact of foreign currency exchange rates on the market prices of the minerals, petroleum or metals we produce; activities of government authorities in some of the countries where we are exploring or developing these projects, facilities or mines, including increases in taxes, changes in environmental and other regulations and political uncertainty; labour unrest; and other factors identified in the risk factors discussed in BHP Billiton's fillings with the US Securities and Exchange Commission (the 'SEC') (including in Annual Reports on Form 20-F) which are available on the SEC's website at www.sec.gov.

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

#### Non-IFRS financial information

BHP Billiton results are reported under International Financial Reporting Standards (IFRS) including Underlying EBIT and Underlying EBITDA which are used to measure segment performance. This release may also include certain non-IFRS measures including Underlying attributable profit, Underlying basic earnings per share, Underlying EBITDA interest coverage, Adjusted effective tax rate, Underlying EBIT margin, Underlying EBITDA margin, Underlying return on capital, Free cash flow, Net debt and Net operating assets. These measures are used internally by management to assess the performance of our business, make decisions on the allocation of our resources and assess operational management. Non-IFRS measures have not been subject to audit or review and should not be considered as an indication of or alternative to an IFRS measure of profitability, financial performance or liquidity.

#### No offer of securities

Nothing in this presentation should be construed as either an offer to sell or a solicitation of an offer to buy or sell BHP Billiton securities or securities in the new company to be created by the proposed demerger (NewCo) in any jurisdiction.

#### Reliance on third party information

The views expressed in this presentation contain information that has been derived from publicly available sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of the information. This presentation should not be relied upon as a recommendation or forecast by BHP Billiton.

### **Key themes**



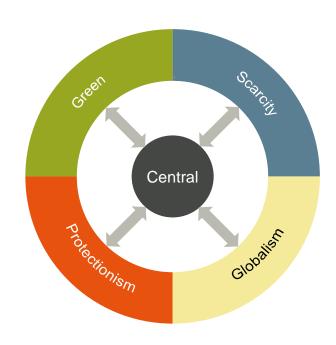
- Virtuous cycle of industrialisation, urbanisation and consumption in emerging economies is expected to continue to underpin long-term commodities demand growth
- We retain a margin advantage for our steelmaking raw materials based on our quality and cost position
- Copper will remain supply constrained and a deficit is expected beyond 2018
- Energy demand growth will remain positive although the shape of future energy demand mix is difficult to predict
- Population growth and the shift towards higher protein diets will require more productive crops given the limited availability of arable land
- Our diversified portfolio is uniquely placed to resource the future

## We consider divergent yet plausible scenarios in our portfolio decisions



- Our corporate planning process is underpinned by scenario analysis
  - encompasses a spectrum of potential outcomes for key global uncertainties
  - considers technical, economic, political and global governance trends
  - explores potential portfolio discontinuities and opportunities
  - tests the robustness of our portfolio against potential financial and non-financial outcomes
- Bottom-up sectoral and commodity analysis provides further insight
  - focused on key drivers of demand and supply
  - informed by our customer relationships and proprietary research

#### Scenario analysis

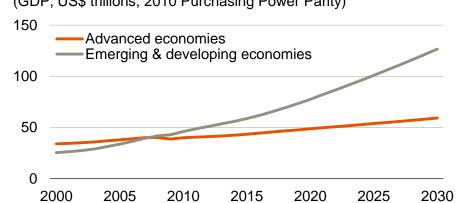


## Emerging economies will continue to drive global growth and commodities demand

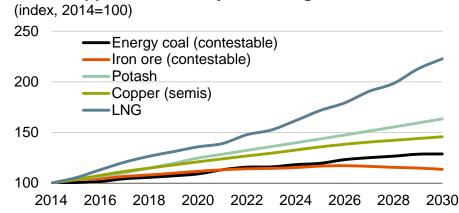


- Demand for our commodities continues to be strong, underpinning the long-term outlook for our portfolio of products
- The transition to consumption-led growth in the developing world is underway and will change the shape of commodities demand
  - early stage investment-led growth is steel intensive
  - demand for copper and electricity increases as an economy transitions to manufacturing-led growth
  - consumption and services-led growth support long-term demand for energy and food

## **Continued momentum in the emerging economies...** (GDP, US\$ trillions, 2010 Purchasing Power Parity)



#### ...will support commodity demand growth

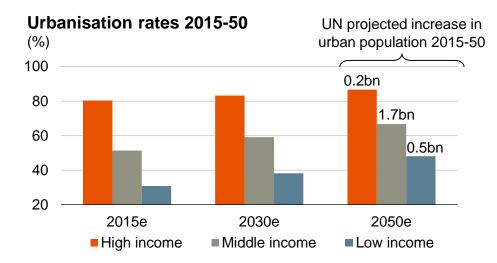


Source: BHP Billiton; Global Insight.

## The urbanisation and industrialisation of the developing world is far from complete



- Urbanisation and industrialisation in the developing world continues to underpin commodities demand
  - potential for ~250 million people to urbanise in China by 2030
- The emergence of the middle class in Asia will be unprecedented in scale
  - potential for ~75 million light duty vehicles to be produced annually in Asia by 2030
  - potential for ~100 million new air conditioners to be installed in India by 2030
  - potential for ~24 Mt more meat<sup>1</sup> to be consumed per year in Asia by 2030



#### Light duty vehicle penetration<sup>2</sup>

(number of vehicles per thousand people)

800 US

600 Japan

400 Europe

200 Other Latin America Middle East

1 10 100

**GDP/capita** 

(US\$ thousands, log scale)

Source: United Nations, Department of Economic and Social Affairs, Population Division (2014); World Urbanization Prospects: The 2014 Revision; National Bureau of Statistics of China; McKinsey; BBVA; HSBC Research; IHS Global Insight; BHP Billiton.

- 1. Includes broiler, pork, beef and veal meat.
- 2. Light duty vehicles include passenger cars and light commercial vehicles. Note: 2013 estimates.

## We retain a margin advantage for our steelmaking raw materials



#### Iron ore

- Growth in low-cost seaborne supply will continue to outpace demand and the cost curve will flatten
- Longer term, an increase in scrap availability in China will impact demand for pig iron

#### **Metallurgical coal**

- The market will recover from current cyclical lows with the exit of high-cost supply
  - supply cuts totalling 21 Mtpa have already been announced with further cuts likely as oversupply remains
  - China is expected to remain a significant importer but much of its demand growth will be met by domestic supply
- A scarcity of high-quality resources will underpin longer-term seaborne demand in other emerging economies

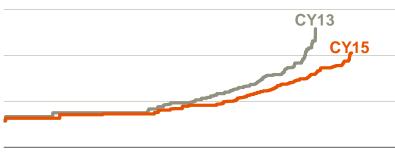
Source: BHP Billiton; cost curve from Macquarie Bank; Wood Mackenzie May 2014.

1. HCC refers to hard coking coal.

2. J/K/T refers to Japan, Korea and Taiwan.

#### The iron ore cost curve is flattening

(CIF China equivalent basis, US\$/t, nominal)



## Cumulative volume

## HCC¹ has broader emerging market exposure (seaborne demand, index, 2014=100)



## Copper will remain supply constrained and a deficit is expected beyond 2018

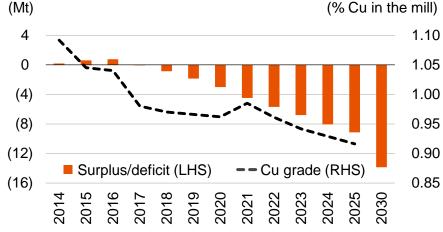


- The outlook for copper demand remains compelling as emerging economies transition to consumption-led growth
  - Chinese copper semis intensity is equivalent to Japan's in the 1960s
  - global copper demand is expected to grow at a CAGR of 2.3% to 2030
- In the near term, new supply induced by high prices will marginally exceed demand growth
- Beyond 2016, a significant deficit is expected to emerge
  - grade decline remains an ongoing challenge
  - existing and new greenfield supply will face a shortage of ready-made power and water supply
  - these factors will also significantly impact the cost of global supply





### Copper grade<sup>1</sup> decline will lead to a market in deficit



Source: BHP Billiton; Wood Mackenzie.

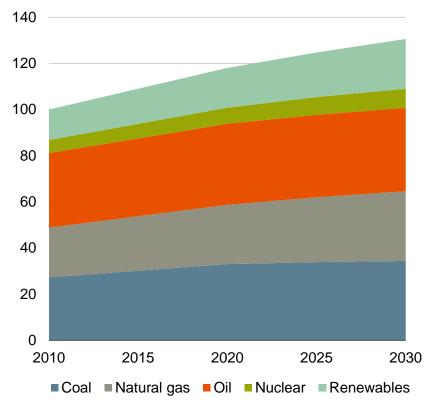
<sup>1.</sup> Production from current operating mines and committed new projects, copper grade data only available until 2025.

### Energy demand growth will remain positive...



- Increasing energy demand is projected under a variety of scenarios, with electrification and transport leading the growth
- Electricity generation is forecast to rise strongly across multiple end-use sectors
  - 1.7 billion people expected to gain first access to electricity by 2030
- Industrial use of energy in manufacturing grows to meet increased demand for consumables
- Transportation fuel requirements are forecast to increase
  - more households in developing countries are able to purchase private vehicles, often for the first time
  - demand for aviation and sea freight is on the rise





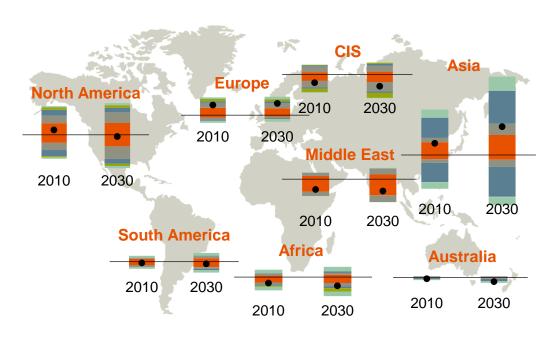
Source: BHP Billiton; Energy Balances @OECD/IEA, 2013; World Energy Outlook @OECD/IEA, 2012; New Policies Scenario of World Energy Outlook @OECD/IEA, 2013.

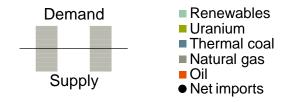
## ... although the shape of future energy demand is difficult to predict



- Asia is expected to account for two thirds of energy demand growth to 2030
  - growth in China and India will be equivalent to current US energy demand
- Global and regional energy policies, together with economic policy, will significantly influence the shape of future energy demand
- Carbon emissions and climate change represent key challenges for the energy sector
- Our diversified portfolio will provide us flexibility as the world makes its energy choices

#### **Energy balances by region**





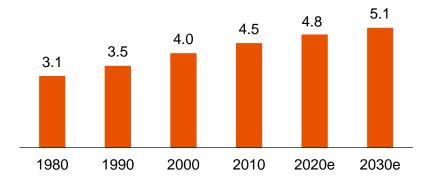
Source: BHP Billiton; Energy Balances ©OECD/IEA, 2014; World Energy Outlook ©OECD/IEA, 2013; Wood Mackenzie; EIA.

## Population growth and the shift towards higher protein diets will require more productive crops

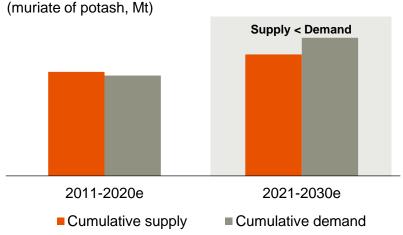


- The long-term demand fundamentals for agricultural products remain attractive
  - growing global population
  - greater economic prosperity
  - changing food consumption patterns
- Constraints on arable land will require higher yields to meet crop demands
- Soil conditions in key crop producing countries require higher potash application rates in order to grow output
- The world needs new greenfield potash capacity to meet demand beyond 2020
- Our large resource base can underpin the staged development of a low-cost potash business that will generate attractive investment returns

## People fed per hectare of arable land (number of people)



### A deficit will emerge in potash beyond 2020



Source: BHP Billiton; IHS Global Insight; Food and Agriculture Organization of the United Nations.

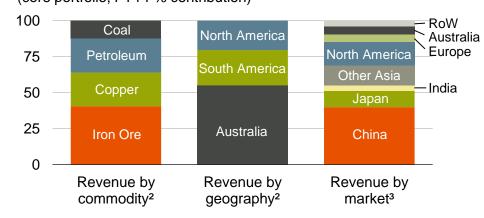
Note: Crops include corn, soybeans, wheat, rice, barley, sorghum, cotton, sunflower, rapeseed, sugarbeets, sugarcane.

### A diversified portfolio resourcing the future



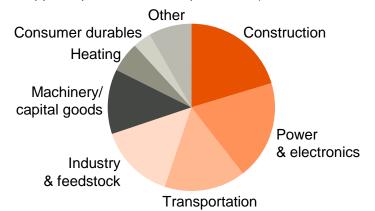
- Our core portfolio<sup>1</sup> reflects our differentiated strategy
  - large, long-life, low-cost, expandable, upstream assets
  - diversified by commodity, geography and market
- It provides broad exposure to steelmaking raw materials, copper, energy and potentially agricultural markets
- This unique level of diversification and our OECD oriented footprint affords greater flexibility and resilience as we respond to changes in commodity markets
- Our low-cost position will be further enhanced by our productivity agenda ensuring our portfolio continues to deliver value across a wide range of scenarios
- 1. Core portfolio following successful execution of proposed demerger.
- 2. Excludes third party trading activities.
- 3. Revenue by market represents location of customer.

#### Diversified by commodity, geography and market (core portfolio, FY14 % contribution)



#### Sales profile by end-use sector<sup>3</sup>

(% of copper equivalent units of production)



<sup>4.</sup> Current BHP Billiton portfolio excluding Aluminium and Nickel. End use sectors approximated using total market share of consumption (exact final use of BHP Billiton products could vary).

### **Key themes**



- Virtuous cycle of industrialisation, urbanisation and consumption in emerging economies is expected to continue to underpin long-term commodities demand growth
- We retain a margin advantage for our steelmaking raw materials based on our quality and cost position
- Copper will remain supply constrained and a deficit is expected beyond 2018
- Energy demand growth will remain positive although the shape of future energy demand mix is difficult to predict
- Population growth and the shift towards higher protein diets will require more productive crops given the limited availability of arable land
- Our diversified portfolio is uniquely placed to resource the future

