We have utilized certain information and statistics set out in this section from various government publications, market data providers and other independent third party sources. We believe that the sources of this information are appropriate and have taken reasonable care in extracting and reproducing such information. 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. The information has not been independently verified by us, the Sole Sponsor, the Joint Bookrunners, the Underwriters or any other party involved in the Global Offering and no representation is given as to its accuracy. Accordingly, you should not unduly rely on such information.

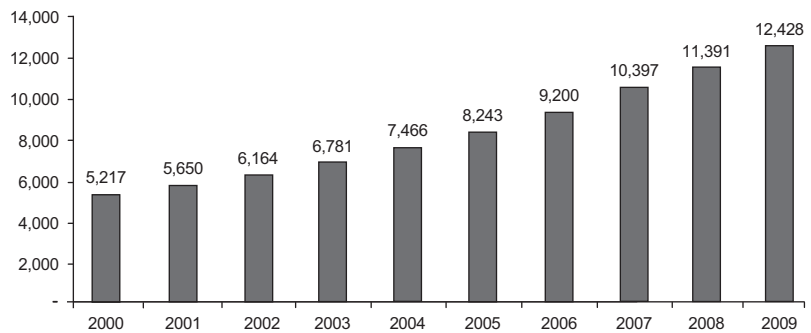
OVERVIEW OF THE ECONOMY OF CHINA AND NORTHERN CHINA

China possesses one of the fastest growing economies in the world. According to the IMF, between 2000 and 2009, China's real GDP grew at a CAGR of approximately 10.1%. Based on the Eleventh Five Year Plan, China expects to achieve an average annual GDP growth rate of 7.5% from 2006 to 2010.

The following chart shows the real GDP of China from 2000 to 2009:

Real GDP Growth of China 2000-2009

(RMB billions, 1990 as the base year)



Source: IMF

Northern China, which consists of Hebei Province, Shanxi Province, Inner Mongolia, Beijing and Tianjin, has demonstrated stronger economic growth than the national average in the past decade, driven by rapid commercial and industrial developments.

The following chart shows the nominal GDP of regions in Northern China from 2000 to 2009:

Nominal GDP Growth of Northern China 2000-2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	CAGR
(RMB billions)											
Hebei	508.9	557.8	612.3	692.1	847.8	1,009.6	1,151.6	1,371.0	1,618.9	1,702.7	14.4%
Beijing	247.9	284.6	321.3	502.4	606.0	688.6	786.1	935.3	1,048.8	1,186.6	19.0%
Inner Mongolia	140.1	154.6	175.6	238.8	304.1	389.6	484.2	609.1	776.2	972.6	24.0%
Tianjin	163.9	184.0	205.1	257.8	311.1	369.8	434.4	505.0	635.4	750.1	18.4%
Shanxi	164.4	178.0	201.8	285.5	357.1	418.0	471.5	573.3	693.9	736.6	18.1%

Source: National Bureau of Statistics of China

Hebei Province is a major resource, tourism and industry hub in Northern China. The nominal GDP of Hebei Province grew from RMB508.9 billion in 2000 to RMB1,702.7 billion in 2009, representing a CAGR of 14.4%. Its nominal GDP per capita increased from RMB7,663 in 2000 to RMB24,283 in 2009, representing a CAGR of 13.7%.

NATURAL GAS INDUSTRY

China's Energy Market

According to the BP Statistical Review of World Energy June 2010, China's consumption of primary energy (including oil, natural gas, coal, nuclear energy and hydropower) in 2009 amounted to 2,177.0 million tonnes of oil equivalent, accounting for approximately 19.5% of the world's energy consumption and ranking second worldwide after the United States. Primary energy consumption in China rose at a CAGR of approximately 9.4% from 2000 to 2009.

Traditionally, coal has constituted the main energy source in China, accounting for over 70% of the country's primary energy consumption in 2009. China's significant reliance on coal has resulted in severe pollution. With the rising awareness of environmental protection, the PRC government has encouraged the use of more environment-friendly fuel sources such as natural gas. From 2000 to 2009, the percentage of natural gas in China's total primary energy consumption grew from 2.3% to 3.7%, which remains a relatively small percentage compared to the Asia-Pacific and global average of approximately 10.8% and 23.8%, respectively. The environment-friendly nature of natural gas, and the relatively low usage of natural gas in China compared to other countries, underpin the strong potential of the natural gas market in China.

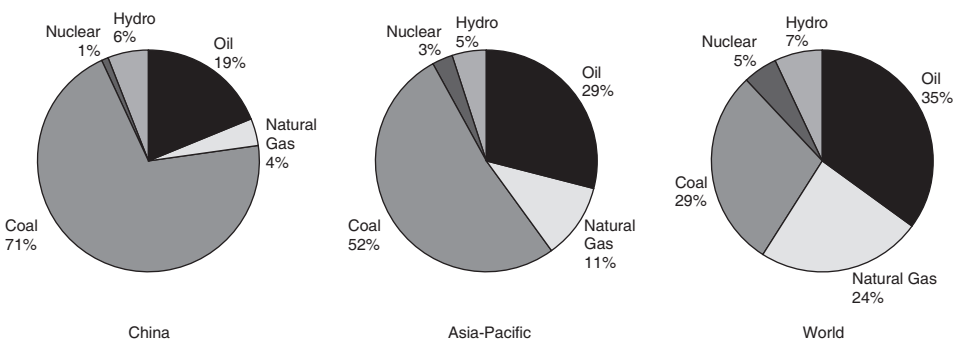
Natural Gas Consumption Growth of China 2000-2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Volume (million tonnes of oil equivalent)	22.1	24.7	26.3	30.5	35.7	42.1	50.5	62.6	73.2	79.8
As a percentage of total primary energy consumption volume in China (%)	2.3	2.5	2.5	2.5	2.5	2.7	2.9	3.4	3.6	3.7

Source: BP Statistical Review of World Energy June 2010

Primary Energy Mix of China, Asia Pacific and the World in 2009

(Percentage of total primary energy consumption of China)



Source: BP Statistical Review of World Energy June 2010

Advantages of Natural Gas

Natural gas is often referred to as the cleanest fossil fuel. Natural gas only emits a fraction of the pollutants emitted by most other energy sources, such as coal and crude oil. Many regard natural gas as a preferred energy source and an environment-friendly alternative to other fossil fuels.

The desirable qualities of natural gas include the following:

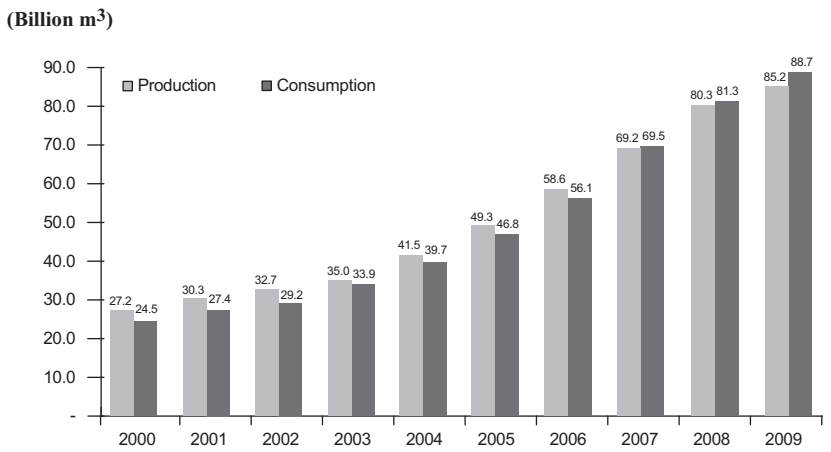
- ***Clean:*** Combustion of natural gas results in virtually no atmospheric emissions of sulphur dioxide or small particulate matter, and far lower emissions of harmful elements compared to combustion of other fossil fuels, such as coal and crude oil.
- ***Economical:*** On a heat content adjusted basis, natural gas is cheaper than most other forms of fuel.
- ***Safe:*** Natural gas does not contain carbon monoxide and other toxic gases.
- ***Efficient:*** Natural gas has a higher heat content compared to other fossil fuels. Under the same pressure, combustion of an equal volume of natural gas generates higher heat content than most other forms of fossil fuel.
- ***Convenient:*** For industrial users, gas units tend to be less complex and easier to operate and maintain than equipment powered by coal and other fossil fuels. In addition, natural gas consumption does not result in solid waste or ash requiring disposal.

Natural Gas Industry Development in China

According to the BP Statistical Review of World Energy June 2010, China consumed 88.7 billion m^3 of natural gas in 2009, ranked fifth worldwide. China's natural gas consumption increased at a CAGR of approximately 15.4% between 2000 to 2009, outpacing China's real GDP's CAGR of approximately 10.1% during the same period. According to the IEA, China will become the top natural gas consuming country in the Asia-Pacific region, overtaking Japan by 2015.

The rapid growth in demand for natural gas in China is primarily due to China's fast-growing economy, urbanization, favorable government policies, the cost advantages of natural gas under a regulated price scheme, a growing awareness of environmental protection, and increasing investment and development in China's gas transmission and distribution infrastructure. The natural gas consumption per capita of China amounted to only 66 m^3 in 2009, significantly lower than the world's average of approximately 432 m^3 in the same year, which suggests substantial growth potential.

Natural Gas Production and Consumption of China 2000-2009



Source: BP Statistical Review of World Energy June 2010

From 2000 to 2009, China's natural gas production increased at a CAGR of 13.5%. Although world gas resources remain plentiful, regions with natural gas surpluses are often located far away from areas with the greatest demand. A shortage of natural gas exists in China due to the lack of infrastructure needed to transport gas from gas fields to end users. The construction of natural gas infrastructure such as transmission pipelines often requires significant capital expenditures and time to complete.

Preferential Government Policy Related to China's Natural Gas Industry

The PRC government has actively promoted natural gas as an alternative fuel. Under the Tenth Five Year Plan (2001 to 2005), the PRC government set the target for raising natural gas use to 10% of the country's energy consumption in 2020. The Eleventh Five Year Plan (2006 to 2010) reaffirmed this goal. The Eleventh Five Year Plan, which placed high priority on energy conservation and environmental protection in China, projected that natural gas would represent 5.3% of energy consumption by 2010.

In order to develop the natural gas market in China and to promote natural gas use as a substitute for coal and oil, the PRC government has been setting price levels for natural gas. The PRC government has determined natural gas prices for different users on a cost-plus basis, with variations across different sectors. As a result, natural gas prices in China are not aligned with those in the international market.

In August 2007, the NDRC issued Policies on Natural Gas Utilization (天然氣利用政策), which prioritized the sectors and projects for natural gas use. The policy paper called for the rationalization of natural gas prices in line with prices of other substitutable energy products. Since publishing the policy paper, the PRC government has raised domestic gas prices.

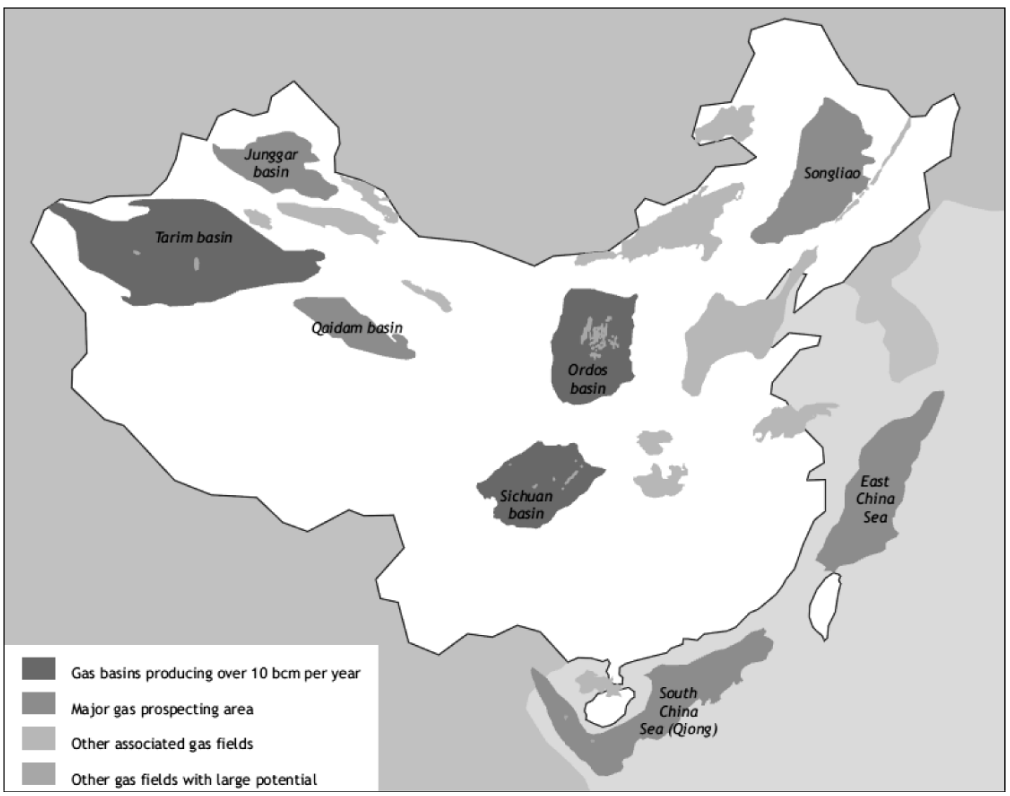
Sources of Supply of Natural Gas

Major sources of supply of natural gas in China include domestic production of natural gas, coalbed methane, syngas (SNG) and import of LNG.

Domestic production of natural gas is concentrated in several gas reserve basins in different parts of China. The three largest oil and gas producers in China — PetroChina, Sinopec and CNOOC — construct and operate China's major gas pipeline transmission networks, which deliver natural gas from reserves to major cities.

Midstream players that operate long-distance transmission pipelines typically enter into natural gas supply arrangements with upstream producers on a rolling basis, with supply volume primarily based on factors including demand and gas availability. Downstream players typically purchase gas either directly from upstream gas producers or midstream pipeline operators to distribute to end-users. See the sub-section headed "The value chain of the natural gas industry" in this "Industry Overview" section for more information on the production and transmission of natural gas. Long-distance transmission pipelines form the backbone of the gas delivery system in China.

Gas Resources in China



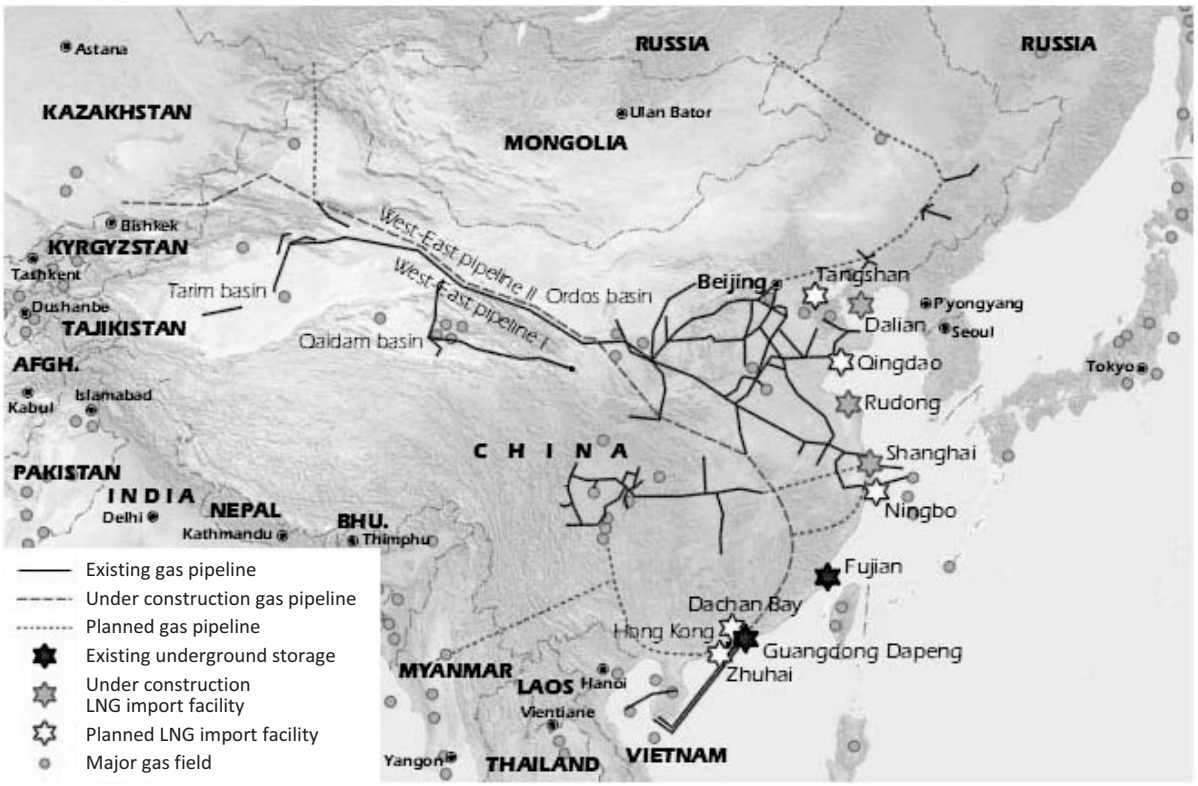
Source: China National Petroleum Corporation

The increasing capacity of current pipelines and the commissioning of new pipelines are expected to relieve the shortage of natural gas supplies in certain areas of China. These include the addition of:

- the Sichuan-to-Shanghai pipeline, commissioned in the third quarter of 2010, expected to reach full capacity of 12 billion m^3 per annum;
- the West-to-East pipeline II, a part of which was commissioned at the end of 2009 and the rest is expected to be commissioned by the fourth quarter of 2010, expected to reach full capacity of 30 billion m^3 per annum;
- the phase II of the Central Asia-China pipeline, expected to be commissioned in 2010 to increase the pipeline's capacity of 30 billion m^3 per annum to 40 billion m^3 per annum in 2010;

- Shannxi-Beijing Pipeline III, connecting Shaanxi Province, Shanxi Province, Hebei Province and Beijing, expected to start operation in the fourth quarter of 2010 and to reach full capacity of 15 billion m^3; and
- other pipelines, such as the Burma-to-China pipeline and the Yulin-to-Jinan pipeline, expected to be commissioned by 2013 and the fourth quarter of 2010, respectively.

The following map shows the additions of major long-distance transmission pipelines in China:



Source: Natural Gas in China (International Energy Agency)

Alternative Gas Sources

Coalbed methane is a form of natural gas extracted from coalbeds and has become an important source of natural gas in China. According to China's Ministry of Land and Resources, China had a total of 36.8 trillion m^3 coalbed methane resources, the third largest in the world, of which approximately 30%, or 11 trillion m^3, represented exploitable reserves as at the end of 2007. China is considering setting a target of increasing coalbed methane use to 8 billion m^3 by 2011 and 24 billion m^3 by 2020 from 0.5 billion m^3, or 1% of total estimated reserves, in 2007.

To fulfill rising gas demand, China is exploring the use of coal-based natural gas, a type of syngas. In August 2009, the NDRC approved Datang International's plan to build a coal gasification plant in Inner Mongolia with the capacity to produce 4 billion m^3 of coal-based natural gas when the plant becomes fully operational in 2012. The coal-based natural gas produced will primarily supply Beijing and certain areas located along the pipeline, including Chengde City.

Another important gas source is imported LNG through LNG terminals, purpose-built ports used exclusively for the import and export of LNG. When an LNG carrier arrives at its destination, the LNG is regasified and distributed as piped natural gas. Due to a significant increase in gas demand, China began to import LNG in 2006. After international gas prices rose sharply in 2007 and 2008, domestic piped natural gas prices were lower than the costs of imported LNG. As a result, demand for LNG eased in 2007 and 2008. However, the global economic crisis caused the price of LNG to decline, making importing LNG more economical. Increases in LNG imports are expected to help ease the current gas supply shortage in China.

The Value Chain of the Natural Gas Industry

The value chain of natural gas industry can be divided into three segments: upstream, midstream and downstream:

- The upstream segment consists of the underground exploration, drilling, extraction and purification of natural gas. After being extracted from a gas well, natural gas is transmitted to nearby refineries for removal of water content and impurities.

- The midstream segment consists of the transportation of natural gas. Natural gas is transmitted via long-distance transmission pipelines and branch pipelines under high pressure to supply a large number of locations.

- The downstream segment consists of gas distribution to the residential, industrial and commercial end-users. Gas distribution companies distribute natural gas through city gas pipeline networks.

Pipelines represent the principal method of transporting natural gas to end users in China. In order to develop the natural gas industry, the necessary pipeline infrastructure must be in place so that natural gas is easily accessible for end users. In addition, natural gas can also be transported in the form of CNG and LNG.

Competitive Landscape of Natural Gas Industry in China

The upstream segment of natural gas industry in China is dominated by PetroChina, Sinopec and CNOOC, who represent the largest suppliers of natural gas in China, with PetroChina accounting for approximately 75% of Chinese domestic natural gas production.

In terms of the midstream natural gas sector, the three largest producers of natural gas construct, own and operate national as well as regional scale long-distance transmission pipelines while other natural gas companies, such as The Hong Kong and China Gas Company Limited, Beijing Enterprises Holdings Limited, China Gas Holdings Ltd., Shaanxi Provincial Natural Gas Company Limited, Shenergy Company Limited, Shenzhen Gas Corporation Limited, Guangzhou Gas Group Company Limited and China Suntien Green Energy Corporation Limited, also invest, construct and operate regional or provincial long-distance transmission pipelines.

The downstream natural gas sector is fragmented. National players who have city gas pipeline projects in multiple provinces and municipalities include The Hong Kong and China Gas Company Limited and its subsidiary Towngas China Company Limited, Xinao Gas Holdings Limited, China Gas Holdings Limited, and China Resources Gas Group Limited. There are also a number of local players whose operation focuses on one specific province or city, such as Beijing Gas Group Company Limited, Shanghai Gas (Group) Co., Ltd., Shaanxi Provincial Natural Gas Company Limited and China Suntien Green Energy Corporation Limited.

Pricing Scheme of Natural Gas in China

China's pricing regime for domestic natural gas comprises three components: ex-plant price, pipeline transportation tariff and end-user price:

- The ex-plant price is a government-guided price. The NDRC determines the benchmark ex-plant price, taking into account production costs (including wellhead cost, purification fees, financing costs and tax) and an appropriate margin for producers.
- The government fixes the pipeline transportation tariff. The NDRC determines the transportation tariff for national long-distance transmission pipelines, whereas provincial price control bureaus determine the transportation tariff for provincial pipelines, including provincial long-distance transmission pipelines. The city gate price is a combination of the ex-plant price and transportation tariff.
- Each local government determines the end-user price by taking into account distribution costs, alternative fuel prices and other market policy factors. Public consultation hearings are held to pass any adjustments in relation to the residential end-user price, while the relevant local pricing authorities set the commercial and industrial price.

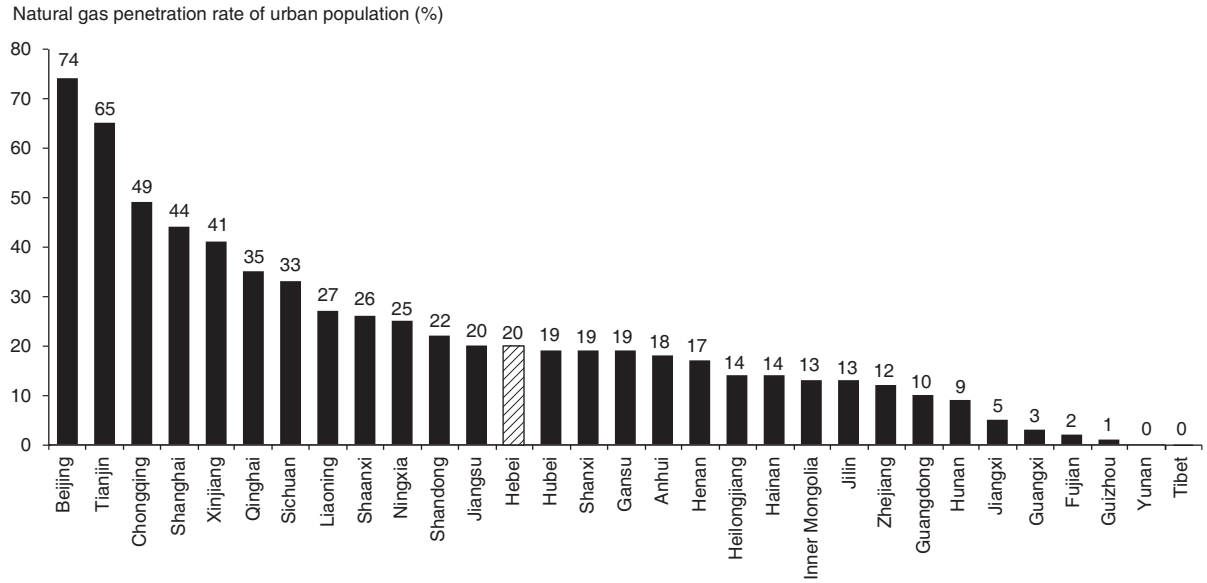
Historically, natural gas prices have been determined on a cost-plus basis in China. This has resulted in relatively inexpensive natural gas prices compared to international market prices — particularly as a substitute for coal. The low price represents one of the principal reasons for the increasing demand for natural gas in China. However, low prices have also hindered the development of natural gas production and transmission and resulted in a natural gas shortage throughout China. On May 31, 2010, the NDRC raised the ex-plant benchmark price by RMB230 per thousand m^3 starting from June 1, 2010 for domestic onshore gas fields. The PRC government is expected to implement a more market-oriented price determination regime that will result in increased prices in future years.

Natural Gas Industry Development in Hebei Province

The natural gas consumption in Hebei Province has picked up rapidly in the last few years. According to Hebei Provincial Bureau of Statistics, the total consumption of natural gas has increased from 638 million m^3 in 2001 to 1,712 million m^3 in 2008, representing a CAGR of 15.2%.

Furthermore, the penetration of natural gas in Hebei Province is relatively low compared with other provinces in China. Only approximately 8.1% of the total population and 19.4% of total urban population in Hebei Province in 2008 have access to natural gas according to the National Bureau of Statistics of China, compared with an average of 9.2% and 20.1%, respectively, for the whole country, which indicates significant growth potential for the natural gas market in Hebei Province.

Natural gas penetration rate of China 2008



Source: National Bureau of Statistics of China

Competitive Landscape of Natural Gas Industry in Hebei Province

PetroChina is the major supplier of natural gas in Hebei Province.

In wholesale natural gas market, PetroChina and we are the two major operators. We mainly operate our wholesale natural gas business in the central and southern part of Hebei Province while PetroChina operates in the northern part of Hebei Province. As regulatory authorities closely control the development of long-distance transmission pipelines to prevent duplicative investments and uneconomic use of resources, our competitors will not likely build long-distance transmission pipelines covering the same areas and customers we currently serve.

There are many city gas pipeline operators in Hebei Province, including nationwide players, such as The Hong Kong and China Gas Company Limited, Xinao Gas Holdings Limited, China Gas Holdings Limited and PetroChina Kunlun Gas Limited, as well as local city gas companies, such as Handan City Gas Company Limited, Baoding City Gas Company Limited, Tangshan City Gas Holdings Limited and our Company. We face competition in developing and acquiring new city gas pipeline network projects.

We face competition from existing operators and new entrants in the CNG market, but our long-distance transmission pipeline, which provides a stable and reliable connection to sources of natural gas, allows us to compete effectively in this sector.

In 2007 and 2008, we sold an aggregate of 393.6 million m^3 and 562.7 million m^3 of natural gas through our distribution facilities, accounting for 32.7% and 32.9% of the total natural gas consumption in Hebei Province in 2007 and 2008, respectively.

WIND POWER INDUSTRY

Global Wind Power Industry Development and Outlook

In recent years, renewable energy has developed rapidly, reflecting a growing awareness of environmental protection and sustainable development, the increasing efficiency of renewable energy technologies, and heightened concerns over energy security in developed countries. Wind power represents one of the fastest-growing forms of renewable electricity generation in the world, due primarily to the availability of wind resources, the maturity of wind technology and the improving economic viability of wind power compared to other types of renewable energy sources. According to BTM, an independent consultancy, global wind installed capacity grew from 18,449 MW as of December 31, 2000 to 160,084 MW as of December 31, 2009, representing a CAGR of approximately 27.1%. BTM also expects that global wind installed capacity will grow at a CAGR of approximately 22.8% between 2009 and 2014, reaching 447,689 MW in 2014.

The following chart shows the forecast for global installed wind power capacity from 2009 to 2014:

Forecast of Wind Power Development 2009-2014

(MW)	2009	2010E	2011E	2012E	2013E	2014E	09-14E CAGR
Europe	76,553	89,858	105,858	123,883	144,383	165,633	16.7%
Americas	40,351	50,351	62,951	81,351	100,251	122,351	24.8%
China	25,853	39,853	54,853	70,353	86,853	104,853	32.3%
South & East Asia (excluding China)	11,294	13,994	16,844	20,944	25,744	30,844	22.3%
OECD-Pacific	4,873	6,073	7,573	9,423	11,773	14,223	23.9%
Other areas	1,161	1,986	3,086	4,686	7,036	9,786	53.2%

Source: International Wind Energy Development, March 2010 (BTM)

Although Europe accounted for approximately 47.8% of global installed wind power capacity as of December 31, 2009, BTM estimates that South and East Asia will experience growth in installed capacity as the region rapidly adopts or migrates to wind power as an alternative energy sources. China's installed wind power capacity is expected to grow at a CAGR of 32.3% from 2009 to 2014.

Overview of a Wind Farm

Developing a wind farm involves several steps. First, a wind farm developer conducts substantial feasibility research to select a site that is consistently and sufficiently windy, a process that, in China, usually involves a one-year wind test on site. The site should be unpopulated but accessible, in particular by existing power grids. After securing sufficient capital, the developer designs and constructs the wind farm. Third party contractors typically oversee the construction process, which involves building roads, constructing foundations and laying cable connections to the electrical grid. In China, third-party contractors typically install wind turbines. Once installed and connected, wind turbines can begin generating electricity.

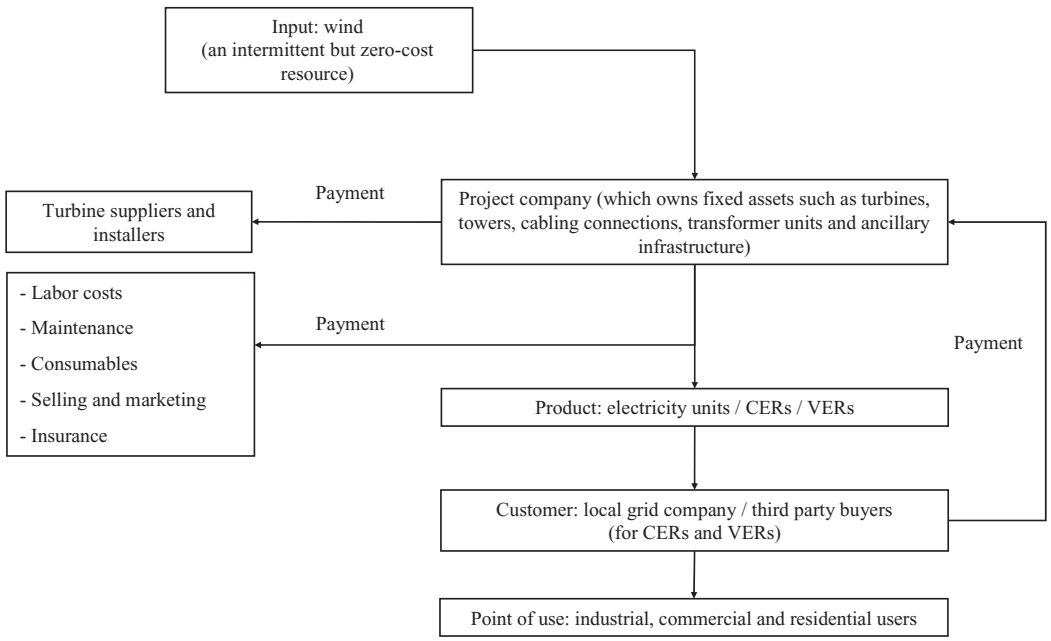
Typically, wind turbines begin to operate when wind reaches a certain speed (approximately 3 to 4 meters per second), and must be disconnected when wind exceeds a certain speed (approximately 20 to 25 meters per second). As wind does not blow at all times, wind power generation is intermittent and seasonal.

Key costs of developing a wind farm include the costs of equipment, primarily wind turbines. Each wind turbine typically consists of blades, a nacelle, a gearbox, a generator, a supporting tower and other ancillary

components. When wind blows, the blades rotate and cause the rotor to spin, which in turn allows a generator to create electric currents, transforming mechanical energy to electricity. Through the electrical collection system, electric power feeds into a step-up substation in which a power transformer converts low/medium voltage into high voltage currents dispatched onto the grid.

Unlike most power generators that pay for fuel sources, the unique feature of the wind farm business is the absence of raw materials. Power generated from a wind farm is dispatched onto grids and is then transmitted to end users. In certain developing countries, qualified wind farm owners can also sell CERs to other third-party buyers. For more description on CERs, see the subsection headed "Clean Development Mechanism" in this "Industry Overview" section.

The following chart shows the business model of a typical wind farm in China:

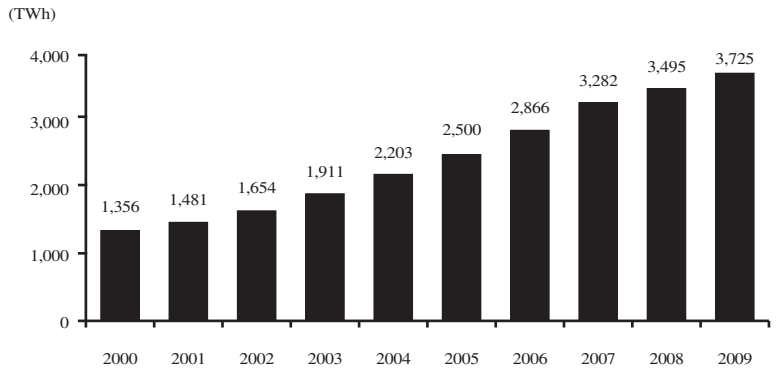


Overview of the Electricity Industry in China

China's electricity generation grew at a CAGR of approximately 11.9% from 2000 to 2009, outpacing China's real GDP during the same period. This largely reflects the fast-growing demand for electricity for industrial production, as well as for commercial and residential consumption.

The following chart sets forth the electricity generation growth in China from 2000 to 2009:

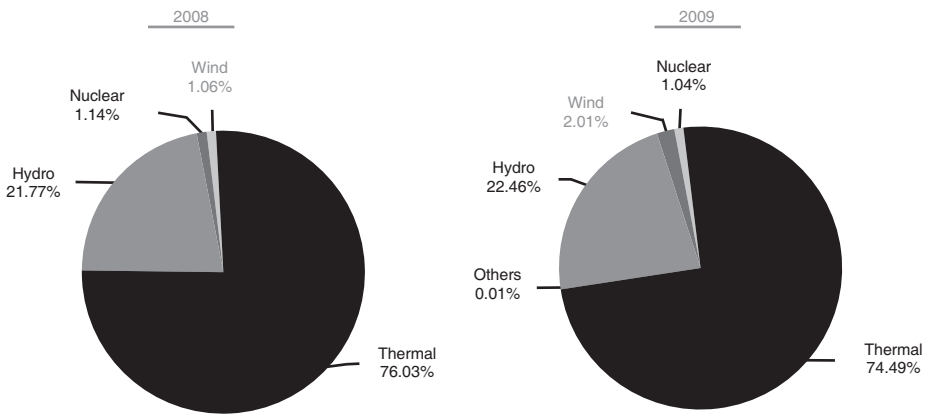
Electricity Generation Growth of China 2000-2009



Source: BP Statistical Review of World Energy June 2010

China relies on thermal power for the majority of its electricity generation. According to the China Electricity Council, as of December 31, 2009, thermal power accounted for approximately 74.5% of China's generation capacity, whereas wind power accounted for only approximately 2.0% of China's generation capacity. The following charts set forth the total installed electricity generation capacity in China by fuel type as of December 31, 2008 and 2009:

Total Installed Capacity by Fuel Type in China

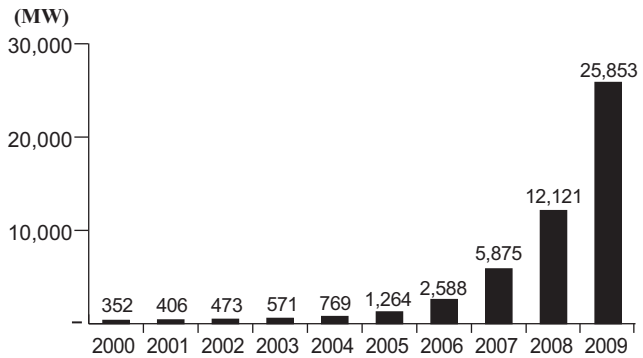


Source: China Electricity Council

China's Wind Power Industry Development

Wind power industry has undergone rapid expansion in China due primarily to growth in demand and favorable government policies. According to BTM, from 2000 to 2009, the total installed capacity of wind power in China grew at a CAGR of approximately 61.1%, to 25,853 MW as of December 31, 2009. The chart below shows the growth in installed wind power capacity in China from 2000 to 2009:

Installed Wind Power Capacity of China 2000-2009



Source: BTM

In 2007, the NDRC released the Renewable Energy Development Plan, which targets renewable energy to constitute 10.0% of national energy consumption by 2010 and 15.0% of national energy consumption by 2020. Originally, the Renewable Energy Development Plan targeted aggregate installed wind power capacity in China to reach 30 GW in 2020. In 2008, because of the recent high growth rate of wind power capacity, the Medium and Long-Term Development Plan raised its forecast of China's aggregate wind energy capacity to 100 GW in 2020.

Based on a general measurement of wind resources in late 1980s performed by the PRC government, the technically exploitable wind resources for wind turbines of a height of ten meters were 253 GW on land and 750 GW offshore. However, the increased height of modern wind turbines provides even greater development potential. The United Nations Environment Program projected that China's wind resources could reach 3,000 GW for wind turbines of 50 meters in height.

According to BTM, China accounted for approximately 16.1% of the world's cumulative wind installed capacity as of December 31, 2009, ranking it as the second largest country after the U.S. in terms of cumulative installed wind power capacity. China's installed capacity in 2008 had already exceeded the 10 GW installed capacity target set by the NDRC to be achieved by 2010. By 2011, China is expected to overtake the U.S. as the largest country in terms of cumulative installed wind power capacity. China's installed wind power capacity is expected to grow at a CAGR of approximately 32.3% from 2009 to 2014. By the end of 2014, China's cumulative installed wind power capacity is expected to increase to 104,853 MW, accounting for approximately 23.4% of global cumulative wind installed capacity.

The following table shows the estimated growth in installed capacity for leading wind power countries from 2009 to 2014:

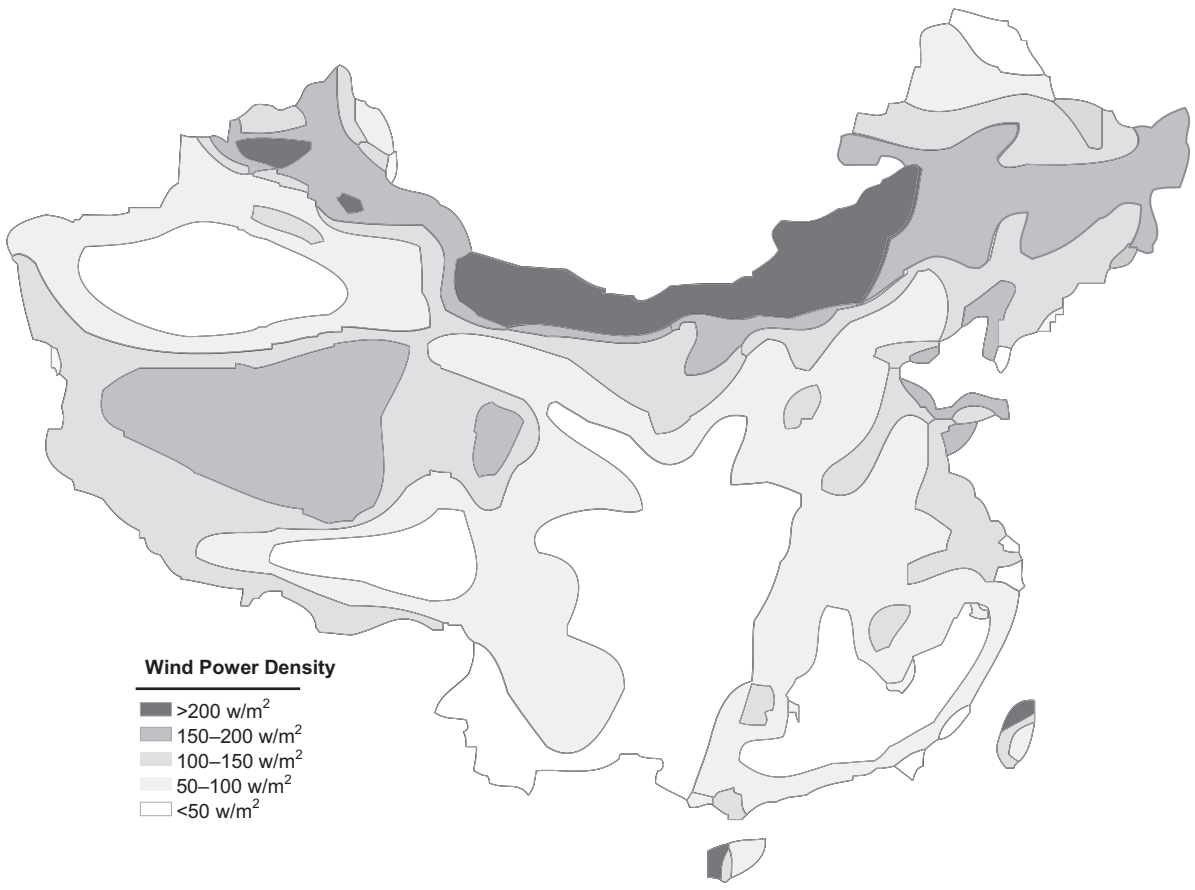
Cumulative Installed Capacity Growth Forecast for Leading Wind Power Countries

	2009	2010E	2011E	2012E	2013E	2014E	CAGR
(MW)							
China	25,853	39,853	54,853	70,353	86,853	104,853	32.3%
U.S.	35,159	43,159	53,159	68,159	83,159	100,159	23.3%
India	10,827	13,327	15,827	19,327	23,327	27,327	20.3%
Spain	18,784	20,784	23,284	25,284	27,784	29,784	9.7%
Germany	25,813	27,813	30,213	32,713	35,713	39,213	8.7%

Source: International Wind Energy Development, March 2010 (BTM)

China's wind resources are spread unevenly across the country; northern and south-eastern regions generally offer the highest development potential. In the northern part of China, provinces and regions with abundant wind resources include Hebei, Inner Mongolia, Jilin, Liaoning, Heilongjiang, Shandong, Gansu, Ningxia and Xinjiang. In the south-eastern coastal region of China, Jiangsu, Zhejiang, Fujian, Guangdong, Guangxi and Hainan offer the greatest development potential for wind farms.

The map below shows China's wind resource distribution:



Source: China Meteorological Administration

Installed Wind Power Capacity Ranking by Province/Region in China 2009 (Top 10)

Province/Region	Total installed capacity at the end of 2009 (MW)
Inner Mongolia	7,988.3
Hebei	2,801.7
Liaoning	2,396.5
Jilin	1,899.7
Heilongjiang	1,576.5
Gansu	1,448.1
Shandong	1,138.6
Jiangsu	1,097.3
Xinjiang	916.9
Guangdong	576.1

Source: HydroChina Corporation

In order to promote the development of wind power with greater efficiency and effectiveness, the NDRC initiated the plan to construct National 10GW-base (千萬千瓦級風電基地) projects in 2008 with the goal of developing concentrated wind farm sites supported by high-voltage transmission infrastructure. The NDRC has selected seven sites in Hebei, Inner Mongolia, Gansu, Xinjiang, Jilin and Jiangsu for the development of National 10GW-bases. The first site, with 12.7 GW of planned installed capacity by 2015, located in Jiuquan, Gansu Province, has already been generating and dispatching electricity. The remaining sites are expected to undergo development in the next few years.

Turbine costs in China declined in 2009. Based on wind turbine tender prices for the 25 NDRC planned Gigawatt-bases in Inner Mongolia and Hebei Province in April 2009, domestic and foreign brand turbine prices on average declined by 17% and 16%, respectively, compared to tender prices at the Gigawatt-base project auction in Jiuquan, Gansu Province that took place in July 2008. This decline was primarily attributable to overcapacity in China's turbine manufacturing sector, as well as the adverse impact of the recent global economic downturn. The decline in turbine prices has reduced the development cost of wind farms, which has benefited wind farm investors and operators.

Power Transmission and Dispatch

In China, power grid companies, primarily State Grid Corporation and China Southern Power Grid Company Limited, dispatch electricity from power plants connected to grids. Power plants liaise with the power grid companies annually to determine the volumes to be dispatched. Under the Renewable Energy Law promulgated by the PRC central government, local grid companies must provide dispatch priority and full purchase of electricity generated by renewable energy sources, as well as providing grid connection, transmission services and related technical support to renewable energy companies.

In China, electricity is dispatched through power grids, except for electricity generated by facilities not connected to a grid. Distribution of power to each grid is administered by dispatch centers. Dispatch centers are responsible for the administration and dispatch of planned output of power plants located within their respective grid coverage areas.

On-grid Tariffs

The PRC government provides favorable on-grid tariffs to renewable energy projects to encourage development of the renewable energy industry. For wind power projects that obtained approvals from the NDRC or provincial DRCs after December 31, 2005, the on-grid tariff represents a government guided price. However, on July 24, 2009, the NDRC issued the On-grid Pricing Policy, which came into effect on August 1, 2009 and applied to all onshore wind power projects approved thereafter. In accordance with this circular, a geographically unified tariff (a form of government fixed price) has replaced the negotiated on-grid tariff (a form of government guided price). Specifically, the NDRC divided China into four zones, and an unified on-grid tariff applies to all the wind farms operating within each of the four zones. The unified on-grid tariff (VAT inclusive) for the four wind resources zones is RMB0.5100/kWh, RMB0.5400/kWh, RMB0.5800/kWh and RMB0.6100/kWh, respectively.

The following table shows the current on-grid tariffs in different provinces in China for wind power and coal-fired power:

Tariff Comparison Table of Wind Power Against Coal-fired Power in China 2010

Area	Wind Power Tariff	Benchmark Tariff for FGD-equipped Coal-fired Generation
	RMB / kWh (incl. VAT)	RMB / kWh (incl. VAT)
Guangdong	0.61	0.50
Zhejiang	0.61	0.46
Shanghai	0.61	0.46
Hunan	0.61	0.44
Hainan	0.61	0.44
Guangxi	0.61	0.44
Jiangsu	0.61	0.43
Hubei	0.61	0.43
Jiangxi	0.61	0.42
Fujian	0.61	0.41
Anhui	0.61	0.40
Shandong[(1)]	0.61	0.40
Sichuan	0.61	0.39
Henan	0.61	0.39
Liaoning	0.61	0.39
Hebei[(2)]		
Zone 2	0.54	0.39
Zone 4	0.61	0.39
Chongqing	0.61	0.39
Tianjin	0.61	0.38
Beijing	0.61	0.38
Heilongjiang[(3)]		
Zone 3	0.58	0.38
Zone 4	0.61	0.38
Jilin[(4)]		
Zone 3	0.58	0.37
Zone 4	0.61	0.37
Shaanxi	0.61	0.34
Guizhou	0.61	0.33

Area	Wind Power Tariff	Benchmark Tariff for FGD-equipped Coal-fired Generation
	RMB / kWh (incl. VAT)	RMB / kWh (incl. VAT)
Shanxi	0.61	0.33
Yunnan	0.61	0.32
Qinghai	0.61	0.29
Inner Mongolia[5]		
Zone 1	0.51	0.28
Zone 2	0.54	0.30
Gansu[6]		
Zone 2	0.54	0.28
Zone 3	0.58	0.28
Ningxia	0.58	0.27
Xinjiang[7]		
Zone 1	0.51	0.22
Zone 3	0.58	0.22

Source: NDRC

Notes:

(1) Although wind power on-grid tariff at Shandong province is RMB0.6100/kWh, all wind projects in Shandong province enjoy RMB0.0900/kWh (VAT inclusive) subsidy from the provincial government.

(2) Zone 2 in Hebei Province includes Zhangjiakou and Chengde; the other areas in Hebei Province are in Zone 4.

(3) Zone 3 in Heilongjiang Province includes Jixi, Shuangyashan, Qitaihe, Suihua, Yichun and Da Hinggan Ling area; the other areas in Heilongjiang Province are in Zone 4.

(4) Zone 3 in Jilin Province includes Baicheng and Songyuan; the other areas in Jilin Province are in Zone 4.

(5) Zone 2 in Inner Mongolia includes Chifeng, Tongliao, Xing'anmeng and Hulun Buir; the other areas in Inner Mongolia are in Zone 1.

(6) Zone 2 in Gansu Province includes Zhangye, Jiayuguan and Jiuquan; the other areas in Gansu Province are in Zone 3.

(7) Zone 1 in Xinjiang includes Urumqi, Yili Kazak autonomous prefecture, Changji Hui autonomous prefecture, Klamyi and Shihezi; the other areas in Xinjiang are in Zone 3.

Clean Development Mechanism

CDM represents an arrangement under the Kyoto Protocol to the UNFCCC. Each of the countries listed in Annex I to the UNFCCC, or Annex I Countries, which include certain developed countries, such as Japan and Western European countries, is assigned an emission reduction target. Non-Annex I Countries, which include certain developing countries, such as China, India and Brazil, have no emission reduction targets but are encouraged to adopt environment-friendly technologies to reduce greenhouse gas emissions.

The CDM arrangement allows Annex I Countries to invest in emission reduction projects in non-Annex I Countries in order to earn CERs. Investors from Annex I Countries can use CERs to satisfy domestic emission reduction targets or sell CERs to other interested parties. This arrangement provides an alternative to reducing emissions in Annex I Countries, which is generally more expensive than investing in emission reduction projects in developing countries. The PRC government ratified the Kyoto Protocol in 2002, as a non-Annex I Country. The first commitment period of the Kyoto Protocol is five years, from 2008 to 2012.

CDM in China is regulated by The Measures for Operation and Management for the CDM Measures promulgated jointly by the NDRC, Ministry of Science and Technology, Ministry of Foreign Affairs and Ministry of Finance in November 2005. In order to issue and sell CERs, a CDM project in China generally must obtain the approval of the NDRC, validate the project design documents by DOE (a third-party agency accredited by the CDM

EB), to ensure the project results in real, measurable and long-term emission reductions, and register the project with the CDM EB.

A CDM project must periodically obtain verification and certification by DOE of the project's emission reductions after the project is registered with the CDM EB. After a project is running, it also needs to obtain CERs issued by the CDM EB with respect to the emission reductions verified and certified by DOE, deliver CERs to the buyers according to the delivery schedule agreed upon with the buyers, and receive payment from the buyers for CERs purchased. The sale of CERs by China's wind farms enhances the economic viability of wind power projects as a project owner may secure a reliable source of revenue through the sale of CERs.

Competitive Landscape of Wind Power Industry in China

A few major operators dominate the wind power industry with a large number of players competing for the remaining small part of the industry.

According to HydroChina Corporation, the top ten wind power operating companies in China in terms of consolidated installed capacity as of the end of 2009 are listed in the following table:

Top 10 Wind Power Operating Companies in China

Company	2009 consolidated installed capacity (MW)
China Guodian Corporation[(1)]	4,615.2
China Datang Corporation	3,326.7
China Huaneng Group	2,503.8
Shenhua Beijing Guohua Electric Power Co., Ltd	1,331.2
China Guangdong Nuclear Power Holding Corporation	1,250.0
China Huadian Corporation	1,174.8
Beijing Jingneng New Energy Co., Ltd	1,095.8
China Energy Conservation Investment Corporation	723.5
China Power Investment Corporation	705.8
China Suntien Green Energy Corporation Limited	406.7

Note:

(1) China Guodian Corporation is the controlling shareholder of China Longyuan Power Group Corporation Limited