This section of the prospectus contains information relating to China, the PRC electricity generation industry, the PRC natural gas power industry, the PRC wind power industry and the global wind power industry. Certain information contained within has been derived from various official and unofficial sources, including, without limitation, information obtained from the National Bureau of Statistics of China, China Electricity Council, WWEA, GWEC, CWEA, Beijing Electric Power Industry Association, EIA and HydroChina Corporation. None of the reports cited in the prospectus was commissioned by the Company or its connected persons and/or the Joint Sponsors.

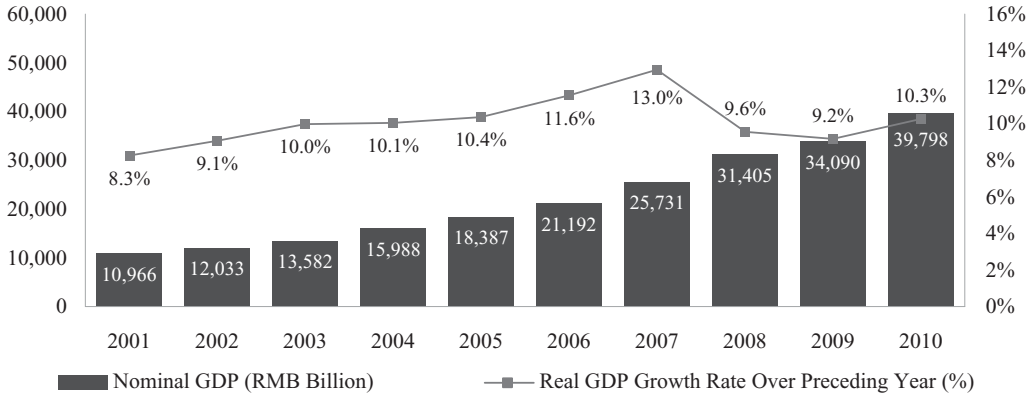
We believe that the sources of this information are appropriate sources for such information and have exercised reasonable care in extracting, compiling and reproducing such information from various official and unofficial sources and we have no reason to believe that such information is false or misleading or that any fact has been omitted that would render such information false or misleading. No independent verification has been carried out on such information and statistics by us, the Joint Global Coordinators, the Joint Sponsors, the Joint Bookrunners, the Underwriters, their respective directors and advisers or any other party involved in the Global Offering. We, the Joint Global Coordinators, the Joint Sponsors, the Joint Bookrunners, the Underwriters, their respective directors and advisers or any other party involved in the Global Offering make no representation as to the accuracy of such information and statistics.

THE PRC ECONOMY

The PRC is one of the fastest growing economies in the world. From 2001 to 2010, the nominal GDP in the PRC grew from approximately RMB10,966 billion to RMB39,798 billion at a CAGR of 15.4%, making the PRC one of the fastest growing economies globally. Since early 2008, the global financial markets have been affected by a general slowdown of economic growth both in the United States and globally, substantial volatility in equity securities markets, and volatility and tightening of liquidity in credit markets. However, partially due to the PRC Government's economic stimulus measures in the amount of approximately RMB4 trillion, the PRC economy maintained real GDP growth rates of 9.6% in 2008, 9.2% in 2009, and 10.3% in 2010.

The following table sets forth the nominal GDP and real GDP growth rates in the PRC for the periods indicated:

Nominal GDP and real GDP growth rates



Source: National Bureau of Statistics of China

THE BEIJING ECONOMY

Beijing Municipality is the political, cultural and economic center of China. According to the China Statistical Summary 2010, as of December 31, 2009, Beijing Municipality had a population of over 17.6 million, and ranked 13th in terms of GDP per region and ranked 2nd in terms of Gross Regional Product per capita among all regions in China in 2009.

The table below sets forth the Gross Regional Product per capita for the top 10 regions in China in 2009.

Regions	2009 Per capita GDP per region
	(RMB)
Shanghai	78,225
Beijing	**68,788**
Tianjin	62,403
Zhejiang	44,335
Jiangsu	44,232
Guangdong	40,748
Inner Mongolia	40,225
Shandong	35,796
Liaoning	34,898

Source: China Statistical Summary 2010

THE PRC ELECTRICITY GENERATION INDUSTRY

Historical Development of the PRC's Electricity Generation Industry

In January 1997, the State Power Corporation (國家電力公司) was established to take ownership of state-owned power generation assets and virtually all of the high voltage power transmission grids and local electricity distribution networks in the PRC. The State Power Corporation (國家電力公司) was responsible for the investment, development, construction, management, operation and ownership of power plants, the inter-connections of

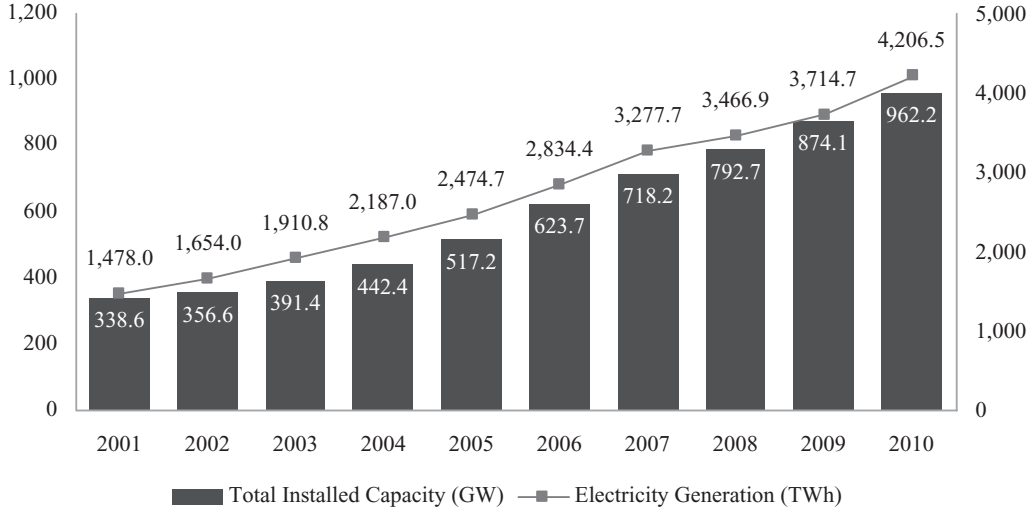
interprovincial and interregional electricity grids, and the transmission of electricity across regions.

As a result of further restructuring of the PRC electricity industry, in December 2002, the State Power Corporation (國家電力公司) was reorganized into five large independent power generation groups, and two major power grid companies, namely the State Grid Corporation of China ("State Grid") and the China Southern Power Grid Co., Ltd. (中國南方電網公司, "Southern Grid"). The State Grid manages the Tibet Power Grid (西藏電網), and also owns and manages five regional power grid companies, which in turn own and operate the interprovincial high voltage power transmission grids and local power distribution networks in 24 provinces (regions) in the PRC. Southern Grid owns and manages interprovincial high voltage power transmission grids and local power distribution networks in five provinces (regions) including Guangdong, Guizhou, Yunnan and Hainan provinces, and Guangxi Zhuang Autonomous Region. In addition, Inner Mongolia Power (Group) Co., Ltd. (內蒙古電力（集團）有限責任公司) operates the power grid in West Inner Mongolia.

Pursuant to the reform of the electric power industry, the SERC was established under the State Council in 2002 to act as a new regulator of the electric power industry. The main responsibilities of the SERC include administering electric power business permits, monitoring the quality and standard of power plant production, ensuring fair competition in the electric power industry and handling electric power market disputes.

Electricity Supply in the PRC

The electricity generation industry in the PRC has experienced significant growth driven by strong demand. From 2001 to 2010, electricity generation in the PRC has recorded a CAGR of approximately 12.3%, which was higher than the CAGR of the real GDP of the PRC of 10.4% in the same period. As at December 31, 2010, according to the SERC, the PRC had the second highest total installed capacity globally. The following table sets forth data in connection with the total installed capacity and the total electricity generation in the PRC for the periods indicated:



Sources: 2001-2008 total installed capacity numbers are taken from China Electric Power Year Book, 2009-2010 total installed capacity numbers are taken from China Electricity Council, and electricity generation figures are taken from National Bureau of Statistics of China

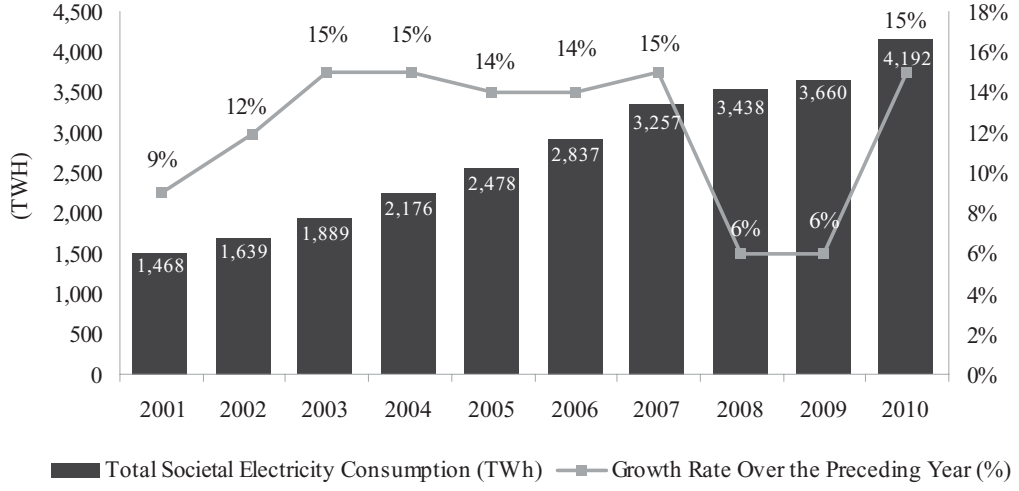
The following table summarizes the electricity generation by region in the PRC from 2008 to 2010.

	(TWh)		
Region	**2008**	**2009**	**2010**
Beijing	25	25	27
Tianjin	40	41	56
Hebei	160	176	206
Shanxi	179	187	215
Inner Mongolia	206	225	261
Liaoning	114	119	134
Jilin	53	55	66
Heilongjiang	74	73	79
Shanghai	80	78	94
Jiangsu	289	298	350
Zhejiang	213	225	257
Anhui	110	133	146
Fujian	109	117	136
Jiangxi	49	52	64
Shandong	270	287	309
Henan	197	207	228
Hubei	175	180	202
Hunan	85	95	110
Guangdong	268	267	316
Guangxi	86	91	103
Hainan	12	14	16
Chongqing	40	43	49
Sichuan	124	145	170
Guizhou	118	134	132
Yunnan	104	117	136
Tibet	2	2	2
Shaanxi	77	84	103
Gansu	69	70	87
Qinghai	32	38	47
Ningxia	46	47	60
Xinjiang	48	55	65
Total	3,451	3,681	4,228

Source: China Electricity Council

Electricity Consumption in the PRC

Electricity consumption in the PRC experienced significant growth in recent years driven by strong GDP growth, significant increases in industrial output and fixed asset investment. The following table sets forth the volume and percentage growth rates of electricity consumption in the PRC for the periods indicated.

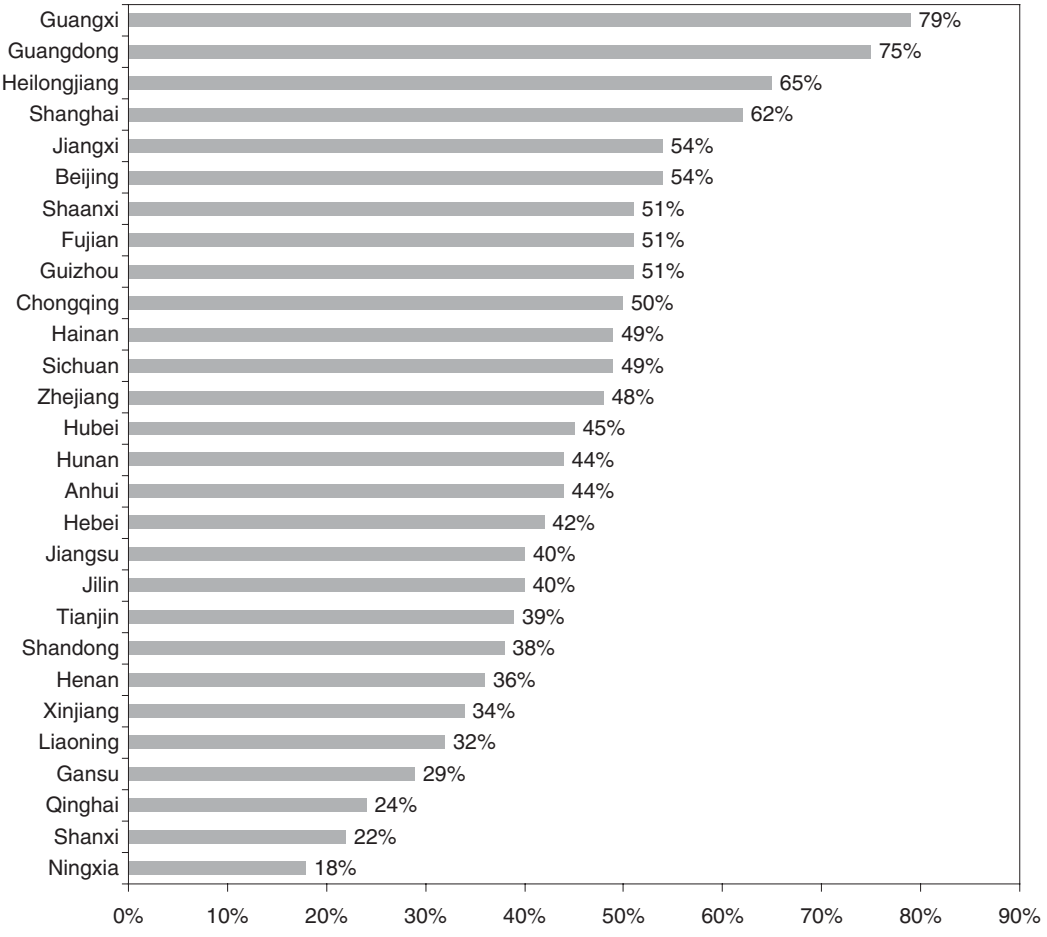


Sources: 2000-2009 total societal electricity consumption figures are taken from China Electric Power Year Book, and 2010 total societal electricity consumption figure is taken from China Electricity Council

Consumption patterns for electricity

Typically, the daily power load experienced by a particular region is not static, but changes during the day depending on actual electricity usage. While industrial electricity consumption can be planned in advance, residential and commercial electricity consumption normally increases during office hours and during the hours around 8 PM, and falls in the late evenings and early mornings. As a result, with the expansion of residential and commercial electricity consumption portion, it is expected that for regions with greater residential and commercial presence, the actual power load would show a more pronounced daily fluctuation in the form of a greater gap between daily peak and trough consumption.

As a result of the PRC's rapid urbanization process, residential and commercial power consumption as a percentage of total power consumption has been expanding. In fact, in regions with a relatively lower heavy industry presence, such as Beijing, the gap between the peak and trough consumption is significantly larger than that of regions with a larger heavy industry presence, such as Ningxia, Shanxi province and Qinghai province. The following chart sets forth the maximum gap between the peak and trough power consumption for the regions indicated in 2008.



Source: China Power Industry Statistic Data Analysis 2009

The increase in the peak load in a region, such as in Beijing, requires power plants with the ability to cope with frequent power start-ups and to satisfy ad-hoc demand for electricity dispatch. As such, the development of gas-fired power plants is expected to increase in areas such as Beijing.

Electricity Generation Structure in the PRC

In China, coal has been the most widely used type of fuel for the generation of electricity because of the abundant domestic supply of coal reserves and its lower cost compared to other fuel types. However, there is strong evidence to suggest that coal-fired power generation generates significant amount of pollution. Therefore, the PRC government has been diversifying modes of electricity generation by encouraging the development of power generation facilities using renewable and clean energy sources.

The following table sets forth the total installed capacity and percentage for each type of energy source in the PRC during 2010.

Fuel Type	For the year ended December 31, 2010	
	Installed Capacity by Fuel Type	Percentage to Total Installed Capacity
	(GW)	(%)
Thermal[1]	706.63	73.4%
Hydro	213.40	22.2%
Wind	31.07	3.2%
Nuclear	10.82	1.1%
Others[2]	0.27	0.0%
Total	962.19	100%

Source: *2010 Power Industry Statistics Express (全國電力工業統計快報(2010年))*

Notes:

(1) Thermal includes (but not limited to) coal-fired and gas-fired power

(2) Others include solar power

The Reform Plan for the PRC Electricity Generation Structure

In order to deal with the emerging energy shortage and in response to rising environmental concerns, the PRC government set forth a number of policies and in its Eleventh Five Year Plan for National Economy and Social Development in 2005 (國民經濟和社會發展第十一個五年規劃, "Eleventh Five Year Plan"), with the purpose to save energy and protect the environment, including setting a target to reduce the energy consumption per unit of GDP in the PRC by 20% by 2010, and a significant expansion of clean and renewable energy sources, such as wind, hydroelectric, natural gas, nuclear, other renewable sources and cogeneration methods.

The table below sets forth the Eleventh Five Year Plan's target increase in installed capacity for the power industry in China by fuel type.

Fuel Type	Eleventh Five Year Plan	
	Total Incremental Installed Capacity by Fuel Type	Percentage to Total Incremental Installed Capacity
	(GW)	(%)
Coal	87.4	53.0
Hydro	45.1	27.3
Gas	13.6	8.3
Nuclear	4.0	2.4
New Energy[1]	1.0	0.6
Other	13.9	8.4
Total	165.0	100.0

Source: *Power Industry Eleventh Five Year Plan and 2020 Development Plan*

Note:

(1) According to China National Committee for Terms in Sciences and Technologies, new energy primarily includes wind power, solar power, biomass power and ocean energy, as well as other non-fossil-fuel-based energy sources.

The Sale and Dispatch of Electricity in the PRC

The power industry in the PRC is a highly regulated industry. Under the Electric Power Law of the PRC (《中華人民共和國電力法》), which became effective on April 1, 1996, the State encourages electricity generation companies to be connected to the power grid. Currently, the majority of electricity generated in the PRC is dispatched by power grid companies. Each electricity generation company will communicate with respective power grid companies on the quantity of electricity that it generates to be transmitted to the power grid.

Currently, China's nationwide power grid is primarily managed by two power grid companies, namely State Grid and Southern Grid, each of which owns or manages a number of regional power grid companies that are responsible for the sale, distribution and transmission of electricity in their respective regions. Electricity generated by individual power plants is sold to the regional power grid companies to which they are connected, pursuant to power dispatch agreements. The regional power grid companies then sell the electricity to end customers, including residential, commercial and industrial customers.

In 1993, the State Council issued the Regulations on the Administration of Electric Power Dispatch to Networks and Grids ("Dispatch Regulations") (《電網調度管理條例》), according to which, electricity dispatch centers, which are subsidiaries of power grid companies, have been established at various levels (national, inter-provincial, provincial, municipality and county) to manage the power generation resources within their respective region in China. Dispatch centers determine the amount of electricity to be produced by each power plant within their jurisdiction to help ensure a cost-efficient and reliable power supply system by managing the mix of types of fuel and technology being used.

According to the Dispatch Regulations, dispatching centers must carry out the output plan made by the State. Each year the NDRC issues a power supply plan for the entire nation for the following year. Based on the national plan, provincial offices of the NDRC then issue annual planned output guidelines to each of the power plants operating within their respective regions and approve new projects accordingly. The plan issued by provincial offices of the NDRC sets forth the utilization hour targets of different types of power plants. In practice, dispatch centers of power grid companies may adjust the daily planned output allocated to power plants based on the actual electricity demand at the time, the stability of the power grid (and other power providers) and weather conditions. Dispatch centers monitor power generation companies closely to ensure that they are able to fulfill the planned output originally allocated to them each year.

On-grid Tariff

Power grid companies enter into power purchase agreements with power generation companies to purchase their electricity. The on-grid tariff is the tariff that grid companies pay to power generation companies. In general, the on-grid tariffs for planned output and excess output are subject to review and approval processes involving the relevant pricing authorities. Each year, the relevant provincial government agency forecasts the electricity demand in the region, based on the projected economic growth, to determine the total electricity output. Pursuant to such estimates, each power generation company and the power purchaser reach an agreement on the amount of planned output and excess output. Additional output is subject to the competitive bidding of on-grid tariffs.

The PRC Electric Power Law (《中華人民共和國電力法》) sets out the general principles for determining on-grid tariffs in China. Under the PRC Electric Power Law (《中華人民共和國電力法》), the on-grid tariffs granted to a power generation company are formulated to provide reasonable compensation for costs as well as a reasonable return on investment.

In April 2001, a new on-grid tariff setting mechanism for planned output was issued. This new mechanism is based on the operating term of a power plant as well as the average cost of technologically advanced power generation unit that was constructed during the same

period within the same provincial grid network. In March 2005, the NDRC issued new legislation with respect to the on-grid tariff setting mechanism. Under this new legislation, the on-grid tariff for individual power plant is determined by the provincial price bureaus based on various factors, including the number of years such power plant has been in operation. The rule also seeks to provide reasonable compensation and return to IPPs. In particular, reasonable return is determined by adding a certain premium to the long-term government bond yield.

In order to reduce environmental pollution, the NDRC has also provided incentives for IPPs to install desulphurization equipment.

In 2007, despite further increases in coal price, due to the PRC government's intention to suppress inflation, there was no substantial increase of on-grid tariffs and retail power tariffs, which are the tariffs consumers pay to grid companies.

On July 2, 2008, the NDRC announced the details of an on-grid tariff increase by the provincial authorities. The national average on-grid tariff increased ranging from RMB17 to 18 per MWh. On August 19, 2008, the NDRC announced a further overall increase in on-grid tariff ranging from RMB10 to 25 per MWh, averaging RMB20 per MWh (including 17% VAT), without adjusting the retail tariffs.

On November 20, 2009, the NDRC announced plans to adjust tariff for thermal power. Effective from November 20, 2009, the average national retail tariff payable by non-residential users would increase, while the scale of adjustment for each individual region and industry would vary. According to the announcement made available on the NDRC's website, the retail tariff increase is intended to alleviate profitability margin pressure on grid companies which resulted when the national average on-grid tariff was increased in 2008 by an average of RMB20 per MWh, while the retail tariff was not correspondingly adjusted. In addition, the NDRC also announced plans to increase the benchmark coal-fired power on-grid tariffs in nine provinces in China by RMB2 to 15 per MWh and decrease the on-grid tariffs in seven provinces by RMB3 to 9 per MWh. As part of the NDRC's tariff adjustment plans, the NDRC also plans to increase the tariff surcharges related to on-grid tariffs of renewable energy sources and the desulfurization equipment-related on-grid tariff subsidies in light of increasing expenses associated with installation and operation of desulfurization equipment.

On May 27, 2011, the NDRC announced a further tariff increase in various provinces and municipalities in China to cope with the coal price increase. Accordingly, the on-grid tariffs for thermal power would increase in these regions while the scope of adjustment varies by region, ranging from RMB10 per MWh to RMB36 per MWh.

Since 1998, the PRC government has begun to experiment with conducting electricity sales through a competitive bidding process in several provinces. For conventional thermal power plants, electricity produced in excess of the planned output will be sold to the grid on a competitive basis against other plants according to a mechanism known as power pooling. The power pooling concept has been piloted in eastern China, northeastern China and southern China. Each day, power plants submit generation capacity and prices for every 15-minute slot of the following day. The grid companies will then select those plants with the lowest prices and the final on-grid tariff will be the market clearing price. The power pooling process typically results in a lower selling price than the tariffs received from the electricity dispatched as part of the planned output.

In addition, in line with its commitment to energy saving and emission reduction, the Chinese government has implemented measures against the industries with high energy consumption by setting forth a punitive electricity pricing system, in order to limit the electricity use of high energy consumption and high emission enterprises.

In 2006, the NDRC issued the Opinion on Consummating the Differential Electricity Pricing Policy (《關於完善差別電價政策的意見》), which imposed differential electricity price on the top eight high energy consumption industries, such as electrolytic aluminum, cement, and steel. Accordingly, enterprises within the scope of the "restricted" category were subject to an RMB 0.05 yuan per kWh price premium, whereas that for the "elimination" category was RMB 0.20 yuan per kWh. Additionally, a punitive electricity price was imposed on enterprises whose per product energy consumption exceeds its provided standard.

In 2010, the NDRC, SERC and Energy Bureau (能源局) jointly implemented the Circular regarding the Issues on the Cancellation of Preferential Electricity Prices for High Energy Consumption Enterprises (《關於清理對高耗能企業優惠電價等問題的通知》), which further elevated the electricity price surcharge to RMB0.10 yuan per kWh and RMB0.30 yuan per kWh for enterprises within the "restricted" and "elimination" category, respectively. Moreover, any preferential electricity pricing policy for high energy consumption enterprises was thereby cancelled and prohibited in future.

On-grid Tariff for Renewable Energies

The Renewable Energy Law promulgated by the PRC Government on February 28, 2005 and as amended on December 26, 2009 has provided the basic principles for the on-grid tariff for power project utilizing renewable energy sources, such as wind power, solar power, hydropower, bio-mass power, geothermal power and ocean power. Under the Renewable Energy Law, the on-grid tariff for power project utilizing renewable energy sources shall be determined and published by the relevant department of the State Council taking into account of various factors, including the economic conditions of different geographic areas, the types of renewable sources being utilized. Such tariff is also subject to adjustment from time to time by such department according to the development of the relevant technology. Moreover, if a public bidding is held, the on-grid tariff for such power projects shall be determined in accordance with the bidding results, but in no case higher than the above published on-grid tariff of power projects utilizing the same type of renewable energy.

In 2006, the NDRC set up a pricing mechanism for the on-grid tariff of electricity generated from different renewable sources. The Trial Measure for the Renewable Resources Tariff and Cost Sharing (《可再生能源發電價格和費用分攤管理試行辦法》) promulgated by the NDRC stipulates the following pricing rules: (1) for wind power electricity, the on-grid tariff shall be set by government guided price, which is determined in the form of bidding; (2) for bio-mass power electricity, if the on-grid tariff follows the government guided price, the benchmark on-grid tariff shall be set by the price regulatory authority of the State Council in accordance with the applicable location, which is calculated by a benchmark on-grid tariff for local coal-fired power plants, added by a government subsidy of RMB0.25 Yuan/kWh, which lasts for 15 years since the beginning of operation, and, if the investors of a project were set by bidding, such project shall follow the government guided price but not higher than the benchmark on-grid tariff in the applicable location; (3) for solar, ocean and geothermal power electricity,

the on-grid tariff shall be set by the government, calculated under the principle of reasonable cost plus reasonable profit; and (4) for hydropower electricity, the pricing mechanism remains unchanged.

On January 11, 2007, the NDRC has promulgated the Temporary Measures on the Regulation of Additional Income of Renewable Energy Power Price (《可再生能源電價附加收人調配暫行辦法》), which requires provincial power grid companies to settle the on-grid tariff with power plants using renewable energy sources. Accordingly, the power grid companies shall settle all electricity power charge and subsidies on a monthly basis according to their respective electricity purchase agreements, calculated by the actual quantity of electricity transmitted to the power grid and the on-grid tariff approved by price regulatory authority of the State Council.

On July 20, 2009, NDRC promulgated the Circular Regarding the Furtherance of On-grid Pricing Policy of Wind Power (《關於完善風力發電上網電價政策的通知》) to further specify the pricing mechanism of wind power electricity. Accordingly, China is categorized into four wind resource zones, and all onshore wind power electricity projects in the same zone shall apply the same standard of benchmark on-grid tariff (VAT inclusive) (RMB0.51/kWh, RMB0.54/kWh, RMB0.58/kWh or RMB0.61/kWh, respectively). For wind farms spanning across more than one province or region, in principle the same on-grid tariff applies, but the higher benchmark on-grid tariff should be applicable. Moreover, the new on-grid tariff will continue to be subsidized by on-grid tariff premiums enjoyed by renewable power projects in general. In the meantime, it is provided that the on-grid tariffs shall remain unchanged under prior regulations for the wind power projects approved before August 1, 2009, when the regulation becomes effective. For more details regarding the new pricing policy and the four wind resource zones, please refer to the section "Regulatory Overview—III. Regulatory Requirements Relating to Renewable Energies—4. Tariff and Cost Sharing Program".

THE FAVORABLE POLICIES TO CLEAN AND RENEWABLE ENERGY INDUSTRY IN CHINA

Perceiving the environmental pollution and driven by the demand for sustainable development, China has been committed to promote utilization of clean and renewable energy to reduce the emissions from electricity generation. According to Circular of the State Council regarding Further Intensifying Efforts Ensuring the Achievement of the Objective of Energy Saving and Emission Reduction for the 11th Five-Year-Plan (《國務院關於進一步加大工作力度確保實現"十一五"節能減排目標的通知》) the PRC government has set a target of cutting carbon dioxide emissions per unit of GDP by 40 to 45 percent by 2020 from the 2005 level. In addition, the PRC Government announced its intention to invest approximately RMB2,000 billion in renewable energy development in Medium to Long Term Development Plan for Renewable Energy (《可再生能源中長期發展規劃》) issued by the NDRC.

The Recommendations from the Chinese Communist Party Central Committee regarding the Formulation of the 12th Five-Year-Plan for National Economy and Social Development (《中共中央關於制定國民經濟和社會發展第十二個五年規劃的建議》) indicate that the PRC government will continue to support the development of clean energy industry in China. Accordingly, during the 12th Five-Year-Plan period, which is from 2011 to 2015, the PRC government will promote the reform of energy production and consumption, with a target to

create a cleaner energy structure in China and speed up the development of new energy. Moreover, the PRC government will enhance the development of power grid constructions during the 12th Five-Year-Plan period, and develop a more technically advanced power grid system in China. As a result, it is expected that our business operations will benefit from the above policy, in terms of both a continued favorable policy to clean and renewable energy business in China, and an expected decrease of the negative impact of grid congestion will have on China's wind power industry in recent years. For more details about favorable policies to renewable energy industry in China, please refer to the sections headed "Regulatory Overview—III. Regulatory Requirements Relating to Renewable Energies".

NATURAL GAS POWER INDUSTRY IN THE PRC

Advantages of Natural Gas Power

Compared to coal, natural gas is considered a cleaner fossil fuel as it produces a smaller amount of pollutants compared to coal. The following table sets forth the emission of air pollutants using various fuel types, based on the same amount of energy generated.

Fossil Fuel Emission Levels—Pounds per Billion Btu of Energy Input

Pollutant	Natural Gas	Oil	Coal
Carbon Dioxide	117,000	164,000	208,000
Carbon Monoxide	40	33	208
Nitrogen Oxides	92	448	457
Sulfur Dioxide	1	1,122	2,591
Particulates	7	84	2,744
Mercury	0.000	0.007	0.016

Source: *EIA*(1)

Note:

(1) The U.S. Energy Information Administration (EIA) is the statistical and analytical agency within the U.S. Department of Energy. According to its website, EIA collects, analyzes, and disseminates energy information to promote sound policy making, efficient markets, and public understanding of energy and its interaction with the economy and the environment.

Moreover, compared to traditional coal-fired power plants, gas-fired power plants are designed to cope with frequent power start-ups, more capable in satisfying ad-hoc demand for electricity dispatch.

PRC Natural Gas-fired Power Industry

According to BP Review(1), consumption of natural gas in the PRC has increased significantly from approximately 24.5 billion m^3 in 2000 to approximately 88.7 billion m^3 in 2009, representing a CAGR of approximately 15.37%. According to the Eleventh Five Year Plan, the NDRC has set the target to increase the proportion of natural gas out of the total fuel consumption to 5.3% in 2010, an increase of 2.5 percentage points compared to 2005. At the same time, the NDRC set the target to decrease the proportion of coal in the total fuel consumption to 66.1% in 2010, a decrease of 3.0 percentage points compared to 2005.

Note:

(1) BP has been annually publishing the BP Statistical Review of World Energy for 58 years and has provided data on world energy markets with statistics taken from government sources and published data. BP Review is one of the most widely respected and authoritative publications in the field of energy economics, used for reference by the media, academia, world governments and energy companies.

According to EIA's estimation published in its International Energy Outlook 2008, the installed gas-fired generating capacity in China is expected to grow at an average annual percent change of 13% from 2005 to 2030.

The Supply of Natural Gas in China

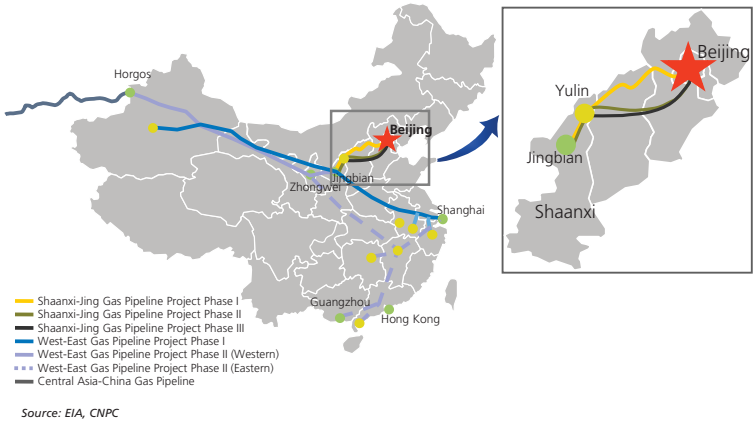
According to BP Review, it is estimated that China had a total of 2.46 trillion m^3 of proven natural gas reserves at the end of 2009, compared with 1.37 trillion m^3 in 1999. China's total gas production has risen to approximately 85.2 billion m^3 in 2009, representing an increase of nearly 238% compared with 10 years ago. Despite the large increase in gas production, China has demonstrated the ability to sustain proven natural gas reserve life at 29-35 years over the past five years.

Existing Major Pipelines

In recent years, China has undertaken the construction of a number of major pipeline projects to support increasing energy consumption. A number of these long-distance pipelines were transnational projects that extended into neighboring countries such as Turkmenistan, Kazakhstan, Uzbekistan and Russia. The following tables set forth the major gas pipelines that have been constructed by China's oil and gas companies in recent years.

Major Gas Pipelines

Project name	Operation from	Total length (km)
Shaanxi-Beijing Gas Pipeline Project Phase I (陝京一線輸氣管線)	1997	1,105
West-East Gas Pipeline Project Phase I (西氣東輸一線工程)	2004	4,000
Zhongxian-Wuhan Natural Gas Pipeline (忠縣-武漢天然氣管線)	2005	1,375
Shaanxi-Beijing Gas Pipeline Project Phase II (陝京二線輸氣管線)	2005	935
Hebei-Nanjing Connection Gas Pipeline (冀寧聯絡輸氣管線)	2005	1,498
Sichuan Gas Pipeline (川氣東送管線)	2009	2,203
Shaanxi-Beijing Gas Pipeline Project Phase III (陝京三線輸氣管線)	2011	896



Source: EIA, CNPC

There are currently two large-scale pipeline projects under construction in China, namely, the West-East Gas Pipeline Project Phase II (西氣東輸二線工程) and the Yulin-Puyang-Jinan Gas Pipeline (榆-濮-濟輸氣管線).

The West-East Gas Pipeline Project (西氣東輸管線工程) is the longest gas pipeline in the PRC. The West-East Gas Pipeline (西氣東輸管線) is constructed and completed in three phases. The West-East Gas Pipeline Phase I (西氣東輸一線工程) was completed in 2004 and was connected to the Shaanxi-Beijing Gas Pipeline (陝京天然氣管線) in 2009, and have been supplying gas to Beijing since 2010. The Phase II of the West-East Gas Pipeline (西氣東輸二線工程) has already reached and been supplying natural gas to Beijing through Shaanxi-Beijing Gas Pipeline Project (陝京天然氣管線工程) since January 2010.

Pricing of Natural Gas

The pricing of natural gas in China has evolved through three stages historically. From 1957 to 1993, the price of natural gas throughout China was unified and was determined and approved by the central government. From 1993 to 2005, the central government determined a price for natural gas as well as a floating price range for companies to use in deciding the actual sale price. In 2005, the NDRC issued a circular entitled Circular on Reforming the Factory Price Pricing Mechanism of Natural Gas and Moderately Increasing the Factory Price of Natural Gas (《國家發展改革委關於改革天然氣出廠價格形成機制及近期適當提高天然氣出廠價格的通知》). Under this circular, the government determines an instructed price for natural gas. When companies determine the final sale price of natural gas, the pricing can be separated into two categories. For natural gas produced from certain gas field, the final price is determined in accordance with the instructed price with a 10% float range. For the remaining gas, the price is determined in accordance with the instructed price; the sale price may not be more than 10% higher than the instructed price, and there is no price floor. Beijing is connected to the Shaanxi-Beijing Gas Pipeline Project (陝京天然氣管線工程), and the natural gas price is determined by NDRC, which has been rising gradually during the recent years. For industrial use city gas, the wellhead price approved by NDRC was RMB1.46 per cubic meter in May 2010.

On-grid Tariff of Gas-fired Power Plants

According to the Provisional Measures for the Administration of On-grid Tariff (上網電價管理暫行辦法) issued by the NDRC in 2005, the on-grid tariffs for gas-fired power plants are determined by relevant governmental pricing bureaus. These tariffs should reflect the production costs plus a reasonable investment return. Consideration factors used by the pricing bureaus include fuel type, cost structure, economic life of the facilities and applicable tax rates.

Gas-fired power plants are generally entitled to a higher on-grid tariff than coal-fired power plants because of the different cost structures and the government policies to stimulate the use of fuels that are more ecologically friendly. Relevant governmental pricing bureaus retain the discretion to adjust the tariff in the occurrence of material changes, such as a dramatic fluctuation in the price of natural gas. Please see the section headed “Regulatory Overview—III. Regulatory Requirements relating to Renewable Energies” for further details.

Gas-fired Heat and Power Cogeneration Model

As northern China has a huge demand for heat energy during the winters, many power plants adopt the production model called heat and power cogeneration. Under such model, part of the steam from the power generator (usually about 350°C) is further utilized to heat the water in the city's heat supply network to supply heat energy to residential and industrial end-users. Alternatively, the steam can be sold to industrial end-users directly, instead of being emitted into the air. Because heat and energy cogeneration can further utilize the waste steam, cogeneration plants can achieve a higher energy utilization rate than non-cogeneration power plants.

Gas-fired cogeneration can achieve a higher power generation efficiency (above 50%), compared to about 30% for traditional coal-fired power generation, thereby achieving a high level of equipment utilization and efficiency. Moreover, compared to coal-fired power plants, gas-fired cogeneration plant has a less complicated engineering structure and does not need room for waste ashes storage, generally occupying only 30% to 40% of the land usually required for a coal-fired power plant.

The development of cogeneration power plants are particularly supported by the government. For instance, the Circular of the Beijing People's Government Approving and Forwarding The Opinions on Accelerating the Structuring of Beijing's Safe, Efficient and Low Carbon Urban Heating System by the NDRC Beijing Branch (《北京市人民政府批轉市發展改革委關於加快構建本市安全高效低碳城市供熱體系有關意見的通知》) issued by the Beijing People's Government specifically emphasizes the development of cogeneration power plants in Beijing in future. As at the end of the Eleventh Five-year Plan period, the gas-fired cogeneration plants in Beijing had a total installed capacity of approximately 2,000 MW, among top cities in China.

Beijing Natural Gas Power and Heat Energy Supply Industry

As the political, economic and cultural centre in China, Beijing has very strict standards of energy stability, environmental protection, energy saving and emission reduction, so as to safeguard and improve energy efficiency, air quality and living standards.

Given its environmentally friendliness, capability to satisfy ad hoc demand, and the city's requirement for heat energy in winters, natural gas is well suited to Beijing's energy needs. According to the Circular of the Beijing People's Government Approving and Forwarding The Opinions on Accelerating the Structuring of Beijing's Safe, Efficient and Low Carbon Urban Heating System by the NDRC Beijing Branch (《北京市人民政府批轉市發展改革委關於加快構建本市安全高效低碳城市供熱體系有關意見的通知》) and Beijing's Energy Development Achievements during the Eleventh Five-year Plan Period (《北京市"'十一五'時期能源發展成效"情況介紹》), Beijing has set a target to increase the natural gas usage to 20% of all energy sources by 2015, and to over 25% by 2020 from the 2009 level of 12.6%. Beijing is planning to develop and construct four major heat and power centers, i.e. cogeneration plants, in the northeast, northwest, southeast and southwest of the Beijing metropolitan area respectively. The total installed capacity of gas-fired cogeneration plants around the Beijing metropolitan area is expected to increase from 1,960 MW as at August 31, 2010 to 6,860 MW by 2015.

In addition, according to Notice of Temporary Measures on Management of Subsidies Funding to Beijing Urban Public Use Enterprises (《關於印發北京市城市公用企業補貼資金使用管理暫行辦法的通知》), natural gas-fired power business is entitled to government subsidies as both electricity and heat energy are regarded as part of urban public use products. The PRC government provides relevant financial subsidies through the policy of feed-in tariffs, which are higher than the on-grid tariff for electricity generated by natural gas-fired power plants. Please see the section headed "Regulatory Overview—III. Regulatory Requirements Relating to Renewable Energies—5. Designated-Purpose-Subsidy" for further details.

Currently, Beijing Gas Group Co., Ltd. (北京市燃氣集團有限責任公司), a state-owned enterprise, is operating as the gas supply agent and is responsible for gas pipeline operation as well as sale and distribution of gas in Beijing.

Electricity Supply and Demand in Beijing

In line with the rapid economic development and the rising living standards in Beijing, the annual electricity generation volume has been increased significantly. However, in the meantime, Beijing's local power sources cannot satisfy the large demand of electricity in Beijing. According to China National Power Industry Statistical Bulletin 2009 (《全國電力工業統計快報2009年》), in 2009, the total power generation in Beijing was approximately 24.4 TWh, while the electricity consumption was approximately 73.6 TWh, the gap of which was transmitted from power sources outside Beijing, which shows a strong demand for additional local power sources in the near future.

WIND POWER INDUSTRY

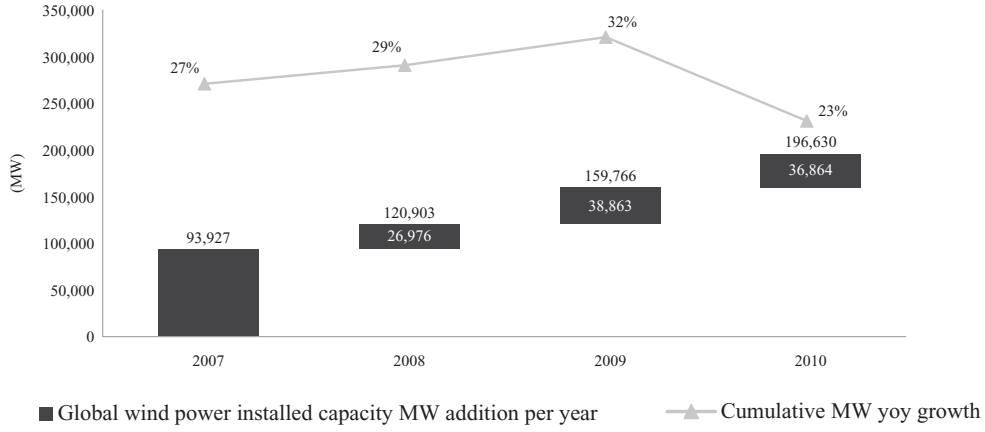
Advantages of Wind Power

Wind is the fastest growing renewable energy sector in the world due to its cost advantages, resource availability and the maturity of the technology in comparison to other types of renewable energy sectors.

Global Wind Power Demand and Installed Capacity

According to the World Wind Energy Association (WWEA)[1], global wind installed capacity grew at a CAGR of approximately 27.9% from 2007 through 2010, bringing cumulative installed capacity from 93,927 MW as at December 31, 2007 to 196,630 MW as at December 31, 2010. The following table sets forth the global wind power installed capacity in the period indicated as well as its cumulative installed capacity growth rate from 2007 to 2010.

Global wind power market installed capacity and cumulative installed capacity growth rate for 2007 – 2010



Source: World Wind Energy Report 2010 (World Wind Energy Association)

Major Global Wind Power Markets

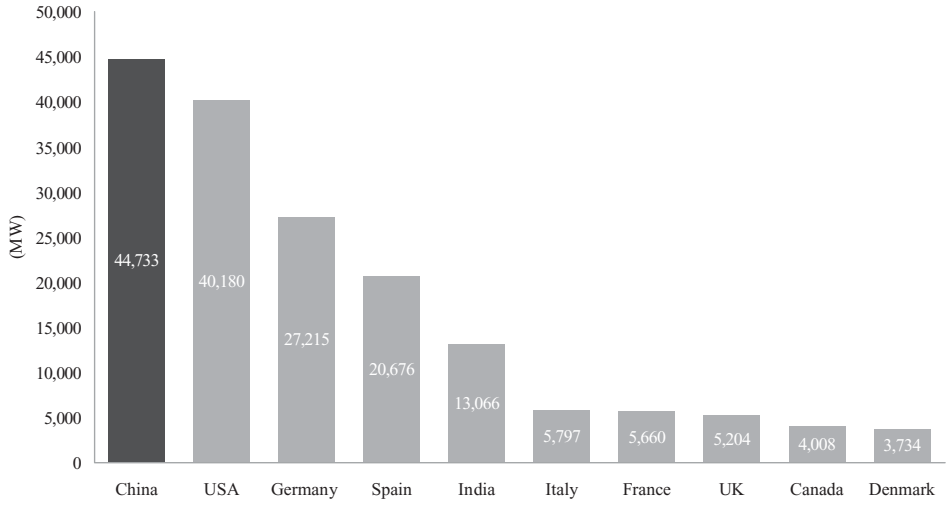
According to WWEA, Europe, Asia and North America are the top three wind power markets in terms of total capacity, accounting for 43.7%, 31.1% and 22.5% of total global capacity respectively in 2010.

Note:

(1) The World Wind Energy Association (WWEA) is a non-profit organization which works for a world energy system fully based on the various renewable energy technologies, with wind energy as one cornerstone. WWEA acts as a communication platform for all wind energy actors worldwide, WWEA advises national governments and international organizations on favorable polices for wind energy implementation and WWEA enhances international technology transfer, a key in the accelerated dissemination of this clean technology.

The following table sets forth the world's top 10 country markets for wind power in terms of installed capacity in 2010.

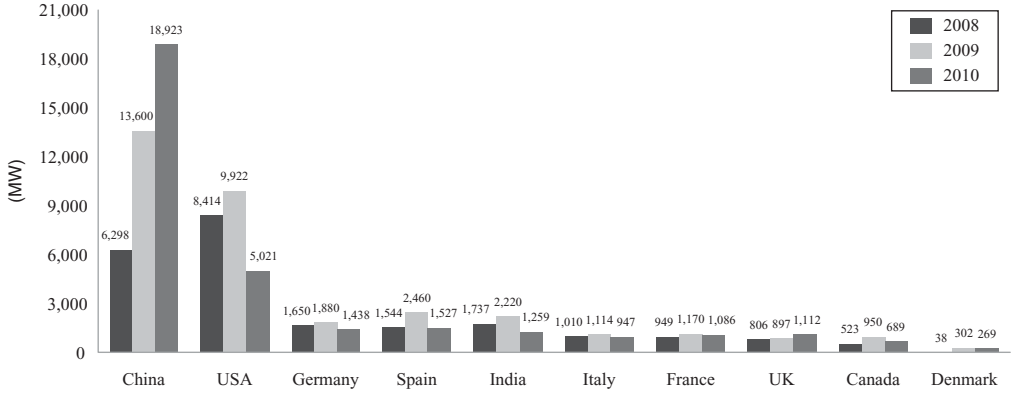
Top 10 country markets for wind power in terms of installed capacity in 2010



Source: World Wind Energy Report 2010 (World Wind Energy Association)

The wind power market has grown rapidly in recent years. The following table sets forth the increases in installed capacity of the Top 10 country markets in 2008, 2009 and 2010.

Newly installed wind power capacity of the Top 10 countries



Source: World Wind Energy Report 2010 (World Wind Energy Association)

According to Global Wind Energy Council (GWEC)[1], the global wind power industry is expected to grow continuously with the installed capacity increasing at a CAGR of 17.4% between 2011 and 2015, reaching 448.8 GW in 2015. The following table sets forth GWEC's global and regional wind power capacity estimates from 2011 through 2015.

Region (GW)	2011E	2012E	2013E	2014E	2015E	11E-15E CAGR
Europe	96.1	107.1	119.1	132.1	146.1	11.0%
North America	52.2	61.2	71.2	82.2	94.2	15.9%
Asia	79.1	101.1	124.1	148.6	174.6	21.9%
Latin America	3.5	6.0	9.5	14.0	19.0	52.6%
Pacific	3.1	3.9	4.9	5.9	7.4	24.3%
Middle East and Africa	1.9	2.7	3.9	5.5	7.5	41.0%
Total	235.9	282.0	332.7	388.3	448.8	17.4%

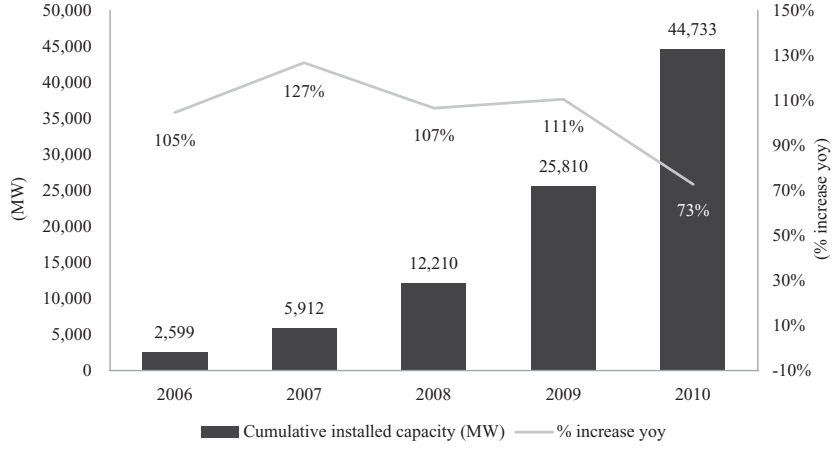
Source: Global Wind Report 2010 (Global Wind Energy Council)

Wind Power Industry in PRC

The wind power industry in the PRC has grown rapidly in recent years. According to WWEA, China accounted for approximately 22.8% of the global cumulative installed capacity of 196,630 MW and was the largest wind power market by installed capacity at the end of 2010. According to WWEA, as at December 31, 2010, the newly installed capacity of wind power in China reached 18,923 MW, increasing its cumulative installed capacity to 44,733 MW, ranking the first globally in terms of both newly installed capacity and cumulative installed capacity.

The following table sets out the installed wind power capacity for the periods indicated in China.

China wind power industry installed capacity (2006 – 2010)



Source: World Wind Energy Report 2010 (World Wind Energy Association)

Note:

(1) Global Wind Energy Council (GWEC) was established in 2005 to provide a credible and representative forum for the entire wind energy sector at the international level. The members of GWEC are both national wind industry associations and companies working in the industry.

The PRC Government has also adopted several preferential policies to encourage the development of the wind power industry. In August 2007, The NDRC issued its Medium and Long-Term Development Plan for Renewable Energy (《可再生能源中長期發展規劃》). This plan sets out the targets for renewable energies up to 2020, with a 10% contribution to total energy consumption by 2010 and 15% by 2020. This plan also sets a target for wind energy capacity to reach 30 GW in 2020. Additionally, this plan includes a "mandated market share" policy, which sets targets for electricity from non-hydro renewable sources at 1% by 2010 and 3% by 2020. As electricity generated from photovoltaic and biomass is likely to be modest given its current rate of development, achievement of this aggressive target will likely rely heavily on wind power.

The Chinese wind power market has a significant potential for growth. According to Chinese Wind Power Industry Development and Future Trends Research by the Chinese Wind Energy Association (CWEA)(1), China's installed wind power capacity is expected to increase to 165 GW under conservative estimates, 248 GW under moderate estimates and 345 GW under optimistic estimates by 2020.

China has abundant wind energy resources with significant development potential. According to the Medium and Long-Term Development Plan for Renewable Energy, the technically exploitable wind resources on land amount to 300 GW. Including offshore wind resources, the total exploitable wind resources could reach 1000 GW.

The Medium and Long-Term Development Plan for Renewable Energy (《可再生能源中長期發展規劃》) identifies Northern China and the South-Eastern coastal areas as having high potential for wind energy development in the PRC. Additionally, some parts of inland China having lakes or other special topographic conditions also have abundant wind energy resources. The most abundant wind resources in Northern China include the regions of Inner Mongolia, Jilin, Liaoning, Heilongjiang, Gansu, Ningxia, Xinjiang and Hebei. The most abundant wind resources along coastal areas and offshore are found in Shandong, Jiangsu, Zhejiang, Fujian, Guangdong, Guangxi and Hainan.

The following table sets forth the estimated wind resources in selected provinces in the PRC in 2009.

China's Wind Resources in Selected Provinces

Province	Technically exploitable wind resources
	(GW)
Inner Mongolia	≈150
Xinjiang	>100
Gansu	>100
Hebei	>40
Jiangsu	>10
Jilin	>10

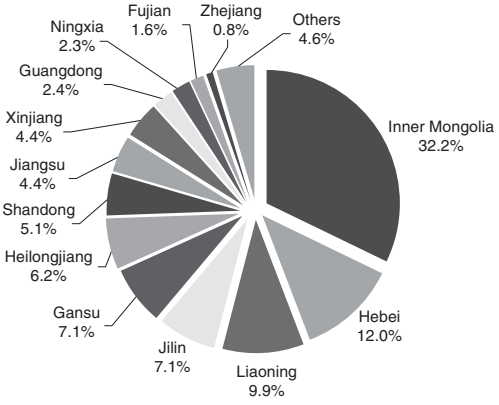
Source: Chinese Renewable Energy Industries Association

Note:

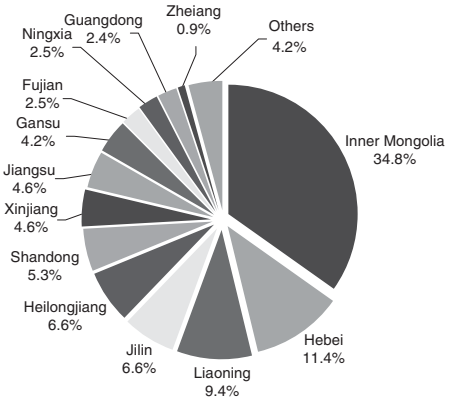
(1) Chinese Wind Energy Association (CWEA) was established in 1981 and is a non-profit organization officially registered with China's Ministry of Civil Affairs and was approved by China's Ministry of Science and Technology and Chinese Association for Science and Technology in 2002. CWEA is a member of World Wind Energy Association.

The uneven distribution of wind resources in China has influenced where wind power capacity will be installed in each province. Areas with abundant wind resources are largely located in coastal and offshore areas and Northern China. As shown in the table below, Inner Mongolia, Hebei and Liaoning are the most developed areas in terms of wind power production. The following tables set forth China's wind power installed capacity by province as a percentage of the nationwide total as at December 31, 2010, and China's wind power gross power generation by province as a percentage of the nationwide total in 2010.

Wind power installed capacity in the PRC by province in 2010



Wind power gross power generation in the PRC by province in 2010



Source: 2010 Power Industry Statistics Express (全國電力工業統計快報(2010年))

According to the HydroChina Report, China Guodian Corporation (中國國電集團公司), China Huaneng Group (中國華能集團公司), China Datang Corporation (中國大唐集團公司), Guohua Power (中國神華能源股份有限公司國華電力分公司), China Guangdong Nuclear Power (中國廣東核電集團有限公司), China Huadian Corporation (中國華電集團公司), China Power Investment Corporation (中國電力投資集團公司), and BEIH (北京能源投資（集團）有限公司) are the top eight wind farm operators in the PRC, accounting for 66.4% of 2010 cumulative connected wind power capacity in the PRC.

The table below sets forth the top wind farm operators in the PRC and their respective market share as at the end of 2010. According to the below table, the Group was the eighth largest wind farm operator in China in terms of connected capacity as at the end of 2010.

Company[1]	Consolidated wind power connected capacity at December 31, 2010 (MW)	Market share of China's total wind power connected capacity (%)[2]	Wind farm operating regions
China Guodian Corporation (中國國電集團公司)	8,001	20.9%	Inner Mongolia, Liaoning, Jilin, Heilongjiang, Gansu, Xinjiang, Hebei, southeast coastal provinces
China Huaneng Group (中國華能集團公司)	4,874	12.7%	Inner Mongolia, Liaoning, Jilin, Shandong, Guangdong, Yunnan, Hebei, Xinjiang, Hainan
China Datang Corporation (中國大唐集團公司)	4,403	11.5%	Inner Mongolia, Liaoning, Jilin, Heilongjiang, Hebei, Henan, Gansu, Shandong, Shanghai
Guohua Power (中國神華能源股份有限公司國華電力分公司)	2,084	5.4%	Guangdong, Jiangsu, Hebei, Shandong, Inner Mongolia, northeast China
China Guangdong Nuclear Power (中國廣東核電集團有限公司)	1,873	4.9%	Inner Mongolia, Jilin, Gansu
China Huadian Corporation (中國華電集團公司)	1,840	4.8%	Inner Mongolia, Xinjiang, Liaoning, Heilongjiang, Hunan, Shandong, Hebei, Ningxia
China Power Investment Corporation (中國電力投資集團公司)	1,286	3.4%	Inner Mongolia, Gansu, Liaoning, Ningxia, Jiangsu
BEIH (北京能源投資（集團）有限公司)[3]	1,081	2.8%	Beijing, Inner Mongolia, Liaoning
Hebei Construction & Investment Group (河北建設投資集團有限責任公司)	1,004	2.6%	Hebei
China Resources Power (華潤電力控股有限公司)	872	2.3%	Guangdong, Shandong, Hebei, Gansu, Inner Mongolia
Others	10,964	28.6%	
Total	**38,280**	**100.0%**	

Sources: The HydroChina Report, company information

Notes:

(1) English names of the companies are provided for identification purpose only.

(2) Market share is calculated based on the 2010 total connected capacity statistics from the HydroChina Report.

(3) All wind power connected capacity of BEIH is operated by us.

Overview of offshore wind power market

Global offshore wind power market

The development of offshore wind power projects globally has evolved slower than onshore projects due to larger required capital expenditures and the older generation models suffered from higher operational and maintenance costs. However, offshore wind energy

technology continues to mature and is set to become one of Europe's main development strategy for its future wind power market.

According to WWEA, in 2010, of the total global cumulative wind installed capacity of 196,630 MW, offshore wind installed capacity was only 3,118 MW, representing approximately 1.6% of the total global wind installed capacity.

China offshore wind power market

China's offshore wind power is still in its infancy, but possesses high growth potential with an abundance of offshore wind resources. According to preliminary estimates by the China Meteorological Administration, China has around 200 GW of offshore wind power resources available for development.

Compared to onshore, China's offshore wind farms require higher initial investment, but have long-term advantages such as lower per unit operating cost(1), longer wind turbine life expectancy, higher generation capacity and more stable supply. In addition, offshore wind power generation does not consume valuable land resources and could be sited closer to coastal load centers. Offshore wind power generation can also effectively address the issue of long-distance transmission faced by onshore wind power generation and hence reduce the grid transmission limitations for wind power.

In January 2010, the National Energy Administration ("NEA") issued a circular to a number of coastal provinces requiring them to trial offshore wind farm concession projects. In May 2010, the NEA officially launched the first round of concession tendering for offshore wind farm and invited large-scale wind farm Chinese operators across the country to bid for four offshore concession wind farm projects (total capacity of 1,000 MW). These four wind farm projects were located near the coast line of Jiangsu province, which has among the richest offshore wind energy resources in the country.

(1) Operating cost excluding depreciation