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## INDUSTRY OVERVIEW

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We commissioned Wood Mackenzie, as industry consultant, to prepare an independent expert report on the energy sector in China and Mongolia (the “Wood Mackenzie Report”) for use in whole or in part in this prospectus. Wood Mackenzie currently has approximately 650 employees making it one of the largest commercial research and consulting companies in the world. It is headquartered in Edinburgh, Scotland, and has offices in more than 20 cities around the world. It analyzes the assets, markets and companies operating upstream and downstream; in oil, gas, coal, carbon, metals and power generation. In 2007, Wood Mackenzie has acquired Hill & Associates, a coal research and consulting company based in the United States, and Barlow Jonker, the Australia-based provider of analysis and advisory services on international coal and electricity markets.

The key objectives of the Wood Mackenzie Report included:

- identifying the most prospective geographic sales areas and buyers for UHG coals in China;
- analyzing the coal supply/demand dynamics within these areas, and the current and likely future prices for UHG coals and similar brands; and
- describing how Mongolian coal products are currently sold and marketed in China.

Wood Mackenzie prepared its report based on its industry knowledge, in-house database, independent third-party reports and publicly available data from reputable industry organizations. Where necessary, Wood Mackenzie visits companies operating in the industry to gather and synthesize information about the market, prices and other relevant information. Wood Mackenzie has assumed that the information and data on which it relied are complete and accurate.

Forecasts and assumptions included in the Wood Mackenzie Report are inherently uncertain because of events or combinations of events that cannot reasonably be foreseen, including, without limitation, the actions of governments, individuals, third parties and competitors. Specific factors that could cause actual results to differ materially include, among others, fluctuations in coal prices, risks inherent in the mining industry, financing risks, labor risks, uncertainty of mineral reserve and resource estimates, equipment and supply risks, regulatory risks and environmental concerns.

Wood Mackenzie has provided part of the statistical and graphical information contained in this section, including tables of historical data and estimated future supply, demand and market trends created by compiling, interpreting and analyzing engineering, production, economic, statistical and technical information from many third-party sources. The information contained herein has been obtained from sources believed by Wood Mackenzie to be reliable, but there can be no assurance as to the accuracy or completeness of included information. Most of the data presented in this section with respect to the Chinese coal industries has been extracted from the Wood Mackenzie Report. We paid Wood Mackenzie a total of US\$125,000 in fees for professional services in connection with the preparation and update of its report.

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Unless otherwise specified, all of the data presented in this section with respect to PRC coal reserves and resources refer to the PRC national standard for the Classification of Resources/Reserves for Solid Fuels and Mineral Commodities (GB/T 17766-1999).

While we, the Selling Shareholders, the Joint Global Coordinators, the Underwriters and the other parties involved in the Global Offering have taken reasonable care in the extraction, compilation and reproduction of the information and statistics from the Wood Mackenzie Report, none of us, the Selling Shareholders, the Joint Global Coordinators, the Underwriters or any other party involved in the Global Offering has independently verified the information and statistics derived directly or indirectly from official government sources or made any representation as to their accuracy. Such information and statistics may be out of date and may not be consistent with other information and statistics compiled within or outside Mongolia. You should not place undue reliance on such information and statistics contained in this section.

### **An Introduction to Coal**

Coal is one of the most abundant fossil fuels worldwide and a major fuel of global energy consumption. It has a variety of uses, including electricity generation, coke production for steel making, and industrial uses such as cement manufacture.

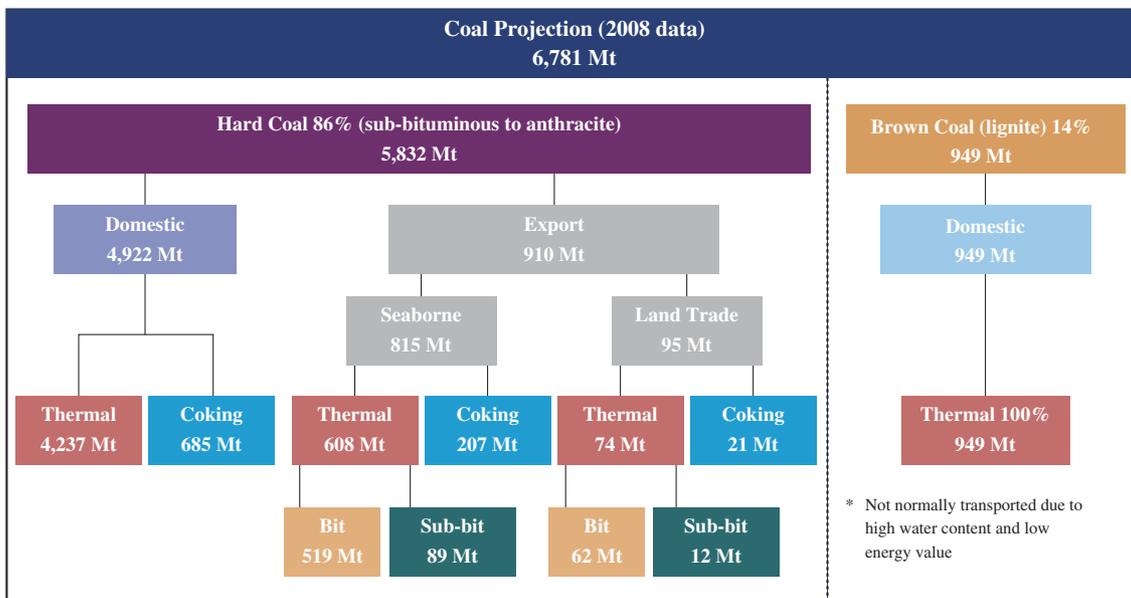
While there are several systems of coal classification used in different countries of the world, coking coal can be broadly categorized into four distinct grades, namely hard coking coal, semi-hard coking coal, semi-soft coking coal and soft coking coal. Hard/semi-hard coking coal is essential for the production of coke. Semi-soft/soft coking coal is typically used for blending purposes to enhance certain physical and chemical parameters of the coke, but in a way that reduces costs by maximizing the proportion of less expensive coals.

Thermal coal is consumed globally as a primary fuel for base load power generation. The energy content of coal is commonly measured as the heat released upon complete combustion in air or oxygen, expressed as the amount of heat (measured in kilocalories) per unit weight of coal (measured in kilograms) or kcal/kg. Generally, coal with a higher energy content is considered premium quality and commands a higher price. The majority of thermal coal produced is consumed regionally due to its bulk commodity nature, resulting in high transportation costs relative to coal prices.

## INDUSTRY OVERVIEW

The following chart shows the global coal production and trade for 2008:

### Global Trade Breakdown 2008



### Chinese Coal Industry

#### *Resources*

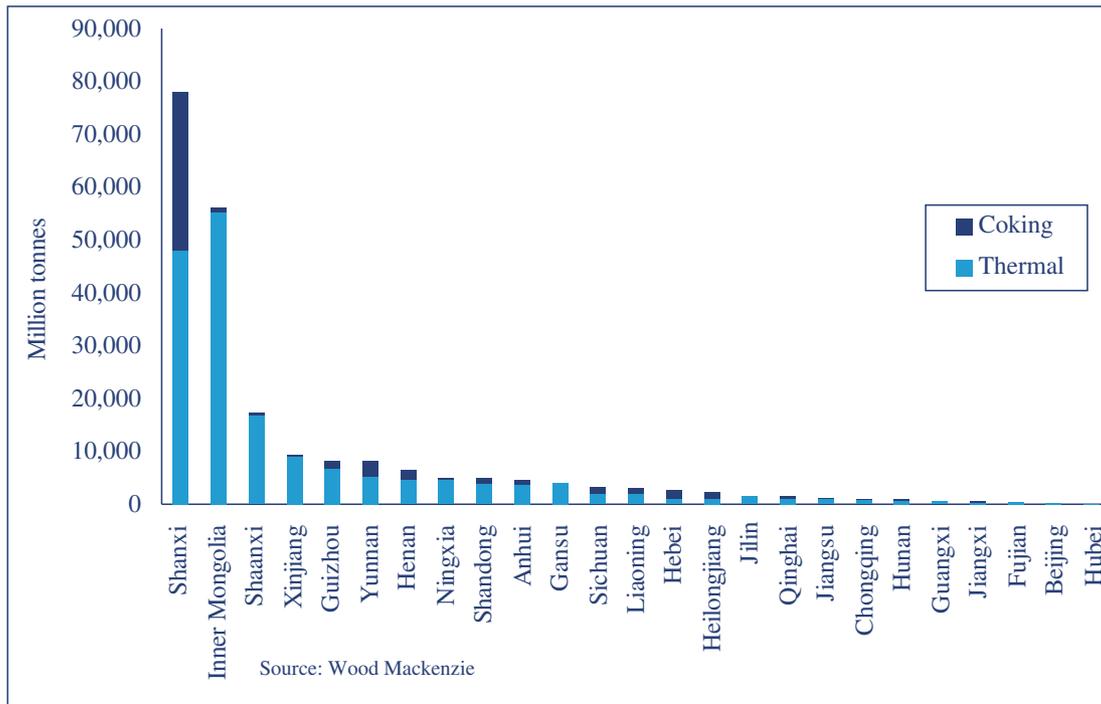
Wood Mackenzie estimates the total exploitable coal resources in China to be 221 billion tonnes as of the end of 2009. The split of thermal versus coking coal resources is 78% to 22%.

Shanxi and Inner Mongolia contain the bulk of Chinese exploitable coal resources with about 134 billion tonnes, or 60% of the total. Shanxi's resources are split approximately 40% and 60% between coking and thermal coal, but Inner Mongolia is dominated by thermal coal, which makes up over 98% of the province's total.

Shaanxi, Guizhou, Yunnan, Henan, Ningxia and Shandong also contain a substantial portion of China's current coal resources. Xinjiang is an important future source of domestic coal, with many large projects being developed, although the province contains almost only thermal coal resources.

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### Chinese Coal Resources by Province and Coal Type

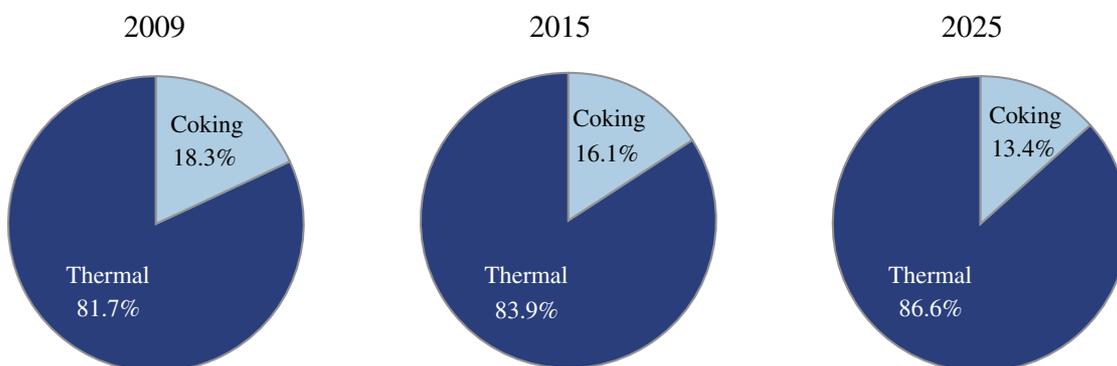


In summary, China has abundant coal resources, but coking coal represents a distinct minority of total coal resources, and with greater geographic concentration.

### *Production*

It is estimated that China produced 2,684 million tonnes of coal in 2009, with a split of 82% thermal coal and 18% coking coal. It is estimated that China's total production will reach 4,373 million tonnes in 2025, with most of the increase from western provinces.

### Chinese Coal Production by Type



Source: Wood Mackenzie

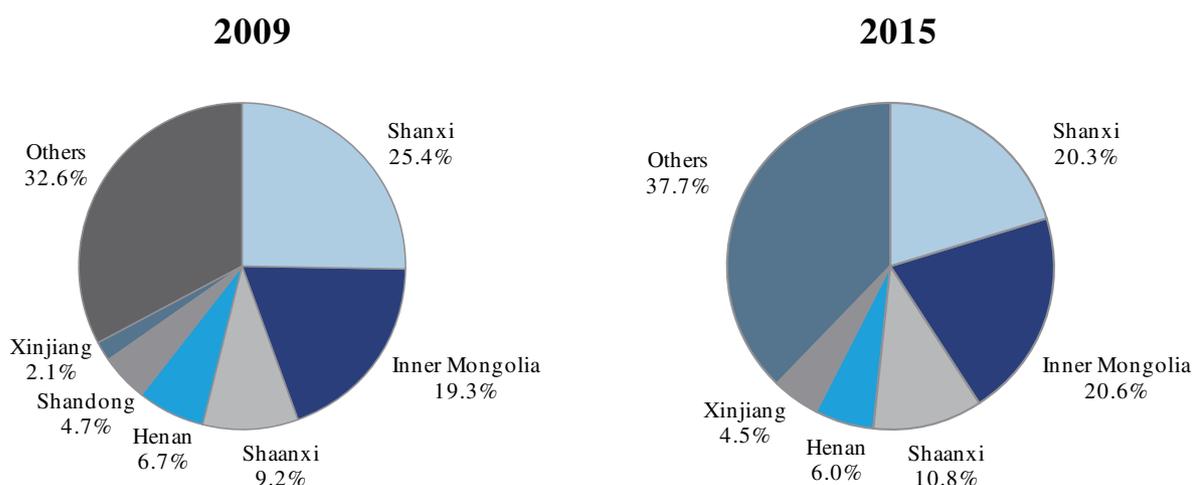
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Shanxi is by far the largest coal producing province, representing 25.4% of the Chinese national total in 2009. Inner Mongolia is another key growth coal producing region, with an estimated 19.3% of the Chinese national total in 2009. Over 95% of Inner Mongolia's output is thermal coal, supplied to customers within the region and in coastal provinces. Xinjiang's production is also expected to grow significantly in the coming years, increasing from 2.1% of the total in 2009 to 4.5% in 2015. By contrast, some of China's traditional coal mining regions, such as Jilin, Hebei and Liaoning are facing resource depletion and their output will decline gradually.

### Chinese Total Production by Province



Source: Wood Mackenzie

Despite the dominance of a few large coal producers, there are thousands of small coal mines providing marginal supply to the market. This fragmentation creates a slew of problems, including safety and environmental issues, increased costs, poor mining conditions, and inefficient resource usage (small mines typically have much lower resource recovery rates). In recent years, the PRC government has taken initiatives to encourage consolidation by closing down small/marginal coal mines. In the 11th five-year-plan for the coal industry, published in January 2007, the National Development and Reform Commission (the "NDRC") set out specific consolidation targets for the industry. This included lowering the proportion of coal production at the small mines, as well as creating several 'mega producers' with annual production exceeding 100 million tonnes.

As part of its long-term strategy to preserve its natural resources base, the PRC Government has encouraged international imports of coal, while also limiting exports.

## INDUSTRY OVERVIEW

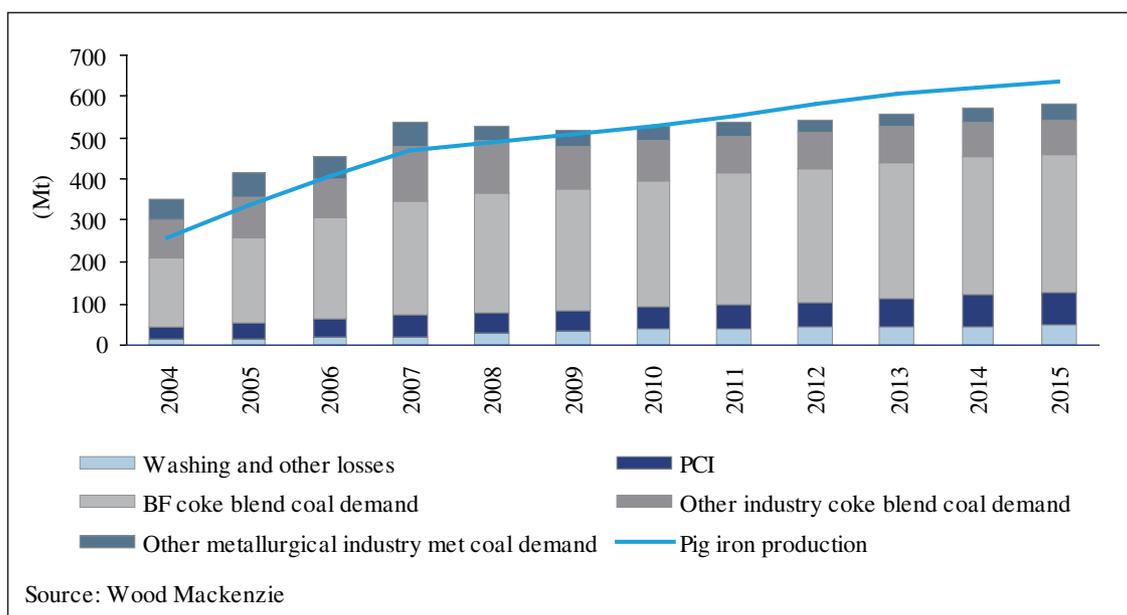
### *China coking coal market*

China is the world's largest consumer of coking coal, an important input for the manufacturing of steel. Coking coal consumption in China has grown significantly since 2003, primarily due to a significant expansion in steel production. In 2009, China produced more steel than North America, Europe, and the rest of Asia taken together, representing 46.6% of global steel production, according to the World Steel Association. This expansion in Chinese steel production has underpinned demand growth for coking coal.

China's large and diverse metallurgical industry uses a wide range of coking coals. Coke blend coal, used in blast furnaces to make steel, constituted approximately 54% of the total 529 million tonnes of coking coal consumed in China in 2008. A further 52 million tonnes of PCI coal was also used in blast furnaces.

Historic and projected coking coal consumption for the 2004 to 2015 period is shown in the table below:

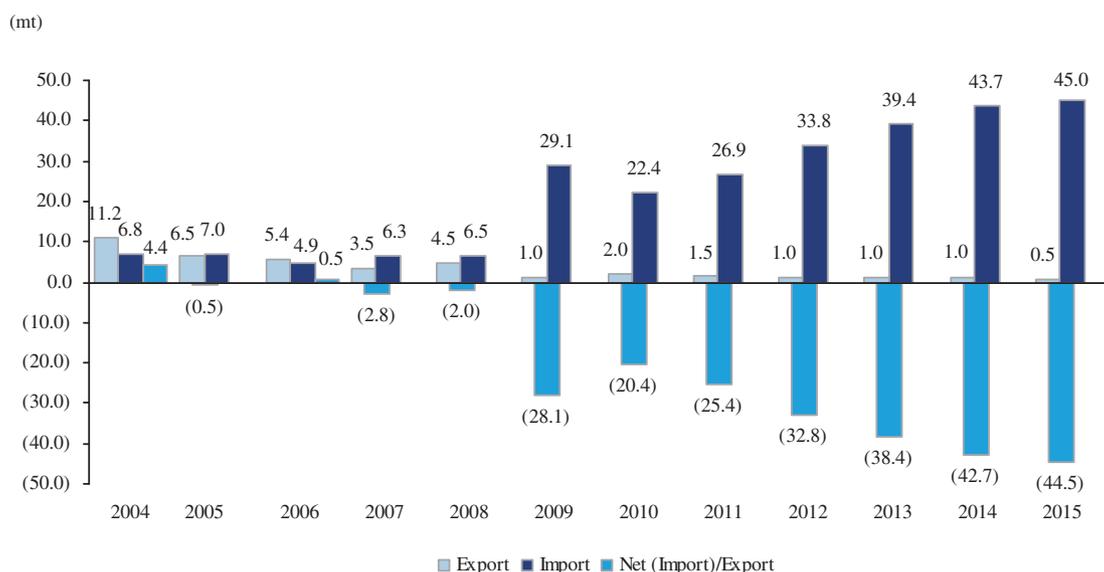
**Historic and Forecast Coking Coal Consumption, 2004-2015**



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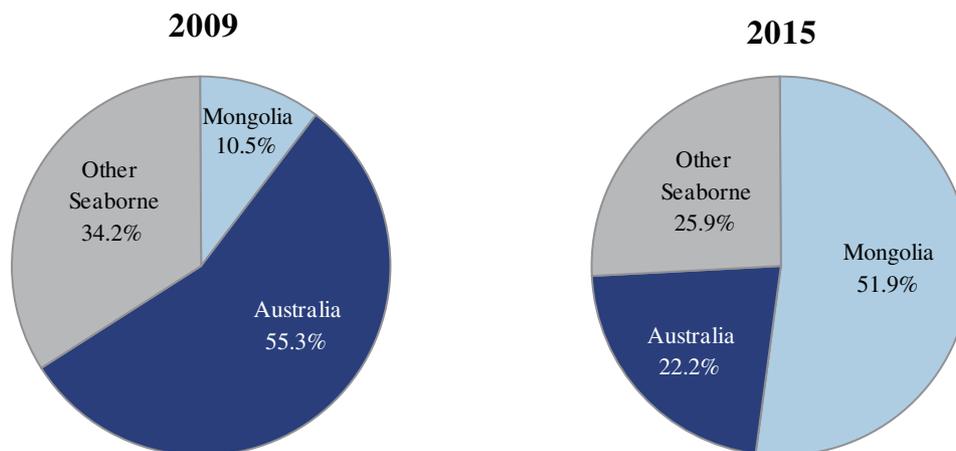
Recently, the PRC government introduced certain policies to cool down the rapid development of several industries, especially the real estate industry. However, given China's rapid macroeconomic growth and the instability of the global and Chinese markets, we believe there will be limited impact on the coking coal industry in China. According to Wood Mackenzie, domestic supply of coking coal in China dropped significantly from 527 million tonnes in 2008 to 488 million tonnes in 2009. Total coking coal imports of 29 million tonnes were recorded in China in 2009, an increase of 22 million tonnes from 2008 levels. Coking coal imports are projected to continue to rise going forward, increasing by 23 million tonnes between 2010 and 2015, while coking coal exports are expected to decline to 0.5 million tonnes by 2015. Landborne imports from Mongolia will augment seaborne supply (mainly from Australia) growing to 28 million tonnes in 2015 from 4.8 million tonnes in 2009, representing a CAGR of 34%.

### Chinese Coking Coal Trade



Source: Wood Mackenzie

### Forecast Australia and Mongolian Imports of Coking Coal into China



Source: Wood Mackenzie

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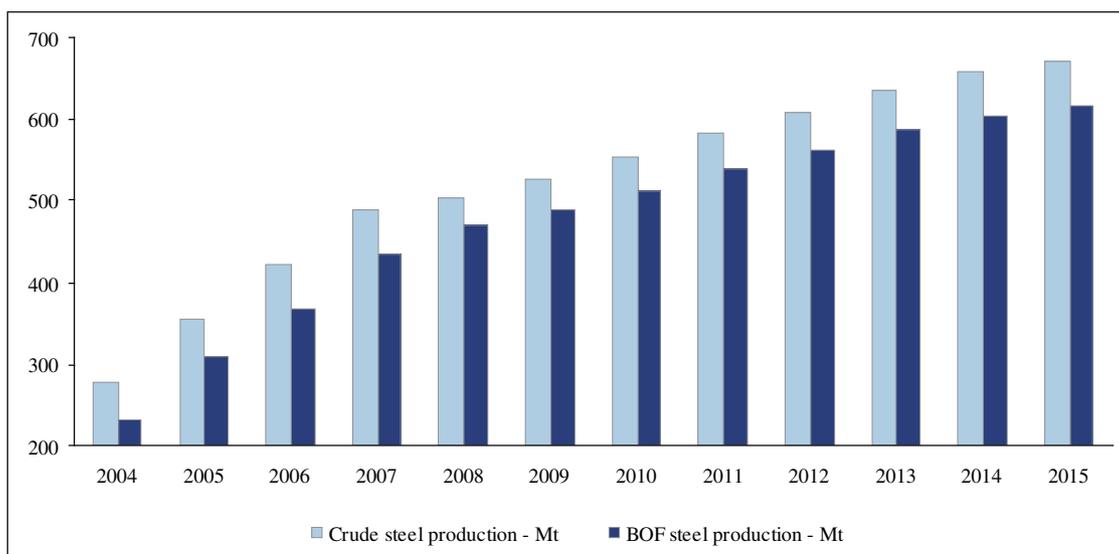
## INDUSTRY OVERVIEW

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### *Steel Production*

Steel production in China experienced rapid growth in recent years. The industry is now undergoing structural change with government authorities requiring closure of small blast furnaces, enforcing a minimum blast furnace size of 300 cubic meters. Chinese crude steel production was estimated at 528 million tonnes in 2009, and is forecast to grow steadily to 671 million tonnes by 2015, representing a 2009-2015 CAGR of 4.1%.

### **Crude Steel Production Forecast for China**



Source: Wood Mackenzie

Steel production will remain the key driver of coking coal demand in the future. The global financial crisis of the past two years has precipitated a structural change in the global steel industry. Steel producers used the slowdown in steel production to reorganize their operations, closing sub-economic blast furnace operations or moving production to lower cost regions. Closure of steel mills in Europe and the U.S. will be countered by new blast furnace builds in South-East Asia, India, China, Eastern Europe and Brazil where high growth in heavy industry and steel demand will drive the need for increasing coking coal imports.

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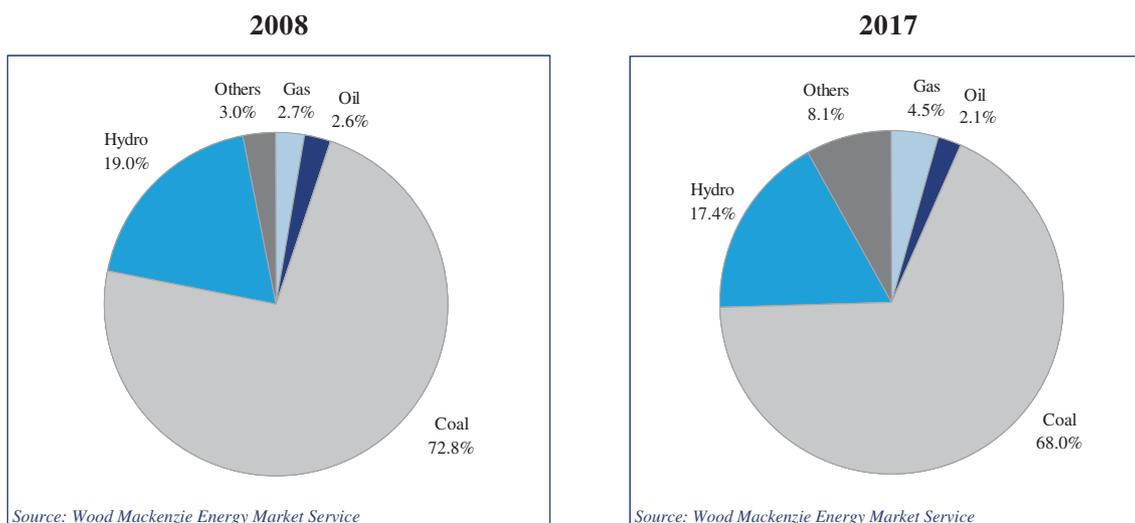
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### *China thermal coal market*

China is the world's largest consumer of thermal coal, with coal accounting for approximately 73% of China's total electricity capacity composition in 2008. China's thermal coal demand increased from approximately 1.6 billion tonnes in 2004 to approximately 2.2 billion tonnes in 2009, equivalent to a CAGR of 6.9%. Wood Mackenzie forecasts thermal coal demand in China to increase by over 533 million tonnes from 2008 to 2015, by far the largest growth worldwide, driven by substantial growth in coal-fired generation capacity.

### Electricity Capacity Composition



The recent trend of increasing thermal coal imports and decreasing thermal coal exports is expected to continue in the future, with China remaining a net importer of thermal coal.

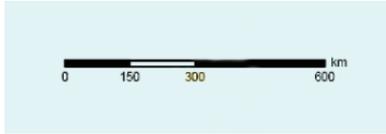
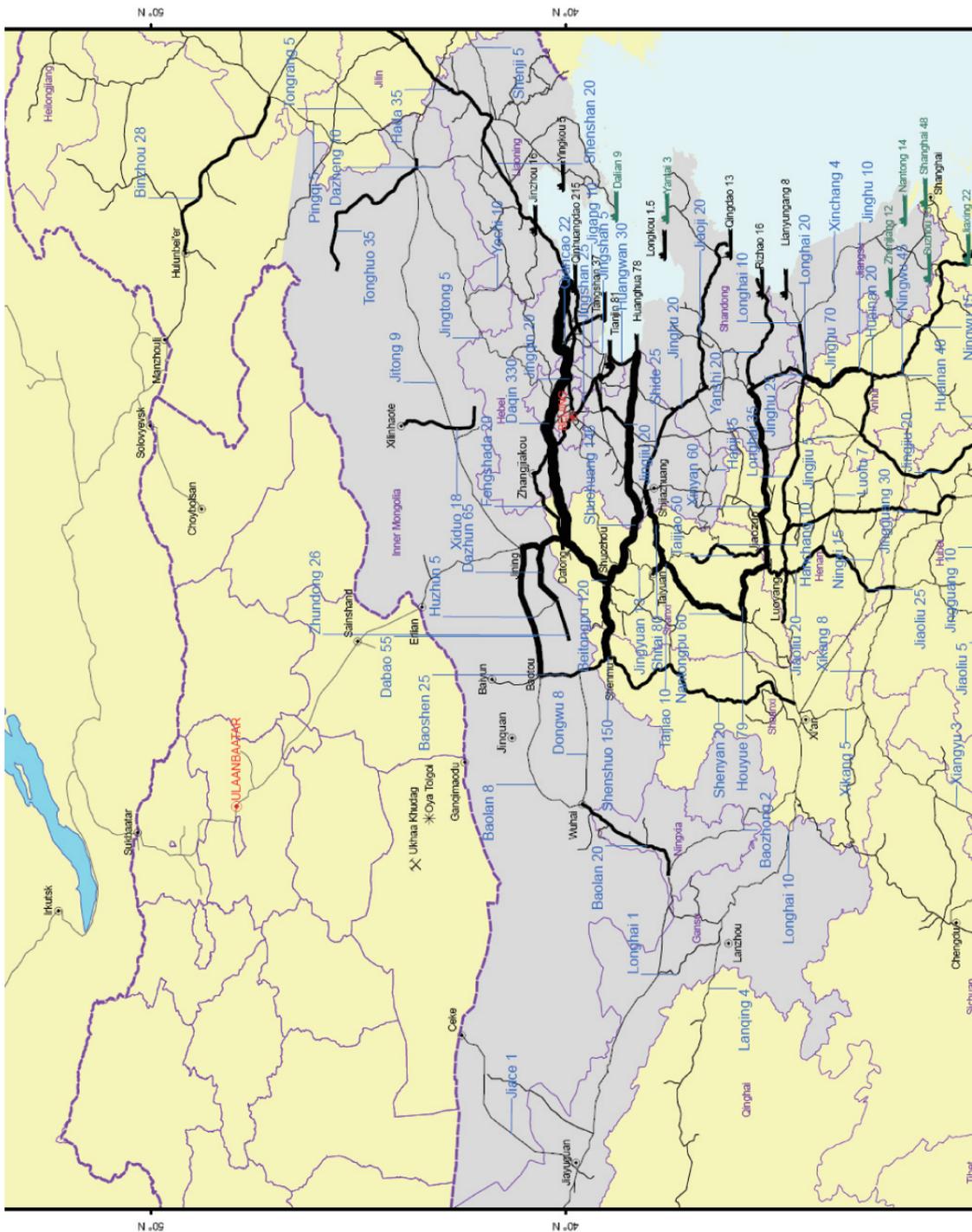
### *Coal transportation infrastructure in China*

Rail is the main method for long distance coal transportation within China. Chinese coal production is mainly concentrated in Shanxi, Shaanxi and Inner Mongolia provinces in the northern part of China, while consumption has been relatively concentrated in the industrialized eastern and southern provinces. This defines the general movement of coal in China, which follows the west to east coal distribution routes.

China's coal rail system is shown in the map below, which contains the names and 2009 coal transport volumes of all the main coal carrying rail lines, as well as the main coal loading and unloading ports.

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## Existing transportation infrastructure 2010



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The 652 km Datong-Qinhuangdao railway in northern China is one of the main coal railways in the country. The railway links coal production regions in Datong and Shanxi to the Qinhuangdao port in Hebei and plays a pivotal role in meeting the coal demand of power generators in China's eastern and southern provinces. Qinhuangdao is one of the main ports for international and domestic coal imports and exports in China.

The 802 km Shenmu-Huanghua railway is another major coal railway in northern China. This railway links coal mines in Erdos and Shenmu with Huanghua port in the coast of Hebei province.

Numerous new rail lines and expansions of existing lines are under development that will impact the TMR market. The PRC government has significantly increased spending on railway development projects and has undertaken to develop the construction of special coal transportation railways in the future to increase coal transportation capacity.

Railway transportation costs vary depending on insurance fees and construction fund fees, and on whether it is a coal dedicated and electrified railway. For example, the Datong-Qinhuangdao railway, which is a coal dedicated and fully electrified railway, currently charges an all inclusive rate of approximately RMB 0.12 per km for every tonne of coal transported.

Trucking is also widely used to transport coal and is considered economic for shorter than 300 km distances for thermal coal, and up to 850 km for higher value coking coals. Trucking fees vary, mainly in relation to distance as well as road conditions. In northern Inner Mongolia fees of RMB0.25-0.40/tkm apply. These are among the lowest in China, chiefly due to the fact there are few road tolls in the area and less stringent policing of overloading.

The nearest coal loading ports to UHG are in the Bohai Sea region at Qinhuangdao, Tianjin and Huanghua. Loading fees for domestic coal shipments average approximately RMB20/t, and RMB35/t for export coal.

### **Mongolian Coal Industry**

#### ***Resources and domestic consumption***

Mongolia has vast coal resources with significant potential, but most of it remains untapped. According to Wood Mackenzie, Mongolia has an estimated 5,824 million tonnes of total exploitable coal resources, approximately 56% of which are coking coal resources.

Domestic Mongolian coal consumption of approximately 5.5 million tonnes per annum has remained stable for the past few years. Much of the locally-consumed coal is low quality lignite used in thermal power plants near the capital, Ulaanbaatar. By comparison, most of the growing Mongolian coal exports to China consist of coking coal.

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### *Coal exports*

Mongolia's coal exports have grown significantly since 2007. Mongolia exported approximately 6.6 million tonnes of coal in 2009, a substantial increase from 3.3 million tonnes of coal exported in 2007. China is currently the main destination for Mongolian coal exports, due to Mongolia's proximity to China. Traditionally, Mongolian coal exports to China have been mainly in coking coal, though recently thermal coal exports have begun to grow.

Currently there are five Mongolian mines exporting coal to China – our UHG mine; the Ovoot Tolgoi mine owned by SouthGobi Energy Resources Ltd.; the existing so-called “small” Tavan Tolgoi mine (“Small TT”), owned by Tavan Tolgoi Joint Stock Company (listed on the Mongolian Stock Exchange and 51% owned by South Gobi province and 49% owned by private investors). Tavan Tolgoi Joint Stock Company does not own and/or operate any of the mines that were previously owned by us; and the Nariin Sukhait coal mines, one of which is a joint venture between Mongolyn Alt Corporation of Mongolia (“MAK”) and the Qinghua Group of China, and a second mine which is operated by MAK. All are open cut operations. By 2015, Wood Mackenzie expects two other new major projects, the new Tavan Tolgoi mine (“Big TT”) owned by state-owned Erdenes MGL LLC, and the Baruun Naran mine, owned by QGX Limited, to come online, with all Mongolian coal mines collectively supplying approximately 30 million tonnes of coal to China at that point, the majority of which would be coking coal.

Mongolian coal enters China through three main border crossings: the Ganqimaodu, Ceke and Erlian border points. A total of 13 million tonnes of coal is expected to be sold into China in 2010, all of which is sold unwashed. Most coal exports from Mongolia are currently trucked into China, typically transported along unsealed road from the coal mines to the Mongolian side of the border, where it is unloaded at a stockpile facility. Border fees are paid in Mongolia and China, and the coal is then trucked over to stockpile facilities on the Chinese side of the border. From the stockpiles, some buyers truck the raw coal directly to end users. Most stockpile coal, however, is trucked south to coal handling and preparation plants in China where it is processed into higher value product – that is, crushed and sized, and in some cases, washed. Transportation costs are a key issue that will determine a Mongolian coal mining project's competitiveness in the Chinese and international seaborne markets.

The current transportation cost between UHG and TKH is approximately US\$18 per tonne (inclusive of VAT). While the cost is not subject to significant fluctuation, from 2006 to 2008 coal transportation costs trended upward due to: (a) a rise in fuel prices from 2006 to 2008 during which time diesel fuel prices more than doubled; (b) the strengthening of the U.S. dollar against the Mongolia Tugrik, which increased by over 20% in 2009 and has remained at such levels since; and (c) general inflationary trends in Mongolia. Because transportation of coal from TKH to Chinese destinations is arranged by customers, we do not have access to information regarding coal transportation costs in China.

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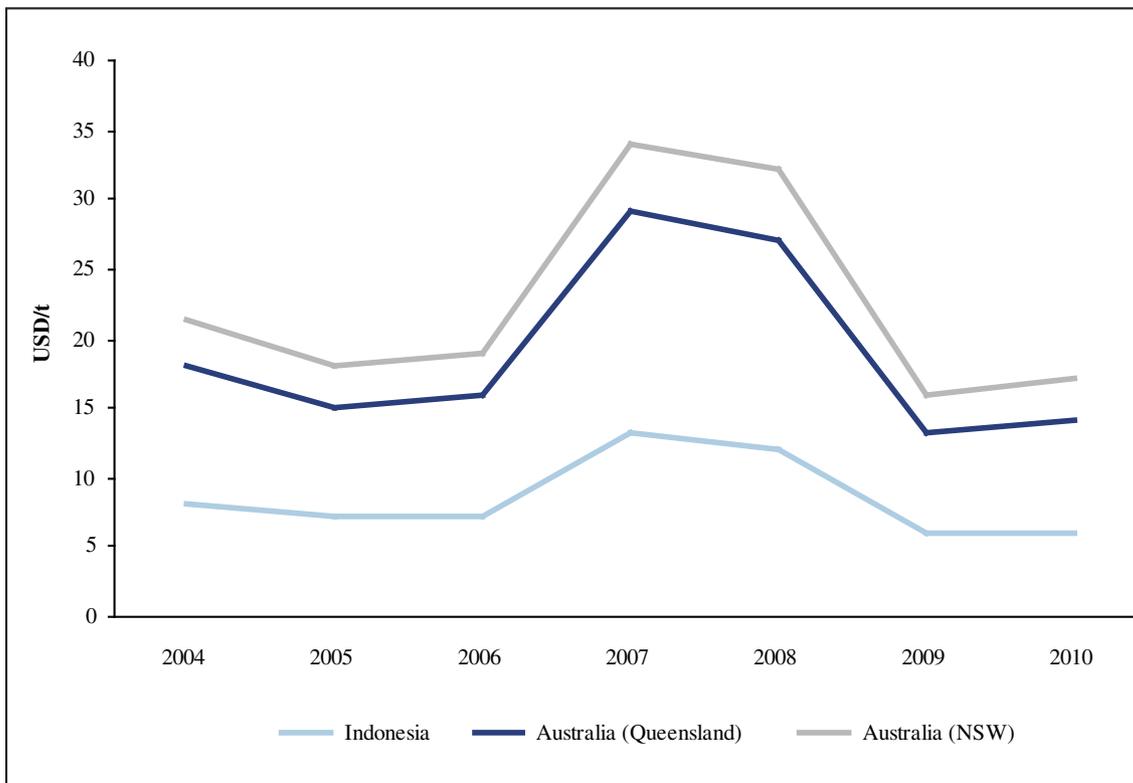
## INDUSTRY OVERVIEW

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According to Wood Mackenzie, the transportation cost from our mine to the Mongolia-China border, as of April 2010, is approximately RMB80/t (US\$12/t). For comparison purposes, the following chart reflects the historical freight rates for shipping coal to China (Hong Kong) from Australia and Indonesia:

### Shipping Costs to China

#### Historical Freight Rates to China



Source: Wood Mackenzie

In recent years, there have been several proposed plans for new rail line developments pertaining to coal mining projects inside Mongolia, including our proposed 236 km rail line from UHG to GS, with an initial throughput capacity of approximately 20 million tonnes per annum of coal. From GS, there are two main proposals/alignments for connecting to the existing Chinese rail system. See “Business – Logistics and Transport – Railway”.

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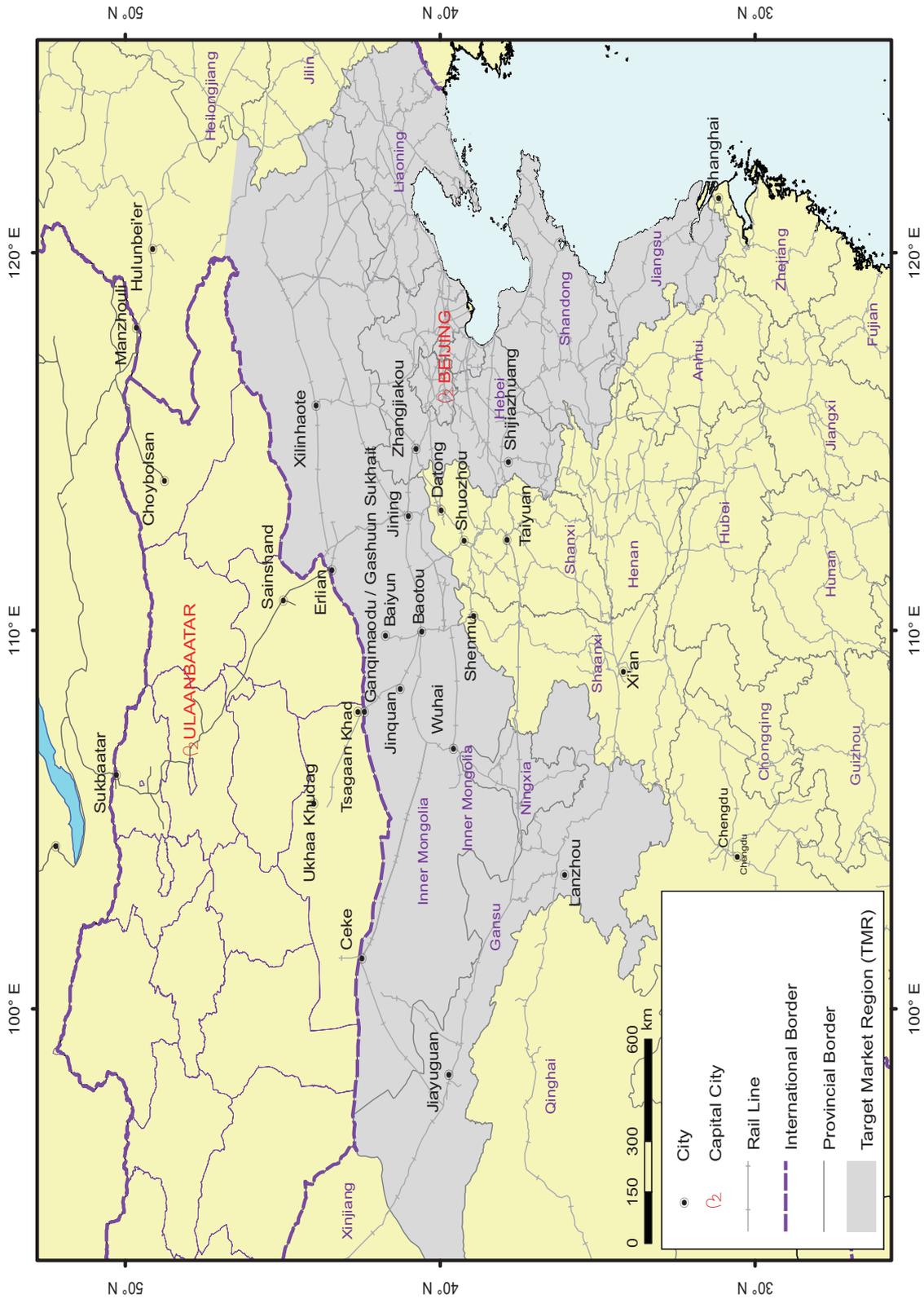
### Target Market Region for UHG Coal

#### *General*

A Chinese TMR for UHG's coal has been determined by Wood Mackenzie in relation to a range of factors relating to transport logistics, supply costs, demand and price levels. It is shaded in grey color in the map below and is considered the most likely area that UHG coal could be competitively sold into. It includes most of the Chinese territory immediately adjacent to Mongolia's southern border with China's Inner Mongolia and Gansu provinces, extending as far west as the Xinjiang provincial border. Eastward it extends to cover Liaoning province, and southward to Jiangsu province, including the three major coal exporting ports of Qinhuangdao, Tianjin and Huanghua.

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## Ukhaa Khudag Target Market Region (TMR)



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As indicated in the table below, Wood Mackenzie expects total 2010 coal consumption in the TMR of 1,726 million tonnes, of which 1,510 million tonnes is thermal coal and 216 million tonnes is coking coal; while the domestic supply is expected to be 1,537 million tonnes.

### Domestic Coal Consumption and Supply in the TMR (2010, Million Tonnes Physical Coal)

	Demand			Supply
	Total	Thermal	Coking	Total
Inner Mongolia . . . . .	<b>159</b>	134	25	<b>379.7</b>
Liaoning . . . . .	<b>170</b>	140	30	<b>62.5</b>
Hebei . . . . .	<b>267</b>	209	58	<b>92.2</b>
Beijing . . . . .	<b>26</b>	24	2	<b>4.3</b>
Tianjin . . . . .	<b>53</b>	46	7	–
Shandong . . . . .	<b>359</b>	307	52	<b>140.8</b>
Ningxia . . . . .	<b>48</b>	42	6	<b>47.4</b>
Gansu . . . . .	<b>53</b>	45	8	<b>28.4</b>
Jiangsu . . . . .	<b>226</b>	209	17	<b>22.3</b>
Qinhuangdao port . . . . .	<b>200</b>	195	5	–
Tianjin port . . . . .	<b>80</b>	74	6	–
Huanghua port . . . . .	<b>85</b>	85	–	–
Heilongjiang . . . . .	–	–	–	<b>22.1</b>
Henan . . . . .	–	–	–	<b>36.9</b>
Shaanxi . . . . .	–	–	–	<b>130.5</b>
Jilin . . . . .	–	–	–	<b>4.6</b>
Shanxi . . . . .	–	–	–	<b>521.7</b>
Qinghai . . . . .	–	–	–	<b>7.8</b>
Xinjiang . . . . .	–	–	–	<b>8.8</b>
Anhui . . . . .	–	–	–	<b>27.0</b>
Total . . . . .	<b>1,726</b>	<b>1,510</b>	<b>216</b>	<b>1,537</b>

*Source:* Based on 2008 coal consumption figures from the China Energy Statistical Yearbook, 2008; and Wood Mackenzie estimates for 2010 based on a variety of inputs including 2009 provincial output figures for electricity, steel, chemical/fertilisers, construction materials and GDP.

### *Supply*

Wood Mackenzie has identified over 600 large-size mines/regions supplying coal into the TMR. However, there are also thousands of smaller mines selling coal into the region. The E'erdusi, Northern Shanxi and Northern Shaanxi areas collectively represent the largest domestic source of coal supply into the TMR, most of which was thermal coal. Other important coal supply sources include mid-Shanxi province, Inner Mongolia, Anhui and Heilongjiang. Imports into the TMR are currently dominated by Mongolian coal coming through the Ganqimaodu, Ceke, and Erlian border points. Coal is also imported into the region from Australia, Indonesia, Russia, Canada and Vietnam.



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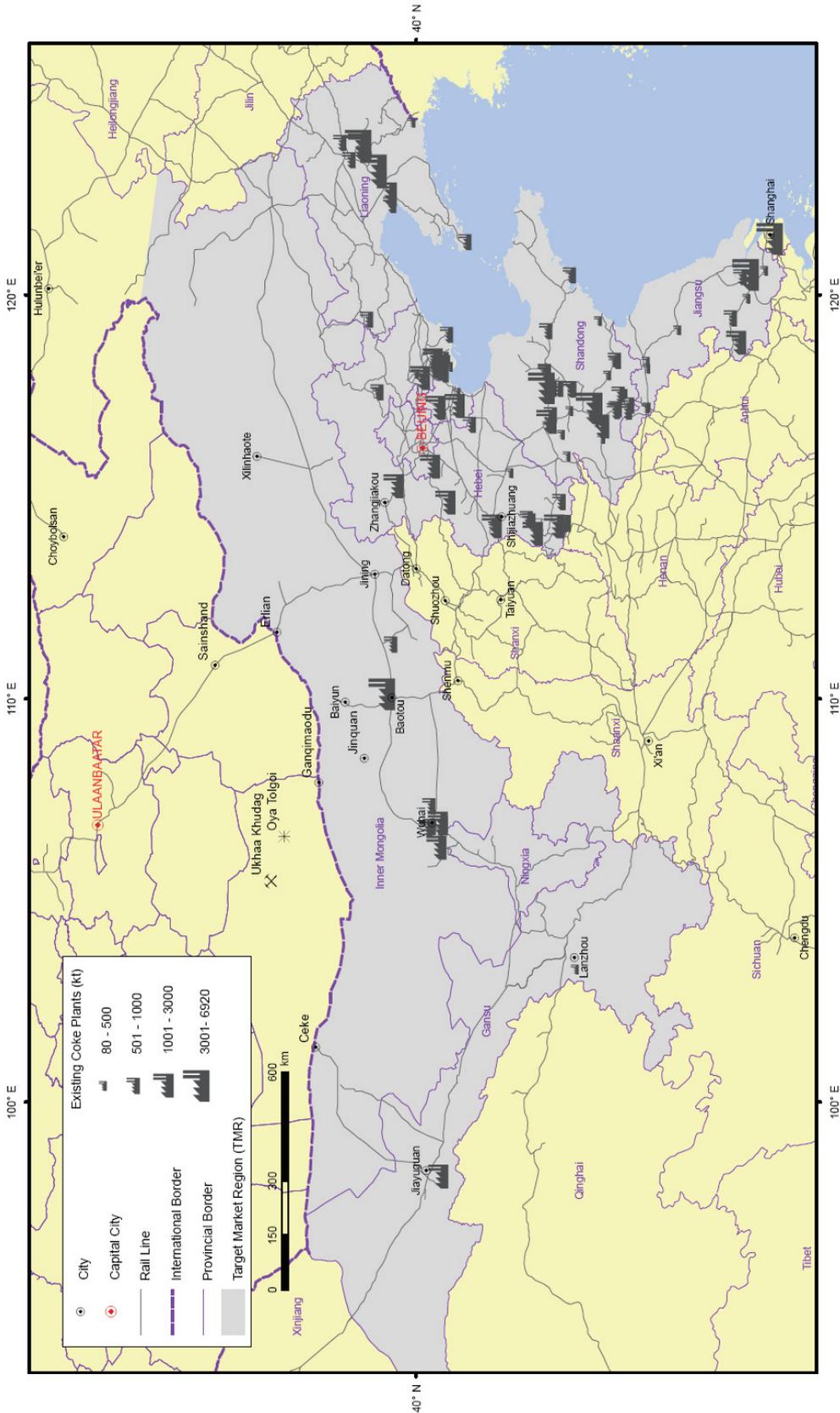
### *Demand*

Total TMR coal demand in 2010 is expected to be 1,726 million tonnes. Wood Mackenzie's estimate of 2010 total coking coal demand is 216 million tonnes, of which approximately 36 million tonnes is PCI coal, which are characterized by their high rank, low volatile matter with the remaining being coke blend coal. Most of this represents consumption inside the TMR, with only approximately 11 million tonnes of coke blend coal loaded at the Bohai Sea ports. The demand within the TMR is supported by the large coke plants within the region. Wood Mackenzie has identified 125 operational large coke plants which will require approximately 170 million tonnes per annum of coke blend coal, with steel mills associated with the plants consuming 27 million tonnes of PCI coal in 2010.

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The map below shows the locations of the existing TMR coke plants:

Existing TMR coke plants



Source: Wood Mackenzie

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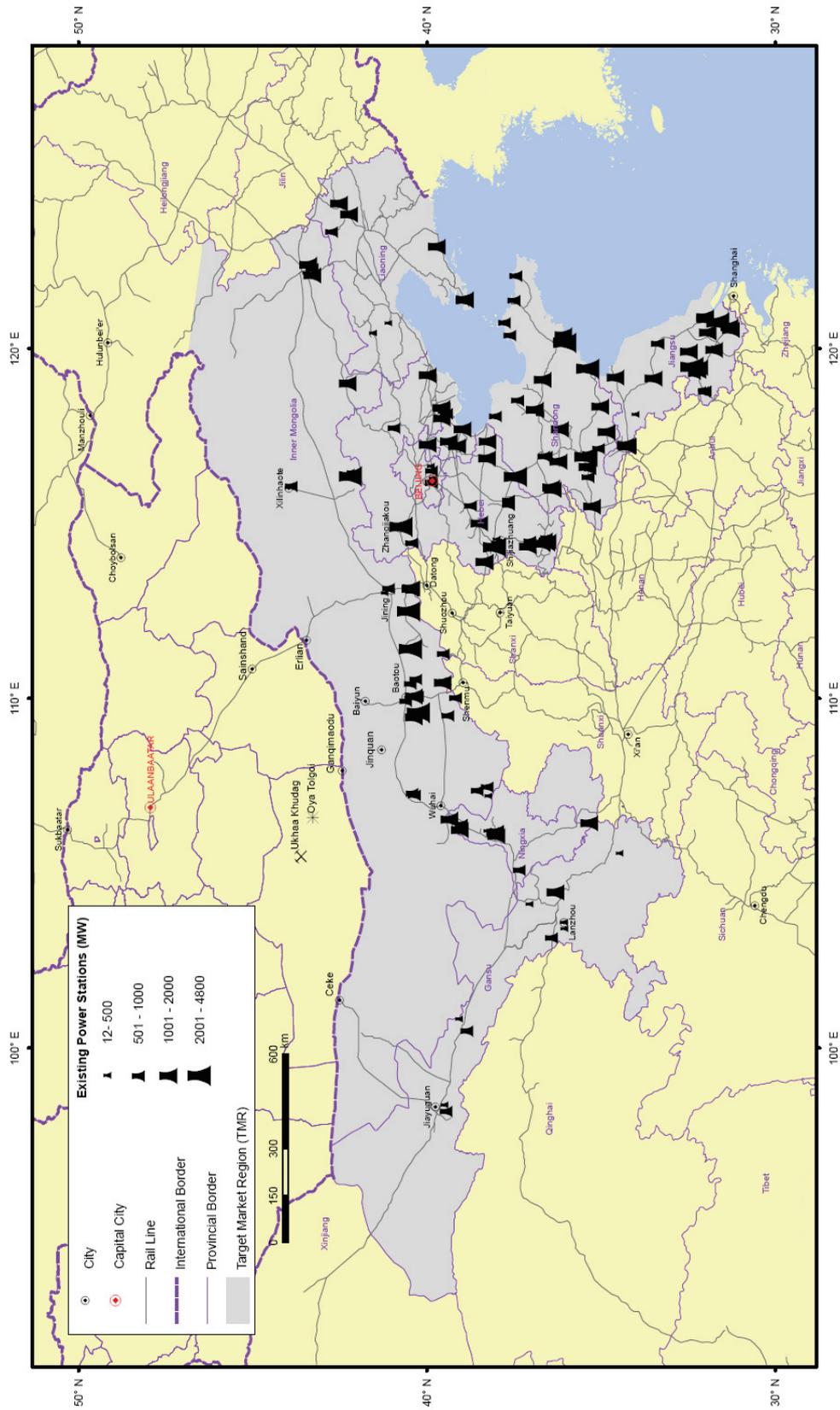
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The highest concentration of demand is in the Tangshan region, Hebei province, which is a major steel area with over 100 million tonnes of pig iron produced per annum. Liaoning also has a high demand for coking coal due to the steel production plants centered around the iron ore supply in the province. Significant demand also exists in Wuhai, central Shandong and southern Jiangsu provinces, which are all large coke manufacturing regions. With the PRC government's policy to expand and consolidate steel production around major production bases in Hebei, Liaoning, Shandong and Jiangsu provinces, steel production within the TMR is forecast to increase substantially, resulting in growing coking coal demand.

Total non-coking coal demand in the TMR is estimated at approximately 1,500 million tonnes in 2010, which includes approximately 365 million tonnes of coal loaded at the Qinhuangdao, Tianjin and Huanghua ports. Hence, approximately 1,135 million tonnes of other non-coking coal is expected to be consumed within the TMR in 2010. Power generation is the largest source of this demand. The closest concentration of power plants to UHG will continue to be in and around Baotou.

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## TMR power plants (2015)



Source: Wood Mackenzie

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### *Supply/demand balance*

Wood Mackenzie estimates total supplies of mid-high volatile matter (“VM”) coke blend coking coal in the TMR to be 142 million tonnes in 2010, which falls short of the total demand of 145 million tonnes for the region. The supply deficit in the TMR is forecast to widen going forward, as supply remains relatively stable at an expected 149 million tonnes in 2015, while demand continues to grow to an estimated 173 million tonnes in 2015.

### **TMR coal balance forecast (million tonnes)**

	<u>2010</u>
Demand	
Mid-high VM coke blend . . . . .	145
Other (mainly thermal) . . . . .	1,582
<b>Total</b> . . . . .	<b>1,726</b>
Supply	
Mid-high VM coke blend . . . . .	142
Other (mainly thermal) . . . . .	1,558
<b>Total</b> . . . . .	<b>1,700</b>
Difference	
Mid-high VM coke blend . . . . .	-3
Other (mainly thermal) . . . . .	-24
<b>Total</b> . . . . .	<b>-27</b>

Source: Wood Mackenzie

Going forward, the demand for mid to high VM coke blend is forecast to outgrow domestic supply, and the TMR will increasingly become an importer of coking coal from both the seaborne and landborne markets, particularly Mongolia.

### **Coal Pricing**

The information below relates to the prices of washed coking coals only. Unwashed coking coals are generally sold at a significant discount to washed coking coals.

#### *Global coal pricing*

Coal is a bulk commodity commonly traded by contract. Coking coal prices are dependent on the coking characteristics of the coal, while thermal coal prices are dependent on the energy level of the coal.

Coal prices in the international market are the result of negotiations which strike a balance between the buyers’ needs for secure, diverse and low priced supply, and producers’ desires to achieve margins that will allow a satisfactory return to shareholders, as well as providing funds for new investment. The main determinants of price are, in the short term, the perception of the supply demand balance, and in the longer term, costs of production.

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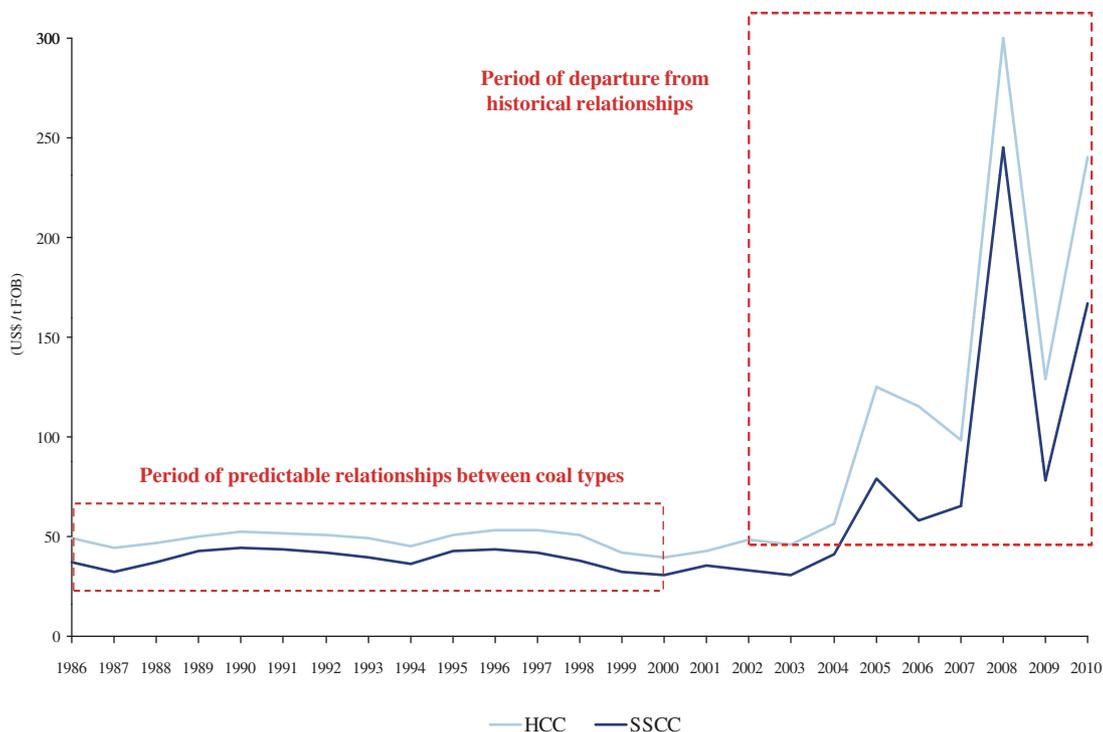
Historically, global coal export contract negotiations were held annually to establish the benchmark prices for the respective coal types. Commencing from the second quarter of 2010, the price setting mechanism is now done on a quarterly basis, helping to set the benchmark prices closer to spot prices.

Coking coal is typically priced at a notable premium to thermal coal. In the period 1986 to 2004, the differential between thermal coal prices and coking coal remained relatively constant. The outcome of the negotiation of thermal coal prices would influence the coking coal price and vice versa. However, post 2004, there has been substantially greater volatility caused by coal shortages in a period of strong demand growth, and historical pricing relationships are no longer valid.

### *Coking coal pricing*

The chart below shows historical pricing trends for coking coals. Coking coal is priced according to certain coking characteristics including ash, sulfur, volatile matter contents and coke strength. The prices shown in the table below are those achieved by Australian suppliers for coal sold to Japanese steel mills in Japanese fiscal years and apply to the premium grades within each category.

**Australian Coking Coal Contracts to Japan**



Source: Wood Mackenzie

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## INDUSTRY OVERVIEW

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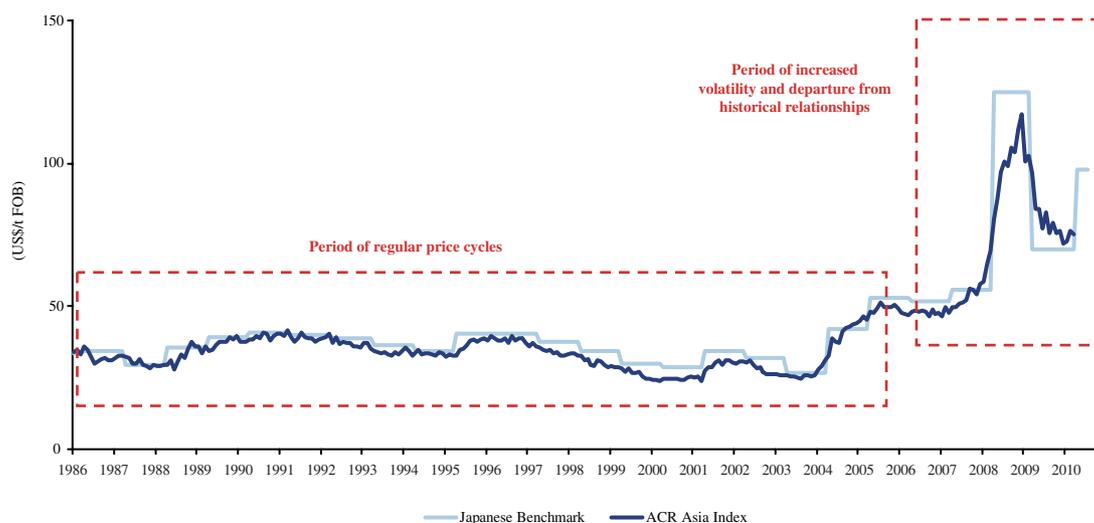
The pricing differences in coking coal types shown in the chart above are as follows:

- hard coking coal ranks highest due to its high value in use (it is essential to make strong coke) and relatively limited source diversity;
- semi-hard coking coals rank lower due to higher ash content;
- soft coking coals are typically high fluidity coals and generally achieve a premium over semi-soft coking coals; and
- semi-soft coking coals are high volatile (+30%), low to medium ash (8% – 10%) and with modest coking properties.

### *Thermal coal price*

Thermal coal is priced primarily on calorific value and sulfur content. The following chart shows historical thermal coal price trends for the benchmark Newcastle type coal since 1986:

**Thermal Coal Price History**



Source: Wood Mackenzie

Prior to 2004, there was a discernable regular cycle of prices with term contract prices for Newcastle coal at 6,322kcal/kg remaining in a band between US\$30/t and US\$40/t. Since 2004, there has been a marked departure from this trend and no cyclical trend has been evident.

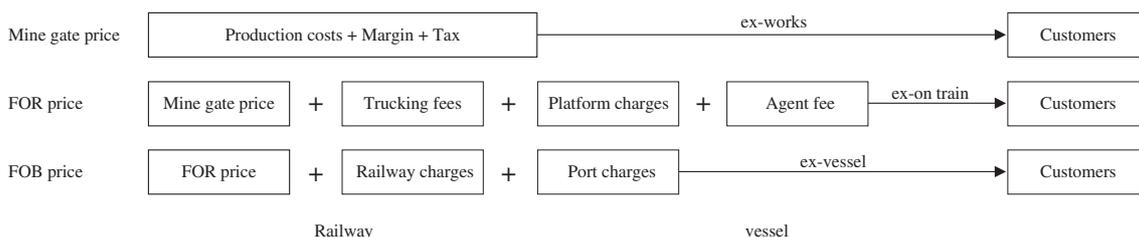
Major Australian thermal coal exporters have reached agreement on 2010 Japanese fiscal year term contract prices with Japanese power utilities. The contract prices for coal exported from the port of Newcastle are reported to have increased 40% (on year), from US\$70/t in Japanese fiscal year 2009 to around US\$98/t basis 6,322 kcal/kg.

## INDUSTRY OVERVIEW

### *PRC coal pricing*

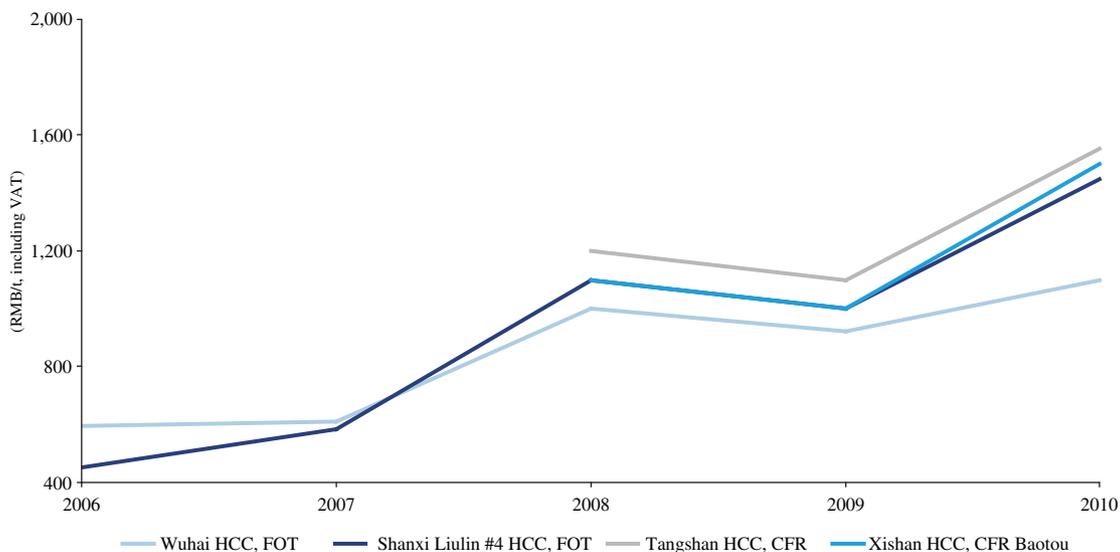
There are three common coal pricing mechanisms in China: mine gate (also called mine mouth), FOR and FOB. Mine gate price refers to the sales price of coal sold at the producing mines. FOR price refers to the sales when the coal is loaded onto trains which is mainly impacted by the mine gate price, freight charges (usually short-distance trucking), platform fee and agent fee. FOB price refers to the price of coal loaded onto ships for export markets. These pricing mechanisms are summarized in the chart below:

#### China coal pricing flow



Wood Mackenzie forecasts for coking coal prices in China as shown in the following tables:

#### Forecast Coking Coal Prices in Northern China, Nominal



Source: Wood Mackenzie

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## INDUSTRY OVERVIEW

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For coking coal, there is a strong relationship between Baotou/Tangshan coal prices and international coking coal prices, driven by the overall scarcity of coking coal, especially in hard coking coal.

The price of thermal coal is primarily determined by the energy content, and affected by sulphur content and VM levels. Generally, when the sulphur content and the volatile matter level are within the acceptable range, thermal coal with higher energy content commands a higher price. Unlike with coking coal, there is a limited correlation between Baotou and international thermal coal prices.

### **Market Share Information**

We do not have information relating to the key market players and their respective shares and our market share.