

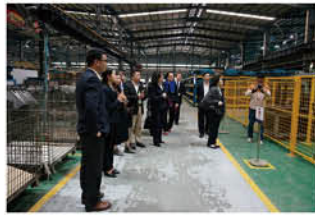


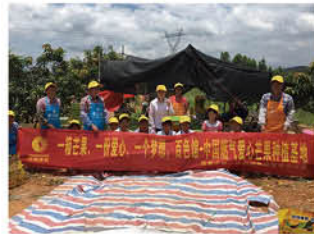
北京控股有限公司
BEIJING ENTERPRISES HOLDINGS LIMITED



2016

Corporate Social Responsibility Report





The publication of the Report marks the 20th anniversary of Beijing Enterprises' listing in Hong Kong. We would like to collect images about working in Beijing Enterprises among all employees to record the efforts we have made and values we have created.

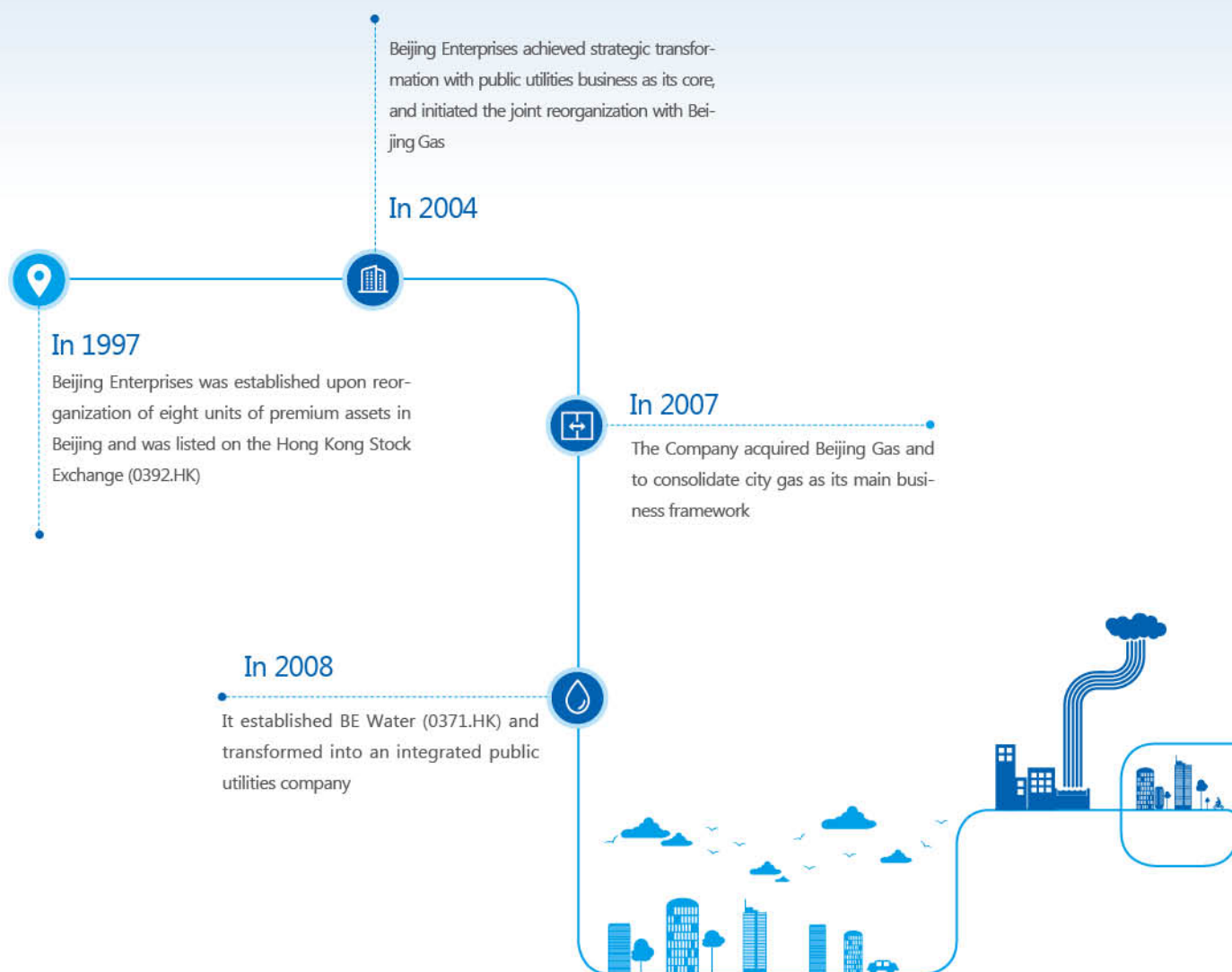
These images are contributed by our respectable employees who have been devoting themselves wholeheartedly to our sustainable development at home and abroad.



A Glimpse of Beijing Enterprises' Responsibility Fulfillment 1997-2017



MAJOR EVENTS IN THE 20-YEAR HISTORY





Beijing Enterprises Environment Group Limited (0514.HK) achieved strategic transformation and acquired the Zomax project and GSE project

In 2014



In 2013

It acquired China Gas (0348.HK) and achieved nationwide planning for gas



In 2012

It further divested non-core business segments, consolidated assets in water treatment, adjusting and optimizing its asset allocation



In 2009

It implemented the development strategies of the solid waste treatment business of Beijing Enterprises, preliminary formed the development pattern of public utilities layout with gas, water, and solid waste treatment



In 2015

Beijing Enterprises concentrated resources to develop gas, water, and solid waste treatment as the three principal businesses, and also beer as its value-oriented investment business



In 2016

It acquired EEW GmbH, a leading energy-from-waste company in Europe, and established the department of environment protection and solid waste treatment, forging a professional platform for solid waste treatment

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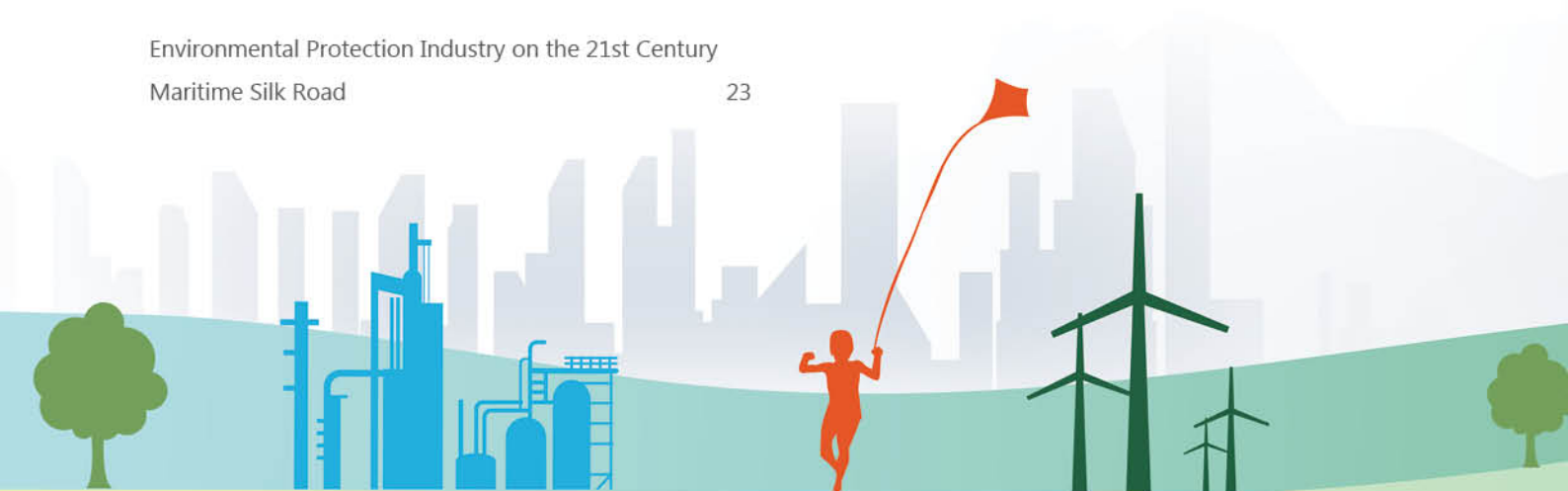
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Message from Our Managers

Chairman of Beijing Enterprises Holding Limited

Wang Dong



In 2015, the 193 UN members signed up the 2030 Agenda for Sustainable Development, which set down 17 Sustainable Development Goals (SDGs). In 2016, Li Keqiang, Premier of the State Council, chaired the Symposium on 2030 Agenda for Sustainable Development at UN headquarters in New York and Releases *China's National Plan for the Implementation of the 2030 Agenda for Sustainable Development*. The analysis of our company's business against the SDGs revealed close parallels between the development of our industry and the goals, such as No Poverty, Good Health and Well-being, Clean Water and Sanitation, Affordable and Clean Energy, and Sustainable Cities and Communities. This strengthened our commitment to social responsibility and reaffirmed our development path, and we will work to address social, economic and environmental issues.

Centered around the concept of green and environmentally friendly and over the past 20 year, Beijing Enterprises has steadily built up our core public utilities businesses of gas, water & environment, solid waste treatment, alongside a brewery segment. In 2016, the first year of the UN 2030 Agenda, Beijing Enterprises pursued Five Development Concepts - innovation, coordination, green development, opening up, and sharing. Annual targets were met smoothly with the Company achieving turnover of HKD 55.96 billion and profit attributable to shareholders of the company was approximately HKD 6.24 billion. This marked a successful start to the Company's 13th Five-Year Plan for the period 2016-2020.

Opening up: Providing green energy along the Belt and Road

With our ethos of "Invest for a better life", Beijing Enterprises is actively implementing the national "Belt and Road" strategy to open up overseas markets, based on a responsible investment and financing model. We are working on new, state-led projects in Portugal, Germany, Indonesia, Malaysia and Singapore to address local sustainable development issues. In 2016, Beijing Enterprises acquired 100% of EEW GmbH ("EEW"), an energy-from-waste company in Germany, which was the largest overseas acquisition to date by a Chinese company in the field of energy generation from solid waste. This significantly increased the Company's operational scope and industry standing, opening the way for us to bring in advanced European expertise, technology and management experience. Besides this, Beijing Gas acquired a stake in Rosneft's Verkhnechonskoe oil and gas project in Russia - a major boost in the upgrading of its portfolio. And Singapore's second water reclamation plant, Changi NEWater Plant II, went into operation, providing Singapore with 50 million gallons (228,000 tons) of water a day. The progress we have made in our various overseas projects has earned the Company plaudits from international partners.

Green development: Boosting the development of core industries

At Beijing Enterprises, we maintain air quality, purify urban water sources and lead the way in transforming waste into energy. The Company's gas segment covers various gas-related businesses, and with total sales of some 24.2 billion cubic meters across over 300 cities and regions. We are actively implementing the government's coal-to-gas conversion policy, while taking concrete action to support the Paris Agreement on climate change. Our water segment, which chiefly comprises urban water services and comprehensive renovation prioritizes environmental protection; we have participated in 452 water plants which are or will be in operation to treat urban water pollution and carry out water reclamation. The Company is actively working to implement the State Council's *Action Plan for the Prevention and Control of Water Pollution*. In the waste-to-energy segment, we adhere to an ethos of sustainable development: in 2016, Beijing Enterprises achieved waste incineration and power generation integrated treatment capacity of 27,961 tons/day, contributing to the development of the domestic solid-waste-to-energy industry. The Company was honored to be ranked in the top three of the Ten Most Influential Companies in the Chinese Solid Waste Industry for our contribution to reducing the longstanding problem of waste mountains outside our cities. Meanwhile, through advanced technology and

CEO of Beijing Enterprises Holding Limited

Zhou Si



proper management, our projects have met emission standards and environmental protection performance, ensuring our leading role in domestic environmental protection sectors.

Coordination: Win-win cooperation with partners

In 2016, Beijing Enterprises set out a new development model of strategic cooperation, known as “Capital + Investment Projects”, to create a framework for strategic cooperation across all our businesses. Seizing the opportunity of integrated development of Beijing-Tianjin-Hebei region, we are working with local governments there to support the building of “Subsidiary Administrative Center” to relieve population pressures, as well as a project to desalinated sea-water for use in Beijing. Beijing Gas and its partners held an excellent Natural Gas Day during the G20 Hangzhou summit, while BE Water in cooperation with the Beijing University of Technology, established China’s only state-level engineering laboratory for urban water pollution treatment. Through cooperation with government environmental enterprises, as well as commercial M&As and partnerships in the sector, the company has taken the traditional water industry to a new level. Companies from the different segments of Beijing Enterprises have actively established stable, long-term relationships with universities and vocational colleges, building industry-academia cooperation through internship and training opportunities for students, while also generating a pool of future talent for the industry.

Innovation: Encouraging industry upgrading and transformation

Beijing Enterprises has embraced technological and management innovation and become one of China’s biggest state-owned utilities companies and a flagship enterprise of Beijing Municipal Government in overseas capital markets, thus contributing to the healthy development of the industrial chain. In terms of investment and financing, the Company has established several innovative platforms to provide professional services for major PPP projects in the water

and environmental fields - and has made the most of the PPP opportunity to develop and maintain client base. Beijing Enterprises also broke new ground by issuing a “Green Panda” bond and renewable green bond.

Our subsidiaries have also wholly embraced innovation in technological and management processes. We took on numerous provincial ministry-level research projects, established a state-level laboratory and a doctorate research station, and won several major accolades. Beijing Gas successfully incorporated the national Beidou satellite navigation network into its cross-business management processes, and the Beijing Natural Gas Utilization System Engineering won China’s top award for civil engineering, the 13th Tien-yow Jeme Civil Engineering Prize. Meanwhile the Changi NEWater Plant II in Singapore won “Water Deal of the Year” at the 2016 Global Water Awards.

Sharing: Working to benefit employees and the community

Thanks to the joint efforts of all of our staff, the Company’s business continues to grow. Talent is nurtured through a comprehensive variety of training programmes tailored to staff at different levels - a concrete example of our care for employees. Beijing Enterprises has also given back to the community through support for China’s charitable sector, launched a jointly organized Seed Plan with the Chinese Football Association, and initiated environmental education with partners across the community to raise public awareness of environmental protection. The Company donated HKD 23 million in 2016.

The UN 2030 Agenda for Sustainable Development has created a broader range of opportunities and wider scope for development. In 2017, as we resolve to carry out reforms, to innovate and expand, to improve standards and outcomes, and to achieve win-win development, we aim to demonstrate our unique strengths in the public utilities sector, bring together domestic and overseas resources and work with stakeholders on all sides to lead the development of the industry and to serve the interests of the country, the people and all of society.

FOR SUSTAINABLE DEVELOPMENT

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Environmental protection will benefit future generations. We must fully understand the urgency and arduousness of protecting the ecological environment and curbing environmental pollution, and understand the importance and necessity of promoting ecological progress. We must commit ourselves to pollution control and environmental protection with a high sense of responsibility for the masses and future generations to head for a new era of socialist ecological progress and create a good environment for our people.

Xi Jinping, in the 6th group study session of the Political Bureau of the CPC Central Committee

”

About Us

Beijing Enterprises Holdings Limited ("Beijing Enterprises") was founded upon eight units of premium assets in Beijing including Yanjing Beer and was listed on the Main Board of the Stock Exchange of Hong Kong ("HKEx") in 1997. Going through restructuring, transformation, upgrading and responsible investing, Beijing Enterprises has grown into one of China's largest state-owned public utilities enterprises and a flagship enterprise of the Beijing Municipal Government in overseas capital markets.

Upholding the idea of environmental protection, active and robust management policy, and prudent investment strategy, Beijing Enterprises has gradually formed the overall pattern composed of three public utilities segments (gas, water & environment, solid waste treatment) and the beer industry (Yanjing Beer) after years of unremitting efforts. As Beijing's largest overseas investment and financing platform, the Company has become one of the red chips that are well received by the HKEx and investors. Among the listed companies under Beijing Enterprises Group Company, BEHL, BE Water and China Gas are among the Hang Seng Composite Index Constituent Stocks, with the former two also among the Hang Seng China-Affiliated Corporations Index Constituent Stocks.

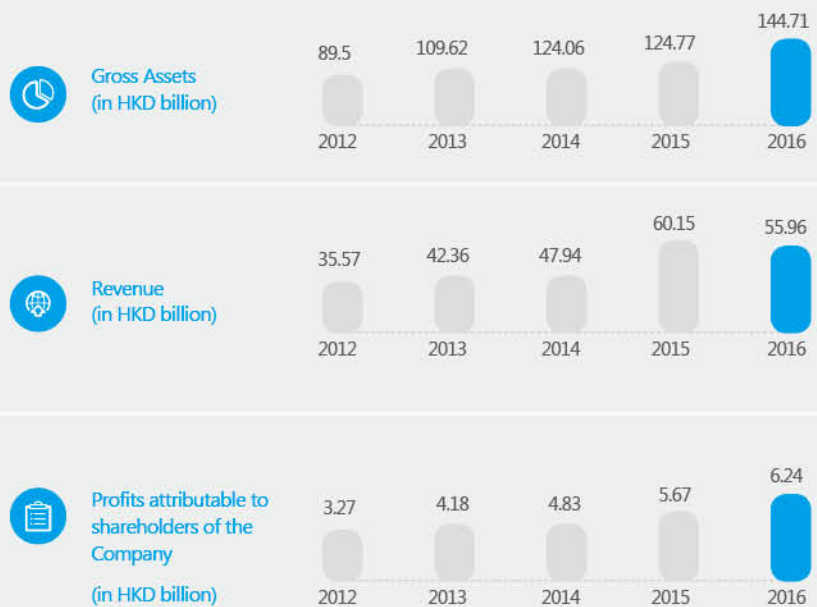
By the end of 2016, the total market value of Beijing Enterprises had increased from HKD 25 billion in 1997 to HKD 46.3 billion, the total revenue had increased from HKD 2.4 billion in 1997 to HKD 56 billion, and the total profit had increased from HKD 1 billion in 1997 to HKD 7.5 billion. The Company has approximately 48,000 employees in total.

The total market value up to

HKD **46.3** billion

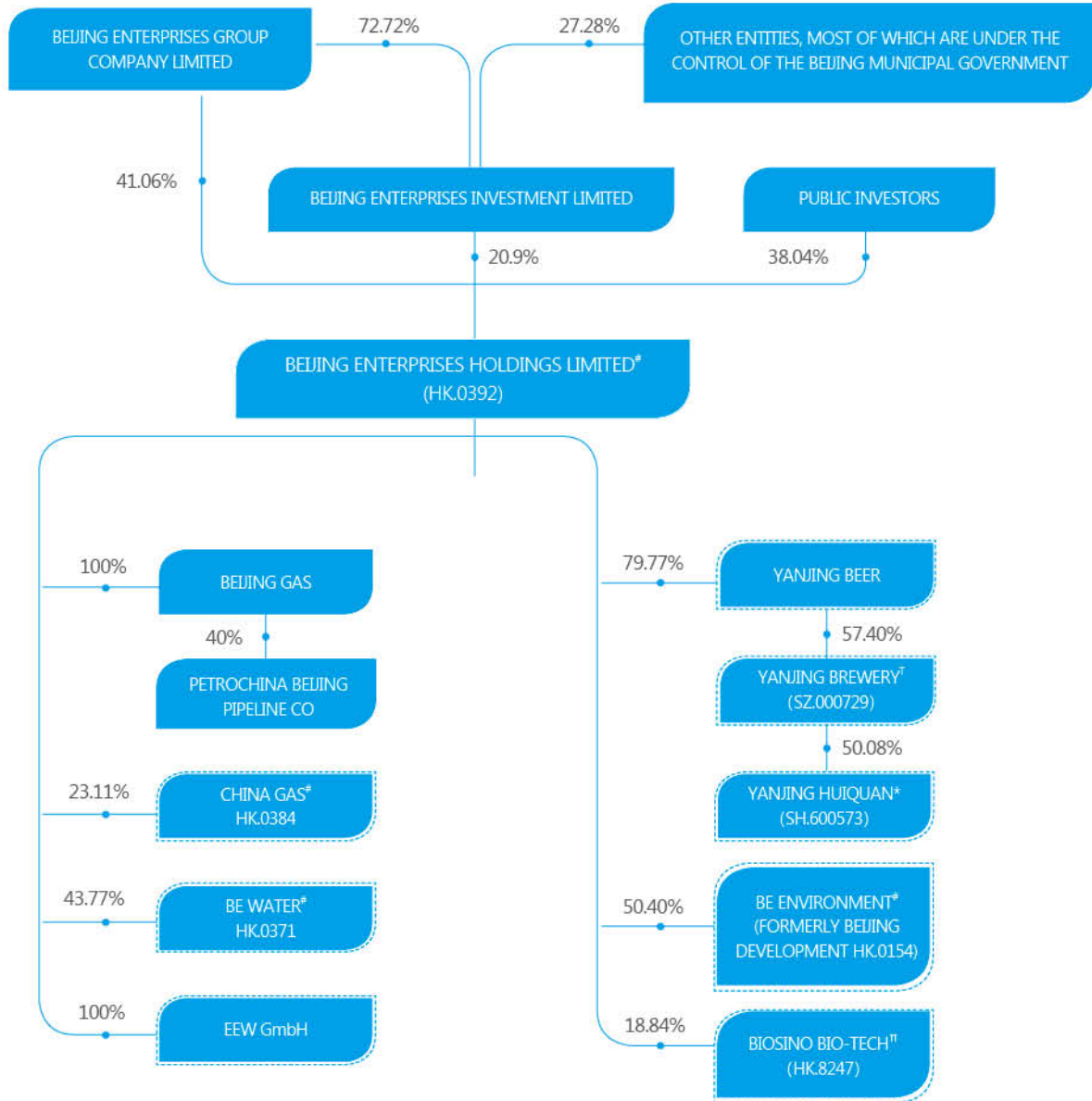
The total profit up to

HKD **7.5** billion



Corporate Structure

As at December 31, 2016



* Listed on the Shanghai Stock Exchange

† Listed on the Shenzhen Stock Exchange

Listed on the Main Board of the Hong Kong Stock Exchange

†† Listed on the Growth Enterprise Market of the Hong Kong Stock Exchange

Corporate Governance

Beijing Enterprises has established a strict corporate governance structure with clear-cut rights and liabilities, comprising the general meeting of shareholders, the Board of Directors and the management. The Company has maintained the dual head office system (Beijing and Hong Kong) and realized seamless inter-head-office communication in defiance of spatial distance. Meanwhile, the Company has strengthened its responsibilities of managing, supervising, coordinating and serving member companies to improve its service and support.

Executive Directors

Mr. Wang Dong (Chairman)

Mr. Hou Zibo (Vice Chairman)

Mr. Zhou Si (Vice Chairman & Chief Executive Officer)

Mr. Li Fucheng (Vice Chairman)

Mr. Li Yongcheng (Vice Chairman)

Mr. E Meng (Executive Vice President)

Mr. Jiang Xinhao (Vice President)

Mr. Tam Chun Fai (Chief Financial Officer & Company Secretary)

Independent Non-Executive Directors

Mr. Wu Jiesi

Mr. Lam Hoi Ham

Mr. Fu Tingmei *

Mr. Sze Chi Ching

Dr. Yu Sun Say

Mr. Ma She

* Ceased to act since 22 June, 2017

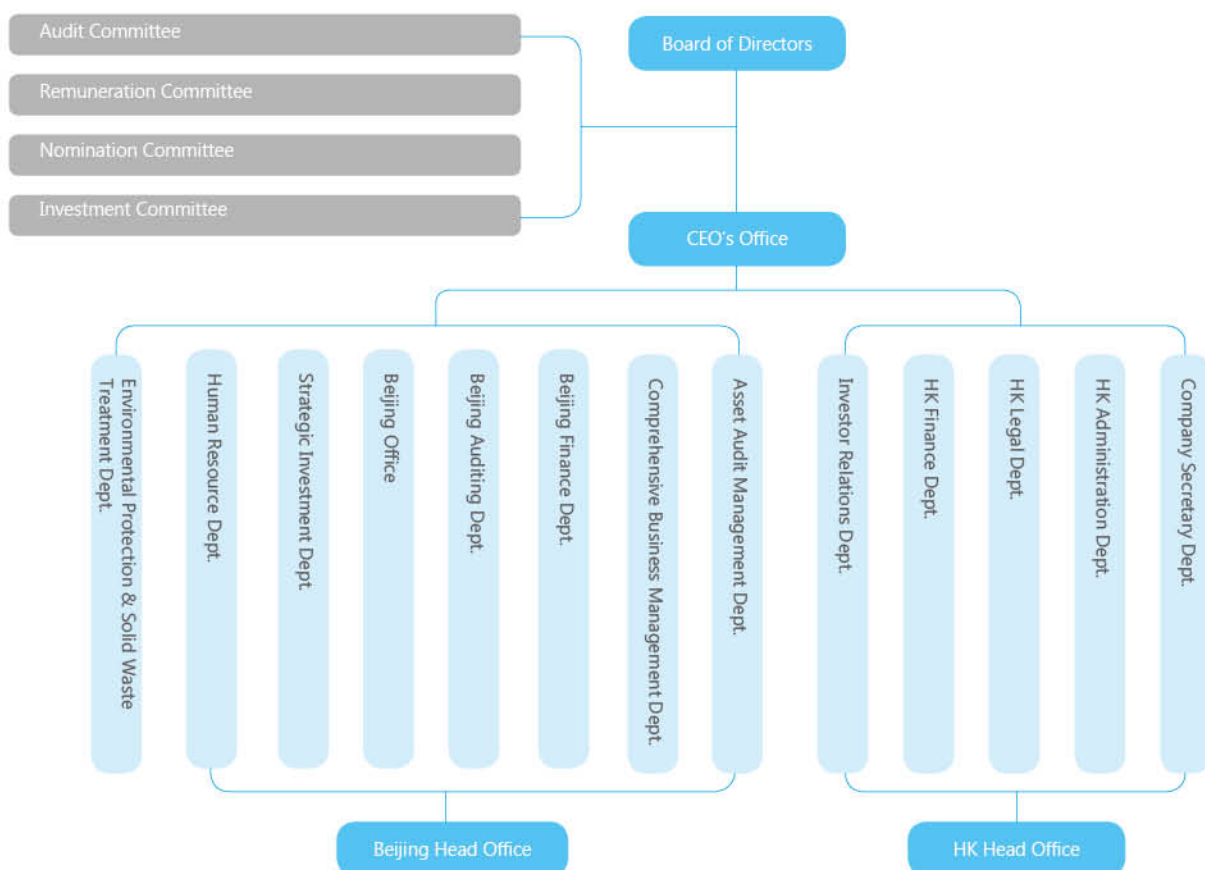
Management Team

Mr. Zhi Xiaoye (Vice President)

Mr. Ke Jian (Vice President)

Ms. Qi Xiaohong (Vice President)

Ms. Sha Ning (Vice President)



Core Business

Centering on the overall pattern of three public utilities segments (gas, water & environment, solid waste treatment) and the value-oriented investment represented by beer business, Beijing Enterprises is constantly improving its value-creating ability and is now the guardian of clean air, purifier of urban water environment and leader in turning waste into energy.

By acquiring 100% shareholding of Beijing Gas, China's largest city gas company, and 23.11% shareholding of China Gas, one of China's largest cross-regional gas supply service companies, Beijing Enterprises has actively implemented the coal-to-gas conversion policy and expanded its business to multiple fields including civil cooking, industrial use, heating, refrigeration, electricity generation, vehicle gas and distributed energy.

The total gas sales volume was approximately **24.2** billion cubic meters, serving over **20** million household, industrial, public-sector and commercial subscribers in over **300** cities **25** provinces, autonomous regions and municipalities.



At the same time, the Company has speeded up the pace of overseas investment. In 2016, it proposed to buy a minority stake in the VCMG project of Rosneft Oil, participated in major cooperation projects such as the restructuring and listing of the financial assets of CNPC, solving environmental problems caused by traditional energy from various aspects.

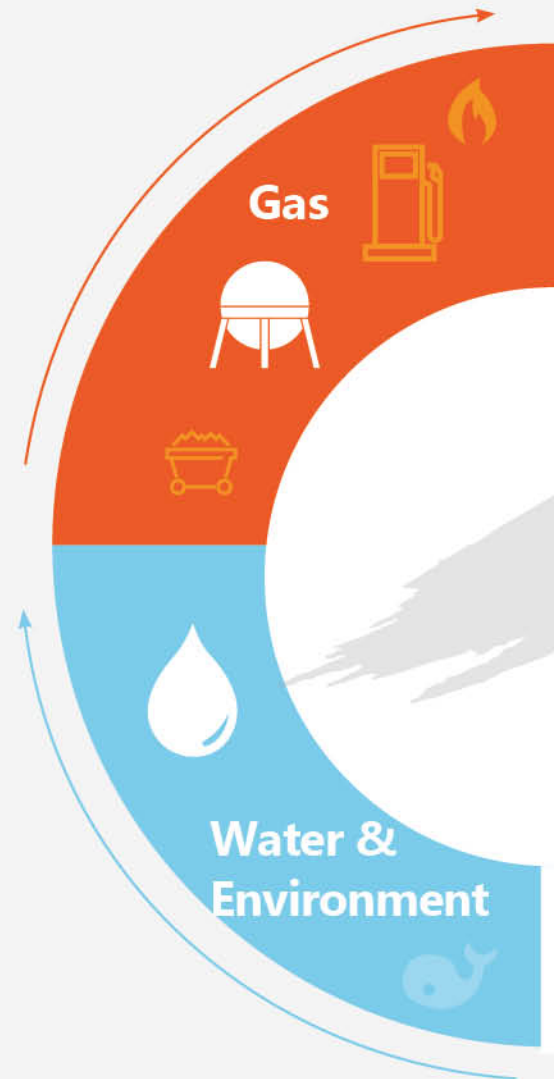
Gas

Through BE Water, a professional comprehensive service provider of water environment, Beijing Enterprises has brought mature technologies to 25 provinces, autonomous regions and municipalities, and to foreign countries including Singapore, Malaysia and Portugal. At present, the Company's Water & environment business includes urban water management, comprehensive renovation of water environment, membrane technology and industrial wastewater treatment, seawater desalination and technology service, with a special focus on urban sewage treatment and reclaimed water environment.

By the end of 2016, BE Water has already participated in **452** water plants which are or will be in operation, with a total designed capacity of the water treatment service of **27.17** million tons per day. The water supply of those in operation is about **5.74** million tons per day, and the amount of purified sewage and reclaimed water is about **10.74** million tons per day.



Water & Environment






Solid waste treatment is an important component of Beijing Enterprises' core businesses. Along with mergers and acquisitions of domestic solid waste assets, the Company took advantage of its brand and capital strength and acquired Europe's leading energy-from-waste company at the expense of 1.438 billion euros, quickly occupying the leading position in solid waste treatment with rich experience and increasing performance.

Adhering to the sustainable development concept of turning waste into energy, Beijing Enterprises is committed to reducing carbon emissions of households and enterprises and promoting the development of domestic solid waste reuse through the management of urban and rural environmental sanitation, kitchen waste incineration power generation, sludge disposal, treatment of industrial hazardous waste and medical waste. In 2016, Beijing Enterprises ranked among Top 3 in the "Top 10 Influential Enterprises in Solid Waste Industry in China" campaign and realized its strategic target.

In 2016, Beijing Enterprises (including the newly acquired EEW GmbH) has accomplished waste incineration and power generation integrated treatment capacity of **27,961** tons per day. Beijing Enterprises Environment Group (formerly Beijing Development) and Beijing Enterprises Environmental Technology achieved an aggregate operating revenue of HKD

 **790** million, and realized an operating profit of HKD **210** million.

In March 2016, Beijing Enterprises acquired 100% shareholding in EEW GmbH, the largest waste incineration power plant in Germany, promoting the domestic solid waste treatment technology to the world-leading level.

Solid Waste Treatment

Beer business is an important component of the Company's value investing strategy. The main subsidiary enterprise is Yanjing Beer. Its national brand "Yanjing" has a brand value of RMB 88.275 billion. Strong local brands include Liqun, Huiquan and Xuelu. In 2016, the proportion of sales volume of its products with price over RMB 2,500 per kiloliter accounted for 51%, among which the sales volume of cans recorded a year-on-year increase of 14.6%; the sales volume of fresh beer increased by 3.7% year on year. The proportion of sales volume of "1+3" brand was 92%, of which 74% is for Yanjing's main brands.

In 2016, the brand value of Yanjing Beer reached RMB **88.275**

billion, an increase of **10%** year on year. During the year, sales volume of Yanjing Beer reached **4.5** million kiloliters, achieving a revenue

 **Beer** of HKD **11.59** billion.

Major Investment and Financing Operations

Centering on the strategic positioning of “comprehensive public utilities enterprise”, Beijing Enterprises proposed the new strategic coordinated development pattern of “capital + investment”, giving full play to its function as an investment & financing platform and taking advantage of its multiple channels domestic and abroad in the public utilities area.

Conducting High-Quality Investment

Acquisition of EEW

In March 2016, Beijing Enterprises acquired 100% shareholding of EEW GmbH, a German energy-from-waste company, through the market bid, which significantly increases its business scale and status in solid waste treatment. The acquisition (1.438 billion Euros) is by far the largest overseas acquisition of Chinese companies in the field of waste utilization, as well as the largest merger of Chinese companies in Germany. It is in line with the Belt and Road Initiative.

EEW is the only company in Germany, or even in Europe, that focuses on waste incineration power generation (with a capacity of 13,000 tons per day). It has 18 waste incineration power plants in Germany and neighboring countries to provide power, heat and industrial steam, occupying 18% of the German market, ranking first in the country. EEW has accumulated rich experience in development and management of waste incineration power plants, and helped other waste incineration plants with its advantages in technology and operation.

By its credit accumulated through years of capital operation and overseas financing, the industrial background as a comprehensive public utilities enterprise, and the existing strengths in solid waste treatment in terms of operation scale, management level and professional team, Beijing Enterprises won the bid and the transaction was approved by the German government within one month.

Capital injection for restructuring Beijing Enterprises Environment

In October 2016, Beijing Enterprises successfully injected six high-quality asset units of solid waste (hazardous waste) treatment project into Beijing Enterprises Environment Group (formerly Beijing Development). This move significantly improves the quality of BE Environment’s assets and the economies of scale of its solid waste projects, realizes resources integration of high-quality assets and listed companies, and lays the foundation for building an environment-friendly solid waste industry group. BE Environment will issue HKD 2,202.3 million of convertible bonds due in 2021. The six projects include Beijing Gaoantun Domestic Waste Comprehensive Treatment Project (84.9% shareholding), Jiangsu Zhangjiagang Domestic Waste Incineration Power Plant (100% shareholding), Harbin Shuangqi Domestic Waste Incineration Power Project (80% shareholding), Jiangsu Shuyang Domestic Waste Incineration Power Plant (100% shareholding), Hainan Wenchang Domestic Waste Incineration Power Plant Project (100% shareholding) and Hunan Hengyang Hazardous Waste Disposal Center (65% shareholding).

By far the largest overseas acquisition of Chinese companies in the field of waste utilization

1.438 billion euros

Occupying the German waste incineration power generation market

18%



The plant of EEW

Subscribing for shares of VCNG and Blue Sky

In 2016, Beijing Gas initiated the acquisition of 20% stake in the VCNG project of Rosneft Oil to obtain the preemption of natural gas in the future. The acquisition provided strong support for the upgrade of Beijing Gas and marked a new chapter of its development.

In January 2016, Beijing Gas signed an agreement to subscribe for shares of Blue Sky Power Holdings Limited at the price of HKD 0.45 per share, involving HKD 970 million of investment and HKD 350 million of convertible bonds (in principal amount). Beijing Gas also invested in the gas distribution project in Guangxi. After the issue and allotment of subscription shares and consideration shares, Beijing Gas held approximately 29% shareholding of Blue Sky and becomes its single major shareholder. Blue Sky Power Holdings Limited has been renamed as Beijing Gas Blue Sky Holdings Limited.

Expanding Financing Channels

Link 

Panda bond refers to the RMB-denominated bond from a non-Chinese issuer and sold in the People's Republic of China.

Green bond refers to the bond instruments whose proceeds are specifically used to provide funding or refinance for eligible green projects.

Successful issue of green bonds and green medium-term notes with embedded options

In July 2016, Beijing Enterprises was approved to issue RMB 4 billion panda bonds, which was by then the largest public placement of Panda corporate bonds and achieved the minimum coupon rate among bonds of the same duration. The RMB 700 million green panda bonds issued in the same month was China's first public issue of green panda corporate bonds in the domestic market and created a new low coupon rate record. The RMB 2.8 billion renewable green corporate bonds issued in September was the first public issue of renewable green bonds by stock exchanges. The RMB 2.8 billion green medium-term notes with embedded options issued in early November had the lowest coupon rate among the same duration notes.

Conducting financing and capital operations

In 2016, Beijing Gas participated in capital operation in Hong Kong, and established an overseas investment and financing platform to accelerate the integration of industry and finance. This move gained a floating profit of HKD 350 million. In addition, Beijing Gas received a USD 1.1 billion financing intention from offshore banks, and was ready for issuing domestic bonds with domestic AAA rating.

Promoting construction of fund management companies

BE Water introduced social capitals from banks, insurance companies and Sunvision Capital to establish fund management companies, including Beijing Tongzhou Water Environment Fund Management Co., Ltd, Yadong Sunvision BE Water Co., Ltd, and Beijing Enterprises Zhongkecheng (Ningbo) Investment & Management Co., Ltd. which were all founded in 2016. The professional platform featuring cooperation, inclusiveness and innovation will provide financial services to major public-private partnership (PPP) projects in the water and environmental protection industry, including BE Water.

RESPONSIBILITY SUBJECT

For Worldwide Sustainable Development – Beijing Enterprises in Overseas

- Environmental protection industry on the silk road economic belt 20
- Environmental protection industry on the 21st century maritime silk road 23

The world we are living in is abundant in material prosperity, but is also challenged by severe environmental problems. Since Xi Jinping, General Secretary of China, raised the Belt and Road Initiative in September 2013, Beijing Enterprises has upheld the concept of “green, environmentally friendly and energy-saving”, implemented the Belt and Road Initiative, speeded up the steps in “going global”, developed the environmental protection industry, and expanded overseas markets. All our efforts intend to provide green energy for the world’s sustainable development. Internationalization not only improves the Company’s scale of main businesses and the status in the industry, establishes a Chinese label in the environmental protection market, but also accumulates rich overseas experience, cultivates a group of international management talents, and accelerates the transformation to a large-scale multinational group. Beijing Enterprises has brought tangible benefits to the project-host countries in terms of economic development and environmental improvement.





Overseas businesses of Beijing Enterprises

Environmental Protection Industry on the Silk Road Economic Belt



Portugal

In March 2013, BE Water acquired 100% shares of two wholly-owned subsidiaries of CGEP, a Portuguese water company subordinate to Veolia Water. The Portuguese project is BE Water's first move in entering the global market, and it symbolizes a significant leap forward not only in geographical distribution, but in business model as well.

Four franchise agreements, to be specific, management of drinking water supply and waste water treatment and disposal in Mafra, Ourém, Valongo, and Paredes respectively

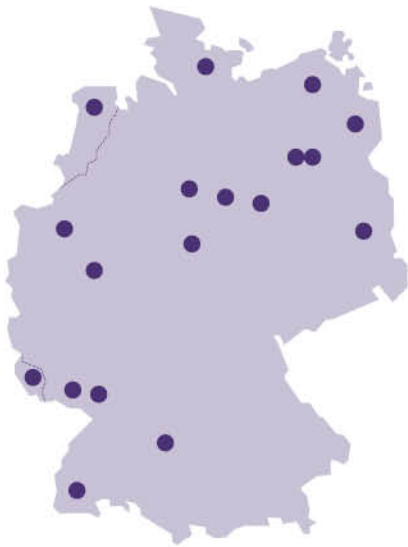
The project includes

Maintenance of the sewage/drainage network of private companies, and management of the recycle center and waste storage system

Three commissioned operation contracts, to be specific, management and maintenance of waste water treatment plants in two districts of Algarve and maintenance of drinking water plants in the whole Algarve

Campo Sewage Treatment Plant in the Valongo project in Portugal

Currently, BE Water has invested in 40 sewage treatment plants and water supply plants in Portugal. The franchise project has water supply capacity of 36,000 tons per day and sewage water treatment capacity of 22,500 tons per day, servicing a population of more than 670,000. BE Water has combined its rich experience with CGEP's existing management techniques and experience to form a more systematic and efficient management mode and synergistic effects.



Germany and Neighboring Countries

In 2016, Beijing Enterprises acquired EEW GmbH, an energy-from-waste company in Germany, which is an important move of Beijing Enterprises to develop the environmental protection industry and expand into overseas markets. EEW has been planning, constructing and operating waste recycling and treatment plants for more than 25 years, setting standards across Europe. In energy generation from the thermal recycling of waste materials, EEW has played the role of an industrial leader, and it has reached top world class in terms of equipment standards, operation efficiency, technology, and emission indicators. As one of the top 10 companies in the world, EEW boasts the largest and most modern industrial park to generate energy from the thermal recycling of waste materials, and is widely recognized for low emission levels, high efficiency and exemplary occupational safety. Beijing Enterprises' successful acquisition of EEW will significantly enhance the Company's business scale and status in solid waste treatment, as well as the overall level of the domestic solid waste industry and environmental protection by introducing advanced concepts, technology and management experience from Europe. Beijing Enterprises is strengthening communication with EEW and deepening cooperation in technology and management in hope of forming synergistic effects.

In 2016:

Treated waste

4.579 million tons

Total annual sales

524 million euros

An increase of

8.5% over 2015

Link 

Environmental Protection Capacity of EEW

Located in Hannover, Germany, EEW can process 260,000 tons of waste each year, and the slag left can be used for paving and the power produced can be used by 50,000 households. One ton of waste equals 600 kWh of electricity, so 18 plants of EEW can produce 2.4 million megawatt hours of electricity per year, providing about 3 million megawatt hours of industrial steam and 800,000 megawatt hours of central heating to meet the demand for 700,000 households.

In 2016, EEW GmbH accomplished treatment waste input volume of 4.579 million tons, representing a year-on-year increase of 3.7%. It accomplished an annual on-grid power generation volume of 1.749 billion kWh, representing an increase of 7.2% over 2015. The total revenue was 524 million euros, representing an increase of 8.5% compared with 2015.

EEW adopts post-processing techniques like catalytic denitration and activated carbon adsorption, so its pollutant emissions indicators are better than the EU standards and are in strict compliance with the German standards.

“ We are very interesting to learn also from Chinese via circular economy because China will be the good example for many other countries. There are a lot of examples especially field in circular economy. The cooperation work is quite well, so today we are very proud to be a part of it.

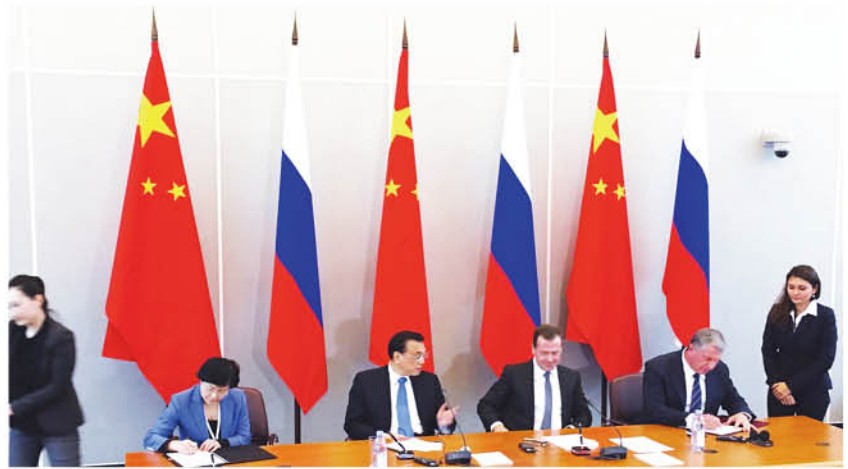
Peter Kus, vice chairman of European Waste Association and chairman of German Association for Water, Wastewater and Waste

”

Russia



On November 7, 2016, Beijing Gas and Rosneft Oil signed a gas-related cooperation framework agreement under the witness of Chinese Premier Li Keqiang and Russian Prime Minister Dmitry Medvedev. Beijing Gas then acquired 20% stake in Verkhnechonskneftegaz (VCNG) project. This transaction will allow Beijing Gas to obtain the preemption of natural gas in the future, providing strong support for the upgrade and future development of Beijing Gas.



The signing ceremony of gas-related cooperation framework agreement between Beijing Gas and Rosneft Oil

“

Our cooperation with Rosneft Oil features rich resources, low mining costs, easy transportation and good quality. It is of great significance to purchasing stake in VCNG and participating in the development and management of upstream gas fields through this cooperation. This project is both a project investment and a strategic investment, laying the foundation for cooperation with Rosneft on a larger scale, which is very important to Beijing Enterprises and the national energy business. The National Energy Administration will spare no effort in creating conditions for cooperation between Beijing Enterprises and Rosneft.

Nuer-Baikeli, deputy director of the National Development and Reform Commission, and director of the National Energy Administration

”

Environmental Protection Industry on the 21st Century Maritime Silk Road



The plant provide water per day for Singapore

50 million gallons

Singapore

The Changi project won huge success and came into operation.

NEWater is a kind of high-quality recycled water which is pure and safe to drink. It is the pillar of Singapore's sustainable water supply. In October 2014, BE Water and UES Holdings Pte Ltd (UESH) won the bid for the Changi NEWater Plant II project. As Singapore's largest NEWater plant, the company turns the output water of Singapore Changi Sewage Reuse Plant into NEWater. The plant passed acceptance of Singapore PUB in November 2016 with a franchise period of 25 years. The project was awarded the first prize of the 2016 Global Water Summit for Water Deal of the Year.

The main technology of Changi NEWater Plant II is dual membrane with microfiltration and reverse osmosis, and UV disinfection is also adopted to ensure safety. The plant can provide 50 million gallons (228,000 tons) of water per day for Singapore, equivalent to the volume of 92 Olympic swimming pools. In 2016, facing severe draughts in Singapore, BE Water produced water in advance and helped ease the water supply in Singapore.

Hong Kong, Macao and Taiwan

BE Water-WATERLEAU Joint Venture signed the contract about the operation and maintenance of Macao Peninsula Wastewater Treatment Plant.

Sewage treatment capacity

180,000 t/d

In September 2016, the joint venture of BE Water and WATERLEAU.NV, a Belgian environmental protection enterprise, signed a draft project contract with the Macao government. The project includes operation and maintenance of facilities of Macao Peninsula Wastewater Treatment Plant and the tail water pump stations, as well as maintenance of the appearance and structural support of the sludge incinerator and its ancillary equipment. Macao Peninsula Wastewater Treatment Plant is the largest sewage treatment plant in Macao with the capacity of 180,000 tons per day. The two-year contract marks the successful entry of BE Water in Macao water services market.

Malaysia

The Pantai project of BE Water passed the acceptance.

In July 2011, BE Water obtained the Pantai Second Sewage Treatment Plant project in Kuala Lumpur, Malaysia. Based on engineering, procurement and construction, the Pantai project is the first underground sewage treatment plant in Malaysia with a capacity of 320,175 tons per day. The project is designed to upgrade facilities of the existing oxidation pond and turn the ground above into a recreational park, removing the bad smell while providing sports, recreation and community facilities for local residents. The project is advanced in many fields:

- Save 11 hectares of urban land;
- Reduce the emission of nitrogen and phosphorus in sewage, thus reducing the possibility of red tide pollution in waters and offshore areas;
- The marsh gas produced by the plant can be used by two 330-kW generating sets to generate electricity;
- The sludge left can be used for dry fertilizers and soil improvement;
- Green technologies like air conditioner water reuse, rainwater reuse, output water reuse and solar power generation are adopted in the architectural design.

In June 2016, the project was complete and successfully passed the acceptance of the local government with outstanding economic and technical indexes. Its timely completion and good operation contributes a lot to the improvement of the local ecological environment. The Pantai Second Sewage Treatment Plant is the first large-scale project of BE Water in overseas markets, marking the entry of BE Water into the global market.

The Pantai project upgrades the inflatable lagoon sewage treatment facilities into a mechanized underground sewage treatment plant with public facilities, and builds an ecological park representing life and nature



BE Water signed contract on the Chukai project in Malaysia.

In June 2016, BE Water and the Terengganu government of Malaysia signed the official contract of the expansion project of Chukai water supply system (the Chukai project). The project includes the renovation of the existing BtSah Water Plant, expansion of the pipe network system, building of new water taps and connection with the water pipe network of Petronas. The construction period is 3 years and is expected to be completed in November 2018. The Chukai project will greatly improve the local water supply and inject vitality into the state's economic development.



Signing contract ceremony on the Chukai project



CREATING A BETTER LIFE WITH SHARED VALUES

- Providing Clean Energy to Protect the Blue Sky 27
- Purifying Water to Guard the Source of Life 35
- Turning Waste into Energy 41
- High-Quality Drinks 46



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We need not only economic growth but also good ecological environment, and we prefer good ecological environment rather than economic growth. In fact, good ecological environment itself is a valuable wealth.

The construction of ecological civilization is about the well-being of the people. Mountains represent beauty, and the sky represents happiness. We should protect the environment like we protect our eyes and treat the environment like it is our lives.

Xi Jinping, at Nazarbayev University, Kazakhstan

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Conformity of Beijing Enterprises' social responsibility practice to the 17 UN 2030 Sustainable Development Goals (SDGs)



Providing Clean Energy to Protect the Blue Sky

Natural gas is a kind of economical, safe and flexible resource, and it plays a key role in carbon emission reduction, environmental stress relief, and stable economic development. With continuous progress in ecology, new-type industrialization and urbanization in China, the natural gas industry has ushered in its hardwon development opportunity. With the support of Beijing Gas and China Gas, Beijing Enterprises aims to create an energy supply chain, diversify the supply modes and channels of natural gas for better provision of green, clean, and convenient energy service to users.

In 2016, the gas sales volume of Beijing Gas reached 14.38 billion m³, representing a year-on-year increase of 10%. The number of natural gas subscribers has reached 5.75 million in Beijing and the pipelines in operation increased to 19,491km in length. During 2016, there were 216,000 new household subscribers and 4,624 new public-sector subscribers. The Company developed heating boilers with a total capacity of 6,227 t/h steam. By September 2016, China Gas had expanded its natural gas projects to cover 311 cities, selling a total of 4.812 billion m³ of natural gas (from April 1 to September 31) with a pipeline system of 78,653km in length. China Gas' business also extends to natural gas drilling, collection, purification and processing, and it has developed one CBM (Coalbed Methane) development project, making it the largest comprehensive LPG operator and service provider in China.

CASE | SECURING ADEQUATE AND STABLE SUPPLY



Pipeline welding

Beijing was hit by a strong cold wave at the end of January 2016, causing the natural gas daily consumption to exceed 100 million m³ in three consecutive days with the highest daily consumption at 105 million m³, setting a historical high. To guarantee adequate heat supply in the capital, Beijing Gas adopted the “marine contingency reserve + stock” supply guarantee plan and purchased 10 ships of LNG from the French multinational electric utility company ENGIE (equating to 900 million m³ of CNG) to improve Beijing’s capacity to cope with high natural

gas demand. Beijing Gas also endeavored to make a regular LNG purchasing plan to diversify natural gas supply channels thus guaranteeing reliable energy provision for residents and enterprises of Beijing.

In recent years, Beijing Gas has launched wide international energy cooperation, and actively participated in the construction of Shaanxi-Beijing gas pipeline and its underground gas storage. The Company has completed the Xiji LNG storage and distribution center, and managed to put the Baodi-Xianghe-Xiji pipeline into operation before winter. The completion of the Dahuichang Gas Station and other natural gas projects has also strengthened the capital’s capacity to tackle huge demand on natural gas. The Company has also invested in coal bed gas projects and launched coal gasification to guarantee stable energy supply for the capital. By now, a “multi-gas, multi-source and multi-channel” natural gas supply

guarantee system integrating imported gas and domestically produced gas, offshore gas and inland gas, as well as conventional gas and unconventional gas has been formed, which effectively guaranteed the gas supply for major political events, and holidays and festivals including the New Year’s Day, the Spring Festival, NPC and CPPCC, the Beijing International Film Festival, and the G20 Energy Ministerial Meeting.

China Gas has been constantly enhancing its strength of upstream procurement, and improving its partnership with domestic resource providers, strategic shareholders and large-scale international LNG operators and traders in order to control procurement risks and cost within a proper range thus guaranteeing the stable supply of terminal resources.



International energy trade, LNG importing ▶

◀ During the 6th Beijing International Film Festival, Beijing Gas guaranteed adequate gas supply for the event and carried out safe production seamlessly





Beijing Governmental Reception Office, Agency for Offices Administration, Central Military Commission

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In the beginning year of the 13th Five-Year Plan period, Beijing Gas and other organizations successfully guaranteed the energy supply for the NPC, CPPCC, G20 and organs under the Central Military Commission. This shows Beijing Gas' spirit of 'being particularly dedicated, being particularly good at withstanding extraordinary hardships, and being particularly good at fighting hard battles' contributing greatly to the construction and development of the capital, and civil-military integration.

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CASE G20 Natural Gas Day



In 2016, Beijing Gas initiated and co-organized the G20 Natural Gas Day with China Gas Society under China Civil Engineering Society and China Gas Association. Over 300 representatives from China and other G20 member countries, guest countries, international energy organizations, related domestic authorities and institutions attended the meeting. They delivered speeches and held discussions over the relationship between natural and climate change, the role of natural gas in global and Chinese energy industry, and other hot-spot issues. Li Yalan, Chairperson of the Board of Directors of Beijing Gas, delivered the keynote speech named "Make Natural Gas a Fundamental Energy in China".

The completion of the G20 Natural Gas Day facilitated China's engagement in the formulation of international energy policies. Since then, China has gained a greater say on views and development strategies of the international energy industry, and has been able to better respond to concerns in Chinese energy industry thus realizing national energy development goals. The event has become another important platform for the Chinese government and the Beijing Municipal Government to promote and implement the low-carbon development concept following the 2015 United Nations Climate Change Conference in Paris. The Natural Gas Day demonstrated Beijing's achievements during the implementation of the clean air action, showcased Beijing's strategic layout for urban function and energy structure adjustment as well as its development vision. The event also served as an effective springboard for state-owned energy enterprises in Beijing to development partnership with international counterparts while demonstrating the great development momentum of the industry in China.



It was proposed both on the G20 Energy Ministerial Meeting and G20 Natural Gas Day that "Natural gas will play a key role in world energy transformation, and become the principal energy in the future"

Safety Guarantee

Safety is the essence. With a focus on guaranteeing energy supply and safe operation in cities, Beijing Gas has improved safety management, enhanced safety prevention, and taken the lead among state-owned enterprises to complete the 13th Five-Year Plan safety development plan. Upholding the corporate safety culture concept of "Keep safety in mind, and serve the public through action", we try to improve our service through regular inspection and maintenance to natural gas users to guarantee safe use of natural gas. Besides, for the promotion of a safe and harmonious community, we organize emergency drills with the aim to build a "safe Beijing". *The Create a Database Platform for Grassroots Organizations, and Innovate Safety Risk Management at Gas Enterprises* issued by the 5th Division of Beijing Gas won the first prize of the Beijing Municipal Enterprise Management Modernization Innovation Award.

Keeping deepening the safety responsibility system, and strictly implementing safety responsibility distribution.

With a focus on positional responsibility and enhanced supervision means, we have promoted the realization of safety goals and implementation of safety responsibility from two dimensions.

Enhancing risk prevention and control through hazard source analysis and hidden trouble identification.

By fixing the damaged database and establishing a full-life-cycle management mechanism for risk-prone projects, we have eliminated 368 potential risks at municipal level. We have also launched special tasks to eliminate risks at users' end and installed gas safety supporting equipment to improve the safety level.

Organizing multi-dimensional safety education and training to improve the safety awareness of all staff.

We have organized various trainings on laws, regulations and standards, and carried out transport, fire-fighting, limited-space operation, and safety evaluation and safety responsibility fulfillment trainings among employees from different positions.

Strengthening supervision and review to promote safety responsibility fulfillment.

We have formed a cross-department safety prevention mechanism and expanded the coverage of the supervision over operation sites. Besides, we have organized inspections on special engineering and major projects to help us better investigate into accidental events.

Promoting safety culture construction vigorously and organizing safe production month.

We have formed a cross-department safety prevention mechanism and expanded the coverage of the supervision over operation sites. Besides, we have organized inspections on special engineering and major projects to help us better investigate into accidental events.

Conducting multi-dimensional assessment to improve the overall quality of inspection.

We have determined the principle and goal for inspection model adjustment, and have formulated an adjustment plan accordingly. A follow-up mechanism has been highlighted among households missing 3 consecutive regular inspections, so as to lower the risk.



the Safety Management Innovation Award won by Beijing Gas



Beijing Gas' occupational safety management system passed the re-accreditation



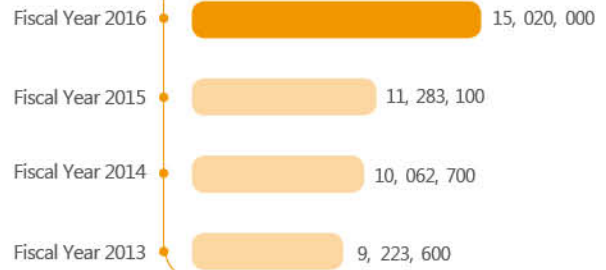
Safety education for primary and middle school students

By introducing the BeiDou Navigation Satellite System (BDS), Beijing Gas has improved its abilities in pipeline examination, gas leakage and emergency response, becoming the pioneer in BDS application. Under the leadership of Beijing Gas, BDS has gradually been introduced to various fields including drainage, heating and electricity, and has been put into operation in 317 cities around China.

In 2016, China Gas formulated and practiced the safe production management standard, and implemented safety risk management and control. With enhanced safety awareness and monitoring, the safety of the Company can be better guaranteed.

Channels for safety communication:

- "Double Hundred Project" promotion activity
- "Household visit for safe natural gas utilization and quality service" promotion activity
- "My efforts for your safety" promotion activity
- Short promotion film
- WeChat platform



China Gas' contribution to safety supervision



Beijing Gas Safety examination before the winter heating season

Clean Air

The natural gas industry has gained mature technology in production, storage, and transportation. With its unique advantage in economic efficiency, natural gas is the best choice to fight haze and realize low-carbon economy. Beijing Enterprises has been ceaselessly promoting the wider application of natural gas. By now, our natural gas has reached more than 300 cities around China, which plays a key role in the improvement of living environment and life quality. We are taking effective actions to respond to the national call for energy saving and emission reduction for the construction of a low-carbon society.

Coal-to-gas conversion. To respond to national and municipal policies on air pollution prevention and treatment, Beijing Gas has undertaken PM2.5 treatment as its major political responsibility. By integrating suburban gas resources and innovating the rural business management model, during the year, Beijing Gas completed coal-to-gas conversion in 78 villages and the coal-fire boiler transformation with a capacity of 6,227 t/h steam, establishing a coal-to-gas conversion LNG supply guarantee system

Transformation of urban development model. Beijing Gas has built an intelligent resource management platform and a regional multi-energy coupling network. In 2016, the subsidiary administrative center coupling energy supply plan with Beijing Gas as the key player was approved by the municipal government, leading the whole city toward a green, low-carbon and recycling-oriented development concept. During the year, Beijing Gas comprehensively implemented the gas engineering transformation in core urban districts, identified key areas and users with high consumption during summer. It completed the gas project of Guijie Street, accomplished the transformation of direct-fired machines in Guohua Power Co., Ltd. and Oriental Media Center project, and the coal-fire boiler transformation with a total capacity of 4,746 t/h steam

Coordinated development. Beijing Gas has been exploring the natural gas markets in the Beijing-Tianjin-Hebei Region and cities in northeast China. The Xingtai and Qitaihe projects have been put under construction.

Distributed natural gas generation. Beijing Gas has developed an industry-leading distributed energy management system with independent intellectual property rights. By now, 11 distributed natural gas generation projects have been put into operation with an outcome of 400 million m³ of natural gas each year, contributing to the preliminary formation of the distributed energy generation market in Beijing.

Gas fuel for vehicles and ships. In 2016, Beijing Gas newly fueled 220 buses, 20 passenger vehicles, 57 garbage trucks, and 277 private vehicles.

In the financial year of 2016, China Gas completed 950 subsidiary administrative center projects with a total capacity of 3,067 t/h steam. The consumption of natural gas was increased by 430 million m³, cutting coal consumption by 1.7 million tons which could have generated 462.4 tons of CO₂, 14,450 tons of SO₂, and 12,580 tons of nitrogen oxides.

CASE Distributed energy supply of China Gas' Guyuan project

The in-construction Guyuan People's Hospital is a tertiary hospital in southern Ningxia province covering an area of 207.5 mu. China Gas' Guyuan project has improved its distributed energy supply system. The project plans to install a 1,200kW gas-powered internal combustion engine and 3 gas-fired boilers to recycle extra heat to guarantee adequate supply for the hospital's heating system, water heating and part of the power demand. China Gas plans to put the distributed energy system into full operation in early 2017. By then, CO₂ emission will be reduced by 2,575.54 tons, a decrease of 32%.

CASE China's first LNG refilling terminal for vessels

In 2016 financial year, China Gas completed the construction of China's first gas dock—Chongqing Maliu LNG Refilling Terminal for Vessels, and made progress in gas source guarantee, marketing, and technological transformation of ships, laying a solid foundation for domestic ship gas development.

Optimized Service

Beijing Gas has improved its service from perspectives of “safety, convenience and comfort”, and checked the data and improved the basic information of the user management system. It re-categorized users, developed differentiated management models for regular inspection, charge, and maintenance to improve management efficiency. In 2016, Beijing Gas optimized the pipeline network scheduling plan, and applied advanced intelligent production and operation management system to carry out 24-hour monitoring and remote control of the operation of the gas pipeline network. Besides, it responded actively to emergencies and carried out timely rescues.

Beijing Gas also optimized the user management system. It updated the tiered gas pricing system, and added Postal Savings Bank of China (PSBC) and Beijing Rural Commercial Bank to the portfolio of banks where users can buy natural gas through their CPU card. With higher mobility of first-line business, bills for ordinary household users can be offered on site. And the Mobile PDA System for regular inspection has also been updated for increased efficiency. To optimize user service management, Beijing Gas has compiled the Gas Group Service System, and established a quarterly service analysis mechanism. It has set up 240 channels to “96777 hotline” for 24-hour servicing. Users that have opened the 96777-text message service will have easier access to “96777 hotline”, and corresponding satisfaction degree grading system has been launched for collecting user feedback.

The financial year of 2016 is the “Year of Quality Service Culture” of China Gas. During the year, China Gas improved the customer service management system, deepened the customer service awareness and upgraded service level among all staff through a multi-channel and multi-form complaint mechanism and a comprehensive high-weight satisfaction evaluation system. Through such efforts, China Gas aims to provide an “all-round, whole-process, one-stop and customized” service, and to become a company that is “satisfactory to customers, recognized by society, and appreciated by employees”.

Activities held during the “Year of Quality Service Culture” include “A Safe Home” to the community campaign, “You and Me—Sunshine Smile” photo collection campaign, examinations, promotions of service ethics and standards, and indoor gas facilities installation and maintenance skills competition.



Beijing Gas has opened its WeChat official account and completed the first-phase construction of its mobile app where users can check their balance, make the payment, report the maintenance need, and enjoy other online value-added services.

CASE

Innovating service methods

In 2016, China Gas has integrated its resources of brand, channels, customers and other factors along the industrial chain through “Internet Plus” and self-developed e-commerce platforms, based on which it established a gas facilities testing center, launched its own gas bellows, gas leakage alarming products, and other gas facilities branded Gasbo. By February 16, 2017, the number of registered users on China Gas app had reached 4,055,500; 910,242 orders had been placed at a total of 1,673 online sellers, generating a turnover of RMB 158.8 million. Through this app, China Gas transformed from a gas user developer and gas seller into a comprehensive gas operator and service provider.

Technological Innovation

Beijing Gas emphasizes the power of science and technology. In 2016, Beijing Gas won the “13th Tien-yow Jeme Civil Engineering Prize” with its “Beijing Natural Gas Utilization System Engineering”, the highest honor in the field of civil engineering in China.

To develop smart gas, China Gas Association has established the Smart Gas Grid Committee in 2016, and Beijing Gas has been selected as chairman among its members. The concept of “smart gas” was first put forward on a national gas forum. During the forum, *Technological Standards for Urban Gas Project Intelligentization*, whose compilation was led by Beijing Gas, passed the examination and verification of the experts, marking up for the lack of such a technology in China. On the Fifth China Energy Enterprise Informatization Summit, Beijing Gas became the first gas enterprise in China winning the China Energy Enterprise Informatization Management Innovation Award.

In 2016, Beijing Gas held the 4th Technology and Informatization Innovation Conference, and awarded 8 organizations and 70 employees. Over the whole year, Beijing Gas acquired 24 patents, 9 among which were patents of invention. Moreover, Beijing Gas published 35 academic theses, co-authored a national technological standard with Beijing Urban Construction, Design & Development Group Co., Ltd., participated in the revision of 6 national standards, 4 industrial standards and 3 Beijing municipal standards. To promote the compilation of standards for industrial informatization, Beijing Gas improved *the Classification and Coding Standards for Urban Gas Facilities and Materials*.

Beijing Gas has endeavored to promote the application and transformation of scientific and technological achievements. It conducted the

Research on *the Protection and Tracing Technology Research of PE Pipeline*, and developed and promoted the application of the new-type PE protection board with independent intellectual property right to facilitate the application of such technologies in the coal-to-gas conversion of rural areas; Besides, it accomplished the pilot project of LNG bottle group gas-supply system to provide technological support for distant suburban areas.

Beijing Gas has strengthened the effort to guarantee information safety and operation maintenance, consolidated the basic structure for informatization, and established the disaster tolerant backup system core business. Through the introduction of the one-card system, the informatization level of the security protection system was improved, and Beijing Gas hence passed the re-audit of ISO27001 Information Security Management System, and won the championship of “The 2nd National Competition of Engineering Control System Information Security Attack and Defense”.



Participating in GASEX Conference & Exhibition.

In September 2016, Beijing Gas participated in the International Gas Technology Exchange Meeting and Exposition of Western Pacific Region in Asia (GASEX in short). During the Conference, Beijing Gas delivered the keynote speech named “Promote the Prosperity of the Natural Gas Market with Strengthened Confidence and Joint Efforts”. Through the exhibition and seminar, corporate strength of Beijing Gas was effectively demonstrated.

Participating in China International LNG & Gas International Summit & Exhibition.

Beijing Gas attended the 2016 China International LNG & Gas International Summit & Exhibition. During the event, Li Yalan, Chairperson of the Board of Directors of Beijing Gas, delivered the keynote speech of Analysis of the Future of China Natural Gas Market from the Development History of Beijing Gas.

Participating in China Distributed Energy International Conference & Exhibition.

In September 2016, Beijing Gas attended the China Distributed Energy International Conference & Exhibition. During the event, Feng Jun, Deputy General Manager of Beijing Gas, delivered the speech of Exploration, Practice, and Thinking of the Promotion of Distributed Energy by Beijing Gas Group.



Purifying Water to Guard the Source of Life

In 2016, China actively promoted environmental protection policies including the Water Pollution Prevention and Control Action Plan (Water Ten Plans), and the implementation of PPP (public-private partnership). BE Water, setting “urban water service and water environment renovation” as its core business, has been dedicated to improving the ecological environment. By means of technological innovation and strict quality control, BE Water has constantly improved the rate of meeting water quality standard and the quality of projects. By doing this, it has developed into a China-leading professional water service and environmental protection comprehensive service provider, providing environmental infrastructure and related services to many domestic and overseas cities and regions, and driving local economic development.

By the end of 2016, BE Water already participated in 335 sewage treatment plants, 108 water distribution plants, 8 reclaimed water treatment plants, and 1 seawater desalination plant, which are or will be in operation.



CASE | PROMOTING COORDINATED DEVELOPMENT IN THE BEIJING-TIANJIN-HEBEI REGION

BE Water has been devoted to the coordinated development of Beijing-Tianjin-Hebei Region, and the construction of the subsidiary administrative center. Apart from the efforts made in improving ecological environment, changing urban and rural landscape, and guaranteeing drinking water supply, BE Water has also contributed greatly to sewage water treatment and water environment improvement. By now, BE Water has launched 20 projects in Beijing with a total investment of RMB 8.2 billion and a total capacity of 1,219,500 tons per day, and 19 projects in Hebei Province with a total investment of RMB 1.7 billion and a total capacity of 693,500 tons per day. Its business has reached Shijiazhuang, Langfang, Hengshui, Xingtai, Zhangjiakou and other cities.

River water comprehensive renovation

By applying new technologies and means to promote water flow, grow plants along river banks, and conduct high-efficient deodorization, BE Water has completed Liangshui River water comprehensive renovation, and the following operation maintenance. A “park-style management” model has been adopted to provide more streamlined operation methods for the comprehensive renovation of water environment of Beijing-Tianjin-Hebei region.

Seawater desalination project in Beijing.

BE Water's 1 million-ton desalinated seawater to Beijing project is a significant move in constructing a multi-source water supply guarantee system and relieving the water shortage problem in Beijing-Tianjin-Hebei region. In 2016, the project's EIP report has been approved by Caofeidian District Government of Tangshan, and was promoting the work of Caofeidian 50,000-ton desalinated water project produced water connecting to the municipal pipeline network. The 246-km long water transportation project has also passed the approval of the District Government. The Zhongguancun Seawater Desalination Key Technology Equipment Demonstration Project (Membrane Method) has been certified by Tangshan Seawater Desalination Engineering Technology Research Institute.

Construction of the sub-center of Beijing.

BE Water has participated in the subsidiary administrative center construction of Beijing. In 2016, BE Water successfully undertook 4 water environment comprehensive renovation treatment PPP projects of the “Two Rivers area & Six Districts Belt” project, respectively about northern Beijing, the Two Rivers area, Hexi District, and the North Canal ecological belt, with a total investment standing at RMB 17.7 billion and a total sewage treatment capacity of 2 million tons per day. The two major projects are:

Comprehensive Renovation

With a comprehensive consideration of water safety, water resources, water environment, water ecology, water landscape, water culture, and smart water, BE Water has improved the ecological environment and improved city image through optimized top-level design and comprehensive approaches. Through partnership with governmental environment groups, and M&As of environmental enterprises, BE Water has extended its traditional water service. Taking PPP transformation as a golden opportunity, BE Water has continuously developed new clients and maintained old ones. In 2016, BE Water contracted a total of 11 projects, with a contractual amount of RMB 15.099 billion.



The northwest-southeast-running Liangshui River passes through 6 districts of Beijing. Covering 67.2km, the River nourishes 4.5 million people living alongside. Though treatment has been conducted repeatedly, sewage intercepting and treatment along the Liangshui River has always been a headache for concerned parties. Some sections of the river are so stinky that neighboring residents have to keep their windows shut in summer.

Exploration of new models. In March 2014, the Beijing Municipal Government has explored into new investment and financing models, introduced social capital, and clarified BE Water's role as the subject of implementing investment, construction, and maintenance in areas along the Liangshui River. In 2016, the Beijing Municipal Government launched Liangshui River comprehensive renovation project to explore new management and maintenance models. When the comprehensive renovation is finished, BE Water will replace the previous multiple parties to undertake the management and maintenance of the Liangshui River.

Phased renovation. BE Water has been assigned the mission of water environment comprehensive renovation of the Liangshui River. By the end of 2014, BE Water had finished the dredging, underwater ecological project, and deodorization work. By the end of 2015, it had completed sewage interception at the trunk stream, landscape improvement along urban trunk section, and the automatic monitoring system. In 2017, BE Water will finish the renovation of the River's suburban section, water system connection, and water quality maintenance project, making the whole Liangshui River clean again.

Beautiful ecological landscape. BE Water has introduced a new-type porous plant growing slope protection technology to protect the river banks by paving hexagon hollow blocks. In the hollow area, willows can be grown to hold the blocks tightly together, and to improve the river's self-cleaning ability. Except for ecological renovation on the river banks, BE Water also improved the landscape by planting arbors, bushes, and flowers, as well as aquatic and ground cover plants alternately on the banks. The pavilions, narrow paths, coaches, and other public facilities offer citizens the chance to get closer to the Liangshui River.

Enhanced flood control ability. In late 2015, BE Water kicked off the treatment project of the Tongzhou section of the Liangshui River. It dredged the riverway, constructed and improved around 10 rainwater outlets, and tore down and constructed new river sluices and rubber dams, hence improving the flood control ability of areas along the river. The project is designed to combat the most severe flood in 50 years, and checked according to the standard to combat the most severe flood in 100 years.

Recognition and support. In March 2016, BE Water received a RMB 100-million national special construction fund, which has been spent in the Tongzhou section of the Liangshui River Water Environment Comprehensive Renovation Project. It is the only "River Renovation and Water Resource Allocation Project" in Beijing. The Tongzhou section of the Liangshui River Water Environment Comprehensive Renovation Project will not only make water clean again, but 5 scenic spots will be constructed along the section.

Urban Water Projects

BE Water has been worked on urban water supply and sewage treatment. We have solved the problem of insufficient domestic and industrial water supply, largely reduced the exploitation of underground water, and improved urban ecological environment. Our efforts are of great strategic significance to long-term water safety in urban areas and the sustainable social and economic development of cities.

In 2016, the designed capacity of BE Water's new projects is approximately 4.548 million tons per day, and the total designed capacity of the projects entrusted by the municipal government has reached 792,000 tons per say, indicating a net increase of 3.756 billion tons per day to the designed daily capacity.

CASE

Reclaiming of sewage in Tuyouqi New Industrial Park, Baotou



In dry areas, sewage treatment plant can effectively reduce pollution, protect water resources, and help recycle and reuse waste water, thus playing a significant role in regional environment improvement. The Tuyouqi New Industrial Park of Baotou has been selected as the Excellent Industrial Parks of the Year 2011 of the core economic belt along the Yellow River. The sewage treatment plant built by BE Water has brought high environmental, social, and economic profits to the industrial park, effectively facilitating the industrial park's sustainable development.

The new-type industrial park (North) specializes in electricity, the photovoltaic sector, natural gas liquidation, metal processing and food processing, so the quality of the waste water it produces is poor. Sewage treatment plants affiliated to BE Water have a treatment capacity of 10,000 m³ per day. By using the advanced ozone catalytic oxidation technology and the BE Water-only high-efficient catalysts, these treatment plants have managed to dispose of hardly degradable materials effectively, thus guaranteeing proper quality of reclaimed water, and making up for the lack of industrial water resources.

Shangejia Sewage Treatment Plant (South) of Tuyouqi Industrial Park has put most efforts on coal chemistry and petrol chemistry with the capacity of its sewage treatment plant reaching 30,000 m³ per day. It not only solves the sewage problem of the industrial park effectively, but also reclaims and reuses sewage actively. The reclaimed water is qualified enough to be used for agricultural irrigation, environmental sanitation, road cleaning, car wash, flushing toilet, and watering plants.



A rendered image of Shangejia Sewage Treatment Plant (South) of Tuyouqi Industrial Park

Energy Saving and Consumption Reduction

BE Water has been focusing on environmental production. In 2016, it continued the effort in reducing energy consumed by water pumps, wind machines, the aeration system, and the dehydrating system. The monthly reports on the operation efficiency improvement and targeted analyses of the economic operation of the three high-consumption systems, namely the transport system, the blast aeration system, and the sludge dehydration system, have offered reference for the appraisal of equipment management quality of different regions. The constantly optimized operation standard, and trainings on initialization and the statement system, have promoted the economic operation and energy-saving technological transformation in different regions.

In 2016, BE Water conducted research on reducing energy consumption of water works, developed standardized management tools, and realized both goals of water quality improvement and energy consumption reduction through centralized monitoring systems of different water works and analyses from experts on process operation. In 2016, BE Water also finished the selection of medicament agents and intensive purchasing, and provided targeted technological guidance for organizations with high consumption of medicament. Besides, BE Water participated in the compilation of A Brief Introduction to the Management of the Operation of Domestic Sewage Treatment Facilities.



The opening ceremony of Puning Lihu Sewage Treatment Plant in May 2016, one of the 9 sewage treatment PPP projects in Jieyang

CASE

Environmental protection at Xinhua Sewage Treatment Plant, Huadu District, Guangzhou



Dehydrated sludge, a kind of strictly controlled waste, is one of the most important components in sewage treated by urban sewage treatment plant. With strict management, all sludge produced by Xinhua Sewage Treatment Plant of Huadu District is delivered to organizations certified by the environmental protection bureau for harmless treatment. By improving the medicament dispensing system of the deslimer, Xinhua did not increase the use of flocculent, saving 1,455.2 tons of tap water each month. The Plant has insisted on using reclaimed water for irrigation, and cleaning the sludge filtering belt. In 2016, the use of reclaimed water for such purposes has exceeded that of tap water. Besides, Xinhua has developed partnership with photovoltaic companies, and when the photovoltaic project is completed, it will gain access to large amount of clean energy.



Technological Innovation

BE Water has vigorously improved its technological competitiveness, and built its edge in capital and technology.

In 2016, BE Water:

7 

Undertook and managed 7 national, ministerial, and provincial research projects

4 

Applied successfully for 4 national and provincial science and technology planning projects

14 

Applied and authorized (or assigned) 14 patents



BE Water has promoted industrial development. In 2016, it participated the compilation of the Assessment Indicator System of Cleaner Production in Sewage Treatment and Recycling, which has become a guideline and programmatic document in its field.

BE Water and Beijing University of Technology has co-constructed The State Engineering Laboratory for Urban and Town Sewage Advanced Treatment and Resource Utilization Technology, which is the only National Engineering Laboratory in the field of municipal wastewater treatment. Besides, BE Water has signed a Long-Term Strategic Partnership Agreement with Capital Technology Service Association, and has carried out technological cooperation in multiple forms with German companies under the framework of *China-Germany Water Service Research Partnership Agreement*. Moreover, through technological exchanges and consults with Wuhan Institute of Hydroecology under Ministry of Water Resources & Chinese Academy of Sciences, Turenscape Design Group, Tsinghua Holdings Human Settlements Institute, and other planning and design institutes, BE Water has gradually formed a pool of preferred organizations to launch technological cooperation on the creation of sponge cities.

Erdos Hazardous Waste Disposal Project, Inner Mongolia

Shanxi Taiyuan Hazardous Waste Disposal Center BOT Project

Shaanxi Xiayang Domestic Waste Incineration Power and Comprehensive Treatment Project

Distribution of solid waste treatment in China by region

Wuhan Hanyang Guodingshan Domestic Waste Incineration Power Plant BOT Project

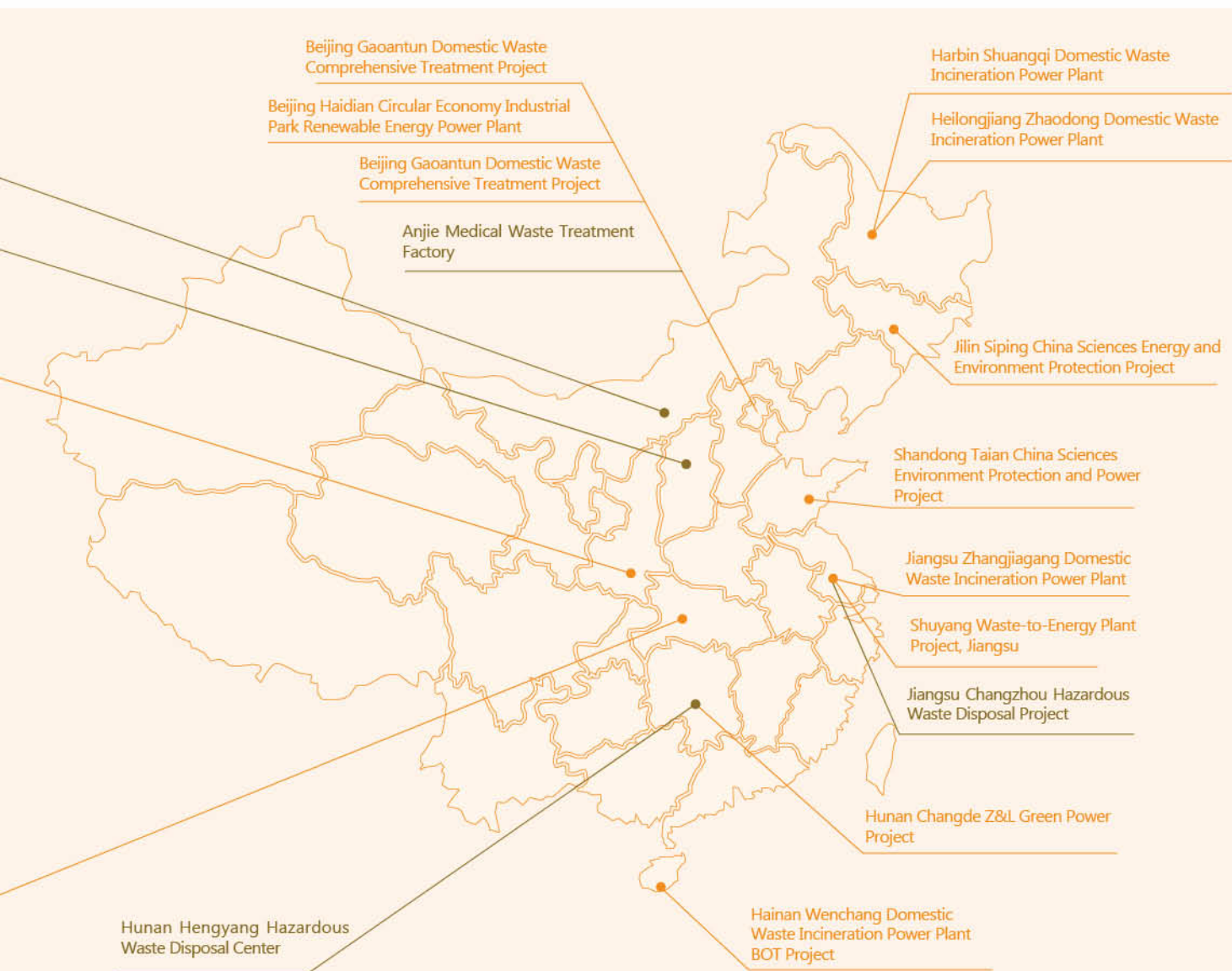
Turning Waste into Energy

"Garbage Siege" has become a headache in urbanization. The 13th Five-Year Plan for National Environmental Protection shows the government's determination to promote the development of solid waste treatment. There is still large space for the development of power generation through waste incineration, kitchen waste treatment, and reuse of recycled resources, so solid waste treatment sector is at the prime time for development.

We provide safer and more environmental ways for waste incineration. Beijing Enterprises Holdings Environment Technology Co., Ltd. (BE Environment Technology) and Beijing Enterprises Environment Group Ltd. (BE Environment) under Beijing Enterprises have upheld the business concept to "Guarantee the satisfaction of the government and customers, create values for enterprises, pursue win-win cooperation with partners, and bring benefits to employees", and have been making ceaseless efforts to become a world-leading solid waste treatment operator. To realize the goal, they have benchmarked their production, operation, management, and business philosophy against the advanced international level, and kept improving their professionalism, accuracy, standardization, and delicacy management.



Beijing Enterprises listed among the Top 10 Influential Solid Waste Treatment Enterprises of China in 2016



Organizational Support

In July 2017, Beijing Enterprises established the Environmental Protection & Solid Waste Business Department and its management committee to carry out unified management over solid waste business of the Company, and to integrate existing environmental protection projects and resources. The establishment of the department will promote the Company's environmental business to a new high, and push forward a higher requirement on the coverage and depth of environmental industry management.



In terms of domestic waste treatment

Beijing Enterprises has upheld the principle of "applying the most suitable technology to the targeted project", and come up with optimal solutions to domestic waste treatment for targeted regions according to their actual demand and features of local waste categories from an international perspective. It has launched 4 domestic waste treatment projects in Wenchang, Wuhan, Shuyang, and Shuangqi, which helped Beijing Enterprises realize significant increases compared to 2015 in both the waste input volume and on-grid power generation volume.

In terms of treatment of hazardous waste

Beijing Enterprises launched 5 hazardous waste and medical waste treatment projects in 2016, with a total waste treatment capacity of nearly 300,000 tons per year.

● The Changzhou Project realized a 53% increase in the quantity of recycled hazardous waste, and a 99.3% increase in hazardous waste treatment capacity.

● Hengyang branch completed the technological transformation, and significantly improved the business scale and profitability in hazardous waste sector.

● Beijing Gaoantun Anjie Medical Waste Disposal Center Project finished the technological evaluation over bids on the slag conveying system.

● The preliminary construction application of the Phase III Reconstruction and Expansion of Changzhou Project has been finished, and the project was launched in November.

CASE

Recycled Resource Power Plant Project of Circular Economy Industrial Park of Haidian District, Beijing



Beijing Haidian Circular Economy Industrial Park Renewable Energy Power Plant is located in Dagong Village, Sujiatuo Town with an area of 25 hectares (375 mu). The Project was launched in March 2013, and is assigned to handle all domestic and kitchen waste produced by Haidian District. The designed capacity is 2,100 tons of domestic waste and 400 tons of kitchen waste via incineration per day, with the annual capacity reaching 910,000 tons, generating 260 million kWh of electricity. The Project is planned to be put into production in May 2017, and in late 2016, its waste incineration function has been put into use for debugging. The civil engineering work for kitchen waste treatment has been finished, and equipment is being installed.

Haidian Project covers the treatment of both domestic waste and kitchen waste. While guaranteeing sufficient energy supply for residents, it effectively lessens waste's impact on the environment by conducting harmless waste treatment and turning it into resources to reduce the total waste quantity. The Project has created distinct social and environmental benefits.

Project is equipped with three incineration lines each with a capacity of 675 tons per day, and two 20MW steam turbine generator units. The power generated through the incineration of domestic waste is connected to the State Grid. All processes of waste treatment, from weight measuring to being sent to the tank, are strictly and accurately controlled. The leachate generated is sent to the designated plant for treatment to guarantee that no sewage is emitted before proper treatment. The reclaimed water is used in different links of production. With characteristics of stable operation, full combustion, and super low emission, the incinerator is suitable for the treatment of Haidian's waste that features high moisture and low heating value. For flue gas treatment, the Project has introduced world-leading treatment technology to guarantee an emission that meets the latest local standard of Beijing and the Directive 2000/76/EC of EU.





常德市生活垃圾焚烧发电厂——鸟瞰图

Changde Domestic Waste Incineration Power Plant

Environmental Protection

Through enhanced management of environmentally friendly production, solid waste treatment plants under Beijing Enterprises have reached the top industrial level in terms of emission, safety and reliability. Gaoantun Project has operated for more than 8,450 hours accumulated, emission of Haidian Project has reached beyond EU standard, and Shuangqi Project of Harbin has performed better than that it has been originally designed in production capacity utilization rate and operation parameters. The Company has also paid special attention to environment construction, and endeavored to create garden-style plants. By building waste treatment plants into green and environmental ecological gardens, and installing entertainment and fitness facilities, Beijing Enterprises is demonstrating its strong sense of responsibility through actions.

In 2016, solid waste treatment has been the focus of our environmental production review. Acting in accordance with the key implementation plan for energy saving and emission reduction, Beijing Enterprises have replaced the central cylinder of boilers, high-temperature superheater tubes, and cleaned cooper pipes of condensers. In this way, we have improved the operation efficiency of power units, controlled coal ratio, and restricted exhaust gas emission to meet corresponding standards, effectively keeping the total emission within the limit set in line with the EIA. All slug generated has been consigned to corresponding organizations for comprehensive use, and we have taken effective measures to cope with waster fermentation in winter.

In 2016, hazardous waste produced (fly ash and furnace clinker) of Beijing Enterprises was about 352,305.36 tons.

● To prevent and control odors at facilities for slug collection and ventilation, the anaerobic leachate sedimentation basin, and the west pipe rack of the leachate adjustment basin, and reduce their impact on the surrounding environment, Gaoantun Project has carried out comprehensive treatment to improve the environment surrounding the plant.

● Wenchang Project has accomplished the completion acceptance of the new online smoke monitoring system, including the completion acceptance of environmental protection. It has also set up a higher sewage emission standard to further improve its on-site management.

case

Construct green and environmental ecological parks



In addition to the efforts in the renovation of production technology and corporate sustainable development, Shuangqi Company is also dedicated to the construction of a better environment, and has been endeavoring to create a garden-style power plant. After the completion of the Phase II expansion and construction of roads within the plant, the Company is adding fitness facilities to the existing entertainment and fitness area. Such a move helps create a better environment for residents from neighboring communities, better relationship among neighbors, and a shared harmonious society.



Technological Innovation

With a special focus on the R&D of waste incineration and hazardous treatment technologies, Beijing Enterprises has developed partnership with colleges and universities, research institutes, professional companies and associations, and other related institutions. In this way, the Company hopes to promote management and technology innovation, achieve accumulation in independent intellectual property rights, and improve services and project efficiency by transforming the innovative concepts into actual productivity.

- Compiled the Document on the Standardization System of Operation Management in Domestic Waste Incineration Power Plants, which won the 5th Management Science Awards of China (Innovation Award) issued by China Management Science Society.

- Established a scientific research and patent innovation promotion team supported by the Changzhou branch to carry out researches on the capacity and efficiency of incinerating hazardous waste with rotary kiln. It has applied for 9 invention patents on the collection, intellectual categorization, and pre-treatment of hazardous waste and its transport to the rotary kiln, and has declared the intellectual property right of 15 new patented applied technologies.

- The innovation project on the automatic control technology of the fluidized bed boiler has been approved and funded by BG, and the project is to be carried out by the Wuhan branch.

- Launched the application of the CCER (China Certified Emissions Reductions) program, and five projects in Tai'an, Wuhan, Shuyang, Siping and Shuangqi have passed the preliminary review to be qualified to carry out carbon offset work.

CASE

Beijing Municipal Enterprise Management Modernization Innovation Award



Beijing Enterprises' *Operation Management System for Domestic Waste Incineration Power Generation* helps waste-to-energy enterprises to comprehensively manage their operation through a pre-control mindset and standardized procedure. Upholding the principles of putting people first, legal operation, and taking social responsibilities, the system shows proper care for employees, stresses on safety environmental protection, and abides by laws and regulations. It covers 8 management sub-systems, including equipment operation, equipment maintenance, safety management, risk prevention and control, and environmental protection, which are further divided into 42 items. The system reflects the basic requirements of the management of Beijing Enterprises on the management of its subordinate waste incineration power generation enterprises.

The Construction of the Standardization System of Operation Management in Domestic Waste Incineration Power Plants won the first prize of the 31st Beijing Modern Corporate Management Innovative Achievements.

Safe Development

In solid waste treatment, Beijing Enterprises has upheld "safe development", and adhered to the principle of "putting safety first via early prevention as well as comprehensive rectification". It has improved the three-level network for safety management, implemented safe production responsibility system, and carried out comprehensive safe production management to uplift the overall on-site management level. With a special focus on safety training, Beijing Enterprises aims to strengthen the safety awareness among all staff. It has also carried out different forms of equipment debugging and renovating to eliminate unsafe behavior of employees, unsafe conditions of objects, and unsafe environmental factors. During the whole year, there have been no major fires, equipment damage, serious injuries, or serious environmental pollution.

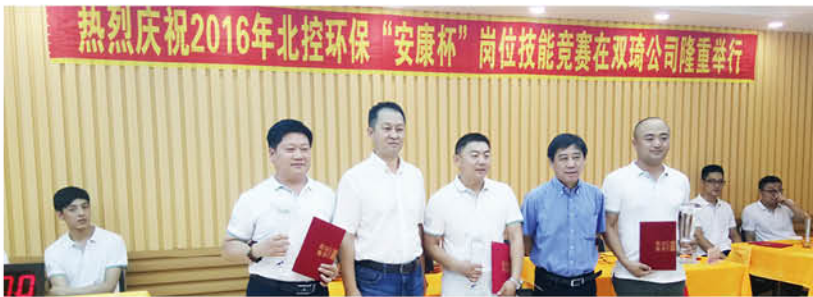
In 2016, Tai'an, Harbin, Siping, Changde and Shuyang projects met the safe production standard for power enterprises. Changde Project was honored the 2015 Safe Production Advanced Unit of Changde Economic and Technological Development Zone; Wuhan Project joined the Hubei Power Safety Specialized Committee and became a member of the council.

CASE

Enhanced safety education at Shuyang Project Company



Shuyang Project Company has strengthened safety education, and properly managed potential risks. Through all-staff rescue training, three-level educational training, examinations on safety regulations and firefighting, and examinations among targeted positions, the employees' safety awareness has been significantly improved. Meanwhile, the Company has enhanced safety inspections, established and improved safe production mechanism, spotted and rectified all of the 118 potential safety risks over the whole year through quarterly, monthly, and weekly checks.



Skill Competition of the Safety & Health Cup

Safe production management

Potential danger check and management

Emergency drill

Safe production standard construction

Safe production training

Safe production month

- Implement safe production responsibility mechanism, and sign the safe production responsibility agreement at each level
- Enhance the check and management of potential dangers, and launch safe production examinations
- Organize emergency drills to enhance the construction of a safe production contingency plan system
- Steadily promote the formulation of standards related to safe production
- Strengthen safe production training to improve employees' awareness of safe production laws
- Formulate Beijing Enterprises 2016 Safe Production Month Campaign Plan, and organize related activities



High-Quality Drinks

We create the national brand with craftsmanship. Yanjing, with a brand value of RMB 88.275 billion, has been ranked 42nd among China's 500 Most Valuable Brands in 2016 released by World Brand Lab. In the 11th Asia Brand Ceremony, Yanjing Beer was ranked 142nd of Top 500 Asia Brand. Considering the new normal of the Chinese economy, and the restructuring of the Chinese beer industry, Yanjing Beer has maintained healthy and stable corporate development, consolidating its leading role in the Chinese beer industry and the 8th position among international counterparts. Yanjing Beer has strengthened the independent innovation ability, and promoted the application of technological achievements, which brings customers natural, green, healthy, and environmentally friendly beer products of superior quality to win their trust and support.

Supreme Quality

With the goal of "fresher, purer, more balanced, and more homogenized" and to brew "natural, green, and healthy" beer, Yanjing Beer has carried out quality upgrade work from 3 dimensions, namely quality standard, management assessment, and study and application of new technologies. In 2016, the Company has realized overall quality improvement. 96% of the beer production has passed the quality check, and the foam stability, net content, as well as air quality at the bottleneck have been significantly improved.



- Yanjing Beer further extended the quality management chain, revised the quality standards for rice, hops, and malt, and implemented on-spot supervision of unloading. Although standards have been set higher, a larger proportion of raw materials have passed the quality test.
- The control over “thermal load” and “oxygen load” was strengthened during the whole brewing process. In the saccharification factory, the forced boiling technology and dynamic low pressure boiling technology were applied for lowering the thermal load of wort. Yanjing Beer has adopted a motivating management system to encourage first-line employees to reduce the oxygen content of sake and beer to effectively guaranteeing their freshness.
- With the support of Yanjing’s state R&D Center, Yanjing Beer has been dedicated to the homogeneity, freshness, and Microbiological Quality Management (MQM) of its products to maintain its advantage of good quality. Yanjing Beer has launched activities including testing ability comparison among corporate labs, and bear taste evaluation.
- Yanjing Beer has established a packaging material quality control platform, and launched the construction of the beer packaging material testing laboratory. It has purchased several professional can testing devices, and formulated can quality index testing procedures to standardize the test of can indexes.
- Yanjing Beer has streamlined food safety management, raw material proportioning, management of fermentation broth stored in tanks, and freshness management, effectively promoting the uniformity of production techniques.

CASE

Improve product quality through science and technology



In November 2016, Yanjing Beer’s two projects, namely the “Development and Application of Efficient Beer Yeast Breeding System based on Aerospace Mutation” and the “Development and Application of the Efficient Dynamic Monitoring System and the Functional Database of Polluting Microflora in Beer Brewing”, passed the scientific and technological achievement appraisal, and were proven to reach advanced international level. The achievements provided Yanjing Beer with the basic data for further optimization of yeasts, and the technological means for efficient yeast screening. Yanjing Beer has constructed a database of 135 microbes that may pollute beer, effectively improving testing personnel’s ability to handle microbial pollution.

In 2016, the Technology Center of Yanjing Beer was listed among the first batch of “Beer Brewing Technology Key Laboratories of China Light Industry”, and Guo Liyun Brewer Chief Technician Studio was certified Municipal Chief Technician Studio.

Considerate Service

Yanjing Beer has always been dedicated to creating healthy, green, and high-end products, and has successively launched competitive products such as draught beer, original white beer, and so on. As the pioneer of draught beer in China and the creator of the original white beer, Yanjing Beer has inherited “Reinheitsgebot” (the German Beer Purity Law) to provide the most original nutrient, and the highest degree of freshness, winning wide popularity among customers. Yanjing Beer also customizes craft beer to customers’ specific demands.

Yanjing Beer has been collecting customers’ feedback through investigation into dealers and store owners, customer visit, online survey, street interview, and other approaches, through which they found that customers of all channels were highly satisfied with their products.

In the Internet Plus era, Yanjing Beer has set up an e-commerce company in 2014 to undertake online brand construction and marketing. By 2016, Yanjing had established a complete online beer sales model on major

e-commerce platforms, and had explored into new sales models by trying out the emerging O2O e-commerce model, and developing cooperation with designated dealers and platforms, offering more convenient services to customers.

CASE**Responsible drinking publicity**

Yanjing Beer advocates responsible drinking, and has participated in the National Responsible Drinking Week. In October 2016, to respond to the call of China Alcoholic Drinks Association, Yanjing Beer distributed 5,000 publicity brochures on responsible drinking among all sales channels including dealers, stores. The campaign covered tens of thousands of stores in near 100 cities, during which 20 in-store publicity activities were held. It shows Yanjing Beer's strong sense of corporate social responsibility.

Both online and offline activities were held during the Week. The Association and its members, other supporting media websites as well as WeChat official accounts pushed micro videos, public welfare commercials, basic knowledge on drinking, and interactive games online. Some major activities held by them were reported in detail. Meanwhile, alcoholic drink producers and dealers also organized online publicity and interaction through website, WeChat, Weibo, and other channels.

CASE**Original white beer was ranked among Top 10 Beer Brands**

On the 2015 New Alcoholic Products Releasing Ceremony Honoring "QINGZHUO Awards" Top 10 held in March 2016, the 12°P Yanjing Original White Beer was awarded. Alcoholic products were sequenced and divided into different groups according to their category. 174 adjudicators were invited to evaluate each product through blind tasting. Notaries public with national qualification to supervise the whole process. The results of online voting and offline tasting together decide the final Top 10.

Such an honor indicates that Yanjing Original White Beer has made great achievements in production technic, product quality, and meeting customer demands. It is a pride of the Chinese beer industry. It leads the development direction of future international beer industry, and reflects consumers' actual demands.

Upstream Management

When selecting suppliers, Yanjing Beer prefers to cooperate with those with certifications of ISO14000, SA8000, ISO9000, HACCP, Green Food, and so on. Yanjing Beer has acquired the certification of Green Food. To guarantee food safety, it uses high-quality raw materials, and requires suppliers to provide malt, hops, rice, and corn starch with Green Food certification.

Besides, Yanjing Beer has launched the Online SRM Supplier Bidding and Procurement Management Platforms in May 2016. The platform integrates internal and external resources and investigates into suppliers' performance comprehensively, thus realizing transparent management of the procurement of raw materials.

Yanjing Beer Zhejiang Xiandu Co., Ltd. was honored the 2014/2015 National Contract-keeping and Promise-stressing Enterprise, becoming the only enterprise in Lishui that has won such an honor for 3 consecutive years.

Green Plant

Devoted to environmental protection, Yanjing Beer has actively developed green, low-carbon, and circular economy with an aim to build a resource-conservation and environmentally friendly society. In 2016, the chemical oxygen demand (COD) around Yanjing Beer Beijing headquarters was reduced by 20.8 tons, biochemical oxygen demand (BOD) was reduced by 8.13 tons, and ammonia nitrogen was reduced by 2.74 tons. The bottle damage rate was lowered to 0.55% in 2016 from 0.66% in 2015; and non-hazardous waste produced was 1,000 tons.

- Yanjing Beer has enhanced the management of sewage emission. It has supported the transformation and upgrade of sewage treatment facilities in Sankong Shandong, Wuming Shandong, Shanxi, Jiangxi, and other branches, thus improving their sewage treatment capacity and helping them realize emission standard.

- Yanjing Beer has established an environmental protection informatization platform where real-time sewage and smoke emission data of all subordinate companies are uploaded for the use of promoting

legal and compliant operation. All subordinate companies outside Beijing have uploaded their emission data to the platform, so that the headquarters can conduct unified supervision with each company in charge of their respective business. The headquarters designate personnel to help those companies to launch environmental protection management projects, actively helping them to find solutions to environmental problems.

- Yanjing Beer has launched

energy consumption benchmarking work. Through 3 years of promotion, the production energy consumption benchmarking platform has been put into use to standardize energy consumption during production, helping reduce total consumption year by year.

CASE

Environmental protection renovation and transformation



To implement the Beijing Clean Air Action Plan, the Yanjing Beer headquarters (south plant) has conducted technological transformation and upgrade of boilers in Beijing, realizing real-time online connectivity with Beijing Municipal Environmental Protection Bureau. All emission indicators of Yanjing Beer have met the standard, with the emission of nitrogen oxides reduced below 100 mg/m³, and SO₂ and smoke below 15mg/m³.

Yanjing Beer has conducted coal-to-gas conversion in Beijing and some subordinate companies. The coal-to-gas conversion project with capacity of 60 t/h steam (Division I) has been put into operation, the coal-fired boiler with capacity of 64 t/h steam of the headquarters (south plant) had been abandoned, and the gas-fired boiler with capacity of 180 t/h steam has completed transformation before the Spring Festival and passed the acceptance evaluation of Beijing Shunyi District Bureau of Quality and Technical Supervision, equipping the company with the competence to use natural gas.

In December 2016, Ma Wen, head of the Central 1st Environmental Protection Inspectorate Group, checked the coal-fired boiler smoke management, coal-to-gas conversion, and sewage treatment and byproduct utilization work of the south plant of Yanjing Beer. She spoke highly of Yanjing Beer's contribution to environmental protection, technological transformation, and emission reduction management.

CASE

Yanjing Beer (Zhejiang Lishui) was honored the "Zhejiang Water-Saving Enterprise"



Yanjing Beer (Zhejiang Lishui) Co., Ltd. has a comprehensive water-saving production management system. By improving water use measurement facilities and management through enhanced water pipe network (equipment), the measurement accuracy of the industrial water meter can reach 90%. The company has also enhanced quota management in order to reach higher water-saving standard by promoting the advance of water-saving technologies, increasing the utilization rate of condensate water and cooling water, and promoting the recycling of industrial sewage and rainwater. In this way, the company endeavors to build itself into a water-saving enterprise from multiple aspects, such as increasing the utilization rate of non-conventional water, and the reuse rate of water resources. Besides, the company has organized publicity and educational activities to promote the awareness of saving water among all staff.

In 2016, Yanjing Beer (Zhejiang Lishui) became the first "Zhejiang Water-Saving Enterprise".

BUILDING A HARMONIOUS COMMUNITY

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4



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Apart from self-development, companies must also focus on corporate citizenship and give back to the community. It's their inescapable responsibility and an important component of a harmonious society.

President Xi Jinping, *Zhijiang Xinyu*

”

Building Beijing Enterprises into a Happy Family

We aspire to build Beijing Enterprises into a happy and encouraging family, maintain people-oriented, foster harmonious labor relations, and guarantee employees' basic rights. Beijing Enterprises strictly complies with the provisions of labor laws such as the Labor Contract Law, adhere to the principle of fair employment, and prohibits child labor and forced labor. Beijing Enterprises respects employees' cultural backgrounds, guarantees their occupational health, and protects their rights to get time off on public holidays. We have multiple channels to communicate with employees and bring into full play their roles in democratic corporate management. The project *Innovation and Practice of the Multi-Tiered Wage Management Model of Beijing Gas* was awarded the first prize of the 31st Beijing Municipal Enterprise Management Modernization Innovation Award.

2016 年

As of 2016, Beijing Enterprises has approximately

48,000 employees with **100%**

trade union coverage and **100%** social insurance coverage.

The employee turnover rate is **6.56%**



Beijing Gas was honored "Outstanding Entity in Harmonious Labor Relations"

Training and Development

Beijing Enterprises values employee training and offers training programs with multiple forms and levels, covering a broad range of contents. Such programs allow us to train our talents in a targeted manner. In 2016, Beijing Enterprises Headquarters organized 49 internal and external training courses. 670 person times received 5,160 hours of training on a person-time basis with an average of 75.88 hours per employee.

Beijing Enterprises adheres to the principle of equal pay for equal work regardless of gender. We promote internal talent cultivation, tap into internal human resources and facilitate internal transfer and dissemination of know-how. We also focus on employees' performance and have increased the performance-related pay of key employees.

CASE

Cultivating specialists through diligence



Beijing Gas is committed to cultivating specialized talents and business-oriented technicians to support corporate strategy. In 2016, Beijing Gas organized the gas appliance technician competition of the 4th Beijing Professional Skill Competition, the compressor technician competition of the BWTA (the Beijing Worker's Technical Association) Professional Skill Competition, as well as co-organized welding technician competition of the Beijing-Tianjin-Hebei Professional Skill Competition. The competitions involve seven kinds of technicians and attract more than 1,800 contestants. Beijing Gas won a group champion both on national and municipal-level. Two employees won the individual champion in the municipal competition of Beijing. 2016 marks the year with the most diversified participants and the best results.

As of 2016, Beijing Gas has had one National-level Master Studio, three Beijing Chief Master Studios and four Beijing Innovation Studios. One of the employees in the high-pressure pipeline subsidiary, Zhang Haijun, was honored "Learning Star of Beijing Citizen".



CASE Yanjing Beer established a Postdoctoral Fellow Research Institute



In 2016, Yanjing Beer lodged an application to establish a Postdoctoral Fellow Research Institute to cultivate high-level innovative talents and promote technological innovation and business growth. The institute will attract internal and external high-level professionals, bring into full play the feature of postdoctoral fellowship, and build a research platform for Yanjing's core technologies. The institute also serves as a platform to educate top talents who are capable of interdisciplinary, strategic and innovative research for the needs of modernization drive.

CASE China Gas Engineering College



In 2016, China Gas and Hebei Normal University jointly established the China Gas Engineering College to cultivate talents for China Gas and promote technological innovation. China Gas Engineering College aims to become a research and education institution that takes a domestically leading position in the field of gas, and has some influence in the field of major energy resources. The college will educate middle- and high-level technicians, engineers and managers with professional skills and ethics, good market awareness and a broad horizon.

Health and Safety

2016 was the first year of the 13th Five-Year Plan period. Aiming to further promote work safety, the trade union of Beijing Enterprises organized the An-ang Safety and Health Skill Competition, according to the working schedule of business units and subsidiaries. Subsidiaries in all sectors were encouraged to take part in the Skill Competition of the Safety & Health Cup.



● BE Water organized a knowledge competition based on its promotion of safety know-how and a skill competition based on project operation. BE Water also launched campaigns for safe and standardized production.



● The trade union of BE Environment Group worked with its subsidiaries and organized the professional skill competition in the Shuangqi Plant in Harbin to strengthen safety promotion, as well as encourage employees to improve their professional skills.



● The trade union of BE Hong Chuang fulfilled its duty of safety supervision and selected employees as safety personnel. BE Hong Chuang also put in a great deal of efforts to promote safety know-how in "Safe Production Month".

In 2016, the Company Headquarters organized an annual physical examination for 68 employees (including retired employees). A physical examination for 26 female employees (including retired employees) on Women's Day was completed. Physical examination was also organized for all the employees in the subsidiaries of Beijing Enterprises, where the health of female employees is a priority and special physical examination for them is organized annually.

Employee Care

We care for employees, delivered summer cool services and winter warm services. Beijing Enterprises is committed to helping employees with their difficulties and troubles. We also strive to protect legitimate and special rights of female employees, organize various activities for them and improve their qualification.

During festivals and holidays, the Company sends regards to disadvantaged employees, as well as frontline workers. In summer, visits the frontline projects and brings cooling products to production line workers. the Company also learns about employees' lives and work conditions, safety precaution measures, and listen to employees' voices.

Beijing Enterprises regularly pays contribution for employees' mutual insurance and helps employees to apply for the Sunshine Fund of BE Group to ease their burdens. Subsidiaries have also initiated donation to raise treatment expenses for sick and needy employees in other cities.

The Labor Union Committee of Beijing Gas High Pressure Pipe Network Branch was awarded "National Model Home for Staff and Workers", which is the highest national honor for labor unions and the greatest praise for their frontline work.



CASE Building Beijing Enterprises into a warm family

In March 2016, BE Environmental Technology organized a donation for an employee, who worked in the Shuyang subsidiary and suffered from illness. In just one week, RMB 138,418 was raised to cover his treatment expenses and help him get through difficulties.

Donation for sick employee
138,418 RMB

We care for female employees. "Mama's hut" with facilities have been built in the Headquarters and subsidiaries for female employees who have special needs. The Company pays visits to female employees who are in maternity leave or sick leave on Women's Day. Trade unions of Beijing Enterprises' subsidiaries have organized various activities for female employees, such as invited professional floral designer to teach flower arrangement; invited professional beauticians to give fashion and beauty lectures for female employees and on-site staff; held several salons themed with "beauty is everywhere" for female employees. These activities have demonstrated the beauty of female employees and enable them to achieve best performance with a healthy physical and mental condition.

Staff Activities

Beijing Enterprises follows the idea of "Commitment and Devotion, Sharing and Respect" and regularly organizes cultural and sports activities with the Company's characteristics to enrich employees' lives.

CASE Workshop for employees' children in summer vacation



Beijing Enterprises organized the first workshop for employees' children in summer vacation, which is themed with "Pioneer in Environmental Protection". The workshop aims to help employees with child care in summer vacation. Prior to the workshop, Beijing Enterprises had conducted a detailed survey, which led to the innovative idea of running the workshop based on the Company's major business. The Company made full use of its human resources, such as professional engineers, and work with education institutions to design the course and activities based on the major aspects of business.



Harmonious Community Connection

Beijing Enterprises gives back to society not only with gratefulness, but also with concrete actions. We are committed to building an open community based on our own business. We carry forward traditional Chinese values of mutual love and help, respect the old and care for the young, to requite citizens' support for Beijing Enterprises.



Logo of Beijing BG Football Club

Support for Sports

Beijing Enterprises is committed to supporting China's sports development and has been the title sponsor for a series of football and basketball games. After sponsoring the Beijing Olympics, the Beijing Women's Volleyball Club, the Chinese National Football Team and the Chinese National Table-Tennis Team, Yanjing Beer again supported sports development with concrete actions by sponsoring the Chinese Football Association (CFA) Cup.

2016 saw sport fans excited by the European Championship and the Olympics. 2016 was the third year that Yanjing Beer had been the exclusive title sponsor for the CFA Cup. Yanjing Beer also renewed its sponsorship with the CFA Team China, supporting Chinese football players to compete in global arena. By sponsoring the CFA Cup, Yanjing Beer continued to carry out "Yanjing Beer Seed Plan". Yanjing Beer also sponsored the Chinese Table-tennis Team in 2016 and 2019 China FIBA Basketball World Cup.

CASE

The Beijing Enterprises Football Club and Basketball Club



Beijing Enterprises, as an important SOE in Beijing, is committed to Beijing's sports development. 2016 was the third year that Beijing Enterprises was the title sponsor of the Beijing Enterprises Football Club (BE Yanjing). Beijing Enterprises is also the title sponsor of the Beijing Enterprises Basketball Club (BE Water). In 2016, both teams have presented wonderful games for sports fans, contributing to Beijing's football and basketball development.



"Yanjing Beer CFA Cup Seed Plan" is a charity event initiated by Yanjing Beer and implemented by Yanjing Beer and CFA. The event aims to use CFA Cup as a platform to donate 100 footballs to 5 schools in the host city of the games. It encourages children who love football and supports Chinese people's football dream, demonstrating the social responsibility of Yanjing Beer and the CFA.

2016 marked the third year of "Seed Plan", which is consistent with the reform trend of promoting football development in school, and with the idea of "Football for Everyone". By the 7th round of the 2016 CFA Cup, "Seed Plan" had donated 18,300 footballs to 850 schools. During the finals of 2016 CFA Cup, "Seed Plan" held a donation ceremony in two elementary schools in Nanjing. Influential figures in China's football history Han Chongde, Qi Wusheng, and Sun Wen as well as representatives from Yanjing Beer attended the event.

“ Embedding the idea of "Football for Everyone", Yanjing Beer promotes public passion and support for football and show the company's social responsibility. Yanjing beer is brewed with the best wheat, and the prospect of China's football lies in the "Seed Plan". "Seed Plan" initiated by Yanjing Beer encourages more teenagers to love and participate in the sport, cultivates talented players, popularizes football in China and promotes China's success in football.

China Football Association comments on Yanjing Beer ”

CASE

Group runner-up in the badminton competition for the 25th anniversary of the Hong Kong Chinese Enterprises Association



In June 2016, Beijing Enterprises and Beijing Holdings formed a team and participated in the badminton competition held to celebrate the 25th anniversary of the Hong Kong Chinese Enterprises Association. Among the 39 teams, our team finished as group runner-up.



School-Enterprise Cooperation

Improving education quality and increasing employment rate in host regions is one of our ways to give back to the community. We are committed to training and developing talents for multiple industries. Based on their major business, our subsidiaries have also established a long-term and stable partnership with universities and vocational colleges. Such a partnership offers students internship and training opportunities, and reserves valuable talents for the industry.

In 2016, BE Water worked with Guangdong Polytechnic of Environmental Protection Engineering, Changsha Environmental Protection College and Shandong Water Conservancy Vocational College to offer students training courses and opportunities to visit water plants. Such visits and training enable the students to learn more about BE Water, their profession and the industry in general. BE Water has signed a school-enterprise partnership agreement with Guizhou Industry Polytechnic College. In addition, BE Water plans to work with Hebei University of Environmental Engineering, Erdos Vocational College of Eco-environment and Xinjiang Agricultural Vocational College to help business units of BE Water to attract and train more talents.

CASE

Shuangqi Plant provided universities and colleges in Harbin with on-site visits and training courses



Aiming to optimize regional labor structure and give back to the society, Shuangqi Plant offers university students on-site visits and has established partnership with several universities and colleges, allowing both parties to train students and share resources.

In order to develop a sustainable school-enterprise partnership, Shuangqi Plant has also been finding more ways to cooperate with colleges, such as organizing lectures in college, so that more students and professionals can know more about waste incineration, about Shuangqi and Beijing Enterprises.

Environmental Protection Education

Beijing Enterprises is committed to balancing human activities and environmental protection. We promote energy saving and emission reduction, the idea of green office and the spirit of environmental protection. We also strive to raise the awareness of employees and citizens, create an atmosphere for environmental protection, and engage all parties to preserve natural resources.

CASE Promotion campaign on the World Water Day

March 22, 2016 marked the 24th World Water Day and the first day of the 29th China Water Week. Subsidiaries of BE Water organized a promotion campaign themed with "Conserve and Protect for a Clean Water Environment".

BE Water played water conservation promotional videos to citizens in Beijing. They learned about comprehensive renovation of Liangshui River and the renovation results in Yangqiao, and received brochures and souvenirs from BE Water. BE Water also designated a number of citizens as volunteer supervisors of the water environment in Beijing, and issued designation certificates to them.



In order to enhance public awareness and knowledge of waste incineration, power plants in Haidian and Gaoantun (Beijing) and Shuangqi plant in Harbin has built centers for training, production and research in environmental technologies to disseminate knowledge about waste incineration to the public and to raise public awareness of environmental protection. Gaoantun plant alone received up to 10,000 public visits every year.



The modern exhibition room in Shuangqi plant uses a combination of technological means, including pictures, models, materials, sound, light and electricity, to attract visitors

CASE Charity running race "Run for Survival"



In February 2016, Beijing Enterprises sponsored the 2nd "Run for Survival", a charity event held by Ocean Park Conservation Foundation, Hong Kong. More than 30 employees and their family members participated in the event.

"Run for Survival" aims to raise the public awareness of ocean conservation and draw public attention to the three major ocean threats, namely waste, unsustainable fishing and pollution. The aim of the event is highly consistent with the idea of environmental protection upheld by Beijing Enterprises. The fund raised at the event would be used for ocean conservation and educational projects, benefiting more than 100,000 students and citizens.



Public Charity

Charity is a long-term cause. Beijing Enterprises has been devoted to charity for years. Beijing Enterprises is dedicated to developing local communities, strives to benefit as many people as possible and promote a harmonious society. In 2016, Beijing Enterprises has made a total donation of HKD 23 million.

CASE

Establishing the platform of environmental protection and volunteer teaching

Beijing Enterprises has established a platform of environmental protection and volunteer teaching based on its major business. In collaboration with BE Water and labor union of BE Environmental Technology, Beijing Enterprises organized the activity of environmental protection and volunteer teaching at the Yifu Experimental Elementary School in WuLingshan Village, Xinglong County, Hebei Province. Themed as "Connected Hearts for Knowledge, Joined Hands for Environment", the activity gained much support from subsidiaries and employees, whose dedication and cooperation received recognition and praise from the school staff.



CASE

Supporting Sowers Action



In October 2016, Beijing Enterprises HK Headquarters participated in the 18th 12-Hour Cross-Country Marathon organized by Sowers Action. Beijing Enterprises also made a donation, which would be used for children and teenager welfare. The fund would also help Sowers Action run three children's welfare institutes in Zhaotong, Yunnan Province, and care for orphans and poor children in villages, bringing hope and happiness to hundreds of children.

Beijing Enterprises' donation and team numbers respectively ranked 1st and 2nd in the corporate category. As a result, Bei-



jing Enterprises won the Golden Foot Fundraising Award and the Corporate Participation Silver Award.

CASE

Gas Service Center named as "Capital First Aid Center"



Wangjing Community Gas Service Center of the Second Subsidiary of Beijing Gas (5S Center) and Yizhuang Community Gas Service Center of the Fourth Subsidiary of Beijing Gas (5S Center) were honored as "Capital First Aid Center" by the Beijing Red Cross. Establishing "Capital First Aid Center" is an important measure to carry out the Implementation Opinions on Promoting Red Cross Development issued by Beijing Municipal Government. Beijing Gas has equipped its service centers with first aid lockers, AEDs, first aid kits and stretchers. A number of volunteers from Beijing Gas are qualified to carry out first aid after receiving counter-terrorism emergency response training, self-help and mutual aid, and psychological intervention. In addition, the volunteers will organize promotion campaigns with the assistance of Beijing Gas and the service centers, so that citizens can learn more about Red Cross and first aid skills.

CORNERSTONE OF RESPONSIBILITY



5

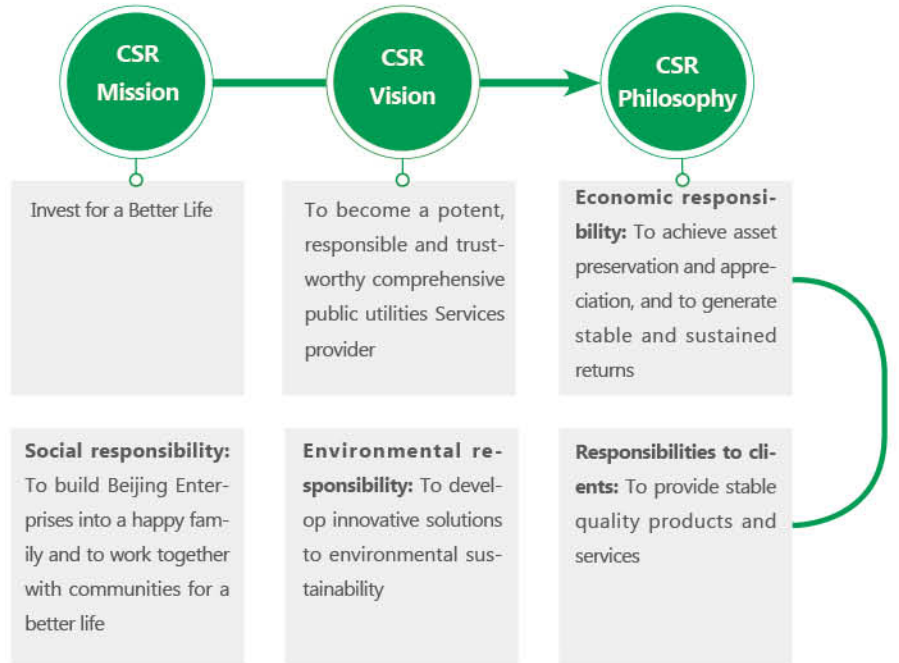


Beijing Enterprises integrates corporate social responsibility into corporate development, formulates sustainable development plans and takes concrete and effective measures in economic growth, environmental protection and public charity.



BE Water awarded the Responsible Brand of the Year at the 2016 China Charity Festival

Concept System of CSR



CSR Management



Beijing Enterprises honored by the *Mirror Post* with the 5th Outstanding Corporate Social Responsibility Award

Improving the systems

The Management Rules of Corporate Social Responsibility was reviewed and ratified by the Board of Directors in August 2016. The rules were formulated in compliance with the *Environmental, Social and Governance Reporting Guide of HKEx* (ESG Guide: 2015), *ISO26000: Guidance on Social Responsibilities* of the International Organization for Standardization and the *Beijing Enterprises Group Management Rules of Corporate Social Responsibility*. With high relevance to the Company's actual condition, the rules will enable Beijing Enterprises to achieve rational, systematic, and standardized CSR management.

Enhancing the capability to perform social responsibilities

As a company listed in Hong Kong, Beijing Enterprises strictly complies with the *ESG Guide: 2015*. Beijing Enterprises, with its subsidiaries, has organized training courses on CSR and

sustainable development of overseas Chinese companies.

Releasing CSR Reports

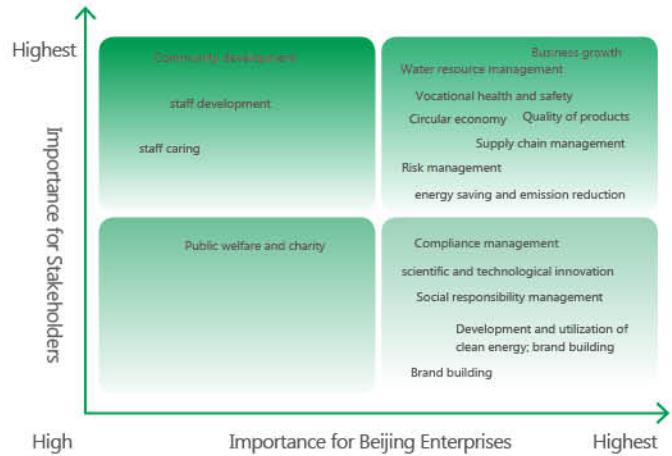
In 2016, Beijing Enterprises released its second CSR report. BE Water and Yanjing Beer respectively released their first and seventh CSR report.

Won CSR awards

In March 2016, Beijing Enterprises was honored by *The Mirror Post* with the 5th Outstanding Corporate Social Responsibility Award. "Seed Plan" initiated by Yanjing Beer received the CSR China Education Pioneer Award and the 2016 China CSR Charity Award. BE Water was awarded with Responsible Brand of the Year by the 2016 China Charity Festival. Beijing Gas was honored with Exemplary Enterprise in Corporate Culture at the Start of the 13th Five-year Plan. China Gas was named as the "Most Honored Company in Asia" by the US magazine *Institutional Investor*.

Materiality Analysis

Through the communication and understanding of internal and external stakeholders, Beijing Enterprises combines development trend of sustainable development fields with company business-related industry dynamics, recognizes appeals of stakeholders, clarifies relative issues of social responsibility, confirms priority based on two dimensions: importance to the company and importance to stakeholders and finally forms the materiality issues matrix.



Materiality issues matrix

Transparent Operation

Investor Relations is one of the top priorities of Beijing Enterprises. In strict conformity with relevant regulations, we have disclosed information about business operation in a timely manner. We also follow the principle of transparent operation and have fostered mutual trust and effective communication with investors. Through full information disclosure and strengthened investor communication, we have made great progress in enhancing investors' attention, understanding and recognition.

In consideration of the nature of Beijing Enterprises as a company listed in Hong Kong, we strictly comply with national laws, regulations, and the HKEx Main Board Listing Rules to ensure a legitimate information disclosure.

Press Conference

Through annual press conferences, Beijing Enterprises informs the public of its business performance and management philosophy, and responds to press inquiries about the Company's operation. Two results announcements in 2016 (full-year results announcements of 2015 and interim results announcements of 2016) and 2016 Annual General Meeting.

Investor Seminar and Meeting

To maintain closer relations with professional investors, Beijing Enterprises participated in the investor seminars in Hong Kong and overseas organized by 15 securities brokerages and conducted more than 100 one-on-one meetings and over 20 group discussions. During the year, we met more than 300 institutional investors. The Investor Relations Department has strengthened its communication with capital markets and worked with securities brokerages and analysts to release regular investment reports, keeping fund managers informed of our business performance, development strategies and investment highlights. By strengthening information disclosure and investor communication, we have made great progress in enhancing investors' attention, understanding and recognition. By the end of 2016, Beijing Enterprises has been on the watch list of 15 major investment banks and nearly 40 analysts.



Stakeholder Engagement

Communication and participation of stakeholders are an important part of the sustainable development of corporate. Beijing Enterprises strengthens the communication with all stakeholders and achieves win-win results.

Stakeholders	Concerns	Responses	Achievements
<p>Governments and regulatory authorities</p>	<ul style="list-style-type: none"> • Law-abiding operation • Tax payment in accordance with the law • Employment promotion Sustained and healthy economic development 	<ul style="list-style-type: none"> • Routine briefing and communications • Surveys and meetings • Related BBS communication activities • Relevant forums 	<ul style="list-style-type: none"> • Strategic cooperation with local governments • A favorable external environment for corporate development
<p>Shareholders</p>	<ul style="list-style-type: none"> • Satisfactory investment returns • Sound market value • Transparent operation • Profitability and core competitiveness 	<ul style="list-style-type: none"> • Annual reports and announcements • Roadshows • Analyst conference calls • Annual shareholders meetings 	<ul style="list-style-type: none"> • Sound investor relations • Enhanced trust among investors • Support of investors and shareholders in major decisions
<p>Clients</p>	<ul style="list-style-type: none"> • Stable and sustained supply of products • High-quality and safe products • Considerate and convenient services • Unimpeded communication channels 	<ul style="list-style-type: none"> • Client seminars • Service hotlines • Community service centers • Satisfaction surveys 	<ul style="list-style-type: none"> • Continuous improvement in business based on clients' feedback • Effective and timely response to client requirements • Continuous improvement in client service
<p>Partners</p>	<ul style="list-style-type: none"> • Fair procurement • Integrity and mutual benefits • Long-term and stable partnership 	<ul style="list-style-type: none"> • Suppliers conferences • Strategic partnership 	<ul style="list-style-type: none"> • Supplier Management Principles for better supply chain efficiency • Shared growth with partners
<p>Employees</p>	<ul style="list-style-type: none"> • Protection of rights and interests • Career development • Work-life balance 	<ul style="list-style-type: none"> • Employee town hall meetings • Complaint mailbox 	<ul style="list-style-type: none"> • Horizontal and vertical communication channels • Harmonious and mutually supportive working environment
<p>Communities</p>	<ul style="list-style-type: none"> • Community development • Harmonious community • Community environment 	<ul style="list-style-type: none"> • Science popularization • Community publicity 	<ul style="list-style-type: none"> • Community supervisors for assessment and supervision of service quality • Strong ties with local communities • A favorable external environment for corporate development
<p>Environment</p>	<ul style="list-style-type: none"> • Clean energy supply • Waste treatment • Green operation practice 	<ul style="list-style-type: none"> • Annual reports and announcements 	<ul style="list-style-type: none"> • Response to the Beijing 2013-2017 Clean Air Action Plan • Participation in environmental governance projects



Legal and Compliance Operations and Anti-Corruption

Promotion campaign of anti-corruption

Beijing Enterprises is committed to anti-corruption education in daily work as well as at critical junctures and organized visits to anti-corruption education centers. 143 employees have signed "no corruption commitment". We have also been strictly complying with selection and appointment process. Major appointments are only effective upon a Certificate of Personal Integrity issued by the Commission for Discipline Inspection.

For major projects, which investment amount exceeds RMB 100 million, Beijing Enterprises has established a mechanism of inspection, retrospection, and efficiency supervision. A work report will be released after inspections, which will summarize achievements and experience drawn in the project, and identify problems and loopholes in investment, construction and management. The report also collects opinions from the companies and entities that have invested in and operated the project before it is distributed to related parties. The related parties will be required to solve the problems timely and thoroughly and avoid same problems in future projects.

By setting up standards and rules for major decisions in corporate operation and management and reinforcing control on the investment and construction process of major projects, we have innovated ways of maintaining and increasing the value of state-owned assets.

Abiding by laws and regulations

Compliance procedures are in place to ensure adherence to applicable laws, regulations, and rules, especially those have significant impact on Beijing Enterprises. The Board review and monitor policies and practices on compliance with legal and regulatory requirements on a regular basis. Any changes in the applicable laws, regulations, and rules are brought to the attention of relevant employees and operation units from time to time.

In 2016, Beijing Enterprise has complied in material respects with the relevant laws and regulations that have a significant impact on corporate business and operation.



THE APPENDIX

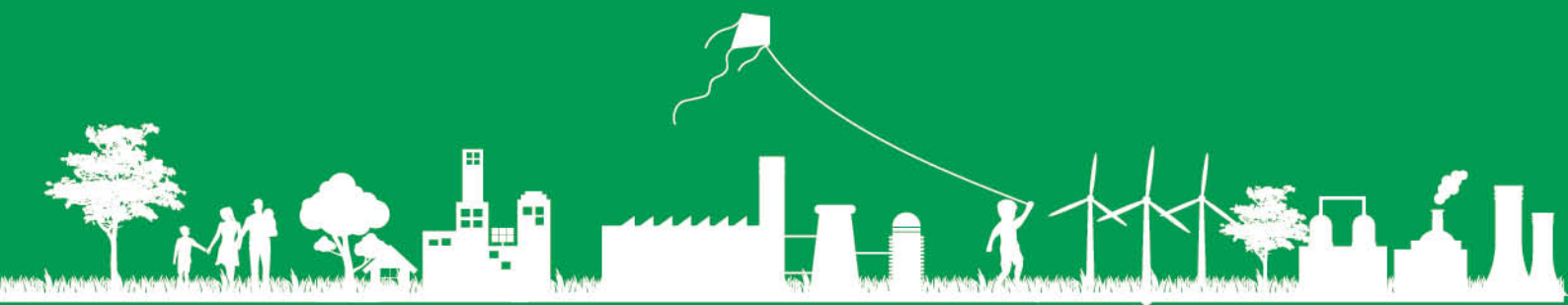
Outlook for 2017

Policies to promote sustainable development are fundamental to tackling global problems of all kinds. In 2016, we saw nations and organizations around the world issued strategies, guidelines and standards with a view to reaching an international consensus which would create a broader range of opportunities and wider scope for development. 2017 is a key year in Beijing Enterprises' 13th Five-Year Plan, and also an important time for the Company to refine its strategic path and to find new impetus to drive innovation and development. We will tackle our social responsibility head on, facing the opportunities and threats thrown up by developments and changes in the industry, as we strive to promote the implementation of the UN's 2030 Agenda for China.

We will continue with our social responsibility mission of "Invest for a better life", and actively engage in the major state-led initiatives of our time: the Belt and Road Initiative, the Beijing-Tianjin-Hebei integration project and the supply-side structural reforms. We will promote international production capacity cooperation, establish platforms for business partners to interact. We will make full use of our own market-leading capital operations and investment and financing channels and identify areas for strategic breakthroughs. We will develop vertical and horizontal cooperation in industrial chains, further integrate our resources, select optimal targets for capital investment in the industry, and steadfastly pursue win-win cooperation and mutual development.

We will step up reform and development efforts by seeking a diverse range of innovation drivers. We will comprehensively raise the Company's core competitiveness, and set the benchmark for the capital investment operations of state-owned enterprises. We will continue to increase investment of capital and resources in our four key segments of gas, water & environment, solid waste treatment and beer, while striving to save energy, reduce emissions and improve our environmental services. Our leading traditional production processes will be concentrated in higher-efficiency areas, in mid-to high-end industrial chains and products, for the benefit of sustainable cities and communities. We will continue with a people-focused policy, refine our talent training programmes, support social and charity projects and community-building, and contribute to the development of local societies and economies.

In 2017, we are committed to becoming a model enterprise in sustainable development, and will share our experience of CSR work with partners and stakeholders and continue to improve our ability to add value to the economy, society and the environment.



Key performance table

Economic performance indicators

	2016	2015	2014	2013	2012
Revenue (in 100 million HK dollars)	559.6	601.5	479.4	423.6	355.7
Total assets(In 100 million HK dollars)	1,447.1	1,247.70	1,240.60	1,096.20	895
Yearly dividend(HK cents/share)	95	95	90	85	75
Basic earning per share(HK dollar/share)	4.92	4.41	3.78	3.36	2.84
Gas sales volume* (in 100 million m ³)	143.8	130.6	99.6	87.2	79.4
Contract-based water treatment capacity (in 10,000 tons/day)	2,717	2,462	1,976	1,670.80	1,067
Operating water treatment capacity (in 10,000 tons/day)	1,647.81	1,302	1,145	942.8	729.4
Waste treatment capacity (ton/day)	27,961	15,025	17,025	13,725	10,525
Beer sales volume (in 10,000 kilolitres)	450	483	532	571	540

*Note: the data only includes Beijing Gas

Environmental performance indicators

(the indicators cover all enterprises included in the consolidated financial statements, and indicators on solid waste do not cover overseas projects)

	2016
Emission of nitrogen oxide (tons)	635.09
Emission of SO ₂ (tons)	177.67
Emission of suspended particles (tons)	67.80
Emission of CO ₂ (tons)	2,237,657.35
Emission of other toxic gases (tons)	0.03
Zpetrol consumption (1,000 liters)	2,831.527
Diesel consumption (1,000 liters)	2,882.840
Coal consumption (10,000 tons)	20.29
Electricity usage (100 million kWh)	1.905
Gas consumption (1,000 cubic meters)	2,711.99
Methane consumption (cubic meters)	117,000
New water consumption (10,000 tons)	5,474.52
RUW (reused water) consumption (10,000 tons)	272.39

Social performance indicators

(the indicators cover all enterprises included in the consolidated financial statements)

	2016
Total employees (person)	48,475
Total male employees (person)	35,409
Total female employees (person)	13,066
Work-related deaths (person)	0
Working days lost because of work-related injuries (day)	1,825
Total contribution to training(in 10,000 RMB)	1,464.69
Percentage of trained employees (%)	98
Total training hours (hour)	368,339
Average training hours per employee (hour)	7.67
Total amount donated for public charity (in 10,000 HK dollars)	2,300

ESG Guide Content Index

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About the Report

The Report has been reviewed and ratified by the Board of Directors of Beijing Enterprises Holdings Limited. Beijing Enterprises hereby represents that the Report contains no false representations, misleading statements or material omissions.

Reporting Period

Jan. 1st, 2016-Dec. 31st, 2016, part of the content is beyond the scope.

Reporting Boundary

The Report covers the headquarters, subsidiaries and affiliates of Beijing Enterprises Holdings Limited.

Reference

For the convenience of expression, Beijing Enterprises Holdings Limited (0392.HK) is hereinafter referred to as "Beijing Enterprises", "the Company", or "we/us".

Beijing Gas Group Company Limited is referred to as Beijing Gas.

China Gas Holdings Ltd. (0384.HK) is referred to as China Gas.

Beijing Enterprises Water Group Limited (0371.HK) is referred to as BE Water.

Beijing Enterprises Environment Group Limited [formerly Beijing Development (Hong Kong) Limited (0154.HK)] is referred to as Beijing Enterprises Environment Group.

Beijing Enterprises Holdings Environmental Technology Co., Ltd is referred to as BE Environmental Technology.

Golden State Environment Investment Corporation is referred to as GSE Investment.

Beijing Yanjing Brewery Company Limited (SZ.000729) is referred to as Yanjing Beer.

Languages of and access to the Report

The Report is prepared in Chinese and English. Should there be any discrepancy between the two versions, the Chinese version shall prevail.

The Report is made public in both hard and soft copies (in PDF format).

Please visit <http://www.behl.com.hk> to read or download the Report in PDF format.

Release cycle

The Report is the third CSR report officially released by Beijing Enterprises.

From 2015 onwards, Beijing Enterprises periodically discloses CSR-related information in line with relevant requirements of the Stock Exchange of Hong Kong Ltd. (HKEX).

Report compilation principles

This Report is aligned with *Environmental, Social and Governance Reporting Guide* of Stock Exchange of Hong Kong Ltd. (HKEX), *Sustainability Reporting Guidelines (G4)* of Global Reporting Initiative (GRI), *China Corporate Social Responsibility Reporting Guidelines (CASS-CSR3.0)* of Chinese Academy of Social Sciences (CASS), *Social Responsibility Guide (ISO 26000:2010)* of International Organization for Standardization (ISO).

Data sources

All data included in the Report are from formal documents, statistical reports and financial reports of the Company, as well as sustainability-related information collected, summarized and reviewed by the CSR management system of the Company. If not specified, monetary unit in the Report is CNY (Chinese Yuan).

Contacts

Company name: Beijing Enterprises Holdings Limited

Address: 66F Central Plaza, No.18 Harbor Road, Wanchai, Hong Kong

Tel: (852) 29152898

Fax: (852) 28575084

Email: mailbox@behl.com.hk



北京控股有限公司
BEIJING ENTERPRISES HOLDINGS LIMITED

Address: 66F Central Plaza, No.18 Harbor Road, Wanchai, Hong Kong

Tel: (852) 29152898

Fax: (852) 28575084

E-mail: mailbox@behl.com.hk



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