

## INDUSTRY OVERVIEW

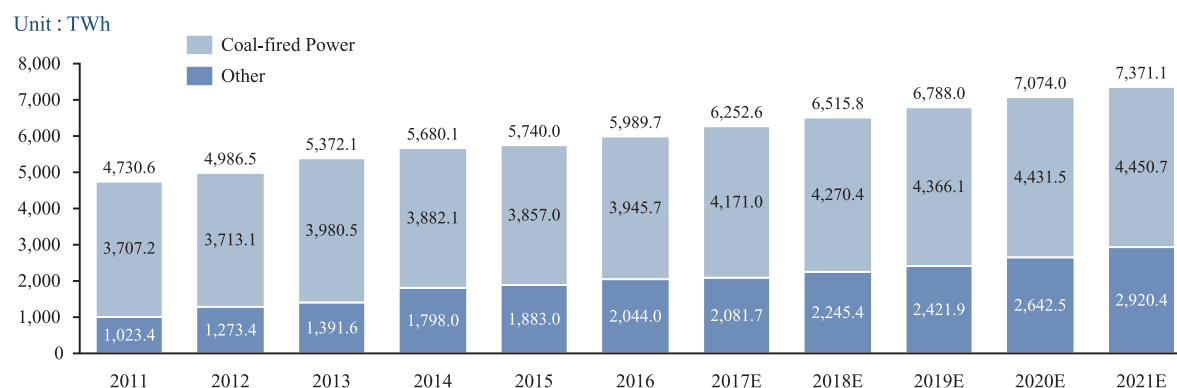
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### OVERVIEW

The PRC is one of the fastest growing economies worldwide and is also the second largest economy in the world. According to National Bureau of Statistics of China, Chinese economy grown at a CAGR of 9.0% from 2011 to 2016. According to IMF, the Chinese economy is forecast to keep growing at a CAGR of 8.5% from 2016 to 2021. In line with the growth of the PRC economy, total electricity consumption and total power generation in the PRC has also increased rapidly, primarily driven by rapid industrialization and also by rising residential power demand as the PRC's per capita income has increased.

The following chart sets forth total power generation structure in China from 2011 to 2021.

*Total Power Generation in China, 2011-2021E*



Source: CEC, Frost & Sullivan

The total electricity consumption in China had increased from 4,703TWh to 5,975TWh, representing a CAGR of 4.9% from 2011 to 2016 and will reach 7,294TWh in 2021. The PRC's installed capacity of power generation per capita and electricity consumed per capita are still significantly lower than those of developed countries. For example, in 2016, the installed capacity of power generation per capita of the U.S. achieved 3.7 kW, while that of China was only about 1.2 kW. China's demand of power is estimated to keep growing.

### Air Pollution Control and Emission Reduction of Coal-fired Power Plants in the PRC

The PRC's rapid industrialization and continuous growth in fossil fuel consumption has resulted in serious concerns over environmental protection. The PRC Government has become increasingly concerned about environmental issues such as air pollution.

In September 2014, NDRC issued the Action Plan of Energy Saving, Emission Reduction, Upgrading and Retrofitting of Coal-fired Power Plants (2014-2020) (the "Action Plan") (《煤電節能減排升級與行動計劃(2014-2020年)》), which tightened the emission limits for newly-built coal-fired power plants. In December 2015, NDRC issued Notice on the Implementation of the Ultra-low

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Emissions Tariff for Coal-fired Plants and Proposals for Comprehensively Implementing the Ultra-low Emissions and Energy-saving Upgrade of Coal-fired Power Plants, requiring all coal-fired power plants to finish upgrade by 2020. Such “ultra-low emission” standard is one of the most stringent standards throughout the world, and huge amount of capital is expected to be invested in related projects according to the forecast of Frost & Sullivan.

In July 2017, the PRC government authorities issued the Opinion on the Promotion of Supply Side Reform and the Prevention of Overcapacity in Coal-fired Power Plants (關於推進供給側結構性改革防範化解煤電產能過剩風險的意見). The policy required the acceleration in the “ultra-low emission” upgrades for existing coal-fired power plants with a total “ultra-low emission” upgrades of 420 million kW during the 13th Five-Year period (2016-2020). By the end of 2020, the cumulative installed power generation capacity of coal-fired power should be controlled within approximately 1,100GW and qualified coal power units should complete the “ultra-low emission” upgrades.

According to Frost & Sullivan, the “ultra-low emission” standard will be a key driver for growth in the environmental protection sector for coal-fired power plants, with substantial increases expected in the market for desulfurization, denitrification and dust removal services between 2016 and 2020. In the foreseeable future, coal-fired power generation is expected to continue to play a key role in the PRC energy sector and installed capacity is expected to continue to grow from 936GW in 2016 to 1,141GW by 2021. The major business segments in the coal-fired power generation related air pollution control in the PRC mainly involve flue gas treatment, which mainly consists of environmental protection facility engineering market and third-party treatment market.

Major Services	Functions	Key Technology Employed
Flue Gas Desulfurization	Remove sulfur-dioxide (SO <sub>2</sub> ) from the flue gasses discharged by coal-fired power plants	Wet system, semi-dry system and dry system
Flue Gas Denitrification	Remove nitrogen oxide (NO <sub>x</sub> ) from the flue gasses discharged by coal-fired power plants	Furnace denitrification (the front-end denitrification) and flue gas denitrification (the back-end denitrification)
Dust Removal	Remove dust emission from the flue gasses discharged by coal-fired power plants	Electrostatic dust removal, cloth bag dust removal, and static-bag composite technology

### ENVIRONMENTAL PROTECTION FACILITY ENGINEERING FOR COAL-FIRED POWER PLANTS IN CHINA

#### Drivers and Entry Barriers of Environmental Protection Facility Engineering Market for Coal-fired Power Plants

Drivers of environmental protection facility engineering market for coal-fired power plants primarily include: (1) steady development of China’s energy industry and the share of coal-fired power is estimated to maintain the dominant position in energy structure; (2) increasingly stringent environmental protection standard and policy support; (3) increasing emission reduction pressure with the development of industry and energy industry; and (4) increasing environmental protection awareness of enterprises and the whole society.

The energy industry (including the power industry) in China is expected to grow in the foreseeable future. The vital role of coal in China’s resources structure determines the leading dominant position of coal-fired power in China’s future power structure. A number of national and local regulations and policies have been issued to improve emission standards and urge the completion of “ultra-low emission” upgrade by 2020. The PRC authorities has also specified the subsidy standard for “ultra-low emission” power. By 2020, China aims for lowering carbon dioxide emissions per unit of GDP by 40% to 45% from the 2005 level. During this period, industries including new energy cars, renewable energy, desulfurization and denitrification are likely to benefit from the policy and target implementation. The increasing public environmental awareness is considered as another major driver for coal-fired power plants to take environmental protection measures like constructing desulfurization and denitrification projects.

Recently, China was executing its acceleration of the coal-to-gas conversion in the PRC in the Jing-Jin-Ji area (Beijing-Tianjin-Hebei). According to Frost & Sullivan, the coal-to-gas conversion would exert limited impact on China’s desulfurization and denitrification industry for coal-fired power plants mainly based on following reasons: (i) Coal is expected to keep its leading role in the energy

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consumption structure of China in the following years; (ii) For desulfurization and denitrification companies, the major customers are large-scale coal-fired power plants, while the coal-to-gas conversion mainly focuses on the elimination of small-sized coal-fired boilers and power plants (usually the plants whose unit capacity is less than 100 MW). Therefore, the close of some small-scale coal-fired power plants only have limited impacts to desulfurization and denitrification companies.

Entry barriers to environmental protection facility engineering market for coal-fired power plants primarily include: (1) technology; (2) certification and qualification; (3) operating experience; and (4) capital. Accumulation of professional skills and experience in environmental protection facility engineering market can assist companies to make more accurate assessment to coal-fired power plants and work out better solutions. Environmental protection facility have strong characteristics of technical integration. Thus, the accumulation of technical knowledge is also one of the major barriers. Enterprises constructing desulfurization and denitrification systems must acquire relevant qualifications and certifications, which are related with the reputation, technology and management level of those companies. Moreover, different levels of qualifications are only qualified with corresponding service scope like engineering designs, EPC and technology consultancy. Therefore, the related certification and qualification is one of the major entry barriers to the new entrants of environmental protection facility engineering market for coal-fired power plants. Customers in the desulfurization, denitrification and dust removal industry usually focus on the performance and experience of the market participants. The professional expertise and experience accumulated in the previous desulfurization, denitrification and dust removal projects can largely facilitate the accurate evaluation of new projects and also help the environmental protection facility engineering companies to find out optimize solutions based on customers' actual operating status. Thus, it is difficult for new market entrants to compete with the incumbent participants due to the lack of relevant experience. Moreover, environmental protection facility engineering companies often need to pay a portion of construction funds in advance, and after the construction, companies also need to leave some retention money for the coal-fired power plants. So capital strength may also poses barrier to the new entrants to some certain extents.

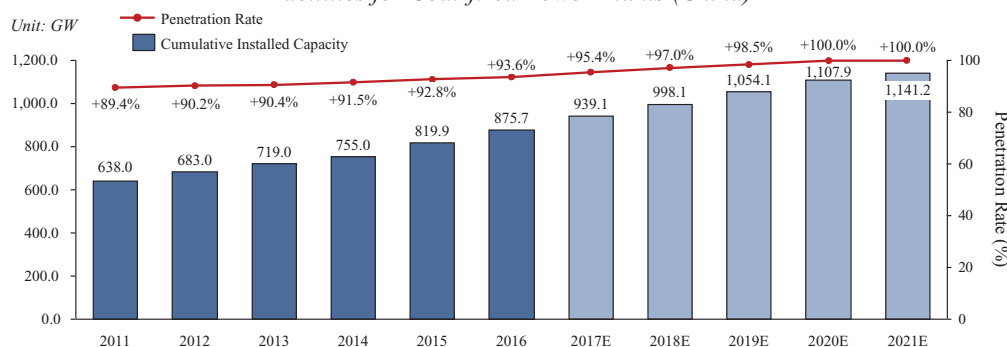
### Market Capacity

In recent years, the market capacity of environmental protection facility (flue gas desulfurization and denitrification and dust removal) engineering market maintains a stable growth and is expected to continue to grow by 2021.

#### *Flue Gas Desulfurization Engineering for Coal-fired Power Plants*

The following chart sets forth the cumulative installed capacity in operation and penetration rate of flue gas desulfurization facilities for coal-fired power plants (China) from 2011 to 2021.

*2011-2021E Cumulative Installed Capacity in Operation and Penetration Rate of Flue Gas Desulfurization Facilities for Coal-fired Power Plants (China)*



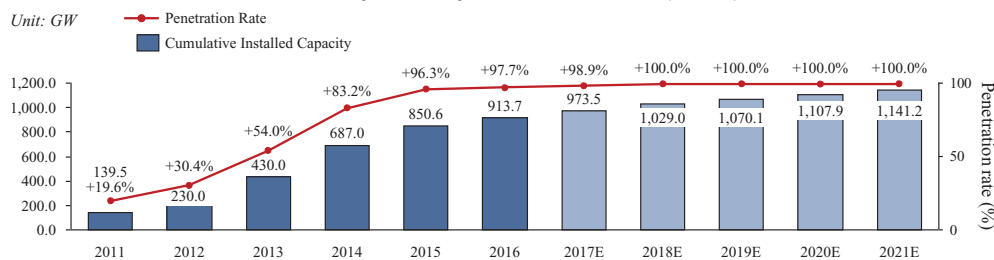
Source: CEC, Frost & Sullivan

#### *Flue Gas Denitrification Engineering for Coal-fired Power Plants*

Based on the issuance of the Action Plan and NDRC's further expansion of the trial regions of denitrification tariff with the raise of subsidy standard, the denitrification market further showed a prosperity during 2013 to 2015. The following chart sets forth the cumulative installed capacity in operation and penetration rate of flue gas denitrification facilities for coal-fired power plants (China) from 2011 to 2021.

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### 2011-2021E Cumulative Installed Capacity in Operation and Penetration Rate of Flue Gas Denitrification Facilities for Coal-fired Power Plants (China)



Source: CEC, Frost & Sullivan

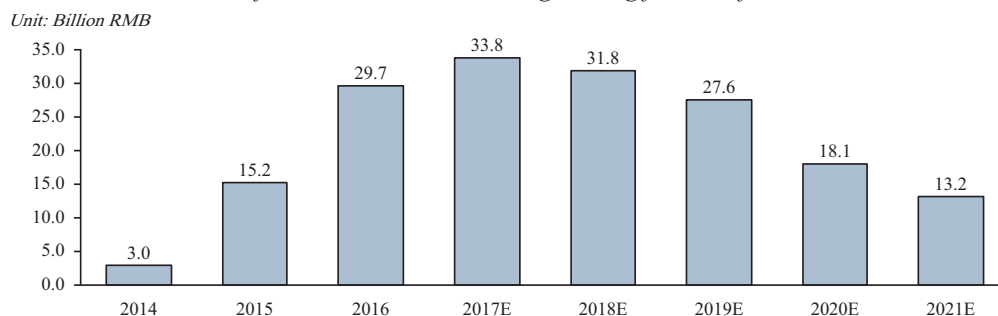
### Dust Removal Engineering for Coal-fired Power Plants

By the end of 2016, the cumulative installed capacity in operation of wet electrostatic dust removal projects for coal-fired power plants reached 85.0GW. Looking forward, to meet “ultra-low emission” standards, coal-fired power plants are expected to seek for solutions like WESP and those service providers with successful track record are likely to enjoy a healthy growth in the coming years.

### Ultra-low Emission Engineering

Recently, central and local governments issued many stricter standards for emission of coal-fired power plants and many coal-fired power plants are pursuing the goal of achieving the “ultra-low emission” as gas-fired power plants. It is expected that the market size of “ultra-low emission” engineering will reach the peak value in 2017 and 2018. According to Frost & Sullivan, cumulative market size between 2016 and 2021 is RMB154.2 billion. Set forth below is the market size of “ultra-low emission” engineering for coal-fired power plants from 2014 to 2021.

#### 2014-2021E Market Size of “Ultra-low Emission” Engineering for Coal-fired Power Plants in China



Source: Frost & Sullivan

## CHINA’S THIRD-PARTY TREATMENT OF DESULFURIZATION AND DENITRIFICATION FOR COAL-FIRED POWER PLANTS

### Drivers and Entry Barriers of Third-party Treatment of Desulfurization and Denitrification for Coal-fired Power Plants

Drivers of third-party treatment of desulfurization and denitrification for coal-fired power plants primarily include (1) increasing marketization degree of environmental protection industry for coal-fired power plants industry, (2) national government policies support and promotion; and (3) rise of relevant emission standards and enhancement of policy execution.

Market-oriented operation of desulfurization/ denitrification projects is one of the major trend in recent years. Professional third-party treatment companies possess richer experience in operation, maintenance and more abundant technical expertise compared with power plants. More and more power generation enterprises begin to recognize the third-party treatment model in desulfurization/ denitrification projects for coal-fired power plants. With the increasing marketization degree in the coming years, the penetration rate of third-party treatment is expected to keep rising. More and more companies are attracted by Chinese government’s favorable policies and are entering the third-party treatment market of some public utilities like desulfurization/ denitrification of coal-fired power plants.

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Under the increasing public awareness of environmental protection and public demand in pollution control, the PRC government keeps lifting the emission standard for coal-fired power plants. It is estimated that the emission standard of coal-fired power plants in different regions is likely to be further enhanced. Those actions point out the increasing demand in the construction and operation for the desulfurization/ denitrification systems, which also promoting the development of professional third-party treatment companies.

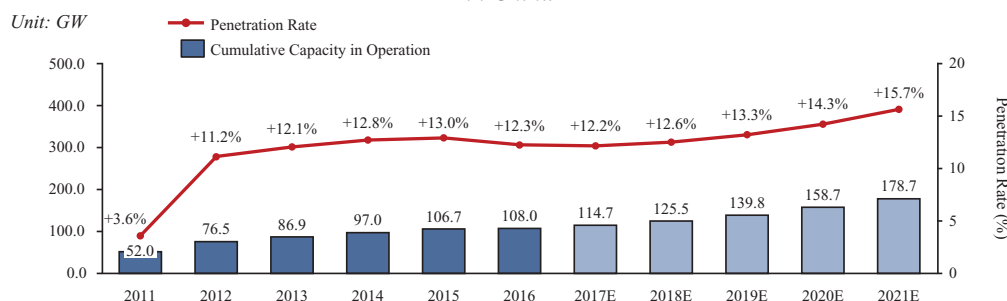
Entry barriers to third-party treatment of desulfurization and denitrification for coal-fired power plants similar to those for environmental protection facility engineering market for coal-fired power plants, which primarily include capital and operating experience.

### Market Capacity

#### ***Cumulative Capacity in Operation of China's Desulfurization Concession Operation for Coal-fired Power Plants***

In 2010, the government issued several policies promoting the operational model, and concession operation for desulfurization was effectively promoted among coal-fired power plants. The PRC government continues to support the growth of this model by implementing a series of supportive policies in recent years. The following chart sets forth the cumulative capacity in operation of desulfurization concession operations and penetration rate (China) from 2011 to 2021.

*2011-2021E Cumulative Capacity in Operation of Desulfurization Concession Operations and Penetration Rate in China*

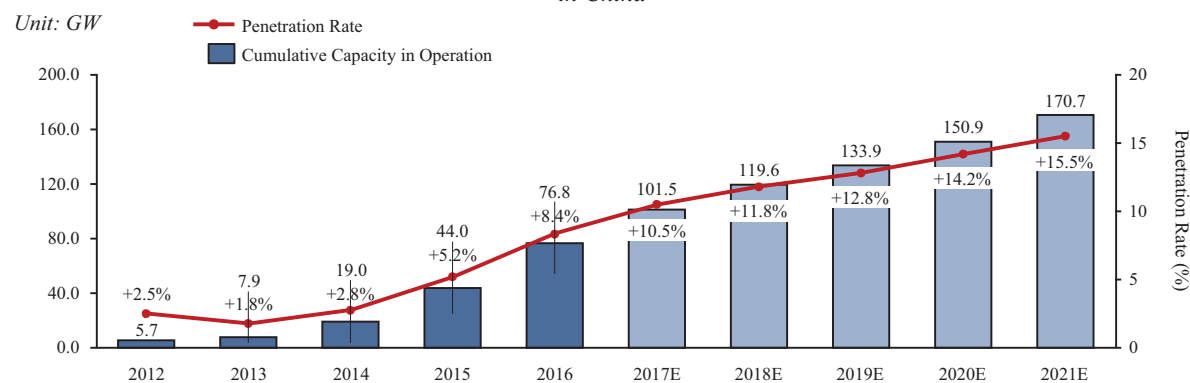


Source: CEC, Frost & Sullivan

#### ***Cumulative Capacity in Operation of China's Denitrification Concession Operation for Coal-fired Power Plants***

During the “12th Five-Year” period, denitrification for coal-fired power plants experienced fast growth, with rapidly increasing installation rate. Similar to desulfurization, third-party treatment through professional solution providers effectively increases the efficiency in the operation. As a result, from 2012 some coal-fired power plants started to adopt concession operation for denitrification facilities. The following chart sets forth the cumulative capacity in operation of denitrification concession operations and penetration rate (China) from 2012 to 2021.

*2012-2021E Cumulative Capacity in Operation of Denitrification Concession Operations and Penetration Rate in China*



Source: CEC, Frost & Sullivan

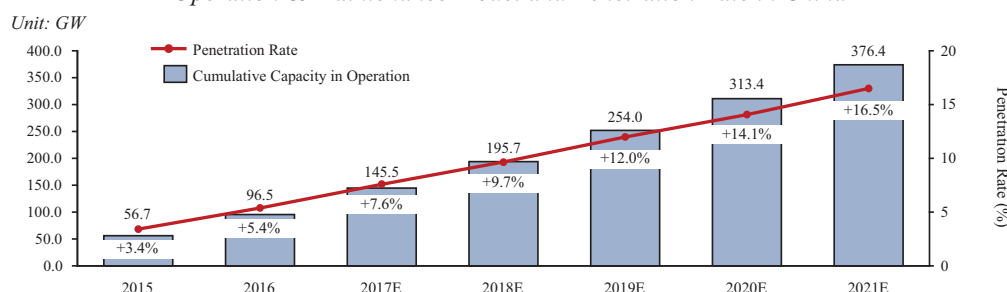


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### Cumulative Installed Capacity in Operation of China's Desulfurization and Denitrification under O&M Model for Coal-fired Power Plants

O&M model is another model for third-party treatment of desulfurization and denitrification for coal-fired power plants. Before 2015, just a few coal-fired power plants adopted the O&M model. Currently, desulfurization projects constitute the major proportion of around 84% in terms of total cumulative capacity in operation of all projects under the O & M model of third-party treatment in 2016. Looking forward, as the third-party treatment model becomes increasingly popular, O&M model is expected to witness a strong development in the coming years. The following chart sets forth the cumulative installed capacity in operation of desulfurization and denitrification under operation & maintenance model and penetration rate (China) from 2015 to 2021.

*2015-2021E Cumulative Installed Capacity in Operation of Desulfurization and Denitrification Under Operation & Maintenance Model and Penetration Rate in China*



Source: Frost & Sullivan

## COMPETITIVE LANDSCAPE

### Overview

China's flue gas treatment market is composed of two submarkets: environmental protection facility engineering market for coal-fired power plants and desulfurization/denitrification third-party treatment market. Both of the two submarkets are operated by two major types of market participants: power plant backed companies and independent companies. Power plant backed companies refer to those desulfurization/denitrification companies whose controlling shareholders are power generation groups or companies. Generally, majority of desulfurization/denitrification projects of those power plant backed companies come from their related power generation groups or companies. Independent companies refer to those private desulfurization/denitrification companies not controlled by any power groups.

### Environmental Protection Facility (Flue Gas Desulfurization and Denitrification and Dust Removal) Engineering Market

#### *Desulfurization Engineering Market of Coal-Fired Power Plants*

The desulfurization engineering market of coal-fired power plants in China is relatively fragmented, by 2016, top 5 companies accounted for around 38.5% of the market share. By the end of 2016, the cumulative installed capacity of Beijing Boqi was 66.5GW and ranked second in China's desulfurization engineering market of coal-fired power plants. Please see table below for further information.

Rank	Company Name	Cumulative Installed Capacity (GW)	Market Share (%)	Location
1	Guodian Technology and Environment Group Corporation Limited . . .	116.5	13.3	Beijing
2	<b>Beijing Boqi</b> . . . . .	<b>66.5</b>	<b>7.6</b>	<b>Beijing</b>
3	CPI Yuanda Environmental Protection Engineering Co., Ltd. . . . .	55.3	6.3	Chongqing
4	Fujian Longking Co., Ltd. . . . .	55.2	6.3	Fujian
5	Wuhan KaiDi Electric Power Environmental Co., Ltd. . . . .	44.0	5.0	Hubei
	Total . . . . .	<u>337.5</u>	38.5	

Sources: CEC, Frost & Sullivan

Note: the data refer to cumulative installed capacity in terms of newly-built projects.

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### *Competitive Landscape of Independent Companies in Desulfurization Engineering Market of Coal-Fired Power Plants*

China's desulfurization engineering market of coal-fired power plants was normally formed by two major types of market participants: independent desulfurization EPC companies and power plant backed desulfurization EPC companies. In 2016, approximately two-thirds of market share of desulfurization engineering market of coal-fired power plants was occupied by independent companies in terms of cumulative installed capacity, accounting for 62.3% of the share. By the end of 2016, cumulative installed capacity of desulfurization engineering project of Beijing Boqi was 66.5GW and ranked first among all the independent companies in China's desulfurization engineering market of coal-fired power plants. Please see table below for further information.

Rank	Company Name	Cumulative Installed Capacity (GW)	Market Share (%)	Location
1	<b>Beijing Boqi</b>	<b>66.5</b>	<b>12.2</b>	<b>Beijing</b>
2	Fujian Longking Co., Ltd.	55.2	10.1	Fujian
3	Wuhan KaiDi Electric Power Environmental Co., Ltd.	44.0	8.1	Hubei
4	Beijing SPC Environment Protection Tech Co., Ltd.	20.5	3.8	Beijing
5	Zhejiang Lantian Qiushi Environmental Protection Co., Ltd.	10.9	2.0	Zhejiang
	Other	348.5	63.9	
	Total	<u>545.6</u>	<u>100.0</u>	

Sources: CEC, Frost & Sullivan

### *Denitrification Engineering Market of Coal-Fired Power Plants*

Compared with the desulfurization market of coal-fired power plants, the development period of China's denitrification engineering market of coal-fired power plants is relatively short. By the end of 2016, top 10 companies account for around 54.1% of the market share. By the end of 2016, the cumulative installed capacity of denitrification engineering project of Beijing Boqi was 13.8GW and Beijing Boqi ranked 10th in China's denitrification engineering market of coal-fired power plants. Please see table below for further information.

Rank	Company Name	Cumulative Installed Capacity (GW)	Market Share (%)	Location
1	Guodian Technology and Environment Group Corporation Limited	116.2	12.7	Beijing
2	China Huadian Engineering CO., Ltd.	82.0	9.0	Beijing
3	Datang Environment Industry Group Co., Ltd.	57.0	6.2	Beijing
4	CPI Yuanda Environmental Protection Engineering Co., Ltd.	54.2	5.9	Chongqing
5	Zhejiang Tiandi Environmental Protection Engineering Co., Ltd.	47.2	5.2	Zhejiang
6	Dongfang Boiler Group Co., Ltd.	46.8	5.1	Sichuan
7	Jiangsu Kehang Group Co., Ltd.	32.9	3.6	Jiangsu
8	Fujian Longking Co., Ltd.	28.5	3.1	Fujian
9	Xi'an Thermal Power Research Institute Co., Ltd.	16.1	1.8	Shaanxi
10	<b>Beijing Boqi</b>	<b>13.8</b>	<b>1.5</b>	<b>Beijing</b>
	Total	<u>494.7</u>	<u>54.1</u>	

Sources: CEC, Frost & Sullivan

### *Competitive Landscape of Independent Companies in Denitrification Engineering Market of Coal-Fired Power Plants*

By the end of 2016, Beijing Boqi's cumulative installed capacity of desulfurization engineering project was 13.8GW and ranked fourth place among all the independent companies in China's

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denitrification engineering market of coal-fired power plants. Please see table below for further information.

Rank	Company Name	Cumulative Installed Capacity (GW)	Market Share (%)	Location
1	Dongfang Boiler Group Co., Ltd. ....	46.8	13.4	Sichuan
2	Jiangsu Kehang Environmental Protection Technology Co., Ltd. ....	32.9	9.4	Jiangsu
3	Fujian Longking Co., Ltd. ....	28.5	8.2	Fujian
4	<b>Beijing Boqi</b> .....	<b>13.8</b>	<b>4.0</b>	<b>Beijing</b>
5	Beijing SPC Environment Protection Tech Co., Ltd. ....	7.6	2.2	Beijing
	Others .....	219.8	62.9	
	Total .....	<u>349.4</u>	<u>100.0</u>	

Sources: CEC, Frost & Sullivan

### Dust Removal Engineering Market of Coal-Fired Power Plants

Beijing Boqi, with 1,290 MW in operation and 1.5 percent market share, ranked 10th in terms of cumulative installed capacity in operation of WESP for coal-fired power plants by 2016.

### Desulfurization of Coal-Fired Power Plants and Denitrification Third-party Treatment Market Desulfurization Concession Operation Market

China's desulfurization concession operation market was emerged and gradually developed after the desulfurization engineering market. Coal-fired power plants backed companies were the major market participants in the early development stage of desulfurization concession operation market and some independent companies began to enter the market in recent years. By the end of 2016, top 10 companies accounted for around 98.6% of the market share. By the end of 2016, the cumulative capacity in operation of Beijing Boqi was 4.4GW and ranked seventh in China's desulfurization concession operation market. Please see table below for further information.

Rank	Company Name	Cumulative Capacity in operation (GW)	Market Share (%)	Location
1	Datang Environment Industry Group Co. Ltd. ....	32.4	30.0	Beijing
2	Beijing SPC Environment Protection Tech Co., Ltd. ....	25.6	23.7	Beijing
3	CPI Yuanda Environmental Protection Engineering Co., Ltd. ....	15.1	14.0	Chongqing
4	Guodian Technology and Environment Group Corporation Limited ...	10.1	9.4	Beijing
5	Zhejiang Tiandi Environmental Protection Engineering Co., Ltd. ....	6.3	5.9	Zhejiang
6	Wuhan Guanggu Environment Protection Tech Co., Ltd. ....	5.9	5.5	Hubei
7	<b>Beijing Boqi</b> .....	<b>4.4</b>	<b>4.1</b>	<b>Beijing</b>
8	Beijing Beile Ouyuan Science & Technology Co., Ltd. ....	2.7	2.5	Beijing
9	China Huadian Engineering Co., Ltd. ....	2.0	1.9	Beijing
10	Jiangsu Fengye Technology & Environmental Group Corporation Limited .....	2.0	1.8	Jiangsu
	Other .....	1.5	1.4	
	Total .....	<u>108.0</u>	<u>100.0</u>	

Sources: CEC, Frost & Sullivan

### Competitive Landscape of Independent Companies in the Desulfurization Concession Operation Market of Coal-Fired Power Plants

China's desulfurization concession operation market was also taken charged by both independent companies and power plant backed companies. With further development of desulfurization concession operation market, some independent companies began to enter the market and the share of independent companies has raised to 38.9% in 2016. By the end of 2016, the cumulative capacity in operation of desulfurization concession operation project of Beijing Boqi was



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4.4GW and ranked third among all the independent companies in China's desulfurization concession market. Please see table below for further information.

Rank	Company Name	Cumulative Capacity in Operation (GW)	Share (%)	Location
1	Beijing SPC Environment Protection Tech Co., Ltd. ....	25.6	61.1	Beijing
2	Wuhan Guanggu Environment Protection Tech Co., Ltd. ....	5.9	14.0	Hubei
<b>3</b>	<b>Beijing Boqi</b> .....	<b>4.4</b>	<b>10.4</b>	<b>Beijing</b>
4	Beijing Beile Ouyuan Science & Technology Co., Ltd. ....	2.7	6.4	Beijing
5	Jiangsu Fengye Environment Protection Tech Co., Ltd. ....	2.0	4.7	Jiangsu
	Others .....	1.4	3.4	
	Total .....	<u>42.0</u>	<u>100.0</u>	

Sources: CEC, Frost & Sullivan

### ***Denitrification Concession Operation Market of Coal-Fired Power Plants***

As an emerging industry in environmental protection industry of coal-fired power plants in China, the denitrification concession operation market is just starting out. By the end of 2016, the cumulative capacity in operation of denitrification concession operation project of Beijing Boqi was 1.3GW and Beijing Boqi ranked eighth in China's denitrification concession operation market. Please see table below for further information.

Rank	Company Name	Cumulative Capacity in Operation (GW)	Share (%)	Location
1	Datang Environment Industry Group Co., Ltd. ....	27.5	35.7	Beijing
2	Beijing SPC Environment Protection Tech Co., Ltd. ....	14.5	18.9	Beijing
3	CPI Yuanda Environmental Protection Engineering Co., Ltd. ....	13.2	17.2	Chongqing
4	Guodian Technology and Environment Group Corporation Limited ...	11.1	14.4	Beijing
5	Beijing Beile Ouyuan Science & Technology Co., Ltd. ....	3.4	4.4	Beijing
6	China Huadian Engineering Co., Ltd. ....	2.8	3.6	Beijing
7	Zhejiang Tiandi Environmental Protection Engineering Co., Ltd. ....	2.4	3.1	Zhejiang
<b>8</b>	<b>Beijing Boqi</b> .....	<b>1.3</b>	<b>1.7</b>	<b>Beijing</b>
	Total .....	<u>76.2</u>	<u>99.0</u>	

Sources: CEC, Frost & Sullivan

### ***Competitive Landscape of Independent Companies in the Denitrification Concession Operation Market of Coal-Fired Power Plants***

China's denitrification concession operation market has just developed for a short period. Some independent companies began to enter the denitrification concession operation market in recent years, representing 25.9% of the share in 2016. By the end of 2016, the cumulative capacity in operation of denitrification concession operation project of Beijing Boqi was 1.3GW and ranked third among all the independent companies in China's denitrification concession operation market. Please see table below for further information.

Rank	Company Name	Cumulative Capacity in Operation (GW)	Market Share (%)	Location
1	Beijing SPC Environment Protection Tech Co., Ltd. ....	14.5	72.9	Beijing
2	Beijing Beile Ouyuan Science & Technology Co., Ltd. ....	3.4	17.0	Beijing
<b>3</b>	<b>Beijing Boqi</b> .....	<b>1.3</b>	<b>6.5</b>	<b>Beijing</b>
	Top 3 total .....	<u>19.2</u>	<u>96.4</u>	

Sources: CEC, Frost & Sullivan

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### *Desulfurization and Denitrification O&M Market of Coal-Fired Power Plants*

China's desulfurization and denitrification O&M market, as another major business model in third-party treatment, was relatively concentrated, and top five players accounted for approximately 75% of the market share. By the end of 2016, the cumulative installed capacity in operation of desulfurization O&M project of Beijing Boqi was 9.1 GW and ranked fourth among in China's desulfurization and denitrification O&M market. Please see table below for further information.

Rank	Company Name	Cumulative Capacity in Operation (GW)	Share (%)	Location
1	Guodian Technology and Environment Group Corporation Limited . . . . .	26.5	27.5	Beijing
2	China Power Conservation & Environment Protection Co., Ltd . . . . .	17.0	17.6	Beijing
3	Shanghai Oriental Enviro-Industry Co., Ltd . . . . .	12.6	13.1	Shanghai
4	<b>Beijing Boqi</b> . . . . .	<b>9.1</b>	<b>9.5</b>	<b>Beijing</b>
5	Beijing Beile Ouyuan Science & Technology Co., Ltd. . . . .	6.7	7.0	Beijing
	Top 5 total . . . . .	<u>72.0</u>	<u>74.6</u>	

Sources: CEC, Frost & Sullivan

### SOURCE OF INFORMATION

We commissioned Frost & Sullivan (Beijing) Inc., Shanghai Branch Co. ("**Frost & Sullivan**"), an independent third party, to prepare an independent industry report on the PRC's coal-fired power environmental protection market for use in whole or in part in this prospectus. This prospectus contains information extracted from the Frost & Sullivan Report in sections such as "Summary," "Industry Overview," "Business" and "Financial Information". We paid Frost & Sullivan a fee of RMB960,000 for the preparation of the Frost and Sullivan Report.

Frost & Sullivan is an independent industry consultant founded in 1961 which has over 40 global offices and employs over 2,000 analysts and experts worldwide. The firm covers a number of industries, including aerospace, defense, automotive, transportation, chemicals, energy and power systems, environmental technologies, electronics, information and communication technologies and healthcare. Frost & Sullivan researches and analyzes new market opportunities for corporate growth and has prepared the Frost & Sullivan Report based on data released by government institutions such as the NDRC, CEC as well as study undertaken by Frost & Sullivan through primary research which involves discussing the status of the industry with leading industry participants and industry experts. The methodology used in the Frost & Sullivan Report is the Expert Opinion Consensus Methodology, which integrates several forecasting techniques with the market engineering measurement-based system. The methodology is a seven-step system that maximizes the credibility and accuracy of the information in the Frost & Sullivan Report. We believe that the sources of information are appropriate sources for such information 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 Selling Shareholders, the Sole Sponsor, the Underwriters or any other party involved in the Global Offering and no representation is given as to its accuracy. Assumptions included in the Frost & Sullivan Report are inherently uncertain because of events or combinations of events that cannot reasonably be foreseen, including, without limitation, the actions of government individuals, third parties and competitors. Specific factors that could cause actual results to differ materially include, among other things, risks inherent in the coal-fired power industry, financing risks, labor risks, supply risks, regulatory risks and environmental concerns.