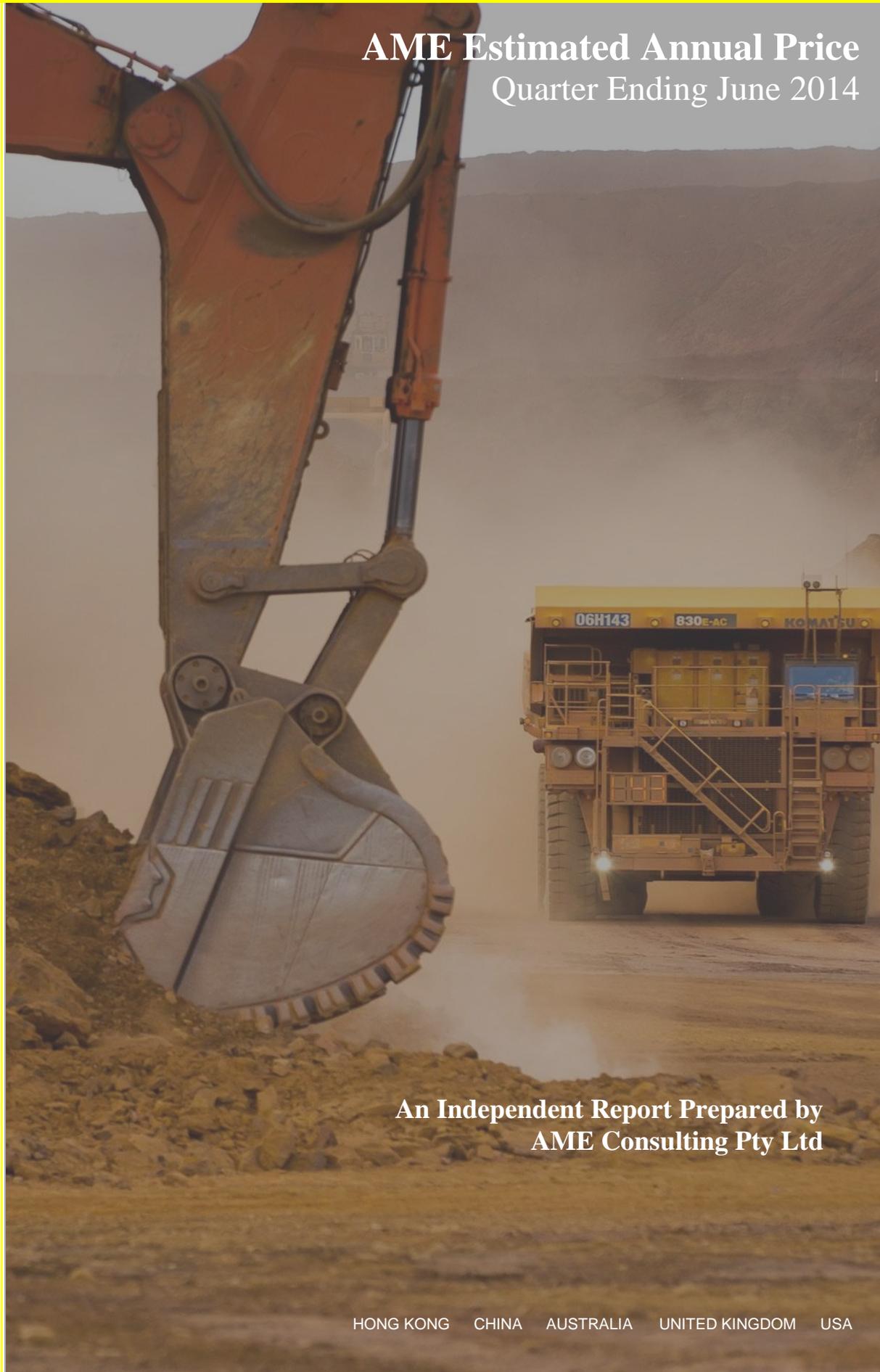


# AME GROUP

## IRON ORE PRICE REPORT

AME Estimated Annual Price  
Quarter Ending June 2014



An Independent Report Prepared by  
AME Consulting Pty Ltd

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## Iron Ore Prices

The purpose of this report is to provide estimates of a prevailing annual FOB price for Mt Newman fines and Nibrasco/Brazilian pellet, delivered into China, for the year ending June 30 2014.

For the June Quarter report, the average annual price has been calculated as the simple average of monthly prices for the 12 months ending June 2014. AME has estimated the annual prevailing FOB price for Mt Newman fines to be approximately 186.4¢/dmu (dry metric tonne unit) for the 12 months ending June 2014. Further, AME estimates the annual prevailing price for Nibrasco/Brazilian pellets to be approximately 231.9¢/dmu over the same 12 month period.

**Table 1: AME's Estimated Annual Prevailing Prices ¢/dmu, 12 months ending June 2014**

¢/dmu	Mt Newman Fines FOB Western Australia	Nibrasco/Brazilian Pellet FOB Tubarao
Jul-13	198.8	234.7
Aug-13	208.7	246.0
Sep-13	205.5	242.9
Oct-13	207.5	247.7
Nov-13	208.1	254.1
Dec-13	199.8	252.1
Jan-14	202.9	254.4
Feb-14	188.4	242.5
Mar-14	159.9	218.9
Apr-14	168.2	220.7
May-14	152.3	194.5
Jun-14	136.6	174.6
<b>Average</b>	<b>186.4</b>	<b>231.9</b>

## Pricing methodology

AME defines the prevailing price as the prices experienced in the market over the relevant time-frame, as reflected in available historical pricing data. Current quarterly contract pricing is typically based on a three-month average index price commencing four months before the relevant pricing period. It is believed a quarterly price determination that is based on available data for the preceding twelve months may also be considered.

In determining the average FOB price for Mt Newman fines and Nibrasco pellets for delivery into China, AME has assessed the published daily spot prices of various Chinese iron ore pricing providers for Australian fines and Brazilian pellets delivered into Northern China.

The price series assessed are:

- Australian Fines 62% Fe CFR Rizhao, price inclusive of 17% VAT, quoted in RMB/WMT;
- Pilbara Blend Fines 61.5% Fe, CFR Rizhao, price inclusive of 17% VAT, quoted in RMB/WMT;
- Pilbara Blend Fines 62% Fe CFR Qingdao, price inclusive of 17% VAT, quoted in RMB/WMT;
- Pilbara Blend Fines 61.5% Fe, CFR Qingdao, price inclusive of 17% VAT, quoted in RMB/WMT;
- Newman Fines 62.5% Fe, CFR Qingdao, price inclusive of 17% VAT, quoted in RMB/WMT;
- Australian Fines 62% Fe CFR Tianjin, price inclusive of 17% VAT, quoted in RMB/WMT;
- Pilbara Blend Fines 61.5% Fe, CFR N. China, price quoted in USD/DMT;
- Brazilian Pellet 65% Fe, CFR Qingdao, quoted in USD/DMT; and

- Samarco Pellets 65% Fe, CFR Qingdao, price inclusive of 17% VAT, quoted in RMB/WMT.

The "Australian Fines" price series is the port price for Rio Tinto's Pilbara blend and Mt Newman fines products. Rio Tinto's Pilbara Blend is considered analogous to BHP Billiton's Mt Newman fines product.

AME has used a combination of import prices and port prices in estimating the prevailing FOB price for Mt Newman fines. That is, iron ore imported by traders and held in port stockpiles which are then sold on to other traders or Chinese steel mills are considered port trades. Port trade prices are quoted in RMB/WMT and include 17% VAT.

Where Chinese trading companies or steel mills purchase cargoes directly from miners or trading companies, prices are considered import trades and are quoted in US\$/DMT on a CFR or CIF basis and exclude import taxes. Port prices and import prices can vary, although AME notes that the difference in the dataset is marginal and price trends are similar.

AME has converted port prices to the same basis as import prices using the following steps:

1. Prices on a wet metric tonne basis are converted to a dry metric tonne basis by dividing the price by (1 minus the moisture content).
2. Daily prices are then converted from RMB to USD using the prevailing (daily) exchange rate.
3. The 17% VAT is removed by dividing by 1.17.

AME netbacks the prices, quoted on a Cost and Freight (CFR) basis, to a Free on Board (FOB) basis. Using the freight rate for the route of Western Australia to Beilun-Baoshan, we adjust for the cost of freight between the port of export (Western Australia) and the respective discharge ports.

As not all prices are quoted for 62% Fe products, we convert prices to a US\$/dmtu basis to account for the differing iron grades.

Iron ore is priced in cents per dry metric tonne unit (¢/dmtu). This pricing basis takes into account the iron and free moisture content of the ore. To convert a price in ¢/dmtu into \$/tonne of wet ore, first multiply the price in ¢/dmtu by the iron content of the ore (as a percentage), and divide by one plus the free moisture content. Effectively, this is the same as US\$ per tonne of iron contained, divided by 100.

AME has determined the prevailing FOB price for the Mt Newman fines and Nibrasco pellet as the simple average of the netback FOB prices for the respective products from each provider. The average price from each provider has been given equal weighting.

### ***Historical pricing dynamics***

Under the traditional "annual contract pricing system", iron ore was priced through annual negotiations between the world's largest steelmakers and their suppliers. A large steel company – usually from Japan, and more recently from China – would reach a pricing agreement with one of the three largest producers, BHP Billiton, Rio Tinto or Vale, and the first agreed price would then be set as the point of reference for all subsequent iron ore contracts within a given timeframe. Prices based on the Japanese Financial Year (JFY) (April 1 of current calendar year to March 31 of following calendar year) during the first quarter of each year.

In JFY2009, through China Iron and Steel Association (CISA), the major steel makers in China took a more collaborative role in price negotiations. In the same year, the 40-year old pricing system broke down as negotiations dragged on beyond the customary April settlement date amid a volatile spot pricing environment. Currently, the pricing system is largely quarterly and monthly-based among the major producers.

From April 2010, iron ore pricing largely shifted from annual fixed pricing to quarterly pricing. One of the last published Mt Newman/Pilbara Blend fines annual contract price was agreed for JFY2009 between Rio Tinto and Japan's Nippon Steel. In May 2009, the Mt Newman/Pilbara Blend fines contract price was agreed at US96¢/dmu, down 33% from US144¢/dmu for JFY2008. The fixed annual contract price for the Nibrasco pellet was last published for JFY2009 at US107¢/dmu between Vale and Japanese steel mills. The price, down 48% from JFY2008, was fixed each year at 94% of Vale's Tubarao pellet sales price into European markets.

## Price forecasts and assumptions

The table below shows historical iron ore prices and forecasted prices to 2014. Iron ore prices are quoted in US¢/dmu on a Japanese fiscal year basis (year ending March 31) for period prior to 2010. For 2010 onwards, annual prices are quoted on a calendar year basis. The Mt Newman fines price is FOB Western Australia. AME believes the Mt Newman product prices to be the most representative benchmark price given that it is the Pacific Basin that predominantly drives the iron ore market. The Nibrasco pellet price is on a FOB Brazil basis. Historical prices are quoted on a nominal basis and in real terms from 2014 onwards.

**Table 2: Historical and Forecast Iron Ore Contract Prices into Asia, 2004-2014 (US¢/dmu)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014F
Pilbara Blend/Mt Newman fines	36.0	61.7	73.5	80.4	144.3	97.0	210.2	264.6	197.0	200.9	154.2
Nibrasco BF pellets	58.2	108.6	105.3	110.9	207.0	107.0	263.6	324.0	220.3	214.4	185.3

*JFY prior to 2010, calendar year starting from 2010*

The strong growth in steel demand in China has supported iron ore prices upward in the period of 2004 to 2008. Rio Tinto's Pilbara Blend fines price lifted at a CAGR (compound annual growth rate) of approximately 41% over the period to 144¢/dmu. The shortfall in iron ore capacity caused by prior underinvestment, along with the growing demand in China, has seen the price bargaining power during contract negotiation shifted to the iron ore miners. Hence they were able to demand higher prices.

In 2008-2009, global consumer spending and fixed asset investment were impacted by the global economic crisis, which led to a sharp decline in steel demand during the period. Pilbara Blend fines price dropped 33% to 97¢/dmu while pellet prices declined 48%. Lumps and pellets, which are regarded as premium products in the iron ore market, recorded a more significant price drops than fines. Lower steel prices caused a squeeze in steel making margin, and in turn lowering the affordability for steelmakers to utilise such premium products.

In the second half of 2009, both benchmark contract prices and spot prices recovered amidst the recovery of global steel markets especially in developing countries. The gradual pick up in steel demand had led to industry destocking of steel inventories, hence driving up iron ore demand. Prices for Pilbara Blend fines surged 117% to 210¢/dmu in 2010 and lifted 26% further to 265¢/dmu in 2011. In 2012, the structural overcapacity of the Chinese steel industry and a lower demand overshadowed iron ore prices. During the year price for Pilbara Blend fines dropped approximately 26% to 197¢/dmu. In 2013, prices for Pilbara Blend fines remained largely stable, up by a mere 2% to 201¢/dmu, supported by high steel production in China.

Over the short and medium term, AME expects prices to fall as iron ore supply growth is anticipated to outweigh demand growth. Chinese steel demand is expected to moderate as the government aims to shift its focus from investment-based to consumer-based economic growth.

AME forecasts iron ore prices to remain relatively suppressed as a result of supply surplus. Chinese marginal producers will be impacted and higher cost producers may be squeezed out of the market due to competition and production increases from lower cost seaborne supply. Horizontal consolidation between miners and vertical integration within the industry may be considered to achieve cost saving and increase efficiency.

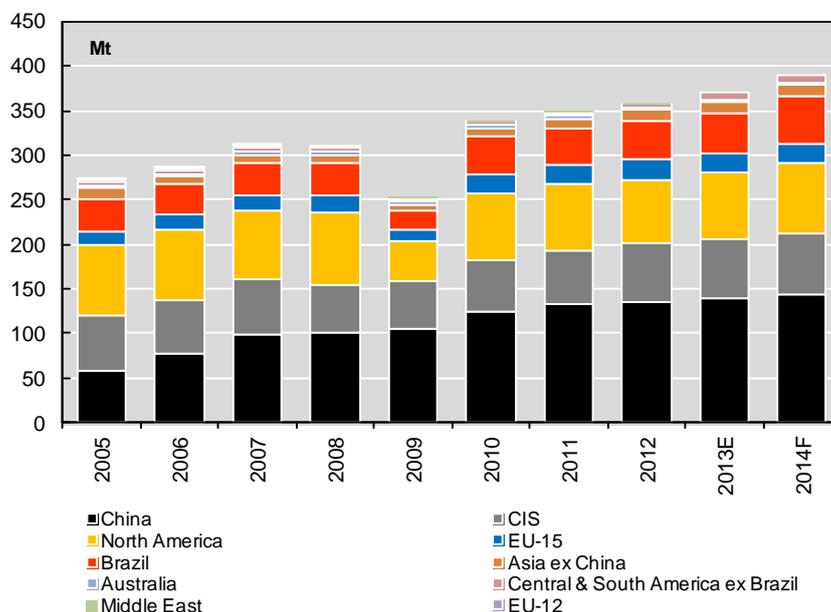
## Iron Ore Market Overview

### Global pellet market

In 2013, Vale produced approximately 50Mt (on an ownership attributable basis) of iron ore pellets, both blast furnace (BF) and direct reduction (DR) grade, which represents approximately 13% of global pellet supply. Vale is the largest pellet producer in the world and operates eight pelletising plants in Brazil and two in Oman. The company also has a 50% stake in the Samarco joint venture with BHP Billiton. In the June Quarter 2014, Vale commissioned two new pelletising operations - the 8.3Mtpa Samarco IV (100% basis) and the 7.5Mtpa Tubarao VIII. Most of Vale's pellet production in Brazil is sold primarily on a contract basis to the seaborne market, as domestic demand is limited.

Other major pellet producers include Cliffs Natural Resources, LKAB, Metalloinvest, US Steel and ArcelorMittal. These four companies produced 107Mt of pellets in 2013, or approximately 26% of global supply. China is currently the largest producer of pellets (around 135Mt in 2013), accounting for approximately 32% of worldwide pellet production. Pelletising plants in China are commonly integrated to steel plants and utilise both domestic concentrate and imported ore.

**Figure 1: Estimated BF Pellet Supply by Key Regions and Countries, 2005-2014 (Dry, Mt)**



Source: AME

Since the start of the 21<sup>st</sup> century, the proportion of pellets in the burden mix for typical Chinese blast furnaces has generally increased as the Chinese government started to promote usage of pellets in its Tenth Five-Year Plan. Major producers such as Pangang have reported that up to 30% of the iron

utilised consisted of pellets. Many of the newly built furnaces in China are designed to consume a higher proportion of pellets in the furnaces.

However AME estimates that BF pellets usage by Chinese blast furnaces dropped in 2013 due to lower steel prices and limited availability of financing. In the June Quarter, the market for BF pellets remained tight and premiums relatively resilient even with a fall in benchmark seaborne iron ore prices. Vale has agreed to pellet premiums at \$38/dmt with steelmakers in northeast Asia for 2014, although it is reported to be considered as a provisional annual price and a new price for the full year would be determined at a later point in time. The JFY2013 pellet premium negotiated into Asia was \$28/dmt. In Europe, pellet premiums are reported to have remained relatively flat at \$40/dmt in June.

AME expects the proportion of BF pellet in the burden blend in China to gradually increase as stricter environmental regulations will support demand for BF pellet due to its lower impurities. China is expected to remain as the primary source of growth for BF pellet consumption, as evidenced by Chinese growing pelletising capacity driven by rising pellet demand in China.

### ***Global iron ore demand***

The primary usage of iron ore is as raw material to feed the iron making process in the steel industry, hence its demand is largely depend on steel production. In 2013, global iron ore demand is estimated to have grown to 2.0Bt, or up 6.4%. China, which possesses the largest steel industry in the world, consumed an estimated 1.2Bt of iron ore products (up 10.5% year-on-year) in 2013 and accounted for 59% of global demand. In other parts of the world, demand is approximately 0.8Bt and growth rate was relatively flat at around 1%.

In the past decade, global demand growth for iron ore has largely been coming from developing economies, especially China. Steel demand per capita has been rising due to infrastructure developments such as power and transportation, and also increased construction demand thanks to urbanisation. As such, the increased steel production has benefited iron ore demand during the period. Chinese iron ore demand has been growing at a CAGR of around 9.7% in 2008-2013 to 1.2Bt, while the CAGR for global demand growth was around 5% during the same period.

However, AME expects iron ore demand growth to slow in the coming years due to the apparent headwind in the Chinese steel industry. In the construction sector, data from the National Bureau of Statistics of China pointed out that the floor space of houses newly started has dropped by about 18.6% year-on-year in the first five months of 2014. In the same period, floor space of commercial buildings sold recorded a drop of 7.8%, and sales of commercial building slid 8.5%.

In addition, Chinese government's stance in improving pollution has put the steel industry at risk of production disruption. For example, in the March Quarter 2014, the Tangshan local government had ordered a temporary production cut of 30% for the local steel enterprises in order to reduce pollution. But since the government stance in environmental has been seen easing later this year.

As a measure to alleviate overcapacity conditions in China, the Chinese government is aiming to cut outdated steel capacity in China. In Hebei, the target for capacity cut is set to 15Mt in 2014, and ultimately 60Mt by 2017. Further, according to China's Ministry of Industry and Information Technology (MIIT), no additional steel capacity will be approved before 2017. Capacity under construction will be allowed to continue unless it has been specifically halted by the government.

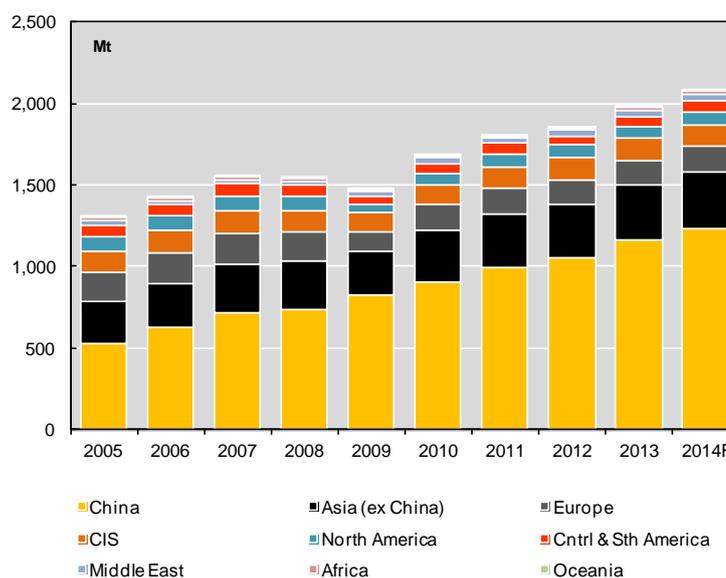
Moreover, as the Chinese government continues to tackle overcapacity and environmental issues of the steel industry, banks and other financiers are seen increasingly reluctant to provide financing to the industry. The tightening credit is seen to have impacted cashflows for steelmakers. In the short term,

AME expects the capacity cuts and tightening credit to impact iron ore demand. In longer term, however, the production loss is likely to be replaced by higher utilisation rate of steel mills.

In the wake of slowing economic growth, the Chinese government has launched several minor stimulus policies to support growth. In June, the People's Bank of China lowered the reserve ratios by 0.5 percentage point for banks that possess certain levels of loans to rural and small business. This policy benefits to approximately 90% of non-country level rural cooperative banks, 80% of non-country level rural commercial banks, and two-thirds of city commercial banks.

In the medium term, AME expects iron ore demand growth in China to slow as the growth of steel use per capita begins to slow. In the meantime global demand is likely to remain relatively stable. Looking further ahead, future source of growth is likely to be coming from other Asian developing countries such as Indonesia, India and Vietnam due to the industrialisation and urbanisation in those countries.

**Figure 2: Estimated Iron Ore Demand by Key Regions and Countries, 2005-2014 (Dry, Mt)**



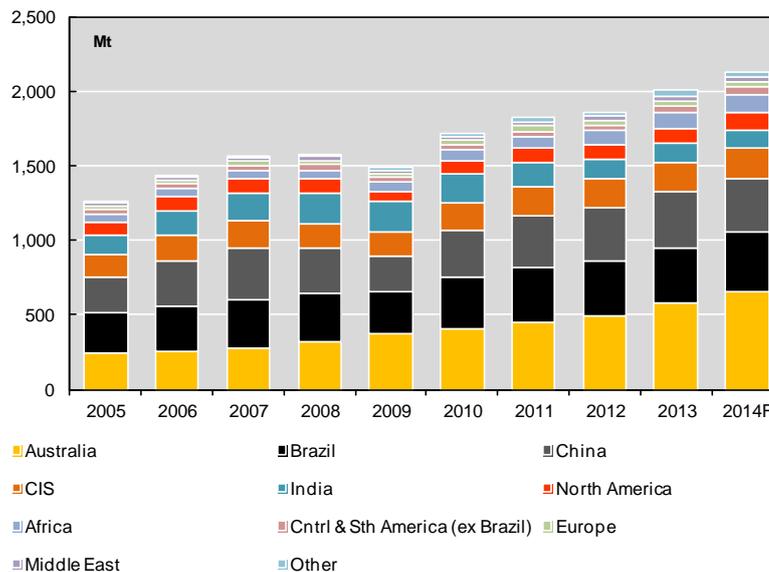
Source: AME

## Global iron ore supply

The global iron ore supply is dominated by Australia, Brazil and China, and they are estimated to have contributed more than half of total global supply in 2013. Although China is a major iron ore producer, its domestic supply is insufficient to support its steel industry and therefore China is also the largest destination for iron ore exports. In the export market, major miners Australia and Brazil dominate, with more than half of global iron ore export originated from Vale, Rio Tinto, BHP Billiton and Fortescue Metals Group (FMG) operating in the two countries.

Global iron ore supply (on dry metric tonne basis) is estimated to be around 2Bt, and it has been expanded by a CAGR of approximately 5% in 2008-2013. As newly commissioned Australian iron ore projects ramped up, growth of global iron ore supply in 2013 accelerated to an estimated 6.4% year-on-year, up from 2.6% in 2012.

**Figure 3: Estimated Iron Ore Supply by Key Regions and Countries, 2005-2014 (Dry, Mt)**



Source: AME

Australia, the largest iron ore exporting country, contributed approximately 29% of global supply in 2013. The primary iron ore producing region is the Pilbara region in Western Australia, where the primary operation base of Rio Tinto, BHP Billiton and FMG are located. Other producing regions in Australia include Midwest in Western Australia and the Gawler region in South Australia. AME expects Australia to remain as the leader in the market as addition supply from ramp-up of newly commissioned brownfield expansions and greenfield projects continue to flow into the market.

Brazil accounts for approximately 29% of global iron ore supply in 2013, and she is the second largest exporting country in the world. Iron ore is primarily produced in three regions in Brazil, namely Carajas, Iron Quadrangle and Corumba. In terms of miner, Vale is the dominant player in Brazil and produced 322Mt (including 100% of Samarco production) and owns iron ore mines in all three producing regions. AME expects Brazilian supply will continue to grow in short-to-medium term due to ramp-up of Vale's 40Mtpa Serra Norte expansion and the commissioning of the 90Mtpa Serra Sul mine in 2016.

South Africa is the third largest exporter of iron ore to China exported around 43Mt in 2013. Kumba Iron, a subsidiary of Anglo American, is the largest iron ore miner in the country produced 42Mt of iron ore last year. While South Africa overtook India in terms of volume exported to China in 2012, exports from South Africa are not expected to displace the loss in Indian exports in short-to-medium term. The reason behind is that South Africa currently lacks of any significant iron ore prospects in the Northern Cape that can support large scale mining. AME believes it is unlikely for South African export to lift significantly until the expansions of Kumba Iron's Kolomela and Sishen operations are commissioned in 2017 and 2018 respectively.

India was once the third largest iron ore exporting country to China but it has been overtaken by South Africa starting in 2012 due to the iron ore mining bans imposed in India. The Supreme Court of India has imposed a mining ban in Karnataka in 2011, and extended to Goa in 2012 and subsequently Orissa in 2014. Since the imposition of mining bans, Indian export contracted from an estimated 101MT in 2010 to 25Mt in 2013. Although the bans in Karnataka and Goa were lifted in 2012 and 2014 respectively, the resumption of iron ore production and export have been slow due to delays in mining lease renewals and acquiring environmental approvals. AME expects Indian supply will remain suppressed in the short-to-medium term.

With additional supply from Australia and Brazil, the iron ore market appears to be in oversupply and it has been suppressing iron ore prices. The lower prices have already been impacting some of the smaller miners globally. Labrador Iron Mines announced that it is not restarting its 2Mtpa Schefferville seasonal iron ore mine in Canada due to insufficient funding. The mine and its related infrastructure is currently in a care-and-maintenance status and it may be restarted when funding is secured and economic conditions improve.

South African company Exxaro has decided to write off its 2Mtpa Mayoko-Lekoumou project in Republic of Congo as latest assumption on costs and iron ore prices render the project no longer economical. Total write-off amount is estimated at ZAR5.4bn (US\$507m), including both total investment amount and capitalised cost.

In South Australia, operation of the Cairn Hill iron ore mine has been halted as one of the owner, Termite Resources NL, declared bankruptcy in the June Quarter. A phase 2 expansion extending mine life to 2015 had originally been planned.

Major iron ore producers are relatively more resilient in the wake of lower iron ore price due to their comparatively lower production cost. However, it has also been impacting their pattern of expansion by shifting focus to brownfield expansions. In late 2013, Rio Tinto decided to postpone the investment decisions for its two greenfield developments, Silvergrass and Koodaideri. Instead, it is aiming to boost production to 330Mtpa by 2015 from brownfield expansions, which include expansions in Yandicoogina, Brockman, Paraburdoo and West Angelas. Likewise, BHP is also targeting to lift capacity to 270Mtpa by de-bottlenecking its infrastructure and also expanding its existing Newman Jimblebar operation.

## **Important Notice**

AME Consulting Pty Limited ("AME") has been engaged by Mineralogy Pty Ltd to prepare this report on iron ore prices (the "Report"). We understand that the Report will be provided to Mineralogy Pty Ltd, for internal use, and an agreed version will be disclosed publicly on the corporate website of Mineralogy Pty Ltd.

### ***Cost and Production Analysis***

Available data varies greatly between iron ore operations and projects. Much information is not reliable due to language difficulties, the confidential nature of the information, the inability to estimate the reliability of AME's sources and general lack of data. Consequently, much information has to be estimated and the quality, accuracy and completeness of the resulting cost comparisons will reflect this. Furthermore, forecast costs embody a number of significant assumptions with respect to exchange rates and other technical variables. Because of these factors, direct comparability between individual projects may be limited, and as such our supply and cost estimates must be treated with caution and cannot be relied upon.

### ***Supply/Demand Analysis***

In addition, AME has supplied tables of historical data and estimated future supply, demand and market trends by compiling, interpreting and analysing engineering, supply, economic, statistical and technical information from many third-party sources. Such company and country statistics may contain inconsistencies and utilises sampling data techniques and thus should not be relied upon.

### ***Data Accuracy***

AME has prepared this Report using information from its in-house database and its expertise, as well as a wide range of public domain and industry data sources. As AME does not have access to the source data (including confidential company information) that underlie the public domain and industry data, an assessment cannot be made in regard to data accuracy. Therefore, reliance can only be provided where we have data that is of sufficient quality that is acceptable to an International Commercial Court.

For the purposes of this report AME has obtained data from a variety of sources. The sourced data may be in the form of historical, estimated or forecast. Unless otherwise noted in the tables, figures or headings of this report, no reliance is to be placed on the information contained within any table, figure or heading. AME does not make any representation or warranty as to the quality or accuracy of the information contained within this report. This caveat to the information in this report is not intended to supersede any other disclaimer contained in this report.

### ***Forward-looking statements***

Statements in this document that contain forward-looking information are identified by words such as "estimates", "intends", "expects", "believes", "may", "will" and included, without limitation, statements regarding the AME's plan of business operations, supply levels and costs, potential contractual arrangements and the delivery of equipment, receipt of working capital, anticipated revenues, mineral reserve and mineral resource estimates, and projected expenditures. There can be no assurance that such statements will prove to be accurate; actual results and future events could differ materially from such statements. Factors that could cause actual results to differ materially include, among others, changes to metal prices, risks inherent in the mining industry, changes in the economic environment, financing risks, labour risks, uncertainty of mineral reserve and resource estimates, equipment and supply risks, regulatory risks and environmental concerns. No reliance on forward-looking information can be made and care should be taken when considering such information. Except as otherwise required by applicable securities statutes or regulation, AME expressly disclaims any intent or obligation to update publicly forward-looking information, whether as a result of new information, future events or otherwise.