Operating Environment Analysis

The macro-economic environment²

The PRC economy

In 2006, China's GDP amounted to RMB20,900 billion, representing a year-on-year increase of 10.7%; the PPI experienced a year-on-year increase of 3.0%, and the CPI experienced a year-on-year increase of 1.5%.

In terms of the national economy, investment in industrial operations was strong, the domestic consumer market was active and the export trade was growing rapidly with general price levels being relatively stable. All these factors have provided a favorable operating environment in China.

The World Bank estimates that in 2007, the GDP of China will grow by 9.6% and such rapid growth will be maintained.

The world economy

The world economy in 2007 will continue to be favourable. It is estimated that the growth rate will be approximately 3.2% for the world economy, and will probably be over 6% for developing economies, of which the economic development of China and India will be particularly rapid. It is estimated that in 2007, the economic growth of India will be 8.7%.

In 2007, the economic growth of the United States will be approximately 2.1%; the economic growth of Japan and the Euro zone will be 2.4% and 1.9% respectively, and such steady growth will be maintained.

All these factors will provide a favourable global operating environment for our growth.

Note:

^{1.} This section is for reference only and is not to be construed as an investment recommendation. The Company has made an effort to confirm the accuracy of the information. However, it does not take any responsibility for or cannot guarantee the accuracy, completeness or validity of all or any part of the contents. The Company will not be responsible for any error or omission. There may be certain forward-looking statements attributable to third parties which are based on subjective assumptions or judgments made about certain political or economic prospect, and which therefore may be subject to uncertainties. The Company takes no responsibility for updating any data or correcting any error. The views, estimates or other data may be revised or eliminated without further notice.

^{2.} Source of information: World Bank, China Coal Trading Association, SACMS and research conducted by the Company.





The industry environment

1. The domestic coal market¹

Table: Key indicators for the coal industry

	2006	2007F
Demand for coal (Million tonnes)	2,370.0	2,530.0
Coal for power (Million tonnes)	1,247.8	1,357.0
Coal for steel (Million tonnes)	410.0	429.0
Coal for construction materials (Million tonnes)	348.0	357.0
Coal for chemical processes (Million tonnes)	134.0	141.0
Coal supply (Million tonnes)	2,380.0	2,530.0
Coal railway transport volume (Million tonnes)	1,390.0	1,480.0
Daqin line (Million tonnes)	250.0	300.0
Shenshuo - Shuohuang line (Million tonnes)	110.0	125.0
Houyue line (Million tonnes)	105.0	125.0
Transit volume at coal ports (Million tonnes)	400.0	445.0
Qinhuangdao Port (Million tonnes)	176.0	190.0
Huanghua Port (Million tonnes))	80.9	80.0
Shenhua Tianjin Coal Dock (Million tonnes)	2.3	15.0
Coal import (Million tonnes)	38.3	_*
Coal export (Million tonnes)	63.3	_*

* No available forecast

Supply and demand of coal

Review for 2006

In terms of demand, domestic demand for coal continued to rise. In 2006, the national commercial coal consumption volume amounted to 2,370 million tonnes, a year-on-year increase of 7.5%. Demand for coal from the key coal-consuming industries increased, with consumption by the power industry at 1,247.8 million tonnes, representing a year-on-year increase of 13.0%, consumption by the steel industry at 410.0 million tonnes, representing a year-on-year increase of 13.8%, consumption by the construction material industry at 348.0 million tonnes, representing a year-on-year increase of 6.1%, and consumption by the chemical industry at 134.0 million tonnes, representing a year-on-year increase of 5.2%.

In terms of supply, the national production volume of raw coal in 2006 amounted to 2.38 billion tonnes, representing a year-on-year increase of 8.0%. A total of 2,652 minor coal mines had been shut down in the year, representing a decrease of 110 million tonnes in production capacity.

In terms of import and export, in 2006, the annual coal export amounted to 63.3 million tonnes, representing a year-on-year decrease of 12.6%, the national coal import volume amounted to 38.3 million tonnes, representing a year-on-year increase of 46.1%. In 2006, the net coal export volume amounted to 25 million tonnes, representing a year-on-year decrease of 44.2%.

In summary, in 2006, the national demand and supply of coal was generally balanced.

Projection for 2007

In terms of demand, it is projected that the total national demand for coal will be approximately 2,530 million tonnes for 2007. Newly added demand of major coal consumption industries will be approximately 144 million tonnes. Of this, newly added demand of the power industry will be approximately 109 million tonnes, representing a year-on-year increase of 8.6%, newly added demand of the steel industry will be approximately 19 million tonnes, representing a year-on-year increase of 4.6%, newly added demand of the construction material industry will be approximately 9 million tonnes, representing a year-on-year increase of 2.6% and newly added demand of the chemical industry will be approximately 7 million tonnes, representing a year-on-year increase of 2.6% and newly added demand of the chemical industry will be approximately 7 million tonnes, representing a year-on-year increase of 2.6% and newly added demand of the chemical industry will be approximately 7 million tonnes, representing a year-on-year increase of approximately 5.2%.

In terms of supply, as at the end of 2006, the confirmed production capacity of coal mines in the PRC amounted to 2,350 million tonnes. Production capacity in construction as planned by the "Eleventh Five-Year Plan" amounted to 800 million tonnes, of which, the balance of 360 million tonnes from the "Tenth Five-Year Plan" have all been in operation: consolidation of minor mines to form large to medium-sized mines resulted in an increase of 200 million tonnes; large to medium-sized mines recently put into operation amounted to 450 million tonnes, and newly constructed mines which have been in operation amounted to 250 million tonnes. It is anticipated that these new production capacity will come on line gradually by the end of 2010. In addition, the State will continue to streamline and shut down minor mines. In 2007, 4,048 mines, with a production capacity of approximately 100 million tonnes, will be shut down. It is anticipated that the national coal production volume in 2007 will be 2,530 million tonnes.

In terms of import and export, with the impact of changes in tax rate for the import and export of coal, strong domestic demand for coal, and the appreciation of Renminbi, the export of coal from China will further decrease whereas the import will further increase, and it is possible that China may become a net importer. The import volume of coal of China in January and February 2007 amounted to 8.6 million tonnes, representing a year-on-year increase of 65.8%, and the export volume amounted to 7.7 million tonnes, representing a year-on-year decrease of 29.6%. The net coal import volume amounted to 0.92 million tonnes.

In summary, it is anticipated that the national coal demand will be generally balanced. However, the supply of quality thermal coal may still be limited seasonally or regionally.

Transport bottleneck

Review for 2006

The transport volume by railway in 2006 amounted to 1,390 million tonnes, representing a year-on-year increase of 7.5%; of which, the transportation volume of Daqin line was 250 million tonnes, the transportation volume of Shenshuo-Shuohuang line was 110 million tonnes, and the transportation volume of Houyue line was 105 million tonnes. The transit volume of key coal ports was approximately 400 million tonnes, representing a year-on-year increase of 9.9%.

Given the features of the distribution of China's coal resources and consumption, coal from western regions is transported to the east, and coal from northern regions is transported to the south, so that transportation of coal by railway cannot meet the transportation demand over a long period of time.

The "Eleventh Five-Year Plan" of the State listed Shanxi, Shaanxi, Inner Mongolia and Ningxia as coal output regions. In 2006, the output of coal from these four provinces or regions amounted to 784 million tonnes, whereas the transportation capacity of railways was merely approximately 700 million tonnes. Hence, a bottleneck problem of limited railway transportation capacity continued to exist.

Projection for 2007

It is estimated that in 2007, the transportation capacity of railways will increase by approximately 90 million tonnes; of which, Daqin line will increase by 50 million tonnes, Shenshuo – Shuohuang line will increase by 15 million tonnes, and Houyue line will increase by 20 million tonnes. The transportation capacity of ports will increase by 45 million tonnes; of which, Qinhuangdao Port will increase by approximately 14 million tonnes, and the Shenhua Tianjin Coal Dock will increase by 13 million tonnes.

Contracts entered into for cross-provincial transportation of coal will amount to 1,200 million tonnes for 2007, exceeding the target set by the State which is 738 million tonnes of transportation capacity. It is estimated that in 2007, the growth in coal transportation capacity by railway will not be able to meet the demand for coal transportation and bottleneck problems will persist. In addition, supply of coal to the coastal regions will be subject to limitations in the transportation capacity by sea, and it is estimated that the transportation capacity of the domestic seaborne market will continue to see constraints.

Policy for the coal industry

The key policies for the coal industry for 2007 are as follows:

The State introduced the "Eleventh Five-Year Plan for the Development of the Coal Industry" to facilitate a more rapid development of large coal production bases and large corporations and consolidation within the industry;

A new mechanism of "A Free-reigned Matching of Supply and Demand for the Resources and Pricing Under the Macroeconomic Control by the State" will be introduced, whereby market-oriented pricing of coal has been adopted when placing orders for coal for 2007;

The State continues to adopt a policy to streamline and shut down minor mines. The NDRC proposed that by 2010, the number of minor coal mines will be reduced to 10,000 and their production volume will be controlled below 700 million tonnes. By the end of 2007, all coal mines under 30,000 tonnes will be shut down. The State Administration of Work Safety will not accept applications for approval for opening of new coal mines with a production capacity below 300,000 tonnes per year.

The State adopted, on a pilot basis, in Shanxi Province a series of measures to ensure the sustainable development of the coal industry. The test will involve coal resources being exploited on a fees basis, such fees to take the form of levies for the sustainable development fund, deposits for the rehabilitation of the environment of coal mines and levies for a development fund for converting coal mine to other operations. It is also examining the application of such measures across the country.

While the State has cancelled the tax rebate for the export of coal, it has also lowered the import duty for coal. In addition, export of four scarce energy products, including coal and coke, are taxed tentatively at an additional rate of 5%.

The State proposes that during the "Eleventh Five-Year Plan" period, the energy consumption per GDP unit will be reduced by about 20% and the annual rate of energy saving will be 4.4%.

In summary, consumption of coal in 2006 continued to be robust with production having increased by a small margin, whereas production capacity was restricted by transportation by railway, so that certain regions still suffered from undersupply. The increase in prices of coal for the year were relatively steady. For example, the FOB price for 6,000 calories per kilogram thermal coal in Qinhuangdao port saw an increase of approximately 11% for the year. In addition, the difference in price of thermal coal between contractual sales and spot sales had narrowed.

It is anticipated that in 2007, the demand for coal will be robust

and continue to have steady growth. The production of coal will grow to some extent, so that the coal market will be steady and no marked unbalance in supply and demand will occur. However, for certain regions and in different seasons, the supply of coal, especially quality thermal coal, could be uneven. Given the transportation bottleneck constraints, the policy that production and transportation will be determined according to demand for the output of coal from Shanxi, Shaanxi, Inner Mongolia and Ningxia will not change. Given the impact of various factors including costs, coal prices will rise gently, contract price for thermal coal will rise and the difference between the contract prices for thermal coal and those of spot sales will shrink further.

2. The thermal coal market of the Asian Pacific Region³

Supply and demand of coal

Review of 2006

In terms of the demand, the major importers of thermal coal in the Asian Pacific market are Japan, Korea, China Taiwan, India and China. In 2006, the import volumes of Japan, Korea and China Taiwan were the three largest, of these the import volume of thermal coal of Japan amounted to 91.4 million tonnes, representing a year-on-year decrease of 5.0%; the import volume of thermal coal of Korea amounted to 59 million tonnes, representing a year-on-year increase of 5.2%; the import volume of thermal coal of China Taiwan amounted to 57.0 million tonnes, representing a year-on-year increase of 3.3%; the import volume of thermal coal of India amounted to 26 million tonnes; and the import volume of thermal coal of China amounted to 10.9 million tonnes, representing a year-on-year increase of 43.9%.

In terms of supply, exporters to the Asian Pacific Region mainly include Indonesia, Australia, China, Russia and South Africa. In 2006, Indonesia had exported a total of 125 million tonnes of thermal coal, representing a year-on-year increase of 13.6%. Australia had exported a total of 111.6 million tonnes of thermal coal, representing a year-on-year increase of approximately 4.4%. Russia had exported 11.0 million tonnes of thermal coal to Asia, which was broadly in line with the previous year. With the rise in transportation fees, South Africa had exported 3.0 million tonnes of thermal coal to the Asian regions, representing a year-on-year decrease of 31%. China had exported 53.8 million tonnes of thermal coal, representing a year-on-year decrease of 11.5%. The decrease was mainly attributable to the growth in domestic demand.

To summarise, the supply of thermal coal for the Asian Pacific market was limited in 2006.

Projection for 2007

In terms of demand, it is estimated that the demand for coal of the Asian Pacific Region will continue to rise. The demand of Japan, Korea and China Taiwan will be relatively steady with little change. The newly added demand will mainly concentrate in China and India. The import volume of thermal coal for India in 2007 will be approximately 30 million tonnes, representing an increase of 15.4%. With the adjustment in import and export duty and appreciation of the Renminbi, the coal import of China will increase further.

In terms of supply, in 2007, the supply capability of the Asian Pacific Region is anticipated to see a small margin of increase. The export volume of thermal coal by Indonesia would increase by 24 million tonnes, but the low calorific value of the product and impact of rainy seasons result in the unevenness in supply and restriction in export markets of thermal coal exported by Indonesia. Australia intends to export 8-10 million tonnes of thermal coal. As Russia has constraints on its port handling capacity, it is anticipated that there will be little change in its export of thermal coal. The export volume of China's thermal coal will continue to decrease as it is subject to factors such as the increase in domestic demand.

To summarise, the supply of thermal coal for the Asian Pacific market will rise but will continue to be limited especially in terms of the supply of coal with high calorific value.

³ Source: China Coal Market Net; TEX Report

Transportation of coal

Review of 2006

The international transportation of coal was influenced by sea transportation fees and the handling capacity of ports. In 2006, the export of coal by Australia to a large extent was restricted by the handling capacity of its ports. In 2006, Newcastle Port dispatched a total of 79.8 million tonnes of coal, a decrease of approximately 0.6% from the 80.3 million tonnes in 2005. The sea transportation fees in 2006 were rising.

Projection for 2007/3/16

It is estimated that the bottleneck problem facing Australia in its transportation of coal will continue in 2007 and the supply of coal for the Asian Pacific Region will continue to be limited. With the completion of export infrastructure currently in construction or under planning in Australia, the throughput of ports in the future will increase by 79 million tonnes, which is favourable to the future coal exports of Australia. Increase in exports of Australia and Indonesia will result in the constraints in the coal transportation capacity by sea to the Asian Pacific Region during 2007.

In summary, in 2006, the economies of the Asian Pacific Region continued to grow, and energy demand of all countries, in particular the demand and import for coal in China and India, was rising. The export volume of Indonesia increased. In 2006, both the supply and demand for coal in the Asian Pacific Region were robust. The long-term contract price for coal was steady and the price for spot sales had increased significantly.

In 2007, although both Indonesia and Australia have plans to increase their exports, with the robust demand for coal in the

Asian Pacific Region and the continued constraints of the port capacity in Australia as well as the change in import and export volumes of China, the supply of coal for the Asian Pacific Region will become increasingly restricted. Hence the prices of coal will rise, especially the long-term contract price of thermal coal in the Asian Pacific Region. In 2007, the supply of thermal coal for the Asian Pacific Region will be increasingly limited and leading to an increase in prices.

The market environment of the power industry ⁴

Supply and demand of power

Review of 2006

In terms of demand for power, the total power consumption maintained its rapid growth, exceeding the GDP growth. In 2006, the nationwide power consumption reached 2,824.8 billion kwh, representing a year-on-year increase of 14.0%, of which, power consumption by heavy industries was 1,702.1 billion kwh, representing a year-on-year increase of 15.4%. The power consumption by urban and rural residents was 324.0 billion kwh, representing a year-on-year increase of 14.7%. It is noteworthy that the growth rate in power consumption by rural residents is higher than that of

⁴ Source: The China Electricity Council, State Grid Corporation

Projection for 2007

In terms of demand, the demand of power in 2007 will continue to rise steadily. The total estimated power consumption across the country will be approximately 3,130 - 3,180 billion kwh, representing a year-on-year increase of 11% - 12.5%.

In terms of power production and supply, it is estimated that the newly-added installed capacity nationwide will be about 95 million kw, and by the end of the year, the national installed capacity will be 720 million kw. It is estimated that the utilisation hours of power generation

Supply and demand of coal

urban residents by about 5% in every month of the year, and also markedly higher than the growth rates of other industries. This shows that driven by the construction in the new rural area and development of rural economy, the power consumption of rural residents will become a key area of growth for the future demand of power.

In terms of power production and supply, in 2006, the national newly added installed capacity in operation exceeded 100 million kw, and the national installed capacity for generation amounted to 622 million kw, representing a year-on-year increase of 20.3%; of which, coal-fired installed capacity amounted to 484 million kw, representing a year-on-year increase of 23.7%. In 2006, the national gross power generation amounted to 2,834.4 billion kwh, representing a year-on-year increase of 13.5%; of which, coal-fired power generation amounted to 2,357.3 billion kwh, representing a year-on-year increase of 15.3%. The national average utilisation hours of generation facilities saw a further decrease, and the national average utilisation hours of generation facilities was 5,221 hours, representing a yearon-year decrease of 203 hours; of which, the average utilisation hours of generation facilities for coal-fired generation was 5,633 hours, representing a year-on-year decrease of 233 hours, indicating that the shortfall in supply of power had been alleviated.

In terms of policy, in 2006, the NDRC initiated the second round of linking coal price with power tariff and adjusted the on-grid tariff upwards, thus alleviating the pressure on power generation cost as a result of the rise in coal price. In addition, the State introduce further directives in respect of environmental protection and required that newly added generation units should also come with FGD facilities. Preferential treatment for on-grid tariff was offered as an incentive for applying such FGD facilities.

In 2006, the supply and demand of power was generally balanced with the shortfall in supply of power being markedly alleviated, though the supply for certain regions remained tight. The power supply in Eastern China, Northen China, the northwest and northeast was generally sufficient, whereas the power supply in Central China remained limited seasonally, and remained limited in the southern regions of China. facilities in 2007 will continue to decrease to 4,900 – 5,000 hours, or about 220 – 320 hours. Of this the utilisation hours for coal-fired units will decrease to 5,200 – 5,300 hours, or about 330 – 430 hours, resulting in the total national supply and demand becoming more balanced.

In terms of policy, it is estimated that with the rise in coal price, in 2007, the NDRC will once again increase the power tariff. In addition, the power industry will implement the policy of preferring large enterprises over the small enterprises for energy conservation and reduction of emission, by making efforts to shut down small coal-fired generation units, reducing energy consumption and emission of pollutants. From 2007 to 2010, China plans to reduce small coal-fired generation units by over 50 million kw and reduce the energy consumption per unit of GDP and the emission of key pollutants by 20% and 10% respectively. Moreover, the State will be implementing its policy on optimizing the distribution of power generation. In regions where the policy is tentatively applied, the utilisation hours of generation units with large capacities and high parameters will be maintained or come down slightly, whereas generation units with small capacities and low parameters, especially the fuel-fixed generation units, will be subject to rigorous tests.

It is estimated that in 2007, the power supply and demand will be generally balanced, and the national average utilisation hours of generation facilities will see a marked decrease. The supply will only be limited in certain regions or at certain times in eastern, northern and southern regions of China.