



北京控股環境集團有限公司  
BEIJING ENTERPRISES ENVIRONMENT GROUP LIMITED

(Stock Code 154)



Environmental, Social And  
Governance Report  
**2018**



## ABOUT THE REPORT

Beijing Enterprises Environment Group Limited (the “Group”) is pleased to present the 2018 Environmental, Social and Governance Report (the “Report”). The Report covers our approach and performance in addressing significant environmental, social and governance issues from 1 January 2018 to 31 December 2018.

The Report has been prepared with reference to the “Environmental, Social and Governance Reporting Guide” recommended by The Stock Exchange of Hong Kong Limited (“Hong Kong Stock Exchange”) to all Hong Kong listed companies. A detailed Hong Kong Stock Exchange content index has been appended to the Report for higher transparency and easy reference.

### The Group

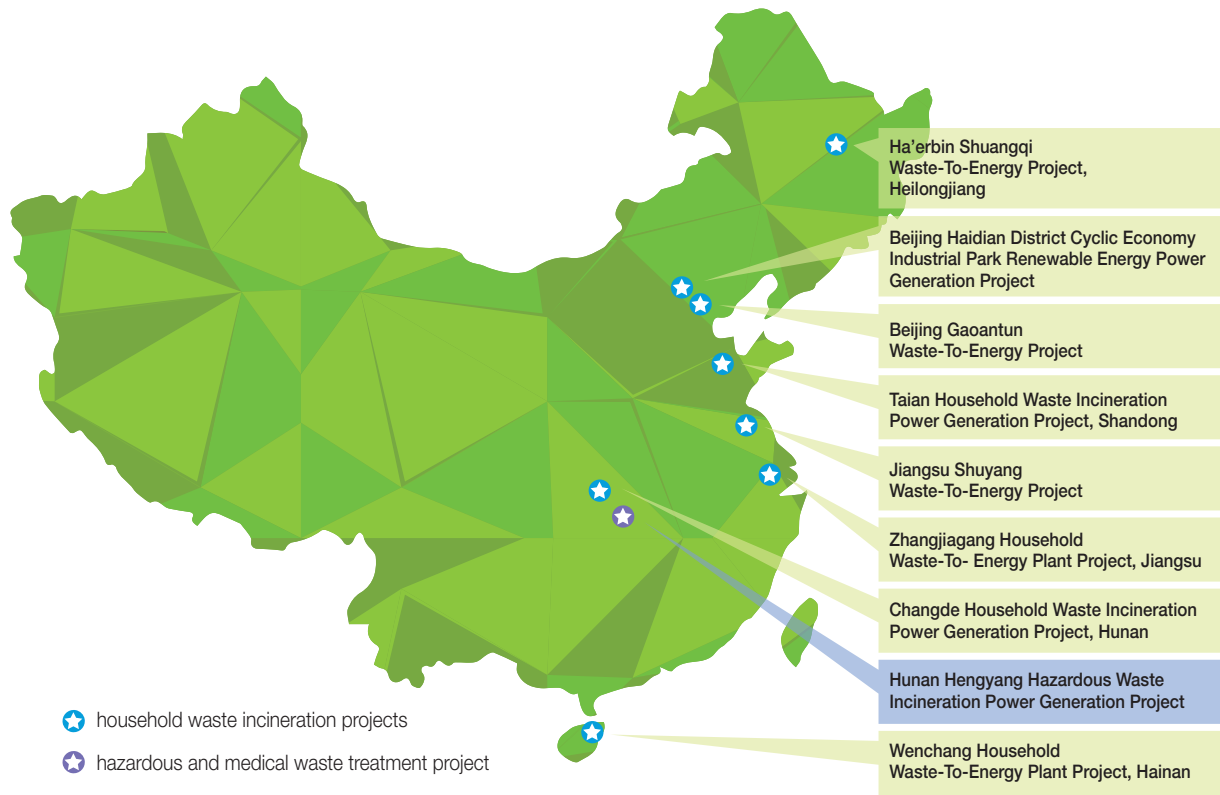
“Garbage Siege” has become a headache in urbanisation. The 13th Five-Year Plan for National Environmental Protection shows the government’s determination to promote the development of solid waste treatment. There is still large room for the development of power generation through waste incineration,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

The Group has been committed to implementing strategic transformation to restructure its existing business into the environmental protection and solid waste treatment industry. In order to complement the development strategy of the Company and place it in a better position to identify itself as a member of Beijing Enterprises Holdings Limited (“BEHL”, stock code: 392) with focus on the environmental protection industry, the Company has changed its company name to “Beijing Enterprises Environment Group Limited 北京控股環境集團有限公司” with effect from 22 July 2016.

At the end of October 2016, the Group completed the acquisition of five household waste incineration projects and one hazardous and medical waste treatment project from BEHL. These projects are located in major cities or provincial capital of the PRC and have a track record of grate furnace technology and a talented and seasoned management team. The acquisition was a valuable opportunity for the Company, and develop the Company into one of the leading companies in solid waste treatment industry in Mainland China. The Group’s domestic waste incineration project in Haidian District, Beijing has been put into commercial operation.

The Group aims to provide safer and greener ways for waste incineration and has 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 has been making ceaseless efforts to become a world-leading solid waste treatment operator. To realise the goal, we have benchmarked the production, operation, management, and business philosophy against the advanced international level, and kept improving professionalism, accuracy, standardisation, and delicacy management.





**Projects**

**Household waste incineration projects**

*Acquired in 2014:*

- Shandong Taian Project
- Hunan Changde Project

*Acquired in October 2016:*

- Beijing Gaoantun Project
- Ha'erbin Shuangqi Project
- Jiangsu Zhangjiagang Project
- Jiangsu Shuyang Project
- Hainan Wenchang Project

*Operated in 2018:*

- Beijing Haidian Project

**Hazardous waste and medical waste treatment project**

*Acquired in October 2016:*

- Hunan Hengxing Project

**Processing capacity**

800 tonnes per day  
1,400 tonnes per day

1,600 tonnes per day  
1,600 tonnes per day  
900 tonnes per day  
600 tonnes per day  
225 tonnes per day

2,100 tonnes per day

35,000 tonnes per annum



## ENVIRONMENTAL

The Group has upheld the principle of “applying the most suitable technology to the targeted project”, and come up with optimal solutions to household waste treatment for targeted regions according to their actual demand and features of local waste from an international perspective.

Through enhanced management of environment friendly production, waste treatment plants of the Group have reached the top industrial level in terms of emission, safety and reliability. In 2018, it has been our focus to carry out environmental production review. Acting in accordance with the key implementation plan for energy saving and emission reduction, we have improved the operation efficiency of power units, controlled coal usage ratio, and restricted exhaust gas emission to meet corresponding standards, effectively keeping the total emission within the limit set in line with the environmental impact assessment approval. Ashes and slags are transported to designated landfills for disposal according to government requirements. The project companies are preparing to transport the slags to cement plants for disposal and actively participate in the recycle for manufacturing cement bricks pursuant to the national environmental policy.

The Group abided by “Pollution Control Standards on Incineration of Household Wastes” (GB18485-2014), “Pollution Control Standards on Incineration of Hazardous Waste” (GB18484-2001) and other relevant environmental protection laws and regulations, and continuously improved the burnout rate of solid waste incineration under the premise of stable production operation, and thus truly achieved the purposes of reduction and harmless incineration treatment.

In 2018, Beijing Gaoantun Project adopted a number of energy-saving and emission-reduction measures in accordance with the “Energy Conservation and Emission Reduction Management System” in combination with its actual production operation, such as, 2# circulating pump motor is adjusted to be run in variable frequency, which generated an annual saving of about 180,000 kWh in electricity consumption; 2# furnace biogas burner replaced primary air steam heating model, representing an annual saving of about 1,480,000 kWh in power generation; strengthened the management of garbage dumping and drainage in garbage pool to ensure combustion conditions and reduce fuel consumption; water generated from leachate water was used as replenishing water for circulating water and cooling water, saving about 100,000 tons of reclaimed water annually.

In addition, Jiangsu Zhangjiagang Project adopted a combined processing technology encompassing SNCR denitration plus semi-dry scrubber plus activated carbon injection plus slaked lime injection and bag filter, the average emission for the major flue gas index of which has meet both national standard and European Union standard.

Set out below are the operating statistics and emissions of the Group for 2018 and 2017:

	2018	2017
<b>Operating statistics:</b>		
Power generation	1,078,011,000 kWh	1,022,563,000 kWh
Waste processing volume (including 36,000 tonnes of medical and hazardous waste)	3,496,000 tonnes	3,338,000 tonnes
Electricity consumption	190,494,000 kWh	194,756,000 kWh
Water consumption	4,013,000 tonnes	3,847,000 tonnes
Diesel usage	1,876,000 litres	586,000 litres
Coal usage	104,000 tonnes	106,000 tonnes
<b>Emissions:</b>		
Ash	113,000 tonnes	130,000 tonnes
Slag	629,000 tonnes	555,000 tonnes
SO <sub>2</sub>	116,000 kg	187,000 kg
NO <sub>x</sub>	1,087,000 kg	1,356,000 kg
Exhaust emissions	8,060 million m <sup>3</sup>	8,750 million m <sup>3</sup>

## SOCIAL

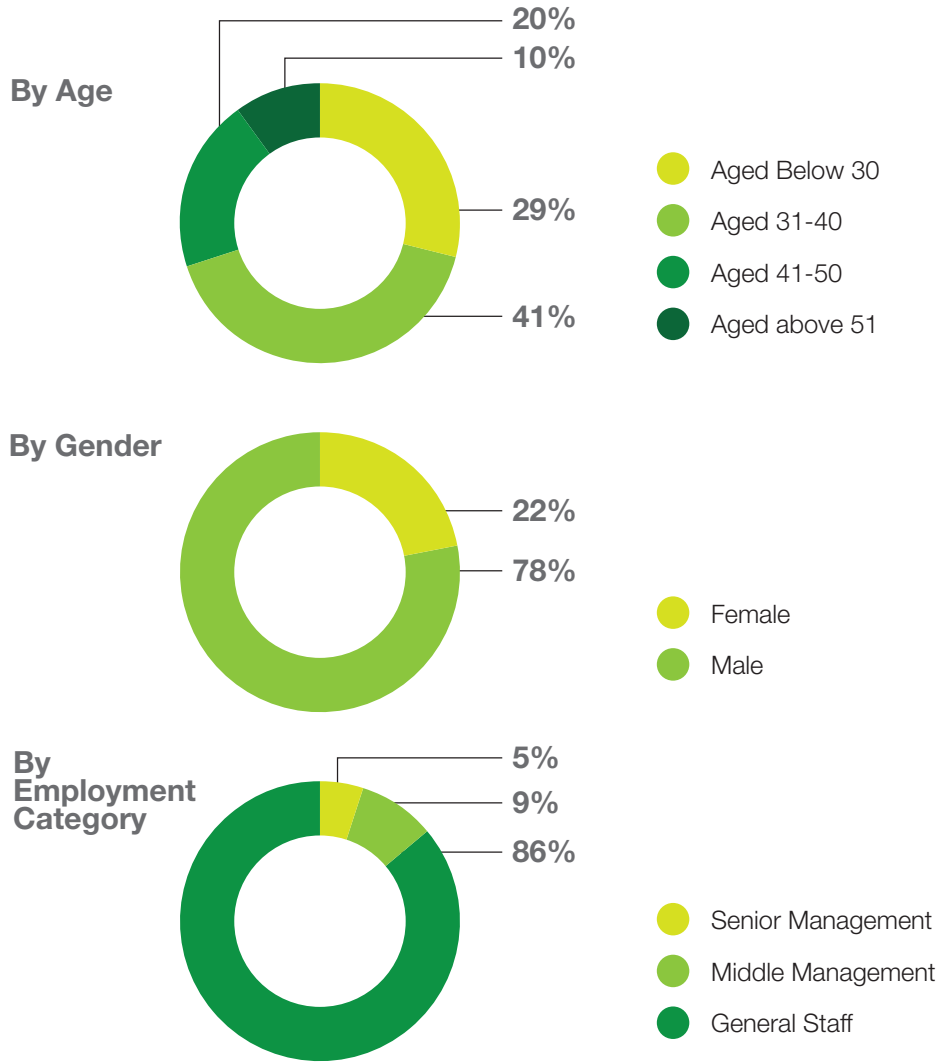
### The Group's employees

We aspire to build the Group into a happy and encouraging family, maintain people-oriented, foster harmonious labour relations, and guarantee employees' basic rights. The Group strictly complies with the provisions of labour laws such as the Labour Contract Law, adheres to the principle of fair employment, and prohibits child labour and forced labour. The Group respects employees' cultural backgrounds, guarantee 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.

As at the end of 2018, the Group had 1,171 employees, including 261 female employees (of which 74 of them held managerial positions). The employee turnover rate was less than 13%. In 2018, the Group had no recorded case of fatality that resulted from working accident and there was no working day lost due to work-related injury.



**Number of employees by employment category, age and gender**



### Training and development

The Group values employee training and offers training programmes with multiple forms and levels, covering a broad range of contents. Such programmes allow us to train our talents in a targeted manner. In 2018, the Group organised internal and external training courses (including job related, occupational health and safety and other training). Employees received 46,400 hours of training on a person-time basis with an average of 39.6 hours per employee. The Group 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.

### Number of training participants and training hours

	Senior management	Middle management	General staff	Total
Training hours (hour) (Note)				
Occupational health and safety	693	5,097	28,565	34,355
Work related	36	3,285	5,764	9,085
Other	112	2,848	–	2,960
<hr/>				
Total training hours of employees	841	11,230	34,329	46,400
<hr/>				
Number of staff	61	108	1,002	1,171
Average training hours (hour)	13.8	104	34.3	39.6

Note: Training hours per session x total number of participants



2018 Beikong Lvhai Neng Labour Union Yi Xing • Beijing Enterprises Health Walk Event  
(2018北控綠海能工會益行·北控健步走活動)

### Health and safety

The Group 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, the Group aims to strengthen the safety awareness among all staff. It has also carried out regular, ad hoc and, seasonal equipment debugging and renovating works to eliminate unsafe behaviour 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. Hunan Changde Project has been rated as the “Safe Production Advanced Unit” by the safety supervision department of Changde Economic and Technological Development Zone for consecutive six years, and has been granted the title of “Fire Safety Advanced Unit” at the municipal level for several times. Shandong Taian Project was awarded the qualification of the secondary enterprise of power safety production standardization and the honorary title of “Safe Production Advanced Unit” in Shandong Province.



Explosive accident emergency exercise

### Anti-corruption and supplier management

Credibility, integrity and honesty are the key elements of our business operation. The employees of the Group handle matters in relation to corruption, conflict of interest and comply with the policy and practices of the Group in a stringent manner. The senior management, middle management, members of the procurement department and finance office have entered into the undertaking of honest practice with the Group.

The suppliers of the Group, which are primarily based in the PRC, mainly supply coal and other raw materials and provide construction services. The distribution model allows us to support and promote local economic development in the course of procurement. For the purpose of enhancing strategic supply chain management, the Group conducts cost analysis on the supply chain every year. In 2018, the largest supplier accounted for 16% of the contract amount, while the top five suppliers accounted for 31% in aggregate.

The Group and its employees did not involve in any corruption lawsuits during the reporting period.



## Community

Apart from the waste-to-energy business, public education is also a crucial part of sustainable development. Hence, the Group regularly organises open days for the public and educational campaigns to promote waste separation.

For Beijing Gaoantun Project, in response to the government’s call, we actively participated in the promotional activities for environmental protection, and took our own advantages to introduce and publicize the harmless treatment of domestic garbage for the people. In the year of 2018, we received 128 batches of visitors and nearly 6,000 people, all of which were unanimously recognised and highly evaluated by the community. In addition, in June 2018, we conducted several technical exchanges and parameter data collection with Beijing University of Technology on the “Automatic Control of Domestic Waste Incinerators”.

The Beijing Haidian Project has been responsible for the daily disposal of domestic waste in Haidian District since its commercial operation. The closed garbage truck started from the transfer station and the community and then entered the factory in an orderly manner. It not only solved the garbage disposal problem for the people living in Haidian District, but also beautified the living environment of the village, town and district, and was recognised and supported by the residents surrounding communities and government agencies. In 2018, it welcomed over 500 people including personnel from government agencies, teachers and students of Tsinghua University, and students from secondary and primary schools. The Haidian project has been included in the second batch of national open units for environmental protection facilities for public visiting. It is open to the public on a regular basis every month to publicize garbage (harmless, reduction, and resource recycling) disposing knowledge, waste classification knowledge and environmental protection knowledge. It has contributed to the construction of a beautiful environment in Beijing.



Public visit control room



For Harbin Shuanqi Project, its green promotion and education exhibition hall opened to public is equipped with full-time lecturers for explanations, and a number of audio-visual facilities with entertaining and learning. It has realised a comprehensive and three-dimensional publicity model of environmental protection. Currently, it has become an important window for promoting the harmless waste treatment and popularization of environmental protection knowledge in three provinces in Northeast China, and the number of visitors has increased year by year. In 2018, it has welcomed a total of 3,000 person-times, including leader visiting groups from government agencies, visiting groups in the industry, and internship teams for college students, foreign friends and social visiting groups.

In future, Harbin Shuangqi Project will focus on the optimization of regional talent structure. In the spirit of serving the society, it will actively provide an internship base for college students by using existing resources, and provide a visiting base for students from primary and secondary schools. It will cooperate with nearly 10 research institutions at universities, colleges, primary and secondary schools level to provide resources for social talent training and also achieve resource sharing.



Student visits

## Appendix: Content index of the Environmental, Social and Governance Reporting Guide of the Listing Rules

SUBJECT AREAS	CONTENT	PAGE NO.
<b>A. Environmental</b>		
<b>Aspect A1: Emissions</b>	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	3
A1.1	The types of emissions and respective emissions data.	4
A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	4
A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	4
A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	4
A1.5	Description of measures to mitigate emissions and results achieved.	3
A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	3
<b>Aspect A2: Use of Resources</b>	Policies on the efficient use of resources, including energy, water and other raw materials.	3
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	4
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	4
A2.3	Description of energy use efficiency initiatives and results achieved.	3
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	3
A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	N/A



SUBJECT AREAS	CONTENT	PAGE NO.
<b>Aspect A3: The Environment and Natural Resources</b>	Policies on minimising the issuer's significant impact on the environment and natural resources.	3
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	3
<b><i>B. Social</i></b>		
<b>Employment and Labour Practices</b>		
<b>Aspect B1: Employment</b>	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	4
B1.1	Total workforce by gender, employment type, age group and geographical region.	4-5
B1.2	Employee turnover rate by gender, age group and geographical region.	4
<b>Aspect B2: Health and Safety</b>	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	7
B2.1	Number and rate of work-related fatalities.	4
B2.2	Lost days due to work injury.	4
B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	7
<b>Aspect B3: Development and Training</b>	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	6
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	5
B3.2	The average training hours completed per employee by gender and employee category.	5-6

SUBJECT AREAS	CONTENT	PAGE NO.
<b>Aspect B4: Labour Standards</b>	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	4
B4.1	Description of measures to review employment practices to avoid child and forced labour.	4
B4.2	Description of steps taken to eliminate such practices when discovered.	4
<b>Operating Practices</b>		
<b>Aspect B5: Supply Chain Management</b>	Policies on managing environmental and social risks of the supply chain.	7
B5.1	Number of suppliers by geographical region.	7
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	7
<b>Aspect B6: Product Responsibility</b>	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	N/A
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	N/A
B6.2	Number of products and service related complaints received and how they are dealt with.	N/A
B6.3	Description of practices relating to observing and protecting intellectual property rights.	N/A
B6.4	Description of quality assurance process and recall procedures.	N/A
B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	N/A



<b>SUBJECT AREAS</b>	<b>CONTENT</b>	<b>PAGE NO.</b>
<b>Aspect B7: Anti-corruption</b>	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	7
B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	7
B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	7
<b>Community</b>		
<b>Aspect B8: Community Investment</b>	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	8–9
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	8–9
B8.2	Resources contributed (e.g. money or time) to the focus area.	8–9