



# 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

2021



## ABOUT THIS REPORT

The board of directors (the “Board”) of Beijing Enterprises Environment Group Limited (the “Company”, together with its subsidiaries, the “Group”) hereby presents this environmental, social and governance (the “ESG”) report for the year ended 31 December 2021.

The Board assumes full responsibility for the Company’s ESG strategy and ESG reporting and is responsible for evaluating and determining the ESG-related risks, and ensuring that appropriate and effective ESG risk management and internal control system are in place.

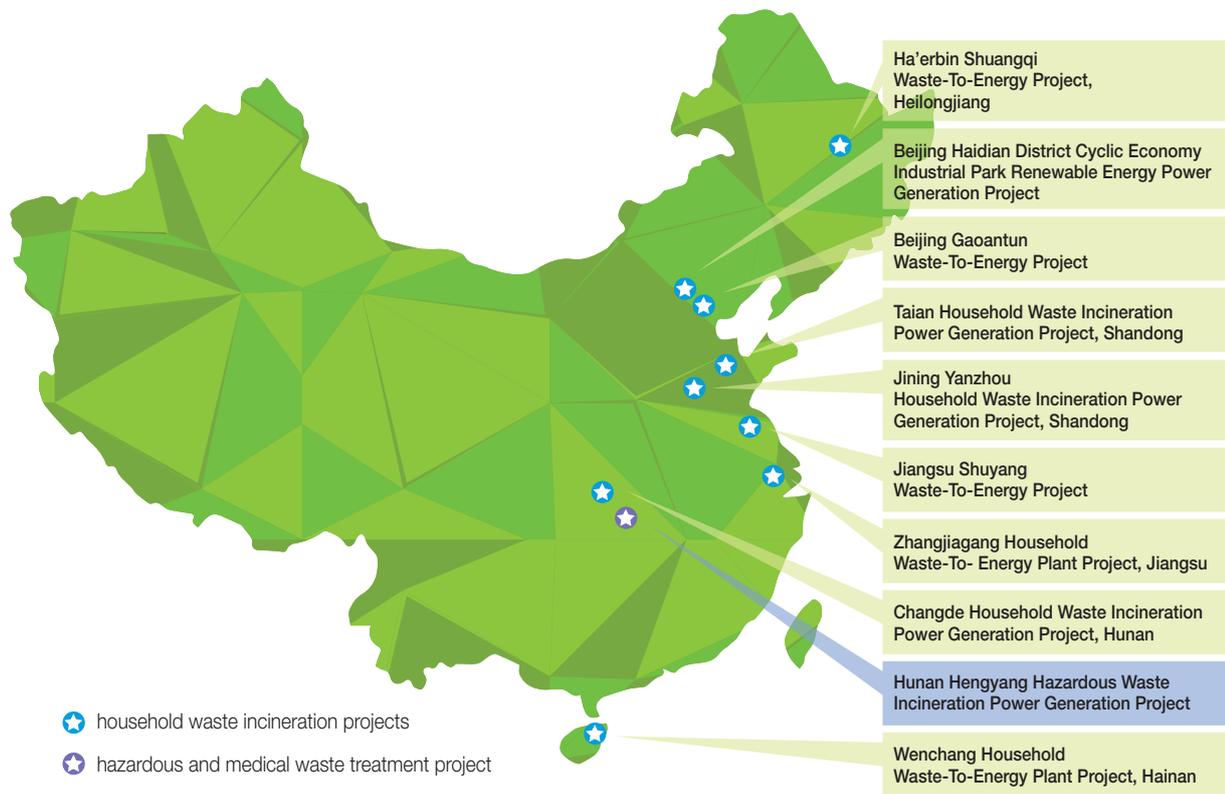
The Board supports the Company’s commitment to fulfilling the ESG responsibility by formulating the Company’s ESG management policies and strategies, identifying, prioritising and managing important ESG-related issues in combination with stakeholder communication and materiality assessment results, as well as setting ESG performance objectives and reviewing the completion progress regularly.

The Board is involved in the materiality assessment and prioritisation of ESG-related issues that may have significant influence on the Company’s long-term sustainability. Key ESG risks have been incorporated into the Company’s risk management system and the Company has formulated risk response measures by considering the possibility, impact and trends of key ESG risks.

The Board is of the opinion that good environmental conditions, social influence and governance structure are crucial to the development of the Group. As such, while seeking to pursue growth in its performances, the Group has also been constantly striving for excellence in such areas as environmental protection, social responsibility and corporate governance. The principles and benchmarks contained in the “Environmental, Social and Governance Reporting Guide” (the “ESG Reporting Guide”) set out in Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited have been adopted by the Group as its standards which, together with the experience it has gathered, form the basis towards the establishment of a sound ESG framework.

The data collection of this report encompasses the Group’s principal businesses based in the People’s Republic of China (the “PRC”) (i.e. the solid waste treatment and ecological construction services) and operations of offices in Beijing and Hong Kong. Covering the businesses operated by the Group, this report sets out its strategies and practices in relation to environmental protection, social responsibility and operational governance in 2021, thereby allowing shareholders, investors as well as the general public to gain a more comprehensive and in-depth understanding of the Group’s ESG issues and culture. This report has been prepared in accordance with the ESG Reporting Guide. The standards, methodologies, assumptions and conversion factors used for the reporting of emissions and energy consumption are with reference to “Reporting Guidance on Environmental KPIs” set out in Appendix 2 to the guideline, “How to prepare an ESG report”, published by The Stock Exchange of Hong Kong Limited.

The Group will publish its ESG reports annually informing our stakeholders and concerned parties of the latest information on the Group’s relevant work on ESG. We welcome any constructive suggestions or comments. This report is available in electronic version which can be viewed and downloaded on the website of HKEXnews ([www.hkexnews.hk](http://www.hkexnews.hk)) and the website of the Company ([www.beegl.com.hk](http://www.beegl.com.hk)).



**Projects**

**Household waste incineration projects**

- Shandong Taian Project
- Hunan Changde Project
- Beijing Gaoantun Project
- Ha'erbin Shuangqi Project
- Jiangsu Zhangjiagang Project
- Jiangsu Shuyang Project
- Hainan Wenchang Project
- Beijing Haidian Project
- Shandong Yanzhou Project

**Hazardous waste and medical waste treatment project**

- Hunan Hengyang Project

**Processing capacity**

- 1,200 tonnes per day
- 1,200 tonnes per day
- 1,600 tonnes per day
- 1,200 tonnes per day
- 900 tonnes per day
- 1,200 tonnes per day
- 225 tonnes per day
- 2,100 tonnes per day
- 1,500 tonnes per day

35,000 tonnes per annum



## STAKEHOLDER INVOLVEMENT AND MATERIALITY ASSESSMENT

The involvement of stakeholders represents an essential component of the Group's business development and of the performance of its social responsibility. The Group maintains an open communication with its stakeholders through a number of channels in order to understand and respond to their comments and demands in a timely manner, devoting itself to ongoing constructive, win-win interactions for promoting the sustainable development of the enterprise. Our communication channels include but are not limited to general meetings.

Through collecting and sorting the stakeholders' comments and issues of concern, the Group has determined the key parameters, which are disclosed in this report, with tracking of performance results and strategic planning regarding the work of ESG.

Based upon the aggregated results of the communication with the stakeholders for the year of 2021, the Group has decided that the following shall be its key ESG tasks:

- 1 Waste treatment
- 2 Emission of exhaust and greenhouse gases
- 3 Use of resources
- 4 Environment and natural resources
- 5 Climate change
- 6 Employment practices
- 7 Occupational health and safety
- 8 Staff development and training
- 9 Labour standards
- 10 Supply chain management
- 11 Product responsibility
- 12 Anti-corruption
- 13 Contribution to the community

## A. ENVIRONMENTAL

Environmental protection is a cornerstone of the Group’s long-term sustainable development. Through adopting practicable measures, the Group performs management over its emissions and use of resources in the course of its specific activities. The Group closely followed the national policies of “peak carbon emissions” by 2030 and “carbon neutrality” by 2060, actively implemented and strived for deep decarbonisation, and fully leveraged the efficient management and extensive practices of listed companies to build more “low-carbon” factories. We actively propelled our efforts in “carbon emission reduction” to achieve reduction in greenhouse gas emission, adopted the basic approaches of green development, low-carbon development, and circulating development, which have promising development prospects and demonstrate the responsibility undertaking of state-owned enterprises.

The Group is principally engaged in solid waste treatment business and ecological construction service business. During the reporting period, there was no material breach of any applicable rules and regulations that have a significant impact on the Group in relation to the environment.

### 1. Emissions Management

The solid waste treatment projects of the Group are located in major cities or provincial capitals of the PRC and possess a sound track record of grate furnace technology and a talented and seasoned management team. In strict compliance with the Environmental Protection Law of the PRC, the Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Waste and other environmental protection laws, regulations and emission standards, the Group continued to monitor the emission issues during its production and operation to control various types of emissions to the greatest possible extent, comply with the requirements of relevant environmental regulations and endeavour its endurance in optimising the environmental performance of the Company.

During the reporting period, the principal emissions arising in the course of the Group’s production include liquid waste and exhaust. In order to ensure that the relevant emission standards are met, the Group has formulated an internal pollutant emissions management program in accordance with the requirements of the national environmental regulations of the PRC, key elements of which are as follows:

- Monitoring data information disclosure system.
- Researching and developing different environmental protection technologies.
- Source discharge classification and tiered management.

<b>Liquid waste discharge (tonnes)</b>	<b>2021</b>	2020
Chemical oxygen demand	<b>7.15</b>	67.34
Ammonia nitrogen	<b>0.61</b>	1.91
Phosphorus	<b>0.06</b>	0.58



The main sources of liquid waste are leachate from domestic waste accumulation and domestic sewage, etc. The Group has adopted the following measures to deal with liquid waste discharge:

- Treated by the sewage treatment station.
- Used for plant greening and watering of plant roads.
- As circulating cooling water.

<b>Air emissions</b>	<b>2021</b>	2020
Nitrogen oxides (tonnes)	<b>1,935</b>	1,737
SO <sub>2</sub> (tonnes)	<b>225</b>	185
Dioxin (mg)	<b>175</b>	302
Smoke (tonnes)	<b>53</b>	65
CO (tonnes)	<b>174</b>	163

The main sources of waste gas are dioxins, carbon monoxide, nitrogen oxides, sulphur dioxide, and soot, etc. produced by domestic waste incineration. The Group always monitor waste gas emissions, and adopts stringent operating procedures during the incineration process to ensure the waste gas discharge process has complied with national emission standards and relevant environmental laws and regulations, so as to reduce the impact on the environment and residents' livelihood nearby. If problems are discovered, they will be reported, solved and marked immediately to ensure the normal operation of pollution prevention and monitoring facilities, and meet relevant standards when discharge. During the year, the total amount of direct and indirect emissions of Green House Gases (GHGs) for the Group was 83,100 tCO<sub>2</sub>e, and GHGs emission intensity was 0.034 tCO<sub>2</sub>e/HK\$1,000 of revenue.

The Group has taken the following measures to deal with waste gas emissions:

- Ashes are chelated and solidified at ash solidification workshop, and then transport to domestic waste landfill after stabilisation.
- Raw ashes are transported to cement kilns for disposal through qualified service providers.
- Monitor flue gas emissions in real time to ensure exhaust gas meet the discharge standards.
- Inspect and maintain surveillance systems in a regular manner.

<b>Total hazardous waste produced</b>	<b>2021</b>	2020
Total hazardous waste produced (tonnes)	<b>111,473</b>	152,601
Intensity of hazardous waste (tonnes/HK\$1,000 of revenue)	<b>0.046</b>	0.085

The hazardous waste produced by the Group mainly consisted of ash.

Accordingly, the Group has adopted the following measures to achieve the target:

- For areas prone to particulate matters, fixed deodorant cannons were equipped with corresponding proportion of deodorant, and control measures were implemented in the above-mentioned areas by conducting atomisation spraying.
- A smart deodorising spray system was installed on the surrounding walls of the entire plant, which greatly curbed the scattering of particulate matters.
- Deploy water dispenser to spray water uninterruptedly in factory boundary area.
- Complete close-loop treatment is adopted in ash temporary storage room before transporting them for disposal and maintain negative pressure indoor to prevent ash from overflowing.

<b>Total non-hazardous waste produced</b>	<b>2021</b>	2020
Total non-hazardous waste produced (tonnes)	<b>4,053,648</b>	2,433,622
Intensity of non-hazardous waste (tonnes/HK\$1,000 of revenue)	<b>1.68</b>	1.36

The non-hazardous waste produced by the Group mainly consisted of slag and sludge from treatment. Sludge are dealt with by qualified environmental protection companies.

During the reporting period, the Group achieved the ignition loss rate of incineration residues by controlling the incineration process, and the measures taken to reduce emissions have been effective in reducing waste.

## 2. Use of Resources

As an advocate of green and environmental protection notions, the Group adheres to the principle of treasuring and making the best use of resources, striving to reduce its consumption of resources and lessen its environmental impact.

To achieve the targets, the Group has adopted the following energy conservation measures:

- Exercising stringent control over the energy consumed in the course of the production for the continuous enhancement of its energy use efficiency.
- Employing a circulating water system for its production steps, whereby the wastewater generated in the course of the production of purified water was reused for, among others, industrial park greening and cleaning purposes, so as to boost the use efficiency of, and reduce the consumption of, water resources.
- Strengthening inspection at job shops (i.e. production workplaces) and equipment maintenance so as to uncover additional losses resulting from improper operation or malfunction of equipments in time.
- Sewage and clean water generated during operation were recycled for cooling boiler flue gas, flushing garbage storage areas and production machines.



- According to the water quality index of the boiler, determined the opening degree of boiler continuous blowdown and the frequency of periodic blowdown to reduce the amount of demineralised water replenishment.
- Gradually introducing the use of modernised office systems such as office automation system and enterprise resource planning system for reducing the resources consumed in offices.
- Proactively switching to conference calls and online video conferences for lowering the frequency of business trips undertaken by employees and lessening the greenhouse gas emissions caused by such trips.

The Group also promotes green office practices and formulates guidelines on behavioural standards to raise employees' awareness of environmental protection, reduce energy and resource consumption in office areas, and continuously promote paperless, energy-efficient and low-carbon office practices.

<b>Direct and indirect energy consumption by type in consumption and intensity</b>	<b>2021</b>	2020
Electricity consumption (kWh)	<b>226,850,600</b>	232,773,000
Electricity consumption intensity (kWh/HK\$1,000 of revenue)	<b>93.8</b>	130.0
Coal consumption (tonnes)	<b>10,490</b>	41,000
<b>Water consumption in total and intensity</b>	<b>2021</b>	2020
Water consumption in total (tonnes)	<b>6,174,700</b>	4,898,000
Water consumption intensity (tonnes/HK\$1,000 of revenue)	<b>2.55</b>	2.74

During the reporting period, the Group has no issue in sourcing water that is fit for purpose, and did not involve the consumption of packaging materials for finished products.

### 3. Environment and Natural Resources

With the goal of mitigating the negative impact of its operations on the environment, the Group took appropriate measures in waste management, use of resources, and greenhouse gas emissions in daily operations, and practiced the concept of energy conservation and emission reduction. In accordance with relevant environmental protection laws and regulations, and in light of its actual situation, the Group adopted regulated measures for the environmental affairs of each department and each project company, including the operation and management system of environmental protection facilities, the management system of hazardous waste, monitoring data information disclosure system, environmental risk hidden hazard investigation and rectification system and other environmental protection management systems in respect of, among others, related emissions, effective use of resources and environmental protection responsibility system. Meanwhile, the Group is committed to reducing the adverse impact on the environment through the research and development of various environmental protection technologies.

In the actions of the “peak carbon emissions” and “carbon neutrality” policies, the Group actively promoted its member companies to carry out various work on carbon emission reduction, deeply explored the potential of internal energy conservation and emission reduction to reduce the overall carbon emission cost and enhance the benefit of systematic emission reduction. In particular, by taking Changde Project Company as a representative, our member companies have conducted a number of technical research and development in energy saving and emission reduction, and have carried out high-tech research and development and transformation of fluidized bed waste incinerators. Through a series of management measures such as strengthening personnel training and optimising combustion, which greatly reduced the coal usage ratio of fluidized bed waste incinerator, further established the green and low-carbon image for the Group, and contributed our efforts to the national low-carbon strategy.

Looking forward, the Group will continue to further develop its carbon asset management capabilities, closely follow the national carbon trading policy, actively build a green and low-carbon industrial chain and participate in carbon trading through multiple channels as so to increase its income, facilitate carbon emission reduction, play a responsible role as a socially responsible state-owned enterprise and play an important role in achieving the “peak carbon emissions and carbon neutrality” goal.

### 4. Climate change

The Group understood the challenges posed on its operations due to global climate change, fully aligned with the PRC government’s policies of “peak carbon emissions” by 2030 and “carbon neutrality” by 2060, and actively explored how to enhance our risk-resistance capacity in climate change and reduce carbon emissions in those places where our operating projects were located.

The Group has formulated the Comprehensive Emergency Response Plans and Measures, which provides comprehensive response plans for environment and climate-related matters in terms of emergency work principles and organisational structure, emergency response agency responsibilities, early warning and response, post-processing, and emergency support.

Judging from the current trend, the global climate issue has been given full attention by many countries. With changing climate conditions, the Group has seen growing impacts on its operation from the increasing requirements of reducing greenhouse gas emission. The continuous increase in carbon emission cost has brought opportunities to the waste incineration power generation industry that the Group is belonging to. Therefore, the Group actively prepares itself to participate in carbon trading. Based on project characteristics, the Group conducts the exploration and practice of carbon quota for key polluting enterprises, domestic and international voluntary emission reduction and successfully traded 110,000 tons of carbon quota, bringing additional benefits to the Group. In addition, with the increasing requirements for carbon emission reduction, the emission restrictions faced by the waste incineration power generation industry that the Group is engaged in are also becoming more and more stringent. The cost of upgrading and technical transformation of the Group’s projects is getting higher and higher, bringing a lot of pressure to its operation. In tackling this problem, the Group actively researches and explores advanced technology, which has been applied in many fluidized bed waste incinerator projects to reduce the coal blending ratio, the Group has effectively coped with the pressure brought by the escalating emission standards.



## B. SOCIAL

### 1. Employment and Labour Practices

The Group regards human resources as one of the important assets, and we offer competitive remuneration packages to our employees while adhering to the principle of “equality and fairness (同工同酬)”. The Group complies with the relevant laws and regulations, including but not limited to the Labour Law of the People’s Republic of China, the Labour Contract Law of the People’s Republic of China and the Provisions on the Prohibition of Child Labour. Individuals’ background, including their ethnicity, race, nationality, gender, religion, age, political affiliation and marital status, has no bearing on our decision to employ, promote or transfer them nor on the compensation and benefits offered to them. We uphold the notions of equality, willingness, and agreement based upon negotiations, and provide all our staff members with equal advancement opportunities under an equitable platform.

The Group follows the principle of openness and fair competition in recruitment, and takes ability and suitability for the position as the criteria for recruitment and promotion, and ensures that the recruitment process is transparent and open. At the same time, the Group offers a variety of career development paths and encourages employees to strive to develop their abilities through internal recruitment, transfer and promotion opportunities. In addition, the Human Resources Department is mainly responsible for the dismissal of the Group, and organise an exit interview with those who was dismissed.

In order to fully motivate our staff and enhance their sense of belonging, we attach importance to the establishment of a fair and equitable remuneration and benefits system. The staff remuneration offered by the Group is adjusted with reference to indicators such as market levels and the relevant staff member’s capabilities, work outcomes etc., such that the contribution made to the Group by its staff is duly recognised. The Group constantly refines its remuneration and staff welfare policies to allow its staff to share in the performance results associated with its development. In addition, in order to enhance the protection extended to its staff, the Group maintains various kinds of insurance for them in accordance with the relevant laws and regulations.

Apart from their entitlement to national statutory festivals and holidays, the Group’s employees are also entitled to paid annual leave, marriage leave and bereavement leave, etc. The wages, subsidies and awards, etc. in respect of paid leave are offered in accordance with the relevant national policies.

The employees of the Group are mainly located in the PRC. As of 31 December 2021, the Group had 1,399 employees in total, including 299 female employees (of which 44 of them held managerial positions). In 2021, the employee turnover rate was 12% (2020: 10%).

<b>Staff structure</b>	<b>2021</b>	2020
<b>By age group</b>		
30 and below	<b>293</b>	300
31-40	<b>692</b>	603
41-50	<b>273</b>	248
51 and above	<b>141</b>	122
Total	<b>1,399</b>	1,273
<b>By gender</b>		
Male	<b>1,100</b>	1,013
Female	<b>299</b>	260
Total	<b>1,399</b>	1,273
<b>By rank</b>		
Senior Management	<b>79</b>	84
Middle Management	<b>123</b>	136
General Staff	<b>1,197</b>	1,053
Total	<b>1,399</b>	1,273
<b>Turnover rate of employees</b>	<b>2021</b>	2020
<b>By age group</b>		
30 and below	<b>19%</b>	15%
31-40	<b>11%</b>	10%
41-50	<b>10%</b>	9%
51 and above	<b>10%</b>	6%
<b>By gender</b>		
Male	<b>12%</b>	10%
Female	<b>13%</b>	12%



## 2. Health and Safety

The Group insisted on developing the safety work policy with scientific concepts, established the concept of safety and environmental protection, adhered to the development concept of “production safety is our profit, meeting environmental protection standards are our benefits”. In strict compliance with the Labour Law of the PRC, the Fire Protection Law of the PRC and other relevant Laws and regulations, we formulated production safety related rules to carry out various safety production management, conduct safety education training for employee every year, improve the level of on-site safety management and employee safety awareness in all respects, ensure the personal safety of employees, and prevent and reduce production safety accidents. We also assigned designated department to oversee the training.

In the beginning of the year, the Group entered into letters of responsibility for the targets of safety, health and environmental protection with project companies, and formulated the targets of safety production and occupational health supervision covering all employees and contractors. In addition, the Group organised its subordinate companies to carry out real-life and tabletop drills through activities such as “Safety Month (安全月)” and “Ankang Cup (安康杯)”, including organising on-duty personnel in water production room to conduct emergency response drills for acid tank leakage accidents; simulating scenarios such as liquid leakage, leaking stoppage, and emergency transfer of liquids; organising on-duty personnel to carry out emergency drills for pressure pipeline explosions; fire control drills in boiler oil tank areas; emergency drills for flooding of comprehensive pump rooms; and fire control and emergency plan drills for accidents in confined space.

In the past three years, there was one worker fatality incident due to workplace accident in 2019 and 2021, respectively. According to the relevant laws and regulations on production safety, the investigation team determined that such accidents were general production safety-related liability accidents, and the Company has paid compensation to the deceased and injured. Different levels of punishment were imposed on accountable personnel. After the accidents, the Group has formulated comprehensive emergency response plans and measures, and encouraged project companies to enter into emergency cooperation agreements with surrounding enterprises, communicated the requirements of higher-level units in a timely manner, and used instant messaging software and other flexible and convenient methods to arrange, implement and respond to relevant work in a timely manner to ensure on-site rescue work during emergency can be carried out in a quick, accurate and effective manner, so as to prevent accident from expanding and reduce the casualties of accident and ensure personnel safety and avoid the recurrence of similar incidents. The number of lost days due to work injury for the Group was 514 days in 2021.

**3. Development and Training**

The Group emphasises on employee growth and development and offers them many opportunities for personal promotion and career development to help them grow rapidly. For management staff, we fully utilise internal and external training resources to strengthen their training, and incorporates, among others, legal knowledge and safety management knowledge and management system publicity in their trainings, so as to accelerate the development of primary-level management team, enhance the professional quality and management skills of existing executives, and secure a strong talent pool for the Company. For business staff, we strengthen special training works, integrate the resources of professional institutions and the Company, enhance the professional skills standard of the Company’s business staff, improve the professional ability of technical personnel. We adopt the fine tradition of “mentorship” system, which enables core technical employees to share their work experience, learn and exchange interactively, and enhances the competence of business staff.

The Group establishes a long-term employment mechanism based on strategic development goals, develops a career plan for employees, and maps out a scientific and reasonable development plan by refining the remuneration system, emphasises on the career design of employees. We organically combine education and training with employee assessment, improvement and promotion, offer talents with career development opportunities in a timely manner in a bid to provide talents with potential for growth and development.

**Key performance indicators**

Category		Percentage of employees trained	Average training hours of employees
By gender	Male	96%	46
	Female	88%	35
By rank	Senior Management	95%	25
	Middle Management	74%	37
	General Staff	96%	46



Safety training



#### 4. Labour Standards

Complying with relevant laws and regulations, including but not limited to the Labour Law of the People's Republic of China, the Labour Contract Law of the People's Republic of China and the Provisions on the Prohibition of Using Child Labour, the Group respects the legitimate rights and interests of employees, and does not use forced labour in the recruitment process to rigorously ban child labour practices. In the event of a forced labour and child labour incident, the forced labour or child labour can file a complaint with the human resources department and the Group will coordinate and handle it internally. If necessary, the Group may request the assistance of the relevant human resources department of the government.

#### 5. Supply Chain Management

The suppliers of the Group are located in Mainland China and mainly provide raw materials such as coal and construction services. In 2021, the Group's products and services are mainly provided by 798 suppliers. The Group regards each supplier as an important partner. Through the established "Measures on Procurement Management", "Implementation Rules for Centralised Procurement" and "Centralised Procurement of Bulk Materials" etc. which are being implemented on a trial basis, the Group provides guidelines for the selection of suppliers that meet its requirements to ensure that they comply with laws and regulations in the process of providing products and services. The Group has relevant departments to be responsible for the tendering and procurement work and to negotiate with suppliers in hiring suppliers that meet the Group's requirements.

The Company has established a list of procurement suppliers and implemented a hierarchy of supplier management, organising on-site inspections and evaluations of suppliers. After the suppliers complete the supply of goods, the quality of the goods supplied by the suppliers and their cooperation, progress management and safety and environmental management (construction type) during the execution of contracts will be assessed separately in accordance with the supplier management system currently in place, and the performance scores of suppliers will be determined after evaluation.

Going forward, the Group will assess the environmental and social risks in its supply chain and formulate policies to manage related risks, including practices on how to identify environmental and social risks in each link of the supply chain, and relevant implementation and monitoring methods. At the same time, the Group will also formulate relevant procedures to promote the practice of using more environmentally friendly products and services when selecting suppliers.

## 6. Product Responsibility

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 enhancing environment-friendly production management, the waste treatment plants of the Group have reached top industrial level in terms of emission, safety and reliability. In 2021, our focus was to carry out environmental production review works. Acting in accordance with the key implementation plan for energy saving and emission reduction, we improved power unit operation efficiency, controlled coal usage ratio and restricted exhaust gas emission to meet corresponding standards, and had effectively kept the total emission below the environmental impact assessment approval. Slags were disposed of at landfills or utilised as building materials safely according to the franchise requirements, and ashes were transported to cement plants for disposal according to the hazardous waste disposal requirements or safely disposed of at landfills after chelation and stabilisation. The Group abided by the “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 assured the solid waste incineration burnout rate and achieved up-to-standard discharge of flue gas under the premise of stable production operation, and thus truly achieved the purposes of reduction and harmless incineration treatment.

The Group is committed to providing quality, efficient and safe services by maintaining relevant standards in production safety and environmental protection, and has established operational management practices and a series of policies on product liability to govern its operational processes. The Group has developed a production safety management system and is responsible for the implementation of production safety management. During the reporting period, the Group did not receive any complaints from the government authorities regarding the operation of the Company.

The Group respects the intellectual property rights of any partner or other business, and to abide by the intellectual property confidentiality agreements and comply with all relevant national or local laws and regulations. In addition, the Group only allows the use of licensed software.

The Group actively carried out research and development and technological innovation, and developed a sludge back-injection and mixed-burning system during the reporting period. It is a pioneering process equipment that “uses waste to treat waste” after continuous exploration and testing. It can avoid the impact of high moisture content sludge on the ignition speed of domestic waste for drying to the greatest extent, and make full use of high temperature smoke and high-temperature flame to dry the surface of the sludge, and the heat that needs to be absorbed during the intense combustion stage would not affect the normal combustion of domestic waste, which ensures that the sludge and the domestic waste can be completely burned, and greatly improves the co-processing ability of sludge. After the system is put into operation, the sludge reception and disposal capacity of the Gaoantun Project Company has reached 100,000 tonnes. The harmless disposal of sludge has been achieved on the premise of ensuring safety and meeting environmental protection standards. While achieving good social and economic benefits, it has also established a good demonstration role for the co-processing of domestic sludge in the domestic waste incineration industry.

The Group will involve information in its daily operations including customer information, commercial secrets and financial information. The Group attaches great importance to customer privacy and is committed to complying with relevant laws and regulations such as the Archives Law of the People’s Republic of China, requiring employees to strictly abide by all the Group’s rules and policies related to confidentiality, and shall not disclose such information to third parties without consent.



## 7. **Anti-corruption**

Integrity, and upstanding are important elements comprising the operation of the Group's business. The Group is committed to promoting cleanliness and strictly abides by relevant laws and regulations such as the Anti-Unfair Competition Law of the People's Republic of China, the Anti-Money Laundering Law of the People's Republic of China, the Criminal Law of the People's Republic of China, and the Interim Provisions on Banning Commercial Bribery. Through daily training, we standardise the professional behaviour of management and all employees, and prohibit all behaviours that are fraudulent, dishonest, unethical or damage the reputation of the Group. All employees are prohibited from soliciting or receiving any personal benefits and gifts, such as rebates, under-the-table commissions and cash, by taking advantage of their work, position or status in the Group.

We provided online and offline anti-corruption training to directors and employees, including reading relevant anti-corruption laws and regulations, watching alert videos, which have further strengthened the compliance awareness of directors and employees, promoted corporate compliance and anti-corruption culture, and improved directors and employees' awareness in commercial bribery manifestations and legal responsibilities.

We encourage employees to report any violation of business ethics to the Group. Employees can report to the office by either email or letter. The Group undertakes that all informers will be protected by the Group regarding their personal data to ensure that they will not be treated unfairly due to whistleblowing.

During the year, there was no case involving any violation of laws that have a significant impact on the Group relating to bribery, extortion, fraud and money laundering being brought against the Group or its staff.

## 8. **Community Investment**

A good external community setting represents an essential condition for the growth and development of an enterprise. While pursuing its business development, the Group has been proactively giving back to society so as to enable the harmonious development of the Group and the society.

During 2021, the Group took initiatives to engage in different community activities, including sponsoring educational activities in remote areas to give our supports in educational and cultural aspects. We carried out the “Warm Clothes for Winter (温暖衣冬)” campaign, actively donated clothes to poverty-stricken areas to convey our warm caring. We strengthened connections with The Beijing Poverty Alleviation Through Consumption Innovation and Start-up Center, and products from poverty-stricken areas were selected in priority as the benefits in kind offered by the labour union. We received study tour group comprised of 42 teachers and students from Hunan University of Arts and Sciences to visit the project company of the Group, which was the fifth study tour of faculty and students since the “industry-university-research” cooperation agreement entered into between Hunan University of Arts and Sciences and the Company and also the fourth wave of visiting groups since the project company was open to the public this year, enabling our commitment in green environmental protection and the educational concept of practicing what they have learned combine each other and achieve seamless connection. It was also a field drill of the industry-university-research cooperation between the university and the enterprise and gave a vivid lecture to students to motivate them to be keen on environmental protection and cherish what we have now, which has strengthened their determination and aspiration to learn skills well and contribute their wisdoms to the national undertakings of environmental protection in the future.



Community activities



## APPENDIX: INDEX FOR ESG REPORTING GUIDE

ASPECT	REQUIREMENTS	PAGE
<b>A1 Emissions</b>	General Disclosure Policies relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste; and information on the compliance with relevant laws and regulations that have a significant impact on the issuer.	4
KPI A1.1	The types of emissions and respective emissions data.	4-6
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	5
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	5
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	6
KPI A1.5	Description of emission target(s) set and steps taken to achieve them.	4-6
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	4-6
<b>A2 Use of Resources</b>	General Disclosure Policies on the efficient use of resources, including energy, water and other raw materials.	6-7
KPI 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).	7
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	7
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	6-7
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	6-7
KPI A2.5	Total packaging material used for finished products (in tonnes) and, where appropriate, with reference to per unit produced.	7

ASPECT	REQUIREMENTS	PAGE
<b>A3 The Environment and Natural Resources</b>	General Disclosure Policies on minimising the issuer’s significant impact on the environment and natural resources.	8
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	8
<b>A4 Climate Change</b>	General Disclosure Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	8
A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	8
<b>B1 Employment</b>	General Disclosure Policies relating to compensation and dismissal, recruitment and promotion, working hours, holidays, equal opportunity, diversity, anti-discrimination as well as other benefits and welfare and information on the compliance with relevant laws and regulations that have a significant impact on the issuer.	9
B1.1	Total workforce by gender, employment type (e.g. full-time or part-time), age group and geographical region.	10
B1.2	Employee turnover rate by gender, age group and geographical region.	10
<b>B2 Health and Safety</b>	General Disclosure Policies relating to providing a safe working environment and protecting employees from occupational hazards; and information on the compliance with relevant laws and regulations that have a significant impact on the issuer.	11
B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	11
B2.2	Lost days due to work injury.	11
B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	11
<b>B3 Development and Training</b>	General Disclosure Policies on improving employees’ knowledge and skills for discharging duties at work. Description of training activities.	12
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	12
B3.2	The average training hours completed per employee by gender and employee category.	12



ASPECT	REQUIREMENTS	PAGE
<b>B4 Labour Standards</b>	General Disclosure Policies relating to preventing child and forced labour; and information on the compliance with relevant laws and regulations that have a significant impact on the issuer.	13
B4.1	Description of measures to review employment practices to avoid child and forced labour.	13
B4.2	Description of steps taken to eliminate such practices when discovered.	13
<b>B5 Supply Chain Management</b>	General Disclosure Policies on managing environmental and social risks of the supply chain.	13
B5.1	Number of suppliers by geographical region.	13
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	13
B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	13
B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	13
<b>B6 Product Responsibility</b>	General Disclosure Policies relating to health and safety, advertising, labelling and privacy matters regarding products and services provided as well as remedies; and information on the compliance with relevant laws and regulations that have a significant impact on the issuer.	14
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	14
B6.2	Number of products and service related complaints received and how they are dealt with.	14
B6.3	Description of practices relating to observing and protecting intellectual property rights.	14
B6.4	Description of quality assurance process and products recall procedures.	14
B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	14

ASPECT	REQUIREMENTS	PAGE
<b>B7 Anti-corruption</b>	General Disclosure Policies relating to bribery, extortion, fraud and money laundering; and information on the compliance with relevant laws and regulations that have a significant impact on the issuer.	15
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.	15
B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	15
B7.3	Description of anti-corruption training provided to directors and staff.	15
<b>B8 Community Investment</b>	General Disclosure 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.	15-16
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	15-16
B8.2	Resources contributed (e.g. money or time) to the focus area.	15-16