



北京控股有限公司  
BEIJING ENTERPRISES HOLDINGS LIMITED

Beijing Enterprises Holdings Limited

# 2021 Sustainability Report

Bowl





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# About This Report

Beijing Enterprises Holdings Limited (BEHL) has put in place a unique social responsibility system after years of experience in performing its social responsibility and promoting sustainable development. We serve the needs of our stakeholders by fulfilling our social responsibility as a state-owned enterprise and disclosing our environmental, social, and governance (ESG) performance on an annual basis.

This is our eighth non-financial report. We value the development of our business in harmony with the economy, society and environment and have created corporate sustainable development plans, adopted practical and effective measures in conjunction with the United Nations Sustainable Development Goals (SDGs) and addressed the ideology, actions, and achievements of sustainability in four areas: operation, environmental protection, employee, and community.

All data and information disclosed in the Report are from official documents and internal statistical systems of the Company, covering BEHL headquarters and its subsidiaries in the four business segments of gas, beer, water and environment, and solid waste treatment, including Beijing Gas Group Co., Ltd. (referred to as “Beijing Gas”), China Gas Holdings Ltd. (referred to as “China Gas”), Beijing Yanjing Brewery Co., Ltd. (referred to as “Yanjing Brewery”), Beijing Enterprises Water Group Limited (referred to as “BE Water”), Beijing Enterprises Environment Group Limited (referred to as “BE Environment”) and Beijing Enterprises Holdings Environment Technology Co., Ltd. (the two are integrated as the new solid waste treatment business management platform, referred to as the “Solid Waste Treatment Platform” for short), and EEW Energy from Waste GmbH (referred to as “EEW GmbH”). Although China Gas and BE Water are not included in consolidated financial statements, they are still highlighted in information disclosure in the Report considering the importance of their business.

The Report is aligned with *Appendix 27 of Environmental, Social and Governance Reporting Guide to the Main Board Listing Rules (HKEX ESG Guidance)* of the Stock Exchange of Hong Kong Limited (HKEX), with reference to the *Social Responsibility Guide (ISO 26000)* of International Organization for Standardization (ISO) and the *GRI Sustainability Reporting Standards (GRI Standards)* issued by the Global Reporting Initiative (GRI).

The reporting period is from January 1, 2021 to December 31, 2021, though it may be longer or shorter than that for some contents out of continuity and comparability considerations. Where not otherwise stated, the aggregate figures shown in the Report are disclosed on a financial consolidation basis and are shown in RMB (Yuan) or HK\$ (Hong Kong dollars), as the case may be. If the data is inconsistent with the financial statements, the data in financial statements shall prevail. For the convenience of expression and reading, Beijing Enterprises Holdings Limited is hereinafter referred to “the Company”, the Company and its subsidiaries are hereinafter referred to as “BEHL” or “we”, and Beijing Enterprises Group Company Limited is referred as the “BEHL Group”.

The Board of Directors and all Directors of the Company pledge that the contents of this Report do not contain any false statements, misleading statements or material omissions and accept individual and joint responsibility for the truthfulness, accuracy and completeness of its contents.

The Report is published in Chinese and English and is available in print and electronic formats. The Report can be viewed or downloaded from the following websites:

HKEX website:

<http://www.hkexnews.hk>

BEHL website:

<http://www.behl.com.hk>

# Board of Directors' ESG Statement

Recognizing the importance of the philosophy of sustainable development to its long-term and sound operation, BEHL has established a sustainable development governance structure with a complete structure, clear hierarchy, clear authority and responsibility, and efficient operation to promote the development of BEHL in harmony with the environment and society and create sustainable environmental, social and corporate value.

BEHL has set up a three-tier sustainable development governance structure, including the Board of Directors, to ensure effective implementation of relevant tasks. The Board of Directors, as the highest decision-making body for ESG matters of BEHL, is responsible for approving the BEHL's sustainable development strategies, policies, objectives, risks and related matters to ensure alignment with its strategies. A Sustainable Development Committee has been established at the Board of Directors level to serve as the management and daily decision-making body for BEHL's sustainability efforts. The management level set up the Sustainable Development Working Group, which serves as the daily liaison and coordination body for BEHL's sustainability efforts and is responsible for alignment with the relevant work requirements of BEHL for sustainable development management. The execution level is composed of the sustainable development focal points from various departments and offices in the headquarters and the sustainable

development working groups of subsidiaries to carry out and implement the work related to sustainable development.

In 2021, BEHL further improved its sustainable development management system, published the *Sustainable Supply Chain Management Policy*, *Labour Rights and Interests Guidelines*, and *Biodiversity Conservation Management Policy*, formulated sustainable development work plans, and assigned responsibilities for implementing improvement projects to specific departments, the execution of which is supervised by the Sustainable Development Working Group. In the 14<sup>th</sup> Five-Year Plan period, BEHL will actively address climate change risks, align itself with government policies and guidance and contribute to the “carbon peaking and carbon neutrality” initiative.

This Report discloses in detail the progress and achievements of BEHL's sustainable development work in 2021, and is reviewed and approved by the Board of Directors on May 31, 2022. The Board of Directors and all Board Directors of BEHL guarantee that there are no false records, misleading statements or material omissions in this Report and assume individual and joint responsibility for the truthfulness, accuracy and completeness of its contents.



# Chairman's Message



Thanks for reading this report. On behalf of the Board of Directors, I would like to thank you for your care and support for BEHL.

Chairman  
Li Yongcheng

As the first year of China's 14<sup>th</sup> Five-Year Plan period, 2021 is of crucial importance to China's socioeconomic success in this period. Due to various risks and challenges such as the COVID-19 pandemic, the accelerated progression of the once-in-a-century changes, and climate change, enterprises face a significantly higher level of instability and uncertainty both internally and externally. BEHL is deeply aware that to achieve a stable and robust development in the current context, it needs to strike a balance between immediate interests and long-term interests and look back to look forward in its operations. Keeping firmly in mind our original aspiration of "investing for a better life", we will take on the promotion of sustainable and healthy socioeconomic development as our mission, and uphold sustainable development as our core value in a bid to keep pace and stay aligned with the country's development and the times.

A sound management system is the cornerstone of corporate development. Starting with governance, we have set up a Sustainable Development Committee and established the

three-layered and interconnected "governance-management-execution" mechanism of communication and coordination for sustainable development management; those efforts aim at fully integrating the concept of sustainable development into daily operation and management as an institutionalized, normalized and long-running component. To ensure an objective and thorough identification of sustainable development issues, we have fully listened to the demands and expectations of internal and external stakeholders, established a smooth communication and participation mechanism, and actively responded to the opinions and suggestions from various stakeholders. Thus we have clearly identified "governance", "operation", "environment", "employee" and "community" as the core pillars to sustainable development, and 17 material issues underpinned by "product and project quality". These efforts will guide us to deliver both social and environmental benefits while effectively creating economic benefits.

Regarding economic benefits, we have seized the three-year reform of state-owned enterprises and established sustainable competitive advantages both domestically and internationally, significantly enhancing our ability in value preservation and appreciation. In 2021, BEHL recorded an increase in both revenue and EBITDA of 17.6% and 41.2% year on year respectively, and the revenue of Beijing Gas, Yanjing Brewery, BE Water and the Solid Waste Treatment segment increased by 19.7%, 9.45%, 10% and 7.8% year on year respectively. Basic and diluted earnings per share amounted to HK\$7.86, representing a year-on-year increase of 87.6%. The steady and robust growth in business performance effectively maintains investors' confidence.

Regarding social benefits, we attach great importance to scientific and technological innovation and invested RMB13.7 billion to support R&D, and keep our focus on our main business segments and place science and technology at the forefront to constantly build on our strengths and excel at those segments. We actively engage in joint efforts for industry development and published the *Sustainable Supply Chain Management Policy* to share win-win results with industry partners. We regard employees as the most valuable asset of BEHL and published the *Labour Rights and Interests Policy* to protect the rights and interests of employees; we attach importance to employee growth and have improved the remuneration system and established an efficient and reasonable incentive system

to build a team of highly competent talents; we pay attention to employee satisfaction, safeguard their occupational health and safety and also care for their lives so that they feel respected, secure and a sense of belonging. With people's wellbeing in mind, we have efficiently completed the tasks of ensuring power supply and heating for people and manifested our commitment to public interests with such efforts as rural rejuvenation, environment protection and charity activities.

Regarding environmental value, we know that green development is the inevitable choice leading to a civilized development path that ensures increasing level of production, better living standards and sound ecosystems and the only way to achieve a harmonious co-existence between man and nature. BEHL firmly and vigorously sticks to the "red line" of ecological protection and the bottom line of environmental quality, builds a solid defense for ecological environmental protection, and adheres to the green, low-carbon and circular development path featuring strong boost from science and technology, low resource consumption and sound ecological protection. In 2021, we released the *Biodiversity Conservation Management Policy*, and, in accordance with the framework and recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), gradually improved our ability to respond to climate change risks, and started to formulate carbon targets and emission reduction paths, serving the low-carbon development.

Although the complicated domestic and international situation has become more severe, China's economy has achieved steady progress and secured new accomplishments in seeking high-quality development. BEHL has also achieved fruitful results in sustainable development, as evidenced by the upgrading of its ratings by the three mainstream ESG raters in the capital markets, which are now at above-industry-average levels.

In the future, BEHL will, based on its sustainable development management system, make vigorous and determined endeavors and innovate on the basis of drawing upon past success experience. Centering its efforts on the business development goals, BEHL will give full play to the unique advantages of Beijing and Hong Kong and its internationally advanced industrial and technological strength to respond to people's desire for a better life and establish a new pattern of people-centered sustainable development.

# About Us

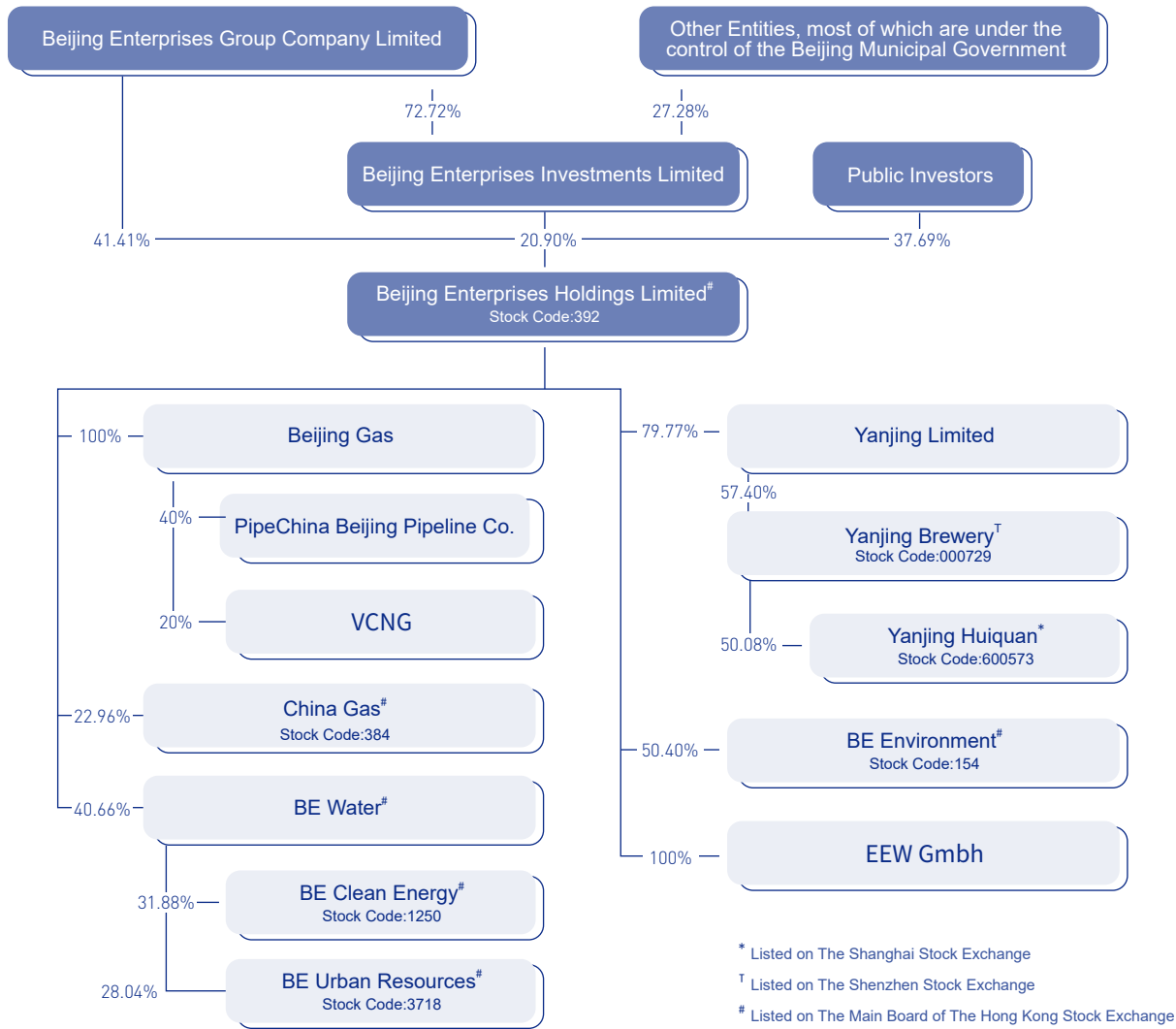
## Company Profile

Formed in 1997 upon eight units of premium assets in Beijing, Beijing Enterprises Holdings Limited is traded on the Main Board of the Hong Kong Stock Exchange (0392.HK) and is a constituent of the Hang Seng Composite Index and the Hang Seng China Enterprises Index.

Over the years, BEHL has given full play to the advantages of both the Beijing and Hong Kong capital markets and implemented a focused development strategy that is at once proactive and prudent and has become a representative red-chip enterprise in the Hong Kong capital market with sustained and steady earnings growth.

## Corporate Structure

As at 31 December 2021



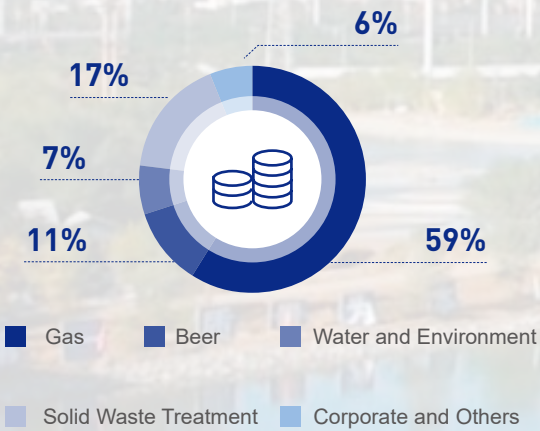


Business Scope

As an integrated utilities company, BEHL's main business covers utilities segments such as urban gas, municipal water supply, and solid waste treatment, in addition to value investing operations with a focus on consumer goods, owning Yanjing Brewery, one of the largest beer conglomerates in China.

BEHL also owns diversified high-quality overseas assets, including multiple technologically leading water and environmental projects in Malaysia and Portugal, and EEW GmbH, a leading solid waste operator in Europe with presence in Germany, Luxembourg and the Netherlands. BEHL has become a utility investing and financing platform with diversified channels for domestic and overseas markets.

Total assets of BEHL's main operations in 2021



Gas



Main companies:

Beijing Gas,China Gas

Main business:

Upstream resources and transportation, midstream gas market and downstream gas market applications

Major progresses in 2021

Beijing Gas

- Steady enhance of business presence in the Beijing-Tianjin-Hebei market, steady development of the LNG business, and new breakthrough in international trade scale
- The Tianjin Nangang Project completed the annual construction task, and the Tangshan LNG Receiving Station was put into operation
- Active development and advancement of integrated energy projects such as those in Xiong'an and Huairou, and new progress in new energy projects such as distributed photovoltaic and geothermal energy

China Gas

- Comprehensively sorted out the safety operation and management, strictly organized the hazard investigation and rectification campaigns, and carried out upgrading of the safety system, operation system, customer service system, engineering system and technical system

Beer



Main company:

Yanjing Brewery

Main business:

Manufacturing and sale of beer, fruit juice cocktails, mineral water, beer ingredients, feed, yeast, plastic boxes and other products

Major progresses in 2021

- Yanjing Brewery launched a number of new products such as Yanjing Osmanthus-flavored Beer, Yanjing Lion King Stout, Alcohol-free White Beer, V10 Craft White Beer, and ON/OFF Fruit-flavored Beer in a bid to keep boosting the awareness of the Yanjing Brewery brand among young consumers
- As an official sponsor of the Beijing 2022 Winter Olympic Games, Yanjing Brewery launched online and offline experiential marketing to promote the brand offline and enhance the brand communication effect online. Its integration of online and offline crossover marketing spreads the Olympic spirit and conveys the brand message

- The comprehensive quality of the products improves every year, as evidenced by the 100% passing rate in the national market quality sampling of 2021

Water and Environment



Main company:

BE Water

Main business:

Water treatment service and water environment treatment

Major progresses in 2021

- Enhancement of corporate competitiveness in digitization and initial establishment of digital capabilities in various business formats through development of applicational products of the Smart Water Platform
- Has improved its digital competitiveness and developed intelligent water application products that have initially equipped all its business formats with digital capabilities
- Has formed a “one-stop” science and technology management system that links “university + research institute + enterprise + users” and that features the combination of technology identification and verification + distinctive university-enterprise cooperation + ecological science and technology outcome commercialization. Through planning and integration, the system serves as an open science and technology innovation platform
- The trial application of the BEAOA new technology in processing 10,000 tonnes of sewage is a success. It represents a breakthrough since it is the first original AOA technology in China that is applied in practice and sets a record for low-temperature denitrification in winter, laying a solid foundation for the widespread application of the technology

Solid Waste Treatment



Main companies:

Solid Waste Treatment Platform, EEW GmbH

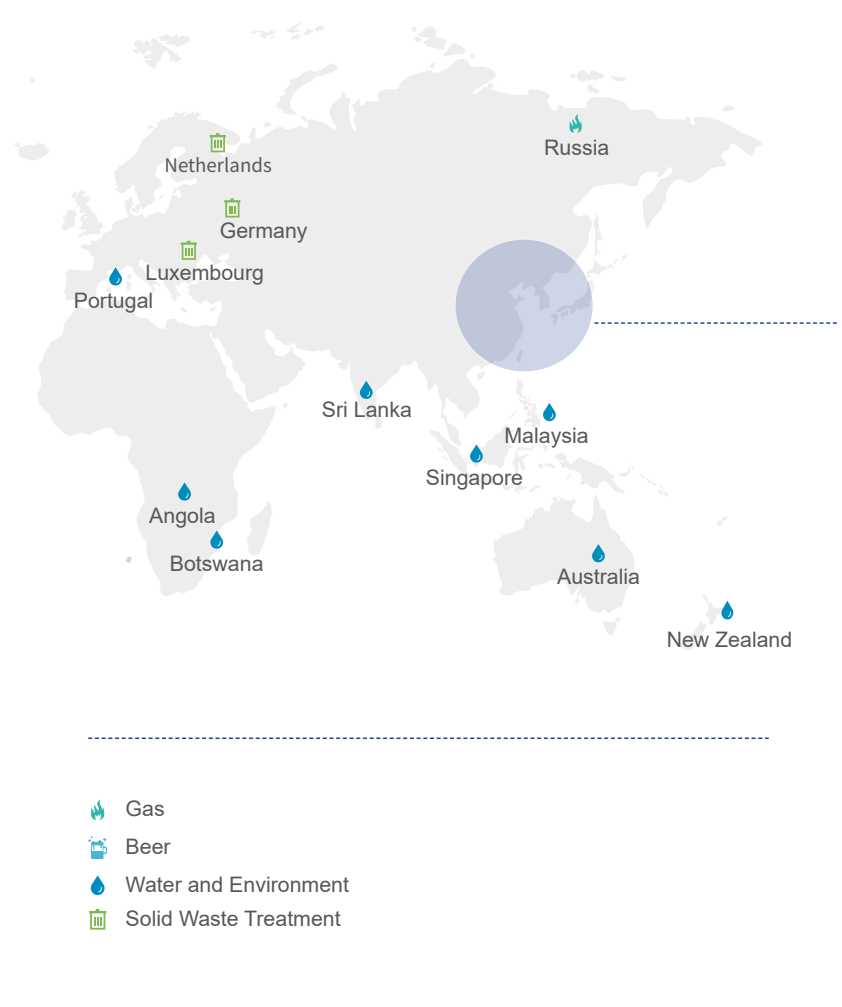
Main business:

Household waste incineration and power generation; kitchen waste, sludge and manure treatment; hazardous waste and medical waste treatment; ecological restoration

Major progresses in 2021

- The domestic solid waste treatment business segment completed management integration, effectively enhancing the operation of the segment and consolidating management across the board at Solid Waste Treatment Platform
- EEW GmbH successfully issued a 5-year green bond of EUR400 million overseas, further consolidating and improving the company's corporate image in green development overseas

# Business Presence





# Sustainable Development Management

BEHL pays attention to the harmonious development of its business with the economy, society and environment, embeds the concept of sustainability into the DNA of corporate development, formulates sustainable corporate development plans and adopts practical and effective ways and measures, and makes continuous efforts in the areas of economic development, environmental protection, and public welfare and charity.

## Management System

BEHL is committed to building a sustainable development management system featuring clear authority and responsibilities, hierarchical management, and regular report and review. Since its listing, the Company has strictly complied with the disclosure requirements of HKEX ESG Guidance and has continuously improved its sustainable development management system, which focuses on quantitative performance-based management of sustainability, is led by the Office of the Board of Directors of the Company and covers all the important business units.

In order to improve the management of sustainable development efforts and to realize the institutionalized and process-based management of sustainable development matters, in 2021, the Company, in accordance with the HKEX ESG Guidance, the consultation paper on the related provisions of the *Listing Rules* and the relevant requirements of other international indexes and ratings, formulated the *Management Measures of the Sustainable Development System of Beijing Enterprises Holdings Limited*<sup>1</sup>, which specifies the management structure and functions, meeting

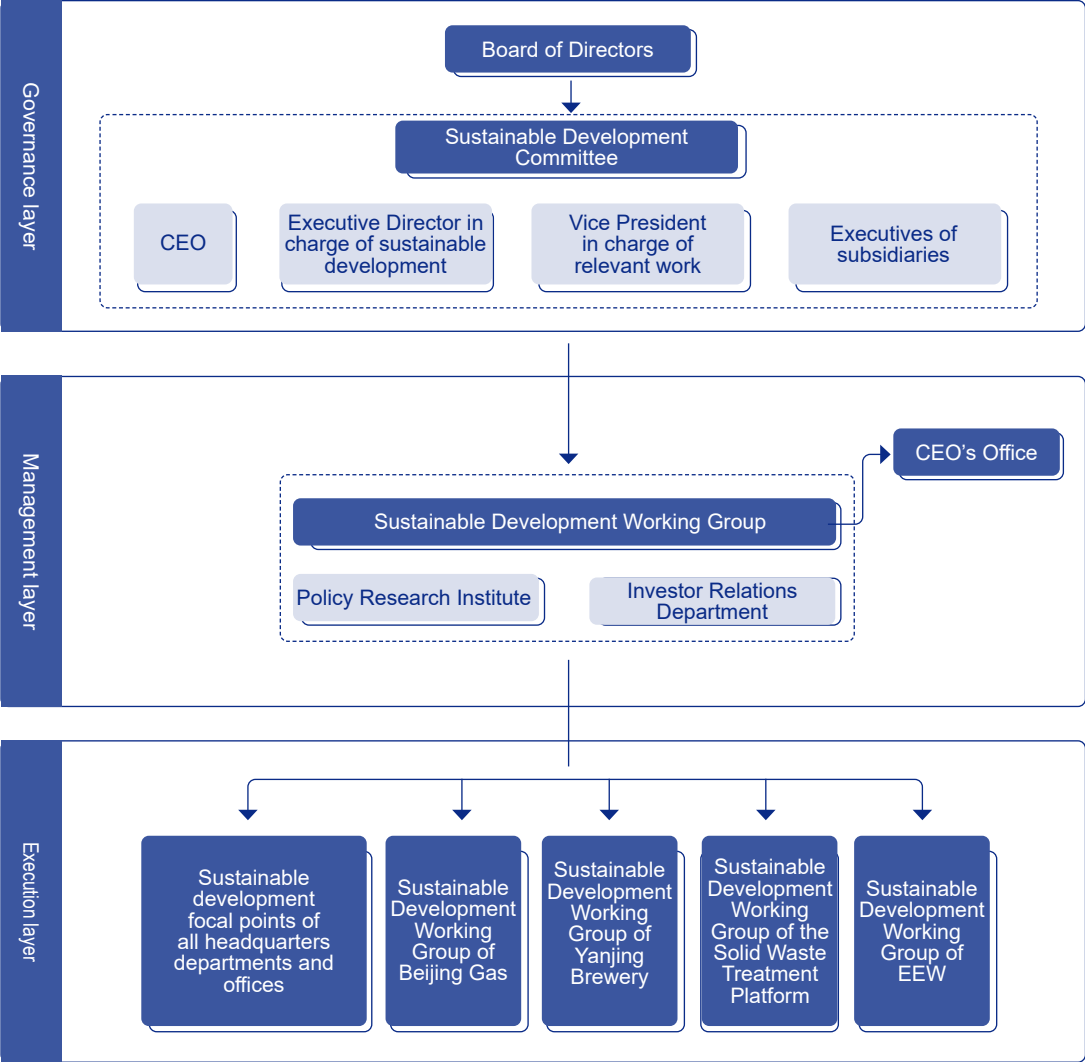
mechanism, information management mechanism, rating mechanism, project budget mechanism, supervision and assessment, and other sustainable development-related tasks to ensure the effective implementation of the sustainable development management system. At the same time, the Company incorporated sustainable development work into performance appraisal in the Company, and sustainable development performance is holistically monitored and supervised by the Sustainable Development Committee, and performance evaluation is conducted at least once a year.

In the Company's sustainability development system, the Board of Directors is the highest decision-making body in the sustainability governance structure, responsible for approving the Company's sustainability-related policies, strategies, objectives, work plans, risk assessment results and other related matters and keeping the Company's sustainability work overall aligned with the Company's business strategies. At the governance layer, the Company has established a Sustainable Development Committee, which is led by the

CEO of the Company and comprises the Executive Director in charge of sustainable development, the Vice President in charge of the relevant work and the heads of each subsidiary, and is responsible for the review and day-to-day decision-making of sustainability-related work. Under the Sustainable Development Committee, a Sustainable Development Working Group was set up, comprising the Investor Relations Department and the Policy Research Institute, and it serves as the daily liaison and coordination body for sustainable development work in BEHL, responsible for formulating strategies and policies related to sustainable development, promoting and executing work plans, and coordinating and supervising the implementation of related tasks. The CEO's Office is responsible for reviewing the materials related to sustainable development work submitted by the Sustainable Development Working Group. The execution layer consists of the sustainable development focal points of all headquarters departments and offices and sustainable development working groups of subsidiaries and is responsible for the implementation of sustainable development-related work.

<sup>1</sup>Note: The Company formulated the *Corporate Social Responsibility Management Measures* in 2017 and carries out ESG-related work through the CSR Leading Group and the CSR Office. The *Corporate Social Responsibility Management Measures* effective since 2017 was abolished when the *Management Measures of the Sustainable Development System* took effect in 2021.

The sustainable development system of BEHL



Management Rules for Each Layer of the Sustainable Development System of BEHL

Governance layer

- The Board of Directors should discuss matters related to the Company's sustainable development at least twice a year
- The Sustainable Development Committee conducts seminars on sustainable development in meetings and other forms at least four times a year

Management layer

- The Sustainable Development Working Group should confirm the sustainable development rating work arrangement for the following year at the end of the first quarter of each year and determine the work plan for the preparation of the annual sustainable development report in November each year
- The Sustainable Development Working Group should submit to the CEO's Office a summary of its work related to sustainable development, including work progress, a summary of its annual work, its work plan for the following year, and the progresses of its goals

Execution layer

- All departments and offices of the BEHL headquarters and subsidiaries should hold working meetings on sustainable development in accordance with the actual situation, and regularly submit and report the progress of efforts to meet sustainable development-related performance indicators as required



## Sustainable Development Milestones of BEHL in 2021











# Stakeholder Engagement

BEHL attaches importance to stakeholder engagement and creates an efficient mechanism for that. We communicate with stakeholders such as government, shareholders, customers and business partners through different channels, obtain feedback and identify expectations from them, and respond to the needs of various parties in a targeted manner to improve our social responsibility performance.

To better learn about stakeholders' demands, we set up an email account mailbox@behl.com.hk for stakeholders to send email directly to us. After that, we will aggregate the feedback from various channels and report it to the CEO's Office, and the Board of Directors, as the highest decision-making body, will listen to the report from the CEO's Office and make the appropriate management decisions.

The Company has been actively engaged in stakeholder communication by holding results announcement meetings and annual general meetings, participating in investment seminars and receiving visiting mainland and overseas investors. As of December 31, 2021, the Company conducted a total of three major conference calls with attendances reaching approximately 160, and conducted over 40 one-on-one meetings and group discussions, had face-to-face talk with institutional investors with attendances reaching around 80, and held 1 annual general meeting and 1 extraordinary general meeting.

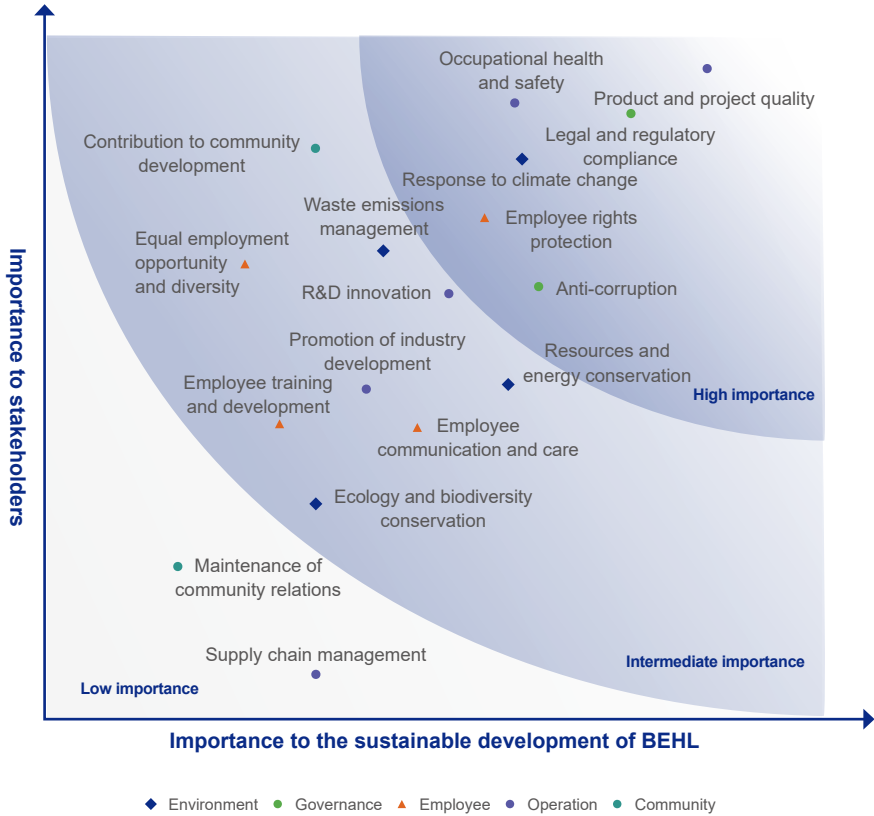
Stakeholders	Topics	Response Channels	Effectiveness of Communication
 Government and regulatory authorities	<ul style="list-style-type: none"> <li>· Lawful business operations</li> <li>· Payment of taxes in accordance with the law</li> <li>· Creation of employment opportunities</li> <li>· Promotion of sustainable and healthy economic development</li> </ul>	<ul style="list-style-type: none"> <li>· Routine reporting and communication</li> <li>· Seminars and on-site meetings</li> <li>· Forums and exchange programs</li> </ul>	<ul style="list-style-type: none"> <li>· Strategic cooperation with local governments</li> <li>· Fostering a good external environment for business development</li> </ul>
 Shareholders and investors	<ul style="list-style-type: none"> <li>· Satisfactory return on investment</li> <li>· Good market value</li> <li>· Transparent operations</li> <li>· Improvement of profitability and core competitiveness</li> </ul>	<ul style="list-style-type: none"> <li>· Annual reports and announcements</li> <li>· Roadshows and investor meetings</li> <li>· Teleconferences with analysts</li> <li>· Annual general meeting</li> <li>· Company website</li> </ul>	<ul style="list-style-type: none"> <li>· Building good investor relations</li> <li>· Continuous improvement on credibility with investors</li> <li>· Gaining support from investors and shareholders on major decisions</li> </ul>
 Customers	<ul style="list-style-type: none"> <li>· Consistent and stable supply of products</li> <li>· High-quality and safe products</li> <li>· Considerate and convenient service</li> <li>· Smooth communication channels</li> </ul>	<ul style="list-style-type: none"> <li>· Customer forums</li> <li>· Service hotlines</li> <li>· Community service centres</li> <li>· Customer satisfaction surveys</li> </ul>	<ul style="list-style-type: none"> <li>· Continuous improvement on business operations based on customers' feedback</li> <li>· Efficient and timely solutions for customers' complaints</li> <li>· Continuous improvement on customer services</li> </ul>
 Business partners	<ul style="list-style-type: none"> <li>· Fair procurement</li> <li>· Integrity and reciprocity</li> <li>· Long-term and stable cooperation</li> </ul>	<ul style="list-style-type: none"> <li>· Supplier conference</li> <li>· Strategic cooperation</li> </ul>	<ul style="list-style-type: none"> <li>· Formulating supplier management requirements to improve supply chain efficiency</li> <li>· Facilitating co-development of upstream and downstream business partners</li> </ul>
 Employees	<ul style="list-style-type: none"> <li>· Safeguard of comprehensive rights and interests</li> <li>· Good platform for career development</li> <li>· Work-life balance</li> <li>· Occupational health</li> </ul>	<ul style="list-style-type: none"> <li>· Staff and workers' congress</li> <li>· Complaint box</li> <li>· Channels of democratic communication</li> </ul>	<ul style="list-style-type: none"> <li>· Vertical and horizontal communication among staff and hierarchies</li> <li>· Fostering a harmonious workplace</li> <li>· Building a healthy and safe working environment</li> </ul>
 Community and non-governmental organizations	<ul style="list-style-type: none"> <li>· Community development</li> <li>· Community harmony</li> <li>· Community environment</li> <li>· Open and transparent information</li> </ul>	<ul style="list-style-type: none"> <li>· Public science communications</li> <li>· Community outreach</li> <li>· Participating in charity and environmental activities</li> </ul>	<ul style="list-style-type: none"> <li>· Appointing social inspectors to check and monitor the quality of services</li> <li>· Building good relations with the local community</li> <li>· Fostering a good external environment for business development</li> </ul>
 Media	<ul style="list-style-type: none"> <li>· Financial performance</li> <li>· Corporate governance</li> <li>· Information disclosure</li> </ul>	<ul style="list-style-type: none"> <li>· Annual reports and announcements</li> <li>· Annual and interim results presentation</li> <li>· Press releases and publications</li> <li>· Media interviews</li> <li>· Media inquiries</li> </ul>	<ul style="list-style-type: none"> <li>· Building good relations with the media</li> <li>· Maintaining the corporate image and gaining public recognition</li> </ul>
 Environment	<ul style="list-style-type: none"> <li>· Supply of clean energy</li> <li>· Waste treatment</li> <li>· Green operation</li> </ul>	<ul style="list-style-type: none"> <li>· Annual reports and announcements</li> </ul>	<ul style="list-style-type: none"> <li>· Implementing the "Clean Air Action Plan"</li> <li>· Participation in environmental projects</li> </ul>



# Compliance with the Principles in the ESG Guidance

**Materiality:**In order to understand stakeholders' concerns, expectations and demands regarding the Company's sustainable development and to review internal performance, we need to identify the key ESG issues through materiality analysis. To that end, we established a standardized materiality analysis workflow with reference to the *HKEX ESG Guidance*, and we thus identify and screen the ESG issues related to BEHL, examine their importance to stakeholders and their impact on the sustainable operations of BEHL, and ultimately determine the material issues that will serve as the objectives and foundation for our sustainability management.

In 2021, in order to ensure accurate and comprehensive information disclosure, the Company interacted and communicated with various stakeholders during its daily production and operation, collected opinions and suggestions from various stakeholders on the sustainable development management of BEHL, and conducted a comprehensive assessment based on the changes in the issues and ESG development trends in the same industry to determine the sustainable development issues for 2021.



Ranking	Issues	Ranking	Issues	Ranking	Issues
1	Product and project quality	2	Legal and regulatory compliance	3	Occupational health and safety
4	Response to climate change	5	Employee rights protection	6	Anti-corruption
7	R&D innovation	8	Waste emissions management	9	Contribution to community development
10	Equal employment opportunity and diversity	11	Promotion of industry development	12	Resources and energy conservation
13	Employee training and development	14	Employee communication and care	15	Ecology and biodiversity conservation
16	Supply chain management	17	Maintenance of community relations		

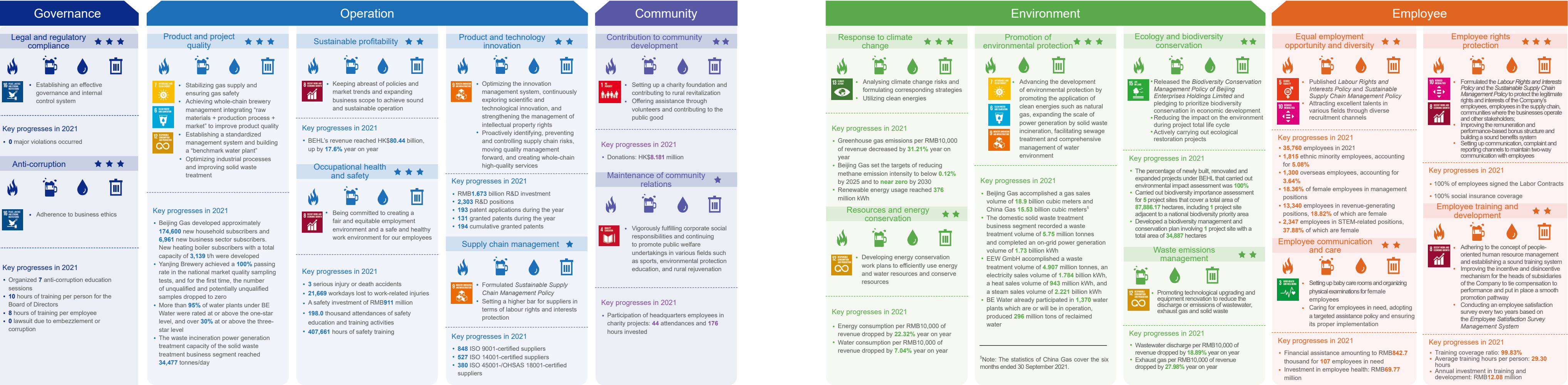
**Quantitative:**BEHL has established ESG indicator collection tools that cover the headquarters and all subsidiaries and regularly collects key quantitative indicators of all major environmental aspects and some social aspects listed in the *ESG Guidance*, which are summarized during the Reporting Period and disclosed in this Report. For detailed information on the quantitative ESG data, please refer to each chapter of this report.

**Balance:**BEHL, upon review and confirmation by the Board of Directors of the Company, pledges that the contents of the Report are objective and open. The contents disclosed can be accessed via our official information disclosure channels or public social media.

**Consistency:**Compared with ESG reports of previous years, this Report does not make major adjustments in the scope of disclosure, and it adopts consistent statistical methods for the disclosure. For ESG data comparison over the years, please refer to each chapter of this report.

# Sustainability Practices and Annual Key Progresses of BEHL

BEHL has been actively making efforts in line with the United Nations Sustainable Development Goals (SDGs) and has identified the 13 SDGs with the highest relevance in the context of its own corporate situation, and it is committed to supporting and implementing the SDGs in its corporate development strategy and business operations.





# Prudent and Compliant Operation

BEHL has shouldered the social responsibility and mission to “Invest for a Better Life” and endeavored to establish and improve a modern enterprise system with Chinese characteristics by constantly improving corporate governance, and building a dynamic, streamlined, efficient and smoothly-operating system and mechanism. Embracing integrity, compliance, honesty and high efficiency, the Company is devoted to protecting the rights and interests of its investors and creating more value for them.

## Major progresses in 2021

- Preparation of *BEHL 2021 Annual Risk Management Report*
- Organization of 7 integrity education sessions, with the Board of Directors trained 10 hours per person, and employees 8 hours per person
- No lawsuit in connection with corruption or violation
- No occurrence of customer privacy leakage
- Issuance of the *Sustainable Supply Chain Management Policy*



# Governance Safeguards

BEHL strictly abides by the *Company Law of the People's Republic of China*, the *Hong Kong Companies Ordinance*, the *Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited* (the *Listing Rules*) and other laws, regulations and regulatory requirements of the place of listing, and continuously improves the corporate governance structure. The management layer responsible to the Board of Directors and its special committees are marked by well-defined authorities and responsibilities and high efficiency, which ensures the stable operation of the Company. The Board of Directors leads and guides the management directly and indirectly through the committees by formulating strategies and supervising their implementation, overseeing the Company's operation and financial performance, and ensuring that sound internal control and risk management systems are in place.

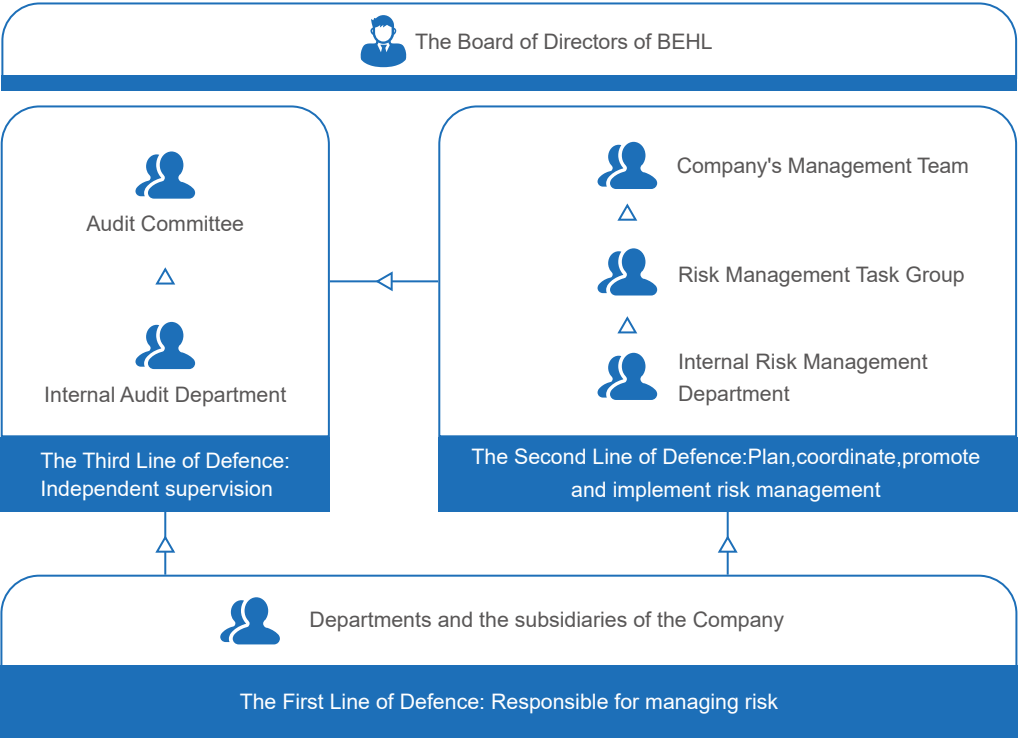
BEHL selects and hires independent directors in line with the qualifications set out in the *Listing Rules*, the *BEHL Policy of Nomination of Board Directors*, the *BEHL Policy of Diversification of Board Members* and the *BEHL Rules of the New Articles of Association*. The headcount and background of the incumbent independent Board Directors meet relevant requirements of the place of listing. The Board Directors of the Company are from different industries at home and abroad with diversified backgrounds, knowledge structure and expertise, whose professional competence and complementarity are beneficial for the informed decision-making of the Board of Directors. As of the date of this report, the Board of Directors of BEHL had 8 Directors, including 5 executive Directors and 3 independent non-executive Directors.

Type		Quantity	Board Directors							
			Li Yong cheng	Jiang Xin hao	Dai Xiao feng	Xiong Bin	Tam Chun Fai	Wu Jie si	Lam Hoi Ham	Yu Sun Say
By specialization	Law	1		✓						
	Business administration	4	✓		✓	✓		✓		
	Economic management	6		✓	✓		✓	✓	✓	✓
	Audit/risk management	2					✓		✓	
	Engineering	3	✓			✓				
By academic background	Bachelor	2					✓		✓	
	Master	4	✓	✓	✓	✓				
	Doctor	3						✓		✓
By business focus	Business segments	Gas	✓	✓	✓	✓	✓			
		Beer	✓	✓	✓	✓	✓			
		Water and Environment	✓	✓	✓	✓	✓			
		Solid Waste Treatment	✓	✓	✓	✓	✓			
	Functions	Audit						✓	✓	✓
		Remuneration						✓	✓	
		Nomination							✓	✓

In 2021, adhering to the principle of diligence, integrity and down-to-earth work, the Board Directors of the Company performed their duties with the interests of all shareholders in mind and held altogether 2 Board meetings. At the end of 2021, 15 Board Directors and middle and senior management attended the in-house seminar themed "Continuing Obligations of HKEX-listed Companies and the Board Directors". The continuing professional guidance and training helped the attendees to gain a better understanding of listing rules and laws and strengthen their ability to perform duties of Board Directors.

# Risk Prevention and Control

In accordance with the *BEHL Risk Management Measures*, the *BEHL Risk Management Manual* and the organizational system of BEHL's Three Lines of Defence for Risk Management , BEHL has established a layered responsibility structure comprising the Board of Directors, the Audit Committee, headquarters departments and subsidiaries to ensure effective internal control and risk management. In line with the *BEHL Internal Audit Regulations*, the leadership, responsibilities and authority of the Party Committee, the Board of Directors and principal responsible persons of the Company in the internal audit are clearly defined.



BEHL's Three Lines of Defence for Risk Management

BEHL has established a relatively sound risk management work system. In 2021, while implementing various regular tasks, BEHL continued to dive deep into risk management and think outside the box. With the annual major risks identification as the foundation, BEHL sorted through its risks comprehensively and clarified objects of its risk management; with the risk management reporting mechanism as the medium, BEHL smoothed out risk information communication under the multi-tiered management and control; with major risks evaluation as the approach, BEHL organized the risk management leading group to evaluate and identify the major risks of the year at the Company's level and achieved level-by-level evaluation and control for risk management; with the statement of responsibility for risk prevention and control as the tool, BEHL clarified responsibilities and put in place clear pathways for risk management and control. In addition, BEHL gradually adopts flexible approaches to combine risk management with post-investment evaluation, management policy formulation and other work to drive improvement of risk management at all levels of the Company.

In order to strengthen the concept of internal control and the culture of risk management, to comprehensively enhance the risk compliance awareness of all staff (including Board Directors, senior executives and employees), and to effectively promote the improvement of risk control level, BEHL continuously carries out internal control and risk management training. In 2021, the Company invited external lawyers to give training on certain key topics such as Board Directors' responsibilities, HKEX's disciplinary powers and sanctions, and the overview of the revision of the *Listing Rules* in 2021.

# Business Ethics

BEHL strictly abides by the *Anti-Monopoly Law of the People's Republic of China*, the *Anti-Unfair Competition Law of the People's Republic of China*, the *Supervision Law of the People's Republic of China*, the *Anti-Money Laundering Law of the People's Republic of China* and other laws and regulations and commercial code of conduct; BEHL engages in market competition in a legal and compliant manner, and opposes any form of commercial bribery, money laundering, monopoly and unfair competition. As instructed by its *Sustainable Supply Chain Management Policy*, the Company requires partners to abide by its anti-commercial bribery and anti-corruption policies and regulations in an effort to establish good cooperative relationships with mutual respect and win-win results. During the Reporting Period, there was zero violation in BEHL.

# Reporting and Whistleblowing

In accordance with the *Measures for Implementing Discipline Inspection and Supervision and for Handling Whistleblowing and Reports*, BEHL has provided smooth channels by receiving whistleblowing and reports via email and phone. Guided by the principles of centralized management, standardized procedures and strict discipline, relevant reports and clues are handled by authorized body in compliance with procedure requirement. According to the *Work Rules for Disciplinary and Supervision Organs' Investigation and Handling of Reports and Accusations, Regulation on Complaint*

# Anti-Corruption

BEHL has set up an anti-corruption supervision and management mechanism for employees and suppliers in accordance with the *Statement of Responsibility for Improving Party Conduct and Upholding Integrity* and the *Letter of Commitment to Integrity*. In addition, BEHL, according to the *Statement of Responsibility for Integrity in Project Management*, curbs all kinds of abuse of power by suppliers for personal gains in all forms in construction projects.

BEHL has continuously carried out anti-corruption activities, fostered a corruption-free culture, and actively organized anti-corruption training and special inspections to ensure the effectiveness of anti-corruption and anti-bribery measures. In 2021, BEHL organized 7 anti-corruption education sessions, with the Board of Directors trained 10 hours per person and employees 8 hours per person. During the Reporting Period, there was no lawsuit in connection with corruption in BEHL.

*Letters and Visits, Guidelines at Hong Kong Headquarters on Equal Opportunity and Privacy of Beijing Enterprises Holdings Limited, BEHL Labour Rights and Interests Policy* and other relevant regulations, BEHL strictly applies the principle of confidentiality and recusal, specifies the legal protection for whistleblowers, controls the access scope of complaints and clues, and strictly prohibits the disclosure of related clues and the disposal methods. No one is allowed to access related clues without approval. In 2021, BEHL received 12 complaints regarding corruption, with a handling rate of 100%.



## The channels of BEHL for Whistleblowing

- Whistleblowing Hotline:010-85879113
- Whistleblowing Email: Jubao@behl.net.cn



# Information Security

BEHL attaches great importance to information security and privacy protection; all its subsidiaries have established appropriate information security and privacy protection mechanisms according to the nature of their own industry and their corporate characteristics, actively fulfilled their responsibilities for information use and confidentiality, strengthened staff training on information security and confidentiality awareness, and put in place proper cybersecurity protection measures to eliminate security risks. In 2021, no incident of customer privacy information leakage occurred in BEHL.

## Beijing Gas

Beijing Gas has introduced many systems, including the *Cybersecurity Management Regulations*, the *Management Measures for Cybersecurity Incidents*, the *Management Measures for Information System Security*, the *Management Measures for Information Security Risks*, the *Management Measures for Cybersecurity Emergency*, the *Management Measures for Mobile Terminal Cybersecurity*, and the *Management Measures for Information System Data Security*; it has implemented strict management processes within the company to regulate the use of information systems to ensure data and information security, the isolation and confidentiality of commercial secret information, and it has obtained the ISO 27001 certification. In 2021, Beijing Gas did not have any major cybersecurity or commercial information leakage incident.

## BE Water

BE Water established the Information Security Management Department, which is responsible for supervising the implementation of information security work within BE Water, and specifying the organization of personnel, processes and standards and norms related to information security management in four major aspects, namely, cybersecurity, data security, system security and staff security, so as to guarantee the data privacy and security of the BE Water in all aspects. At the same time, BE Water stepped up digitization efforts and strictly carried out data security management to ensure its data security and user privacy. In 2021, BE Water issued a series of policies related to information security, covering network security, system security, application security, asset security, data security and terminal security, etc.; carried out information security level certification and the protection level assessment under the Industry and Education Alliance system, and subsequently obtained the *Report of Network Security Level of BE Water Official Website System* and the *Report of Network Security Level under the Industry and Education Alliance System*.



## Yanjing Brewery

Yanjing Brewery formulated the *Cybersecurity and Information Security Emergency Response Plan*, classified information security risks into four levels and, based on the consequences and influence of each level, adopted corresponding risk management measures to improve information security emergency management. In 2021, Yanjing Brewery, according to requirements of Level 2 information security networks, systematically and comprehensively reviewed and rectified its existing security networks by increasing and upgrading security equipment and improving the information security management system. As of December 31, 2021, Yanjing Brewery had passed the Level 2 information security network assessment by the Ministry of Public Security.

## Solid Waste Treatment Platform

BE Environment formulated *Management Measures for Assessment and Evaluation of Adoption of Genuine Software and Computer and Software Management Measures (Trial)* and strengthens cybersecurity management based on them. In addition, the information management platform of BE Environment is also being gradually established and improved.

In terms of privacy protection, Yanjing Brewery, in accordance with the management requirements of the excellent quality system, boosted employees' awareness of customer privacy protection in after-sales services and their awareness of and ability in protecting customer information; Beijing Gas, based on the *Beijing Gas Regulations on Information Secrecy Management*, formulated specific rules on the nature of customer information, conditions of use, users' power to determine the way that information is used, information retention time, and third-party disclosure policies. Beijing Gas requires all employees with access to user information to sign a confidentiality commitment letter and clearly assigns responsibilities at all levels. In this way, it has formed a long-term mechanism for user information protection, which effectively safeguards user privacy and information security. In 2021, it received no complaint related to violations of customer privacy; BE Water adopted strict data security measures to strengthen the management of equipment security, server security, machine room security, and access rights to ensure user privacy. As of December 31, 2021, there were no major information security incidents and no complaints about customer privacy received by BE Water.

# Responsible Supply

BEHL strictly abides by laws, regulations and industry rules such as the *Labour Contract Law of the People's Republic of China*, the *Civil Code of the People's Republic of China* and the *Law of the People's Republic of China on Tenders and Bids*, continuously works towards moving quality management forward and strives to establish whole-chain quality management; BEHL works with partners on both fronts of quality management and technology development to improve quality and build a win-win future. According to the actual procurement needs in engineering construction, production and operation, BEHL actively seeks out new suppliers via the process of candidate inspection, evaluation and admission, and arranges for targeted supplier performance evaluation according to the implementation status of engineering construction, production and operation at appropriate time points throughout the year.

## Sustainable Procurement

The Company publicly released the *Sustainable Supply Chain Management Policy* to incorporate ESG factors into supplier management. The Company has made detailed regulations on the criteria of supplier classification, admission and management, established clear definitions of qualified suppliers and key suppliers, and required suppliers to strengthen management in terms of labour rights and interests, environmental protection and business ethics. In addition, the Company proactively identifies and evaluates the potential sustainability risks of suppliers, and timely provides feedback to suppliers, requiring them to complete rectification within the specified time.

For different business segments, BEHL has formulated corresponding internal systems, including the *Tendering and Bidding Management System*, *Procurement Control Manual* and *Contract Management Regulations*. During the tendering process, we will give priority to suppliers who hold ISO 9001, ISO 14001, ISO 45001 and other ESG-related certifications and factor partnering suppliers' certifications into their performance evaluation. For projects involving data security, we will sign confidentiality agreements with suppliers, and require suppliers to sign a corresponding letter of pledge according to the type of project. For example, Yanjing Brewery signed the *Sunshine Commitment* with collective bulk suppliers, making detailed requirements for suppliers' business ethics.

BEHL includes environmental factors into the consideration of supplier eligibility and encourages partnering suppliers to use environmentally friendly products and services and seek energy conservation and emission reduction. For example, in the technical documents for equipment and material procurement, Yanjing Brewery lists clear environmental protection and energy conservation standards for suppliers' reference and implementation. In 2021, BE Water set up environmental protection requirements as a threshold for suppliers of pharmaceutical raw materials, requiring them to provide supporting information on the use of environmental protection materials as the prerequisite for bid validity.



# Supplier Management

We implement tiered management of suppliers, and, in accordance with the internal *Supplier Management System*, evaluates the quality of goods supplied by suppliers as well as the cooperativeness, progress and environment safety (for suppliers in the construction category) during the contract period separately on a regular basis, and determines the performance score of suppliers after the evaluation. We conduct annual sustainability risk assessment for key suppliers and high sustainability risk suppliers. Suppliers with unqualified scores are defined as high sustainability risk suppliers and will be included in the pool of termination-pending suppliers for management and lose eligibility for procurement. For suppliers with flawed performance in the supply process, we will issue an early warning to project companies so that they will use such suppliers with caution.

In addition, we carries out annual supplier inspection and audit, which includes, but is not limited to, reviewing the name, management team, business premises, corporate qualifications and other information of suppliers and calculating suppliers’ timely delivery rate, product quality qualification rate, product price change rate and after-sales service effectiveness ratio, so as to make a holistic judgment on whether there are potential risks in the operation of qualified suppliers.

In order to jointly build a business-friendly environment, we encourage suppliers to formulate relevant policies internally to protect the safety and health of employees. Currently, some of BEHL’s partnering suppliers have formulated the *Quality, Environment, Occupational Health and Safety Management Manual* and the *Guidelines on Workplace Safety Compliance Work* with reference to regulatory standards, revised internal safety management agreements and provided safety training for employees to ensure employee safety in an all-round manner.

In 2021, Yanjing Brewery strengthened technical and quality communication and collaboration with individual-product raw material suppliers and key quality control equipment suppliers, carried out and completed on-site quality audits and risk assessments of three core suppliers, introduced standards for key quality control equipment such as the yeast propagation system, the yeast storage tank system and yeast centrifuges, and standardized the general technical requirements for the product tracking system that assigns one unique code to each product and quality standards for plastic flat pallets. BE Water took the initiative to promote supply chain digitization, completed the development of the supplier service platform, organized supplier conferences, and integrated the ESG mindset into all aspects of management: at the preliminary review stage, new suppliers are required to submit materials on third-party quality, environmental and occupational health and safety management system certification; at the on-site review stage, BE Water examines new suppliers according to ESG-related key points of terms for on-site supplier review, including certifications, ESG-related system development, hazard identification, corrective and preventive measures, waste and hazardous material management.

Table Quantity and Certifications of BEHL Suppliers in 2021

Indicator		Quantity in 2021
Total number of suppliers		2,670
	Suppliers on mainland China	2,626
	Suppliers from overseas, Hong Kong, Macao and Taiwan	44
ISO 9001-certified suppliers		848
ISO 14001-certified suppliers		527
ISO 45001/ OHSAS 18001-certified suppliers		380

As of the end of the Reporting Period, there were 76 qualified suppliers of specific materials for Beijing Gas, all of which had obtained ISO 9001, ISO 14001, OHSAS 18001 (ISO 45001) or the equivalent GB/T 19001, GB/T 14001, GB/T 18001 certification.



As of the end of the Reporting Period, there were

**76** qualified suppliers of specific materials for Beijing Gas



# Delivery of Excellent Quality

With a vision to become a responsible, strong and reliable integrated utilities service provider, BEHL strives to reward the trust of investors with robust operation. We are committed to controlling the quality of products at the source, driving innovation by leveraging the technical advantages of each business segment, providing customers with high-quality and satisfactory products and services, and working hand in hand with suppliers for win-win results.

## Major progresses in 2021

- BEHL invested a total of RMB1.673 billion in R&D, set 2,303 R&D positions, filed for 193 patents and obtained 131 granted patents during the year. As of the end of the Reporting Period, BEHL obtained 194 cumulative granted patents
- Beijing Gas fully implemented a city-wide household service delivery system and introduced a first-contact responsibility system for services provided to residential users across unit territories and jurisdictions
- Yanjing Brewery achieved a 100% passing rate in the national market quality sampling tests, and for the first time, the number of unqualified and potentially unqualified samples dropped to zero
- Five plants of BE Water have implemented the standardized water plant management system

# Quality Assurance

BEHL regards product quality as the foundation of its development. We continuously improve quality according to the specifics of each business segment, strictly control product quality and safety, and improve precision and lean management in production and operation.

## Gas Business

As the largest single-city gas supplier in China's urban gas industry, Beijing Gas has built a full industrial chain which integrates upstream resources, midstream long-distance pipeline construction and downstream gas utilization. To continuously ensure safe and stable gas supply, Beijing Gas empowers smart pipeline network construction with digital intelligence, and it manages the entire gas operation chain with the aid of the national BeiDou precision service network and continuously improves risk early warning and safety management to prevent leakage risks from the source.

Beijing Gas always puts safe production and supply in the first place, takes multiple measures to strengthen pipeline network and gas storage to meet user demand, and increases the penetration of smart meters. In 2021, Beijing Gas developed approximately 214,900 new natural gas customers, of which 207,900 were household subscribers; the number of natural gas subscribers accumulatively reached about 7,135,300, and the natural gas pipeline length totalled around 29,900 kilometres. By the end of the Reporting Period, Beijing Gas further promoted the smart meter penetration among residential subscribers, and the smart meter penetration has reached 78.32% among non-residential customers. Furthermore, Beijing Gas maintained good communication with CNPC, PipeChina, State Grid Beijing Electric Power Company and various gas power plants to ensure the balance of supply and demand, strengthen energy coordination and manage gas consumption planning during the heating season.

In response to China's "Belt and Road" Initiative, Beijing Gas has accelerated the pace of going global, pushed ahead new pipeline projects to boost gas imports from Russia to Beijing, and expanded overseas business footprint. In 2021, Beijing Gas formulated the *Power Plant Combustion Adjustment and Russian Gas Receiving Program* to effectively ensure the safe operation of power plants and gas pipeline network.

### Case: Beijing Gas fully applies digital intelligence system to pipeline network business chain management

In 2021, Beijing Gas continued to optimize the construction of its smart pipeline network on the basis of the Internet + Smart City service platform, and completed the upgrade and construction of various operation and management platforms with significant improvement in operational quality and efficiency.

- Upgraded the production and operation system:

Beijing Gas has established a production operation system covering comprehensive operation, leak detection, corrosion control, production operations, equipment maintenance, gate well monitoring and other business functions; it has also realized online management and dynamic monitoring of the main business in production and operation.

- Upgraded the EAM system platform:

Beijing Gas has realized the full life-cycle asset management by promoting electronic forms, application integration, business mobility and content visualization, providing complete and accurate static parameters and dynamic maintenance data for production and operation and asset management business.

- Built an analysis platform for production and operation data:

Indicators are presented in an intuitive, straightforward and concrete way, combined with the industry status quo and management objectives. A whole-process query is enabled, which covers management objectives, management standards, process data and problem lists, providing one-stop data-driven decision-making and analysis services for managers at all levels.

# Beer Business

In adherence to the business philosophy of “act with love, operate with honesty, run business with integrity”, Yanjing Brewery regards quality as the lifeblood and strives to meet the quality goal of “making each batch and every bottle the best offerings”. To this end, Yanjing Brewery has adopted the advanced production equipment to provide consumers with high-quality products such as beer and beverages. In 2021, the scope of Yanjing Brewery’s quality management has been initially expanded from production quality to the whole chain which integrates “raw materials + production process + market”. The quality of the manufacturing system has also been improved for better product quality. The pass rate of Yanjing Brewery’s products stood at 100% in the national market quality sampling tests, and the number of unqualified and potentially unqualified samples dropped to zero for the first time.

To strengthen the modern food safety corporate governance system, Yanjing Brewery has implemented “the four strictest requirements”<sup>6</sup> with food safety management at the core, actively carried out food safety inspections, and continuously eliminated food safety hazards. In 2021, Yanjing Brewery set up 34 plant-level food safety teams, rolled out the quantifiable, enforceable and feasible *Food Safety Audit Rules*, and formulated 2,214 standard enforcement provisions. It has also introduced and improved 177 quality standards, organized over 100 individual product reviews, 36 quality training sessions, and on-site audits of 15 companies to fully guarantee food safety and quality.

As a holder of ISO 9000 quality management system certification, Yanjing Brewery has continuously strengthened the harmonized audit standards, and enhanced the on-site audit and quality management system. In 2021, Yanjing Brewery established a more scientific and comprehensive quality assessment program, which focuses on five areas: product quality, completion of quality objectives, progress of the excellent quality system, talent qualification and veto items. In addition, 12 major assessment indicators were introduced to close the loop of management functions and promote the steady improvement of quality. Meanwhile, Yanjing Brewery organized a qualification exam for 106 food safety officers, all of whom have passed the exam.

<sup>6</sup>Note: “The four strictest requirements” are regulations on food safety, which require companies to establish the most rigorous standards, implement the strictest supervision, impose the most severe penalties, and introduce the most stringent accountability system.

To cope with product recall incidents, Yanjing Brewery formulated the *Product Recall Management Policy* to regulate the procedures for product recalls and stipulated that at least one product recall response drill should be organized each year. During the Reporting Period, there was no occurrence of product recall in Yanjing Brewery and one drill was held. During the drill, Yanjing Brewery formulated the *Product Recall Drill Plan* in accordance with the *Product Recall Management Policy*, which specified the duties, time, type of drawbacks of recalled products and the drill process, all of which were documented for record after the drill.

## Awards Received by Yanjing Brewery and Its Products in 2021

Yanjing Brewery won the **2021 Quality Model Enterprise (Golden Bull Award)**.

Yanjing Brewery was awarded the title of “**National Top-quality Enterprise in the Beer Industry**”.

Yanjing U8 won the “**New Product of the Year - Gold Award**” in the category of traditional fermented Chinese food.

Xuelu Beer won the **Best Innovation Award** in the International Traditional Fermented Food Innovation Competition.

Yanjing Alcohol-free White Beer won the **Gold Metal in 2021 Brussels Beer Challenge**.

ON/OFF Peach Juice Wheat Beer won the **Silver Metal in the 2021 World Beer Awards (WBA)**.



# Water and Environment Business

To further improve product quality and build a national “benchmark water plant”, BE Water, with the focus on delivery and operation quality management, has established a standardized management system; it also formulated the *Delivery Quality Standards Manual for Wastewater Treatment Plants of BE Water*, which specifies the quality standards for project delivery, and clarifies the priority in compliance inspection and dynamic supervision at each stage of the construction period. Each water treatment plant has realized precision management in various aspects such as production and operation, equipment, facilities, chemical tests and safety management. By the end of the Reporting Period, five plants of BE Water have implemented the standardized water plant management system.

With focuses placed on making star-rated water plants and standardized demonstration plants, BE Water strives to continuously strengthen the standardized operation system. In 2021, BE Water carried out star-rated water plant acceptance evaluation and revised the *Management Measures for Star-rated Operation Enterprise Acceptance*. By drawing on the management experience of star-rated hotels, BE Water has conducted a comprehensive assessment of operating enterprises from four perspectives: personnel capability, operation process, operation quality and economic efficiency. A star-rated water plant assessment has also been carried out in its subordinate water plants. These quantitative assessments have helped to clarify the product quality responsibilities in the operation process. In addition, BE Water has built a standardized demonstration plant, supported by a dedicated team, and set up a standardized system for on-site production management. As of the end of the Reporting Period, BE Water already participated in 1,370 water plants which are or will be in operation, including 1,116 sewage treatment plants, 191 water distribution plants, 61 reclaimed water treatment plants and 2 seawater desalination plants. all water plants operated by BE Water had completed star-rated operation assessment and acceptance, with more than 95% rated as one star or higher, and over 30% at or above the three-star level, a significant improvement compared to 2020.



## Case: BE Water’s self-developed sewage management system (SED)

Focusing on the construction of standardized demonstration plant, BE Water independently developed a sewage management system (SED) based on the IOT platform in 2021. With the input of data standards, process standards and operation standards for management optimization, the SED system contributes to the scale-up of the standardized management model. By the end of the Reporting Period, BE Water has compiled 9 procedure documents, 88 management methods and 128 operation instructions. 115 sewage treatment plants have adopted the SED system.

# Solid Waste Treatment Business

To meet the requirements for the Group’s strategic transformation for precision management, the Solid Waste Treatment Platform earnestly implements precision, regulated, digital and standardized management in quality control. In 2021, BEHL made major headway by integrating its domestic solid waste segment business into a new Solid Waste Treatment Platform. This has laid a solid foundation for BEHL to improve management, boost the operation of the segment and become “a leading integrated environmental service provider with solid waste treatment and disposal as core business in China”. The Solid Waste Treatment Platform , in response to the requirements of strengthening control and integrated management, has built direct lines of communication with BEHL and its subsidiaries, effectively enhancing management efficiency.

On the basis of ensuring good quality control, the Solid Waste Treatment Platform has continuously optimized processes and improved solid waste treatment capabilities. In 2021, the platform had further driven digitization and standardization in hazardous waste management to better regulate the management of hazardous waste and ensure that all steps would be documented. Beijing Enterprises Holding Environmental Renewable Energy Shuyang Co., Ltd. owned by Solid Waste Treatment Platform has established a digital procurement platform for the standardized management of hazardous waste, which covers the generation, declaration and discharge of hazardous waste. As of the end of the Reporting Period, the waste incineration and power generation capacity of the solid waste treatment business segment reached 34,477 tonnes per day.



As of the end of the Reporting Period, the waste incineration and power generation capacity of the solid waste treatment business segment reached

34,477 tonnes per day

## Quality Management Awards and Recognition to BEHL Solid Waste Treatment Platform in 2021

Tai’an Beijing Enterprises Environmental Energy Development Co., Ltd. owned by Solid Waste Treatment Platform won the honorary title of “Municipal Demonstration Enterprise for Workplace Safety Emergency Management” in Tai’an City.

Changde Zhonglian Green Power Co., Ltd. owned by Solid Waste Treatment Platform won the title of “Advanced Organization for Urban Security of Changde City” (issued by Changde Public Security Bureau).

BEGSE owned by Solid Waste Treatment Platform was awarded the “Two Centenaries” Model for Waste Incineration with Public Engagement and was listed as one of the E20 solid waste treatment best practices.



# Innovation-driven Development

BEHL strictly abides by the *Patent Law of the People's Republic of China* and other relevant laws and regulations, making relentless efforts to strengthen its innovation management system and technological innovation. It also attaches great importance to intellectual property (IP) management, and fully respects others' IP rights while protecting its own IP interests. In 2021, by giving full play to the technological edges of each business segment, we have obtained considerable achievements in R&D. During the Reporting Period, BEHL invested a total of RMB1.673 billion in R&D, set 2,303 R&D positions, filed for 193 patents and obtained 131 granted patents during the year. As of the end of the Reporting Period, BEHL obtained 194 cumulative granted patents.

## Gas Business

By focusing on precision energy management, Beijing Gas pushes forward technology innovation and equipment R&D in energy metering, which has unlocked a variety of achievements such as the metering standard system, smart remote transmission meters, air-ground collaborative point detection technology, regional gas-based energy Internet micro-grid, and the technology of multi-stage power generation from pressure, providing solid technical support for energy saving and emission reduction, safety control, green energy use, and precise services in the energy industry.

### Case: Key green and smart metering technology helps to build an intelligent gas system in Beijing

With multiple sources, large scale, a complicated structure and huge overlap, the gas system in Beijing is closely intertwined with other utility systems such as water, electricity, heating, and communication. As a metering terminal is a sensitive component for the safe operation of the gas system, Beijing Gas gives high priority to standardization and has built a "three-in-one" metering standard system which integrates the type of gas, energy consumption monitoring indicators (gas consumption, energy saving, emission reduction), and energy use business processes to provide guidance for the management and development of gas metering in Beijing.

On May 20, 2021, the "Innovation and Application of Key Green Smart Metering Technology Demonstration Project" launched by Beijing Gas was awarded the title of "2020 Energy Resources Metering Service Demonstration Project" by the State Administration for Market Regulation and the National Development and Reform Commission. The project is designed to generate replicable and scalable practices in energy saving, emission reduction, and high energy efficiency that can be applied in architecture, energy consumption in the residential and commercial sectors, by leveraging technologies such as "air-ground cooperative detection based on BeiDou and IoT" and "financial and meter safety intelligent detection and remote transmission devices based on TPM security chip and IoT".

### Case: Innovative construction management of LNG storage facilities in Beijing

On September 3, 2021, the Beijing Municipal Emergency Natural Gas Storage Facilities Project (hereinafter referred to as Beijing LNG Storage Facilities), funded by the Beijing Municipal Government and entrusted to Beijing Gas as the main operator, was put into operation. The facilities are designed to further ensure the gas supply in winter, enhance the city's ability in peak shaving and ensuring supply and coping with extreme weather. The coordinated development of Beijing, Tianjin and Hebei will also be boosted by this strong supply of clean energy.

The Beijing LNG Storage Facilities Project has also introduced a ground-breaking management mode which involves commissioning construction and operation in the establishment of LNG receiving stations. It has also become a pioneer in using automatic welding technology of vertical seam in China, which is not only labour-saving, but has also improved the consistency of welding work. Moreover, with the integration of digital engineering project management, this project has achieved significant improvements in resource allocation, progress management, construction operation and funding allocation compared with traditional approaches.



LNG storage facilities in Beijing

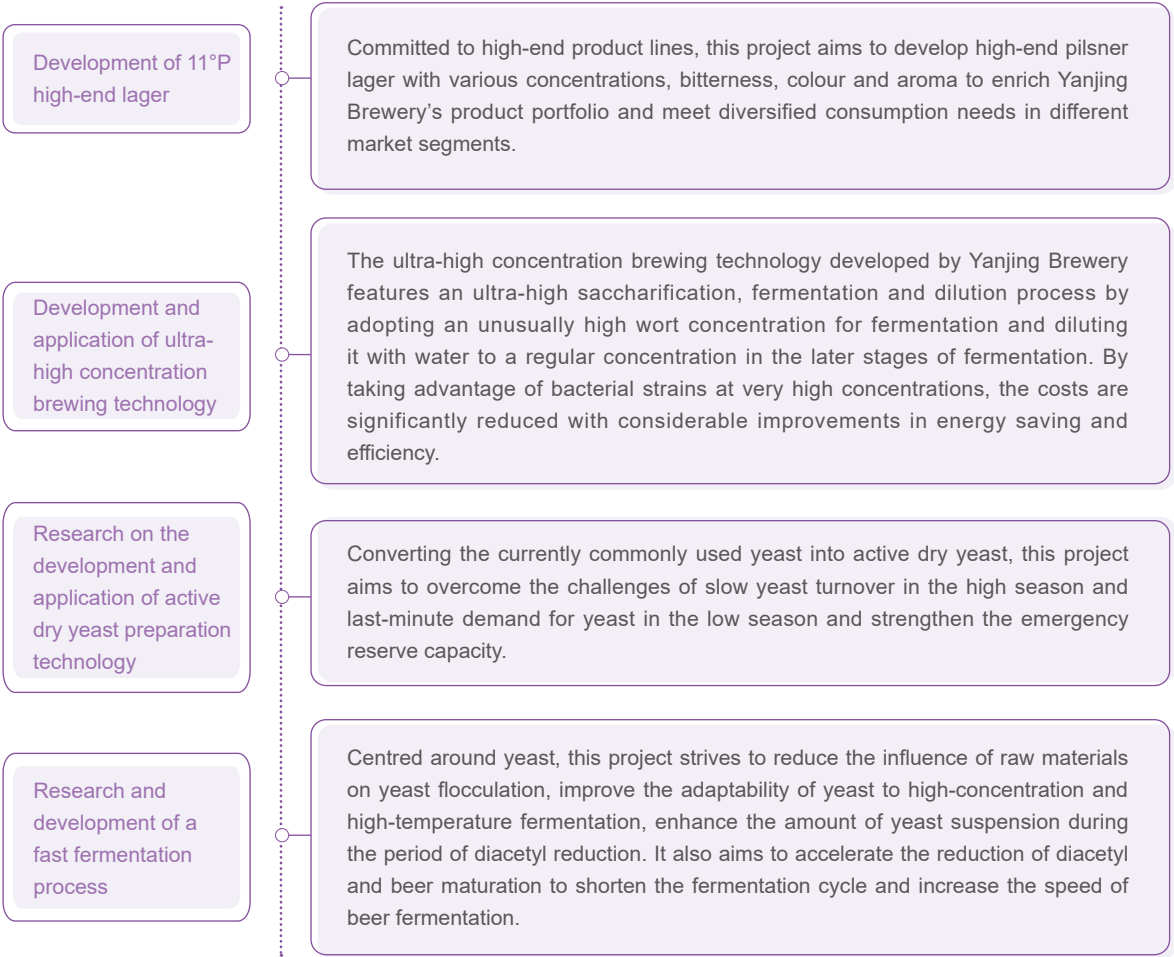


# Beer Business

To continuously improve its R&D structure, Yanjing Brewery has set up a project team-based management mode and approves and reviews the undertaking, approval, implementation plan, progress check, result review and reward allocation in accordance with the *A/B Project Process*. In 2021, for the first time, Yanjing Brewery completed the annual project evaluation of scientific and technological innovation R&D projects by combining online questionnaires and offline reviews. The candidates were scored and graded based on their types according to the *Project Grade Evaluation and Reward Criteria*. A well-defined project incentive program has also been put in place.

During the Reporting Period, there were 30 ongoing science and technology innovation R&D projects managed by Yanjing Brewery, 14 projects were approved and pending implementation. The focus areas span across 32 major scientific research tasks such as the development of 11°P high-end lager products, safe raw material formula, consumer science EEG evaluation, mixed fermentation and intelligent brewing to meet the diversified needs of consumers.

## Some of Yanjing Brewery's Key Ongoing Projects in 2021



# Water and Environment Business

Focusing on digital technology R&D and strengthening intellectual property management, BE Water strives to provide intelligent water services and drive high-quality development of the water industry. Committed to boosting smart water systems, BE Water continues to build smart water plants, establishes the “1+N” smart water management model, and realizes the smart water plant operation by integrating “IoT platform, big data analysis, intelligent control, human-machine collaboration and mobile office”. In addition, based on cutting-edge technologies such as cloud computing and big data, BE Water has built an intelligent cloud platform system named BECloud, a water plant digital twin system, an intelligent control system called BE-EMR and an analysis system named BE-Doctor, in a bid to push forward digitalization and smart technologies in the water industry.

In compliance with the *Management System of Intellectual Property Rights of BE Water*, BE Water regulates the process of application, approval, transfer, commercialization, management, utilization, confidentiality, rewards and punishment concerning intellectual property rights. Meanwhile, BE Water issued the *Notice on the Declaration of Intellectual Property Rights, Standards Preparations and Rewards* and set up special rewards for patents, software works, trademarks, and national, industry and local standards for three consecutive years. In 2021, BE Water obtained a total of 64 intellectual property rights and external standards that meet the reward criteria. Compared with 2020, the number of rewarded achievements increased by 1.4 times.

## Case: BE-EMR, the industry's first intelligent control robot, was launched

In 2021, BE Water developed the industry's first intelligent control robot, BE-EMR. This robot features low energy consumption, stable water output, closed-loop automatic control, strong adaptability and flexible response, which enables the unlimited replication of the wisdom of operation experts at low costs and ensures automatic, efficient and low-carbon operation of all projects. BE-EMR was awarded “the first batch of certified technology products” in the pre-evaluation of technology products in the sewage treatment industry in 2021.

# Solid Waste Treatment Business

In 2021, the Solid Waste Treatment Platform carried out six R&D activities, including sprayed sludge co-combustion, small diesel storage tank VOC emission control, grate full combustion, incinerator high-temperature area anti-coking, igniter area fire control technology, and improvement of boiler incineration during winter in cold areas. As of the end of the Reporting Period, all the six projects had gained acceptance, and the results have been applied to actual production.

## Case: Innovative technical transformation of sprayed sludge co-combustion system in Gao'antun Project under the Solid Waste Treatment Platform

In 2021, thanks to tireless efforts in exploration and testing, the Gao'antun Project under the Solid Waste Treatment Platform completed the technical upgrading of the sprayed sludge co-combustion system to achieve the goal of “reusing waste to treat waste”. The upgraded system can minimize the impact of sludge with high water content on the drying and ignition speed of domestic waste. It is also able to ensure the full combustion of sludge and domestic waste by drying the surface of sludge with high temperature flue gas and flame to improve the capacity of sludge co-disposal.

With the original sludge blending method, the annual sludge receiving and disposal volume was about 70,000 tonnes and the annual power generation volume was about 240 million. After the innovative system is put into operation, the sludge receiving and disposal capacity of Gao'antun Project has been steadily maintained at 100,000 tonnes, which is more than 40% higher than the capacity before, and the annual power generation capacity is more than 250 million, delivering harmless disposal of sludge and serving as a good example for the household waste incineration companies in the co-disposal of domestic sludge.



## Gas Business

### Customer Service

BEHL implements a full-cycle customer service quality management system, closely follows the policies and market trends and deeply analyses the needs of different customer segments. It also strives to improve service quality and customer satisfaction on the basis of product safety by quickly responding to and properly handling customer complaints.

To ensure gas safety for users, Beijing Gas continues to promote periodic free home inspections and gas safety campaigns, enhance the expertise of its service team and establish a fast and effective customer feedback mechanism. It is also actively promoting online service channels to facilitate payment and other matters. In 2021, Beijing Gas conducted 4,000 gas safety activities.

In 2021, in order to improve the service capability and professionalism of the service team, Beijing Gas organized four service training sessions, including the “Sparkle Program”, in which 23 departments and subsidiaries were engaged, and a total of 216 trainees completed the training. For grave misconduct in the service process, Beijing Gas conducts in-depth root cause analysis, uncovers the underlying causes of inadequate services, inappropriate attitudes and safety issues in the key steps, and rigorously implements the assessment and punishment mechanism. By tracing back the wrongful actions, it can pin down the unit, service terminal down to the personnel that should be held responsible.

In 2021, Beijing Gas revised and introduced the *Notice on Further Promoting Immediate Resolution of Complaints from Citizens’ Hotline and the Work Plan* in accordance with the *Guidance on Promoting Immediate Resolution of Complaints for Municipal Enterprises* and other documents. The document specifies the establishment of a management centre to provide immediate resolution of user complaints and a dedicated team under the centre, responsible for implementing the work plan and forming a closed-loop service mechanism with unified scheduling, clear division of labour, rapid response and dedication to solution. During the Reporting Period, Beijing Gas received 8 complaints that needed to be rectified, with the customer satisfaction rate reaching 98.86%.



### Measures Taken by Beijing Gas to Improve Service Quality in 2021

Beijing Gas launched the “Get the Job Done for the Public” campaign. Each month, a theme closely related to people’s well-being is selected with the goal of solving potential issues by taking various actions such as improving technical services, introducing safety guardians into the community, making gas purchase more convenient and replacing coal with gas in rural areas.

Beijing Gas has enhanced intelligent customer service by improving intelligent call-backs and pushing requests to responsible personnel for wider and higher customer satisfaction with Beijing Gas’ services.

Beijing Gas has set up a four-level quality inspection system at the group level, company level, management level and service centre level, and established nine service quality inspection teams, covering walkaround inspection, quality inspection, maintenance quality inspection and window service quality inspection.

Beijing Gas has continuously deepened the comprehensive evaluation of gas service centres, further promoted the in-depth integration of the household business and further promoted the management mode featuring “horizontal and vertical integration”.

Beijing Gas produced and filmed a series of three-part promotional videos covering smart gas meters, self-closing valves, metal-clad hoses, gas stoves with flame failure protection and other essential safety equipment and general knowledge of safe gas use.

### Case: Beijing Gas launched a “Citywide Service Delivery System” for household services to promote online service channels

To meet customer needs, Beijing Gas fully implements a city-wide household service delivery system in 2021, and introduced a first-contact responsibility mechanism for services provided to residential users across unit territories and jurisdictions. Meanwhile, Beijing Gas has promoted the Beijing Gas APP, WeChat and Alipay mini-programs, formulated the installation and maintenance plan for Bluetooth-enabled self-service devices. It has also made an operation and maintenance plan for more than 3,600 devices, and posted usage brochures in neighbourhoods where Bluetooth-enabled or wall-mounted self-service were installed to provide greater convenience for gas purchase and maintain smooth customer communication channels.



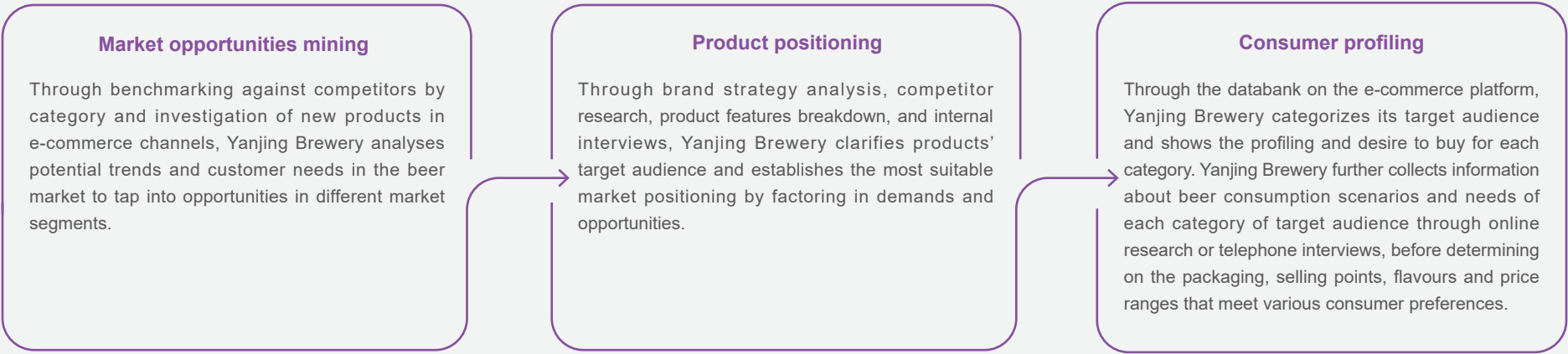
# Beer Business

In the spirit of “Yanjing quality products, brew a good life”, Yanjing Brewery has established a well-designed pre-sales and after-sales service mechanism in accordance with national laws, regulations and industry standards to continuously improve consumer experience. As required by the *After-sales Service Management Policy* and *Complaint Handling Process*, Yanjing Brewery standardizes its after-sales service, improves after-sales service, and sets up a comprehensive approach to handle and track consumer complaints about products. By standardizing the classification of consumer complaints, information statements, handling procedures and related requirements, Yanjing Brewery ensures that consumer concerns are handled and reviewed in a timely manner.

In 2021, Yanjing Brewery continuously optimized the management workflow of customer service providers and follow-up indicators, improved the service of e-commerce stores, and conducted professional training for customer service personnel. The shipment was closely monitored and the processing of after-sales work orders in each store was tracked in real time. Research has been conducted to create a complaint index covering both factory customers and retail consumers, which is used to measure complaints about product quality, identify complaint risks and trends, and continuously improve consumer satisfaction. During the Reporting Period, Yanjing Brewery received a total of 647 complaints, 17 of which occurred in the e-commerce channel. All complaints were resolved based on mutual consensus and all brought satisfactory results, with the overall customer satisfaction reaching 100%.

In order to fully understand consumer needs, Yanjing brewery has carried out in-depth market research covering multiple dimensions such as opportunities, product positioning and consumer profiling to drive the growth of high-quality and high-end products, and to create a sales model catering to the needs of differentiated consumption scenarios.

## Customer Demand Analysis Process at Yanjing Brewery



# Water and Environment Business

To improve the quality of end-user services, BE Water has set up a 24/7 water supply service hotline to ensure the smooth communication regarding water issues raised via the urban management platform, mayor's hotline, social media and other platforms. In response to customer inquiries, suggestions and complaints, BE Water follows up the entire process and provides timely feedback in order to ensure good customer experience and improve customer satisfaction.

BE Water has set up regional companies which are dedicated to full-cycle customer management by strengthening customer interaction, exploring customer needs, and reviewing customer interaction interfaces and processes to improve customer experience. In 2021, with a bigger scope and broader channels including the newly added online questionnaire, BE Water's customer satisfaction surveys covered all government customers across 13 regional companies, and the results revealed that over 90% of customers are very satisfied or satisfied. Moreover, the satisfaction rate among the existing customers of regional companies saw an increase compared with 2020.



BE Water's customer satisfaction rate reached

90%<sup>7</sup>

<sup>7</sup>Note: The remaining nearly 10% of customers rated it as "average".





# Low-carbon Practices

BEHL believes that “public wellbeing depends on environment – the beautiful green mountains and blue skies bring us happiness”. In light of this environmental protection mindset, BEHL regards “innovative solutions to environmental sustainability” as part of its environmental responsibility. In the course of making China a beautiful country, BEHL continuously strengthens its environmental management capability, promotes biodiversity conservation in operation, strives to reduce resource and energy consumption and waste discharge, and actively responds to climate change.

## Major progresses in 2021

- Released the *Biodiversity Conservation Management Policy of Beijing Enterprises Holdings Limited*
- Conducted climate change risk identification and responses based on the TCFD framework
- Beijing Gas set methane emission reduction target: keep the methane emission intensity below 0.12% by 2025 and reduce emission intensity to nearly zero by 2030



# Environmental Management

BEHL continuously improves its environmental management capability and performance, promotes the construction and certification of environmental management systems, and clarifies environmental responsibility governance. Meanwhile, it also strives to protect biodiversity and local ecology in the operation, and continuously strengthen the awareness of environmental management responsibility.

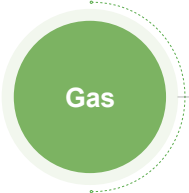
## Implementation of Environmental Management

BEHL strictly follows the *Environmental Protection Law of the People's Republic of China*, the *Law of the People's Republic of China on Prevention and Control of Air Pollution*, the *Law of the People's Republic of China on Prevention and Control of Water Pollution*, the *Law of the People's Republic of China on Prevention and Control of Solid Waste Pollution*, and other relevant laws and regulations. Each business segment has set forth its environmental management system and promoted environmental management system certification to strengthen environmental management.

Striving for effective environmental management, we keep improving the well-defined responsibility system for environmental protection to better clarify the environmental responsibilities of employees. In 2021, in response to the actual needs for safety and environmental protection, BEHL set up a dedicated department in this field to take charge of environmental management in the daily operation.

To prevent the occurrence of environmental violations, BEHL actively promotes the identification of potential risks against environmental protection and environmental management optimization to improve the environmental protection system and guarantee continuous improvement of environmental management. In 2021, BE Environment launched a full investigation to remove the potential risks in the production process and system, which revealed 175 hidden environmental protection issues, all of which have been rectified at present.

## Environmental Management Policy of Each Business Segment at BEHL



- *Energy Management Policy and Energy Conservation and Environmental Protection Work System* are set forth to standardize energy management, improve the management of energy conservation and environmental protection, reduce unnecessary energy consumption and pollutants.



- *Beijing Yanjing Brewery Co., Ltd. Special Response Plan for Environmental Emergencies* and *Beijing Yanjing Brewery Co., Ltd. On-site Response Plan for Environmental Emergencies* have been rolled out.
- The *Emergency Response Plan for Environmental Emergencies of Beijing Yanjing Brewery Co., Ltd.* has been revised.
- The certifications of GB/T24001-2016 /ISO14001:2015 environmental management system and GB/T23331-2020 /ISO 50001:2018 energy management system have been obtained.
- The first company in the industry to obtain the ISO14001 environmental management system certification.
- An environmental protection and energy saving department has been set up to guide and supervise each production department for clean production.
- A centralized management platform and a joint inspection mechanism for exhaust gas and wastewater have been established to improve the joint prevention and control system for environmental protection.



- Created environmental management systems including the *Practices and Measures of Key Control Nodes in Traditional Water Construction Projects*, the *Design Regulations for Urban Sewage Treatment Projects*, and the *Environmental Index Evaluation System in accordance with the National Quality Management System -Requirements* (GB/T19001:2016) and the *National Environmental Management Systems - Requirements with Guidance for Use* (GB/T24001:2016).
- BE Water obtained the ISO14001 environmental management system certification.



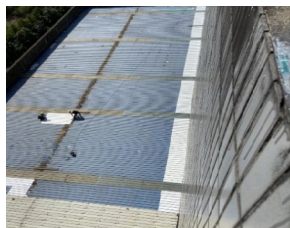
- A variety of regulations such as *Environmental Management Policy*, *Environmental Assessment Standards and Environmental Reward and Punishment Policy* have been formulated to ensure that responsibilities are attributed to individuals with fair rewards and punishments.
- 11 subordinate project companies have obtained the environmental management system certification, and 5 are renewing the certification.

### Case: BE Environment carried out identification of potential risks against environmental protection and environmental management optimization

In 2021, BE Environment carried out the identification of potential risks against environmental protection, and comprehensively investigated the hazards in environmental protection facilities, systems and equipment related to exhaust gas, wastewater and hazardous waste; it improved environmental management capability through precision/digitized/standardized management.

#### Leak detection of the ceiling of a garbage station and odour control at a sewage treatment station at the Changde Project

Staff of the Changde Project blocked the leaks after using specialized devices to inspect and examine the ceiling of the garbage station in question. Through multiple investigations, all leaks in the sewage treatment station were double-blocked and new double-film biogas bags were installed, which substantially reduced the odour.



Leaks of the garbage station were blocked



The double-film biogas bag was replaced

#### Xixian New Area Project carried out identification of soil pollution hazards

Xixian New Area BE Environment Technology Co., Ltd. (hereinafter referred to as Xixian New Area Project) carried out an inspection into potential risks arising from soil pollution across the key scopes and areas of the plant. Through this inspection, Xixian New Area Project is able to identify the potential risks and take pre-emptive correction actions before the soil pollution risks expand, which has effectively mitigated or eliminated hazards to soil contamination.



The inspection of potential risks from soil pollution



Inspection Report on Potential Risks for Soil Pollution

#### Changde Project carried out environmental management optimization

The Changde Project carried out a series of environmental management optimization activities in 2021, including purchasing the 24-hour waste gas early warning service, and fine-tuning the environmental protection indicators displayed by the DCS (distributed control system) to lower the possibility of the hourly value of exhaust gas pollution sources exceeding the standard at the source; the sprayed calcium hydroxide volume of the nebulizer in the semi-dry deacidification tower of boilers used to be controlled manually via the DCS but is now automatically controlled by the DCS after a technical upgrade, which ensures a long-term and stable discharge that meets environmental protection indicators and reduces the amount of calcium hydroxide used.

### Stronger Ecological Protection

In response to the national call to “build a beautiful homeland in harmony with all creatures” and the United Nations’ Sustainable Development Goals (SDG 15: Life on Land), BEHL has rolled out the *Biodiversity Conservation Management Policy of Beijing Enterprises Holdings Limited* to coordinate biodiversity conservation and economic development while complying with biodiversity conservation initiatives in its operating locations. This policy applies to BEHL and all its domestic and overseas subsidiaries. In addition to this policy, BE Water has formulated the *BE Water Source Management Policy* and *BE Water Biodiversity Conservation Management Measures* to further promote biodiversity conservation and ecological civilization.

In 2021, we carried out biodiversity importance assessment for 5 project sites that cover a total area of 87,886.17 hectares, including 1 project site adjacent to a national biodiversity priority area. We also developed a biodiversity management and conservation plan involving 1 project site with a total area of 34,887 hectares. In 2021, the percentage of newly built, renovated and expanded projects under BEHL that carried out environmental impact assessment was 100%.

#### We promise to:

- give priority to biodiversity conservation in economic growth;
- ensure that every project will generate good ecological benefits, integrate biodiversity conservation into the design, construction, operation and maintenance of projects across all business segments, conduct regular biodiversity assessments and information disclosure, and subject ourselves to stakeholder scrutiny;
- steer clear of operations/exploration/exploitation/drilling in World Heritage areas and Category I-IV protected areas identified by IUCN (International Union for Conservation of Nature);
- respect the traditions of ethnic minorities and try our best to avoid or minimize the impact on local communities during the construction or operation of projects.



To deliver good ecological and social benefits, BEHL has integrated the ecological protection measures throughout the entire cycle of all projects and implemented a three-stage initiative to deepen the ecological protection in the area where a project is undertaken.

BEHL Ecological Protection Measures



Pre-project

- Thorough identification of environmental factors
- Scientific and reasonable site selection
- Eviction of wild animals inhabiting the project construction area in advance



Mid-project

- Developing environmental protection facilities operation and maintenance plans
- Regularly carrying out inspection of environmental protection hazards
- Conducting targeted education for employees on environmental protection and animal protection to raise their awareness of ecological protection



Post-project

- Restoring the vegetation and green landscape within the project area to avoid damage to the local ecosystem

Case: In-situ water ecology restoration technology adopted by BE Water significantly enhanced biodiversity

In 2021, BE Water applied the in-situ water ecology restoration technology to successfully restore the water environment of the re-routed section of Xiaotaihou River around Universal Studios Beijing. This technology has not only eliminated the black and odorous water bodies in the demonstration section and made the water quality index more than 20% higher than that of the upstream water, but also increased the biodiversity of various species and populations by 2-6 times. The ecological landscape of the demonstration section has been significantly improved with positive impact on the downstream watercourse as well. BE Water also applied its in-situ water ecology restoration technology to Shaping River in Heshan City, Guangdong Province and Xinfeng River Basin in Daxing District, Beijing, helping to improve water quality and significantly increase biodiversity in the rivers, for example, a 143% increase in the level of polymorphism in Shaping River and a 200% increase in the comprehensive health index of water ecology in Xinfeng River.



Green Sandpiper



Upland Buzzard



Common Moorhen



Short-eared Owl



Mayfly



Little Grebe



Oryzias sinensis

New bird varieties that inhabit Xiaotaihou River after the technology adoption

# Green Operation

BEHL attaches importance to strengthening energy resource management, actively practices optimal resource allocation in production and operations, continuously improves energy use efficiency and strives to minimize emissions of pollutants and waste. At the same time, we implement green office initiatives to promote green and sustainable operations.

## Energy Conservation and Consumption Reduction

BEHL strictly abides by the *Energy Conservation Law of the People's Republic of China* and other laws and regulations, and each business segment has formulated a system related to energy conservation and consumption reduction. Beijing Gas has formulated the *Energy Conservation and Environmental Protection Work System*, which requires prioritization of clean energy in daily life, production and construction and the adoption of processes with high resource utilization efficiency and low pollutant emissions or discharges. In 2021, we adopted upgrading energy-saving technology and utilized clean energy to increase energy efficiency and reduce energy consumption as much as possible in order to maximize gains. In 2021, the renewable energy used by BEHL was 375,728.9 MWh, 37.3 MWh of which was used by the gas segment and 375,691.6 MWh by the solid waste treatment segment.

## Energy Conservation and Consumption Reduction of Each BEHL Business Segment

### Gas

Beijing Gas established a smart energy management platform and a regional multi-energy-coupling energy network, leading the green and low-carbon and circular development.

China Gas built a coal-to-gas control system and enhanced its technical expertise in natural gas storage and transportation.

### Beer

Established an Environmental Protection and Energy Conservation Department as the major competent department for environmental protection and promoted the construction of a green manufacturing system; carried out energy consumption benchmarking and continued to study energy consumption and utilization to spot areas with potential for further energy saving.

Strictly followed the principles of reduction, reuse and recycling, launched a special CO<sub>2</sub> recycling program, improved the energy metering system and the Energy Management System (EMS).

### Water and Environment

Formulated standard procedures such as the *Procedures for Project Operation Control* and the *Procedures for Performance Monitoring and Control* to continuously optimize energy and resource consumption.

### Solid Waste Treatment

Each project company established a leading group for energy conservation and incorporated energy conservation into its own important agendas.

## Major Resources and Energy Utilization by BEHL Business Segments

Indicator	Unit	2021	2020
<b>Gas business<sup>8</sup></b>			
Purchased electricity	10,000 kWh	1,688.2	1,560.9
Outsourced heat	GJ	44,794.2	45,672.1
Natural gas usage	10,000 cubic meters	248.8	222.7
Liquefied petroleum gas usage	tonnes	2.1	3.7
Gasoline usage	KL	813.3	786.6
Diesel usage	KL	48.9	47.3
Fresh water consumption	10,000 tonnes	23.5	24.0
<b>Beer business</b>			
Purchased electricity	10,000 kWh	33,643.2	29,818.5
Purchased industrial steam	tonnes	266,903.9	276,346.4
Natural gas usage	10,000 cubic meters	12,137.5	10,822.2
Coal consumption	10,000 tonnes	6.0	8.7
Gasoline usage	KL	1,180.4	575.4
Diesel usage	KL	90.5	401.5
Fresh water consumption	10,000 tonnes	2,084.2	1,784.2

<sup>8</sup> Note: All gas business data in the Low-carbon Practices section covers only Beijing Gas.

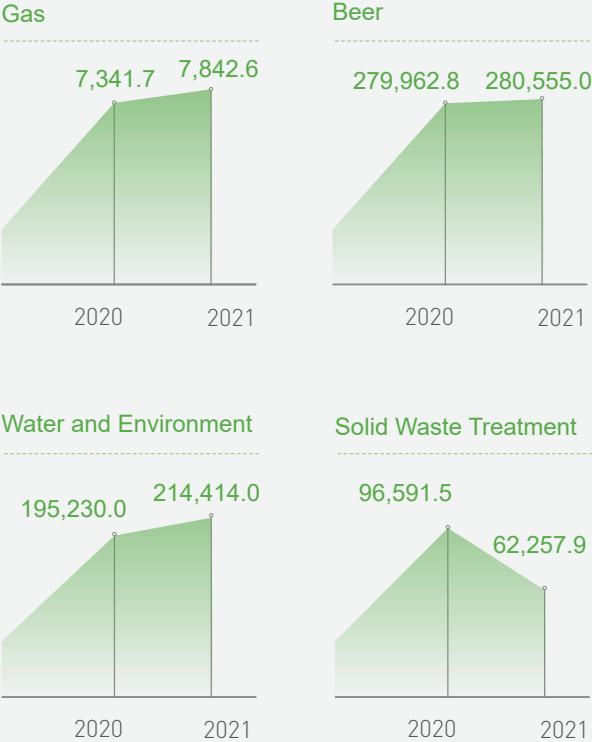
Indicator	Unit	2021	2020
<b>Water and Environment business<sup>9</sup></b>			
Purchased electricity	10,000 kWh	169,898.0	155,890.5
Purchased industrial steam	GJ	10,005.0	4,121.0
Natural gas usage	10,000 cubic meters	201.9	125.8
Gasoline usage	tonnes	581.0	564.0
Diesel usage	tonnes	782.0	586.0
Fresh water consumption	10,000 tonnes	461.2	308.3
<b>Solid Waste Treatment business<sup>10</sup></b>			
Purchased electricity	10,000 kWh	2,528.7	3,233.3
Purchased industrial steam	tonnes	-	581.5
Natural gas usage	10,000 cubic meters	1,839.5	1,654.3
Liquefied petroleum gas	tonnes	47.6	7.9
Coal consumption	tonnes	34,002.8	90,870.6
Gasoline usage	KL	3.9	108.4
Diesel usage	KL	27.1	4,477.4
Fresh water consumption	10,000 tonnes	352.6	442.5

<sup>9</sup> Note: As a result of the clarified and revised statistical caliber of energy consumption indicators for water and environment business in 2021, some indicator data in 2020 changed.

<sup>10</sup> Note: Solid waste business data covers BE Environment, BEHET, and EEW GmbH. Fresh water consumption statistics do not include EEW GmbH.



### Total Energy Consumption of BEHL Business Segments in 2020-2021 (tonnes of standard coal)<sup>11</sup>



<sup>11</sup> Note: The comprehensive energy consumption was calculated according to the General Principles for Calculation of the Comprehensive Energy Consumption (GB/T2589 2020). As a result of the clarified and revised statistical caliber of energy consumption indicators for water and environment business in 2021, the indicator data in 2020 changed.

### Case: Multiple measures taken in beer business to save resources

In 2021, the beer business segment promoted energy conservation and improved energy utilization efficiency through such measures as production process control, application of energy-saving and environmental protection equipment, and energy recycling.

#### Production process control

- The Beijing plant of Yanjing Brewery saved 3.33 million cubic meters of natural gas by standardizing the boiler start-up and shutdown procedures and reducing the pollutant discharge rate.

#### Application of energy-saving and environmental protection equipment

- The Xiandu Company of Yanjing Brewery suspended the use of 3 high-energy-consuming screw air compressors, and purchased two new screw compressors, reducing electricity consumption by 10%.
- The Xuelu Company of Yanjing Brewery applied screw air compressors to improve operating efficiency and reduce electricity consumption, which is expected to reduce the electricity bill by RMB200,000 a year.
- The Hebei Glass Company of Yanjing Brewery introduced special technical services for electricity saving, reducing the electricity bill by about RMB510,000 from July 2020 to June 2021.

#### Energy recycling and utilization

- To avoid energy waste and reduce greenhouse gas emissions, the Xiandu Company of Yanjing Brewery recycled the biogas generated in the wastewater treatment process as the energy source for biogas-fuelled boilers. The biogas recycling project saved about 100,000 cubic meters of natural gas in 2021.
- In July 2021, the Liquan Company of Yanjing Brewery completed the transfer of the recycled high-temperature condensed water to the sterilizer in the packaging workshop for heat exchange, replacing the use of steam. The condensed water recycling project saved 4,800 tonnes of steam in 2021.

Case: Beijing Gas expanded the use of renewable energy and promoted energy conservation and emission reduction

In 2021, Beijing Gas applied geothermal energy, solar energy and other renewable energy sources to continuously explore the development and utilization methods as well as application scenarios of renewable energy, expand the application scope of renewable energy and promote energy conservation and pollutant emission reduction.

Centralized energy supply project for Huaibei Science City Innovation Town and Huairou South Station TOD

Beijing Gas and Beijing Changcheng Weiye Investment and Development Co., Ltd. established a joint venture to invest in the centralized energy supply project for Huaibei Science City Innovation Town and Huairou South Station TOD. The project has achieved a 100% clean energy utilization rate, a 24.2% renewable energy utilization rate, and a comprehensive energy utilization rate higher than 70%, bringing about substantial environmental benefits with the emission reduction of CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and dust by 6,000, 50, 50 and 25 tonnes respectively, and greatly reducing the harm of the project emission to the environment.



Huaibei Science City Innovation Town



Planning map for Huaibei Science City Innovation Town and Huairou South Station TOD

Xijiang Station Green Energy Application Project in Nanjing Pukou High-tech Zone

The Xijiang Station project adopts the heat-source-tower heat pump to deal with the basic cooling and heating loads, raising the project's clean energy utilization rate to 100%, the renewable energy cooling rate to 52.5%, the renewable energy heating rate to 56.1%, the comprehensive cooling efficiency to 2.86, and the comprehensive heating efficiency to 1.09. This system also reduces consumption by 840 tonnes of standard coal, CO<sub>2</sub> emission by 2,201 tonnes, SO<sub>2</sub> emission by 25.2 kg, NO<sub>x</sub> emission by 30.2 kg, and soot emission by 9.24 kg on average each year.



The Xijiang Station project adopts the heat-source-tower heat pump to deal with the basic cooling and heating loads, raising the project's clean energy utilization rate to

100%

Photovoltaic project construction in self-owned plants and stations

Beijing Gas focuses on promoting the construction of photovoltaic projects in its own plants and stations, and has developed distributed photovoltaic projects such as photovoltaics for rural households and Yanjing Brewery, and Tianjin Nangang LNG receiving station, with a total investment of RMB200 million, an installed capacity of 48 megawatts, and an average annual power generation of 57.6 million kWh. This can reduce consumption by 23.04 million tonnes of standard coal, and cut the emission of CO<sub>2</sub>, SO<sub>2</sub>, dust, and NO<sub>x</sub> by 57.4272 million, 1.728 million, 15.6672 million, and 864,000 tonnes respectively on average each year, greatly reducing energy consumption and delivering visible environmental benefits.



Distributed power generation project

**Case: BE Water vigorously promoted the use of clean energy and renewable energy in water projects**

To optimize the energy consumption structure, BE Water widely uses solar energy, ground-source heat pumps and water-source heat pumps in water projects to replace coal and electricity consumption. As of the end of December 2021, more than 50 water plants of BE Water had adopted photovoltaic technologies, with a total installed capacity of more than 30 MW. BE Water has applied water-source heat pumps in Qinhuangdao Haigang District West Wastewater Treatment Plant, Beijing Daoxiang Lake Wastewater Treatment Plant and Hangzhou Yuhang Wastewater Treatment Plant, using the water recycled from wastewater as the heat source of water-source heat pumps. This has provided heating and cooling for office buildings, production facilities and living areas, and effectively reduced carbon emissions.



Distributed photovoltaic power generation project

**Case: Solid Waste Treatment Platform adopted new-energy street lamps to reduce electricity consumption for lighting**

In 2021, the Changde Project of BE Environment invested RMB6,400 to replace 8 sets of ordinary street lights with street lights powered by solar and wind energy, which will subsequently save 2,920 kWh of electricity a year; the Xixian Project of Beijing Enterprises Holdings Environment Technology Co., Ltd. invested RMB370,000 to replace 80 ordinary street lights with solar street lights, which are automatically controlled by light-controlled timing switches and can save electricity of about 28,000 kWh a year.



Solar street lights of the Changde Project of BE Environment

**Resource Utilization**

BEHL has attached great importance to resource conservation, especially the conservation and recycling of water resources and production consumables in production and operation, and adopted precision management for various resources to improve the resource management efficiency.

As a National Green Factory, Yanjing Brewery has paid great attention to and stayed committed to promoting the conservation of resources such as water and packaging materials in the production process. In 2021, the project companies under Yanjing Brewery adopted a variety of ways to save water resources and packaging materials and strengthen their management capability in resource utilization.

**Resource-saving Measures Adopted by Yanjing Brewery in 2021**

**Water conservation**

- The Beijing plant of Yanjing Brewery saved 708,000 tonnes of water through such measures as improving the recycling rate of condensed water, recycling the water from packaging vacuum pumps and from packaging and bottle washing machines, and strengthening internal management.
- The Xuelu Company of Yanjing Brewery reused 12,000 tonnes of water recycled from wastewater.
- The Xiandu Company of Yanjing Brewery conducted water-saving management through such measures as installing water meters for water use procedures and water use equipment, fully collecting rainwater as an unconventional water resource in the plant, and building a secondary water recycling and booster system with a recycling capacity of 500 tonnes per day. In 2021, the Xiandu Company passed the re-examination of eligibility for Water-saving Enterprises in Zhejiang Province.

**Packaging material conservation**

- The Liquan Company of Yanjing Brewery completed the speed matching renovation for conveyor belts in three workshops in 2021, to reduce the number of defective bottles of beer due to crooked caps, air leakage, and scratched caps and the loss incurred by flying caps during the capping process. In 2021, this renovation project decreased the cap loss by 0.19% year-on-year, and directly saved 544,000 bottle caps.



### Case: Solid Waste Treatment Platform implemented water-saving renovation and wastewater recycling to improve water resource utilization

In 2021, the Solid Waste Treatment Platform took multiple measures to implement water-saving renovation and wastewater recycling to improve water resource utilization.

#### Water-saving renovation

The Xixian Project of Beijing Enterprises Holdings Environment Technology Co., Ltd. invested more than RMB6 million to purchase 4 sets of plume abatement devices for cooling towers, which save water of 400 tonnes a day, equivalent to an annual water saving of about 102,000 tonnes and a reduction of water bills by about RMB510,000.

#### Sewage recycling project of BE Environment

In 2021, the Changde Project recycled sewage after compliant treatment, saving about 69,000 tonnes of tap water. The treated effluent water of the Tai'an Project was all reused in the production process system, saving 56,842 tonnes of water resources for the year. All reclaimed water of the BEGSE project was reused in the production system, saving 93,468 tonnes of water and RMB233,670 for the whole year.



## Emission Reduction and Pollution Control

To effectively control the pollutant discharge in operation and reduce the impact of production and operation on the environment as much as possible, BEHL ensures the up-to-standard and legal discharge of “three wastes” (wastewater, waste gas, and solid waste) and reduces pollutant discharge through scientific project design, effective operation management, strict end-of-pipe control, and regular monitoring on the three industrial wastes. We have achieved a 100% classification, recycling, comprehensive utilization and bio-safety disposal rate for solid waste.

In 2021, the Solid Waste Treatment Platform continued to promote the standardized waste management and strictly regulated the process of waste collection, storage and disposal. BE Environment has established a record for the standardized hazardous waste management, implemented dynamic monitoring, and managed the whole process of the generation, transfer and disposal of hazardous wastes, requiring all project companies to conduct full-coverage management of hazardous wastes. In December 2021, the project of BEGSE was awarded the title of “Two Centenaries” Model for Large-scale Waste Incineration for Power Generation with Public Engagement, and was included in the E20 Excellent Solid Waste Treatment Cases.



The project of BEGSE was awarded the title of Model for Large-scale Waste Incineration for Power Generation with Public Engagement

### Case: Gao'antun Exhaust Gas Management of BE Environment

In 2021, Gao'antun Exhaust Gas Management of BE Environment stepped up the introduction of waste gas management equipment, and adopted targeted exhaust gas management in different areas of the project to minimize exhaust gas emissions.

#### Construction area

Purchasing fixed high pressure long-range deodorant sprays with a certain proportion of deodorant added, and conducting atomized spray in the areas prone to particulate matter generation and areas prone to construction-induced particulate matter generation.


#### Factory wall

Installing a smart deodorizing spray system to greatly curb the drifting of particulate matter.


#### Area within the plant boundary

Deploying sprinklers to spray water continuously in the area within the plant boundary.


“Three Wastes” Treatment and Management in BEHL Business Segments

Gas

- Signed the *Guiding Principles on Reducing Methane Emissions across the Natural Gas Value Chain*.
- Counted and calculated methane emissions.

Beer

- Established a centralized control platform for exhaust gas and wastewater in line with industry standards such as the *Clean Production Standards for Brewing Industry* and the *Discharge Standards for Pollutants of Beer Industry* (GB 19821-2005) to ensure that all indicators meet the standards; strengthened the control of pollutant discharge and improved wastewater treatment capacity.
- Carried out special recycling and treatment of residual trademarks and broken beer bottles.

Water and Environment

- Strictly abided by relevant national and local standards such as the *Discharge Standards of Pollutants for Municipal Wastewater Treatment Plants* (GB18918-2002), implemented strict operational emission management, and controlled five kinds of pollution: atmospheric pollution, water pollution, noise pollution, light pollution, and waste.
- Formulated internal management regulations such as the *Guidebook for Safe and Civilized Construction of Urban Water Projects* and the *Manual of BE Water for Civilized Construction*, and set up working groups of construction project emission reduction to strictly control the discharge of various pollutants.

Solid Waste Treatment

- Worked in accordance with laws and regulations including the *Standards for Pollution Control of the Municipal Solid Waste Incineration* (GB18485-2014), the *Pollution Control Standards for Hazardous Waste Incineration* (GB18484-2001), and EU 2000/76/EC & 2010/75/EC, conducted online monitoring of the exhaust gas generated during operation and connected it with the environmental protection department in real time, and continuously upgraded the flue gas purification process and equipment to reduce the concentration of pollutants in the flue gas.
- Exhaust gas is mainly the waste gas (dioxin, carbon monoxide, nitrogen oxides, sulfur dioxide, soot, hydrogen chloride, etc.) generated during domestic waste incineration, which is discharged up to the standard after treatment. Among them, fly ash is transferred to the domestic waste landfill after being chelated and solidified in the fly ash solidification workshop and stabilized for 3 days. Part of the raw ash is transferred by qualified third-party institutions to cement kilns for co-processing.
- Wastewater is mainly the leachate generated from the accumulation of domestic waste and is reused after collection and treatment by the sewage treatment station.
- General wastes are mainly sludge and kitchen waste, which is treated through incineration; hazardous wastes are mainly fly ash from domestic waste incineration, waste engine oil, waste catalyst and laboratory waste liquid, etc., which are entrusted to qualified third-party institutions for treatment.

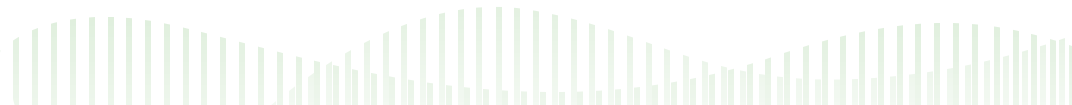
## Waste Discharge of BEHL's Business Segments in 2020-2021

Indicator		Unit	2021	2020
Beer business				
Wastewater	Effluent wastewater	10,000 tonnes	1,398.4	1,494.6
	COD	tonnes	581.4	637.2
	Ammonia nitrogen	tonnes	30.4	36.7
	Total phosphorus	tonnes	43.4	-
Exhaust gas	Exhaust gas	million cubic meters	2,313.4	2,844.9
	Nitrogen oxides	tonnes	259.0	337.6
	Sulfur dioxide	tonnes	197.0	111.3
Hazardous solid waste	Waste lubricating oil, etc.	tonnes	413.3	414.5
Non-hazardous solid waste	Waste glass	10,000 tonnes	5.1	-
	Waste wheat grains, waste hops, coagulum and waste yeast, etc.	10,000 tonnes	18.7	21.5
Water and Environment business <sup>12</sup>				
Wastewater	Effluent wastewater	10,000 tonnes	-	0.3
Exhaust gas	Nitrogen oxides	tonnes	305.0	194.0
	Sulfur oxides	tonnes	37.0	21.0
Hazardous solid waste	Hazardous waste generated by sewage treatment process, etc.	tonnes	199.0	205.0
Non-hazardous solid waste	Sludge, etc.	10,000 tonnes	255.6	205.2

Indicator		Unit	2021	2020
Solid Waste Treatment business <sup>13</sup>				
Wastewater	Effluent wastewater	10,000 tonnes	111.8	88.9
	COD	tonnes	10.4	71.7
	Ammonia nitrogen	tonnes	1.1	2.2
Exhaust gas	Exhaust gas	million cubic meters	16,133.7	18,937.5
	Nitrogen oxides	tonnes	2,938.8	5,356.0
	Sulfur dioxide	tonnes	363.5	598.9
	Dioxin	milligram	290.7	450.8
	Soot	tonnes	84.4	138.3
Hazardous solid waste	Fly ash, etc.	10,000 tonnes	52.8	53.7
Non-hazardous solid waste	Slag, etc.	10,000 tonnes	273.0	219.1
Gas business				
Hazardous solid waste	Waste filter element, etc.	tonnes	15.0	-
Non-hazardous solid waste	Waste soil and stone, etc.	10,000 tonnes	12.1	-

<sup>12</sup> Note: 2021, As a result of the clarified and revised statistical caliber of waste discharge indicators for water and environment business in 2021, some indicator data in 2020 changed.

<sup>13</sup> Note: The solid waste treatment segment data covers BE Environment, BEHET, and EEW GmbH, where exhaust gas statistics do not include EEW GmbH.





# Green Office

Besides energy conservation and consumption reduction during production, BEHL also vigorously advocates for and advances green and low-carbon office. To that end, it formulated the *Regulations for the Management of Company Vehicles and Drivers (Trial)*, the *Management Measures for Video Conference Systems*, and the *Regulations for the Management of Local Area Networks and Office Automation Systems*. We also focus on promoting water saving, electricity saving, office consumables saving and green travel in daily office and work settings and strengthening the awareness of energy saving and environmental protection among employees so that they can attend to green office even in daily details.

## Green Office Measures of BEHL

### Electricity conservation

- Strengthening the management of electrical equipment to avoid long-term standby
- Replacing existing bulbs with energy-saving ones and using more energy-efficient office equipment
- Controlling air conditioning time and setting the temperature range for air conditioning use in winter and summer respectively

### Water conservation

- Strengthening the regular maintenance of water-using equipment, posting water-saving signs, and advocating multi-purpose use of water

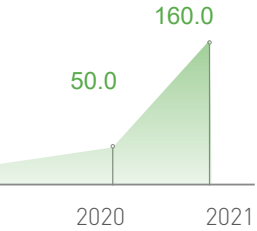
### Consumption reduction

- Implementing online paperless processes in offices
- Collective procurement of office supplies in uniform specifications to reduce replacement and maintenance loss
- Unified management of company vehicles, reduction of unnecessary trips and gradual switch to electric vehicles

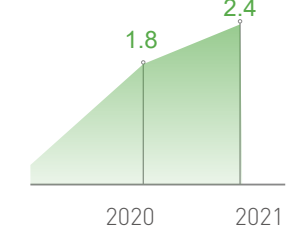
In 2021, to continuously raise employees' awareness of energy conservation, Beijing Gas, echoing the Publicity Week theme of "Energy Conservation and Carbon Reduction for Green Development", compiled the Low-Carbon and Environmental-Protection Publicity Manual and the Energy Conservation and Environmental Protection Knowledge Quiz, and carried out a series of activities such as the quiz and the publicity film watching, which were all intensified publicity efforts to raise all employees' awareness of energy conservation.

## Main Environmental Data of BEHL Headquarters Offices 2020-2021<sup>14</sup>

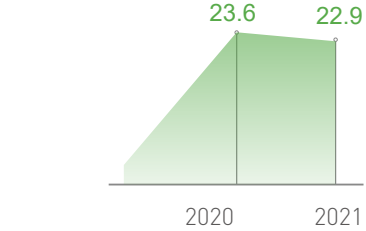
### Electronic waste (kg)



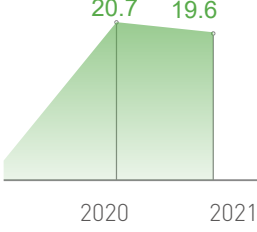
### Office paper usage (tonnes)



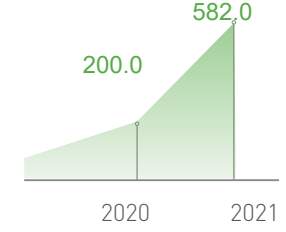
### Purchased electricity (10,000 kWh)



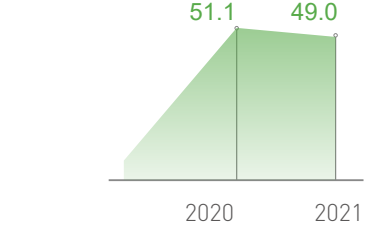
### Gasoline usage (KL)



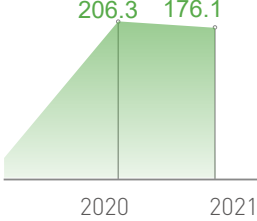
### Fresh water consumption (tonnes)



### Comprehensive energy consumption (tonnes of standard coal equivalent)



### Greenhouse gas emission (tonnes of carbon dioxide equivalent)



<sup>14</sup> Note: The statistics of the office buildings cover the Hong Kong headquarters office and the Beijing headquarters office. The calculation method of greenhouse gas emissions is consistent with the calculation method of Beijing Gas and the solid waste treatment segment.

# Response to Climate Change

Against the background of the national initiative of “carbon peaking by 2030 and carbon neutrality by 2060” and the frequent occurrence of extreme weather events, BEHL attaches importance to its climate change governance; in accordance with the framework and recommendations of the Task Force on Climate-related Financial Disclosure (TCFD), BEHL is gradually improving its overall capabilities in the four aspects of governance, strategy, risk management, metrics and targets and actively promoting the development of clean energy, in a bid to make its due contribution to addressing global climate change.

## Climate Governance

Viewing climate change risks as an important concern, BEHL has integrated them into its daily operations and development strategies. Based on the sustainable development system of BEHL, we have established a climate change governance system that covers the Board of Directors and all functional departments and all subsidiaries to decide on and implement climate change-related matters of BEHL.

### Climate Change Risk Governance System of BEHL

- Sustainable Development Committee

The highest decision-making body for BEHL’s climate change work, coordinating the overall planning of related work and approving climate change strategy and targets
- Sustainable Development Working Group


Responsible for the organization, implementation and coordination of the climate change work plan, regularly monitoring initiatives against climate change risks and risk changes, and reporting to the Board of Directors
- Focal points of sustainable development from departments and offices of the headquarters and the sustainable development working group of subsidiaries


Responsible for the day-to-day management and implementation of climate change work, and facilitating all functional departments and subsidiaries to identify climate change risks and take countermeasures





# Response Strategies


In 2021, we actively identified and analysed initially the potential physical risks and transition risks, and developed countermeasures and strategies for the identified risks to improve our ability to adapt to climate change. In addition, we identified the degree of impact of seven kinds of physical risks and drew a map of BEHL's business distribution on which the physical risks for each business region and their relevance are marked.



Typhoon



Extreme cold


Extreme precipitation

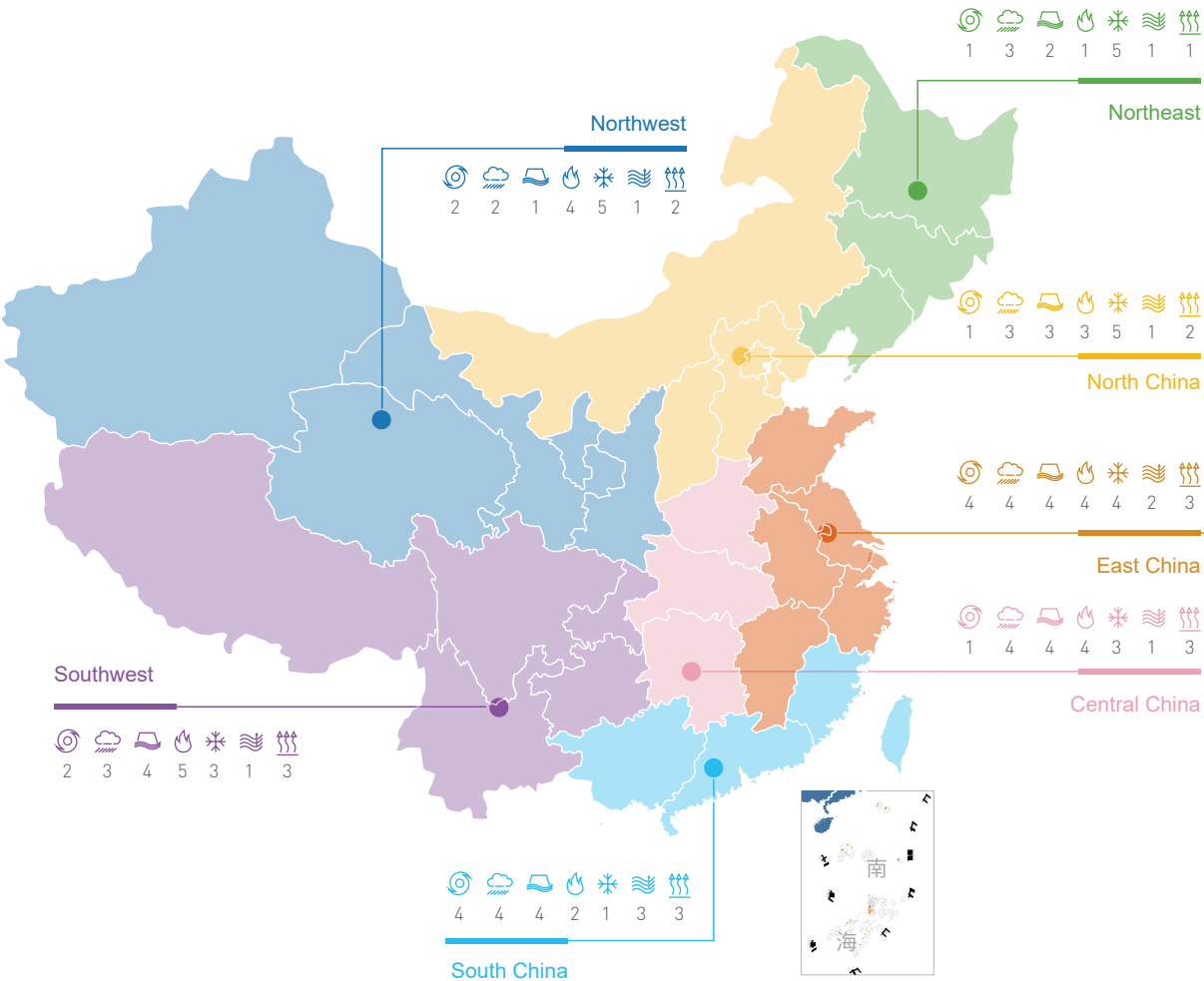

Rising sea levels


Flood


Warming


Extreme heat

Relevance of Each Physical Risk for Each BEHL Business Region





## Climate Change Risks Identified and Response Strategies of BEHL

Risk category		Risks	Response Strategies
Acute risks	Extreme precipitation/flood	<ul style="list-style-type: none"> <li>The cost of repairing or replacing damaged or destroyed equipment</li> <li>Safety risks to customers, employees and the public</li> </ul>	<ul style="list-style-type: none"> <li>To strictly implement the shutdown and evacuation system in extreme weather and the system of assigning staff on duty in the flood season</li> <li>To make emergency plans for extreme precipitation</li> </ul>
	Extreme heat	<ul style="list-style-type: none"> <li>Greater safety risks for workers working outdoors</li> <li>Higher maintenance cost of gas supply equipment and higher operating cost of ventilation equipment in stations</li> </ul>	<ul style="list-style-type: none"> <li>To skip high-temperature periods when making work schedule</li> <li>To carry out equipment safety patrol and inspection</li> <li>To make an emergency plan for heat stroke</li> </ul>
	Extreme cold	<ul style="list-style-type: none"> <li>Fluctuation of natural gas demand affects its supply stability</li> <li>Greater damage and loss of gas supply pipeline facilities and greater safety risks of workers working outdoors</li> </ul>	<ul style="list-style-type: none"> <li>To strictly implement various safety precautions against snow and icy roads and take emergency measures in time</li> <li>To carry out daily equipment safety patrol and inspection</li> </ul>
	Typhoon	<ul style="list-style-type: none"> <li>Greater cost of building design and building materials to cope with strong winds</li> <li>Damage and loss of equipment and greater safety risks to customers, employees and the public</li> </ul>	<ul style="list-style-type: none"> <li>To continue to improve the typhoon emergency plan</li> <li>To actively cooperate with meteorological departments and pay attention to typhoon progress in real time</li> </ul>
Chronic risks	Sea level rise	<ul style="list-style-type: none"> <li>The migration of investment and commercial activities to inland regions, and the impact on the existing market</li> <li>The need to consider the impact of sea level rise for site selection and design of new projects</li> </ul>	<ul style="list-style-type: none"> <li>To regularly monitor the sea level rise over the long term, study the product transportation and export routes to reduce the impact caused by the interruption of logistics routes</li> </ul>
	Global warming	<ul style="list-style-type: none"> <li>Global warming may reduce the gas consumption of customers and increase the maintenance cost of gas supply facilities</li> </ul>	<ul style="list-style-type: none"> <li>To include climate risk factors into future project construction and equipment procurement considerations</li> </ul>
Policy risk	Energy structure risk	<ul style="list-style-type: none"> <li>China and the European Union introduced a package of energy policies, which may affect the energy consumption structure of BEHL, resulting in increased operating costs and compliance risks</li> </ul>	<ul style="list-style-type: none"> <li>To formulate carbon-neutrality planning and path, and publicly publish policies related to low-carbon management</li> <li>To use more renewable energy</li> </ul>
	Environmental disclosure compliance risk	<ul style="list-style-type: none"> <li>The international or local regulatory authorities, and capital market rating guidelines, among others, all pay more attention to corporate efforts to cope with climate change or their carbon emission reduction</li> </ul>	<ul style="list-style-type: none"> <li>To disclose environmental information according to compliance requirements</li> <li>To conduct assessment of climate change risks and opportunities</li> </ul>
Technology risk	Low-carbon equipment transformation and improvement cost risk	<ul style="list-style-type: none"> <li>The promotion of carbon emission reduction targets will require low-carbon upgrading and transformation of production equipment, which will lead to an increase in R&amp;D cost and investment cost</li> </ul>	<ul style="list-style-type: none"> <li>To actively follow the latest progress of low-carbon technology</li> <li>To strengthen the R&amp;D or introduction of energy-saving and emission-reducing equipment</li> </ul>
Legal risk	Pollutant discharge compliance risk	<ul style="list-style-type: none"> <li>The increasingly strict environmental regulation and emission standards will add to the compliance cost of enterprises</li> </ul>	<ul style="list-style-type: none"> <li>To constantly follow the legal content related to climate change and adjust the operation plan</li> </ul>
Market risk	Demand and supply risk of natural gas	<ul style="list-style-type: none"> <li>Natural gas business may embrace market opportunities, which will lead to gas supply fluctuations and equipment upgrading</li> </ul>	<ul style="list-style-type: none"> <li>To carry out short-, medium- and long-term forecast of natural gas business, and make relevant moves and preparations in advance</li> </ul>
	Cost risk of solid waste treatment	<ul style="list-style-type: none"> <li>With the increasing demand for solid waste treatment and ecological restoration in China, the solid waste business, water business and other business operations will be influenced</li> </ul>	<ul style="list-style-type: none"> <li>To improve the ecological environment protection in related business operations</li> </ul>
Reputation risk	Risk of stakeholder communication	<ul style="list-style-type: none"> <li>BEHL's performance in environmental protection and carbon emission reduction may not meet the expectations of stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>To strengthen communication with stakeholders and adjust environmental protection and carbon emission reduction measures</li> </ul>

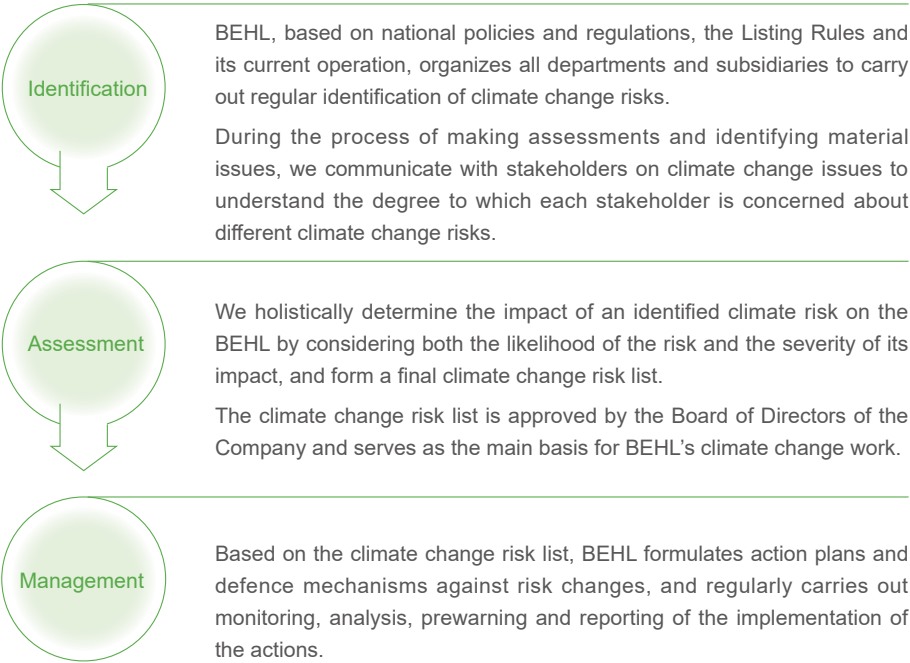
Climate Change Opportunities Identification of BEHL

Opportunity		Opportunity description
Resource efficiency	Production process energy efficiency opportunity	By improving resource and energy efficiency in production, distribution, buildings, equipment and transportation, we can reduce operating costs.
	Natural gas supply opportunity	As the most important product of the gas segment under BEHL, natural gas is the cleanest fossil fuel and has created environmental benefits in terms of air quality and greenhouse gas emissions.
Sources of energy	Opportunity for the transition to renewable energy	In terms of energy use, the transition to low-emission energy (renewable energy) is a great transition opportunity that we need to consider.
	Product carbon footprint opportunity	Creating and developing new low-emission products and services help us better meet the needs of customers and the market.
Products/ services	New business opportunity	Actively seeking new markets or new assets will help us diversify its business activities and make it more competitive in the transition to low-carbon economy.
Market	Adaptability opportunity	By improving efficiency and developing new products, we can better manage climate change-related risks and seize opportunities.
Adaptability		

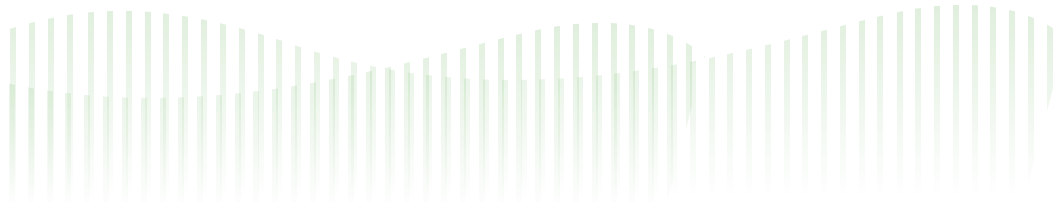
Risk Management

BEHL incorporates climate change risks into its risk management system and carries out whole-process actions including the identification, assessment and management of climate change risks to enhance our ability to resist climate change risks and ensure sustainable and stable operations.

Climate Risks Management Process of BEHL



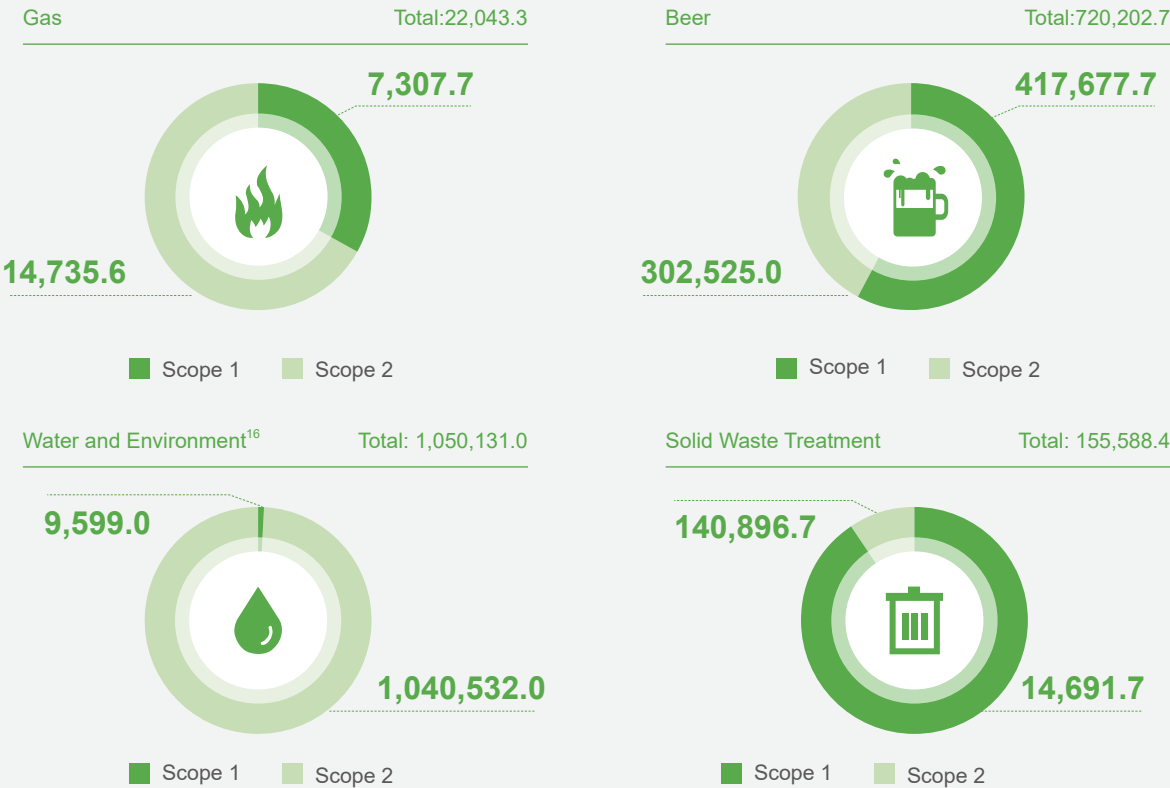
In 2021, Beijing Gas fully completed the replacement of non-residential liquefied petroleum gas in the core area of the capital, met the dual control targets for total energy consumption and intensity issued by Beijing on schedule, and successfully completed the carbon emission compliance task in Xicheng District. In addition, we actively participated in low-carbon research and completed the *Study on Beijing's Carbon Neutrality Development Path*, and the relevant research results were incorporated into the Beijing Carbon Neutral Action Outline, contributing to the green and low-carbon development in the capital.



# Indicators and Goals

BEHL continuously pays attention to and tracks its own CO<sub>2</sub> emissions, and regularly discloses greenhouse gas emission data for the past three years in our ESG reports. We will continue to reduce our emissions of carbon dioxide, methane, and other greenhouse gases, striving to minimize our impact on the climate.

Total Greenhouse Gas Emissions of Each Business Segment of BEHL in 2021 (tonnes of carbon dioxide equivalent)<sup>15</sup>



Based on the BEHL development strategy, historical environmental data and other information, we will actively promote the formulation and implementation of medium- and long-term environmental targets for the Company and its subsidiaries to better guide BEHL’s low-carbon development path. In 2021, Beijing Gas already set methane emission reduction targets.

Methane emission targets:

Beijing Gas will take stronger measures and strive to reduce methane emission intensity to less than **0.12%** by 2025 and reduce the emission intensity to **nearly zero** by 2030.

<sup>15</sup> Note: Scope I greenhouse gas emissions are converted from gasoline, diesel, natural gas, liquefied petroleum gas, raw coal, and residual oil. Scope 2 greenhouse gas emissions are converted from purchased electricity, purchased heat and purchased industrial steam. The accounting methods and coefficients are based on the greenhouse gas emission accounting methods and reporting guidelines for 24 industries issued by the National Development and Reform Commission; the basis for Beijing Gas and the Solid Waste Treatment Platform specifically is the *Guidelines on Greenhouse Gas Emissions Accounting and Reporting for Enterprises in Other Industries (Trial)* and that for Yanjing Brewery specifically is the *Guidelines on Greenhouse Gas Emissions Accounting and Reporting for Food, Tobacco and Alcohol, Beverages and Refined Tea Enterprises (Trial)*. Purchased electricity is converted based on the national grid emission factors specified in the *Notice on Properly Carrying out Key Tasks Related to Management of Enterprise Greenhouse Gas Emissions Reporting in 2022* issued by the Ministry of Ecology and Environment of China. Please note that the Water and Environment segment is not included in the consolidation of BEHL.

<sup>16</sup> Note: As a result of the clarified and revised statistical caliber of greenhouse gas emissions indicators for water and environment business in 2021, the indicator data in 2020 changed.



# Talent Development

BEHL is committed to creating a fair and equitable employment environment and a safe and healthy working environment for our employees. We always respect the rights and interests of our employees and continuously improve their compensation and welfare. We attach great importance to the growth and development of our employees, providing them with high-quality training and diversified development opportunities, and we also provide them with proper care and support to achieve a win-win situation for BEHL and its employees.

## Major progresses in 2021

- Released the *Labour Rights and Interests Policy* and the *Sustainable Supply Chain Management Policy* to protect the legitimate rights and interests of BEHL's employees, employees in the supply chain, communities where the businesses operate and other stakeholders
- BEHL was awarded the "Good MPF Employer" for the second consecutive year, which proved employees' satisfaction with BEHL's retirement support scheme
- The total training attendances were 87,664 person-time, and total training 1,047,839.50 hours, covering 99.83% of employees
- A total of 97 subsidiaries of BEHL completed the assessment of workplace safety standardization, with a total investment of RMB911 million in safety

# Talent Attraction and Retention

Recognizing that talent is an important driving force for enterprises to move forward, we attract outstanding talents in various fields through diversified recruitment channels, continuously optimize and improve the remuneration and performance-based bonus structure, build a sound benefits system, and care and love every employee, in a bid to jointly create a harmonious and human-centred environment and boost cohesion in the Company and improve employees' sense of belonging.

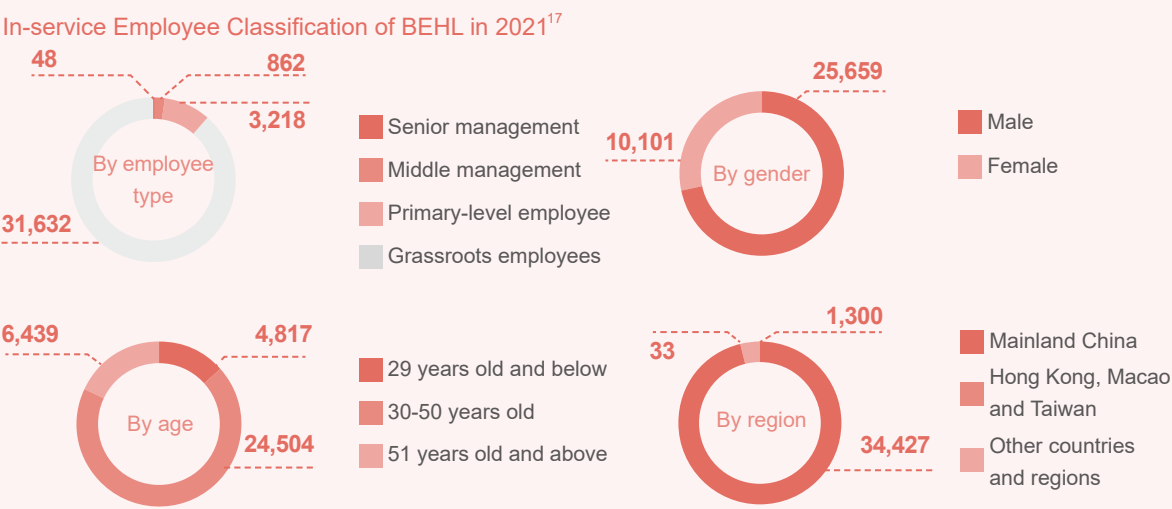
## Team Building

BEHL adheres to the people-oriented human resource management philosophy, improves the selection and employment mechanism, opens recruitment channels and continuously attracts outstanding talents both in its own and other industries to further lead, drive and support business development.

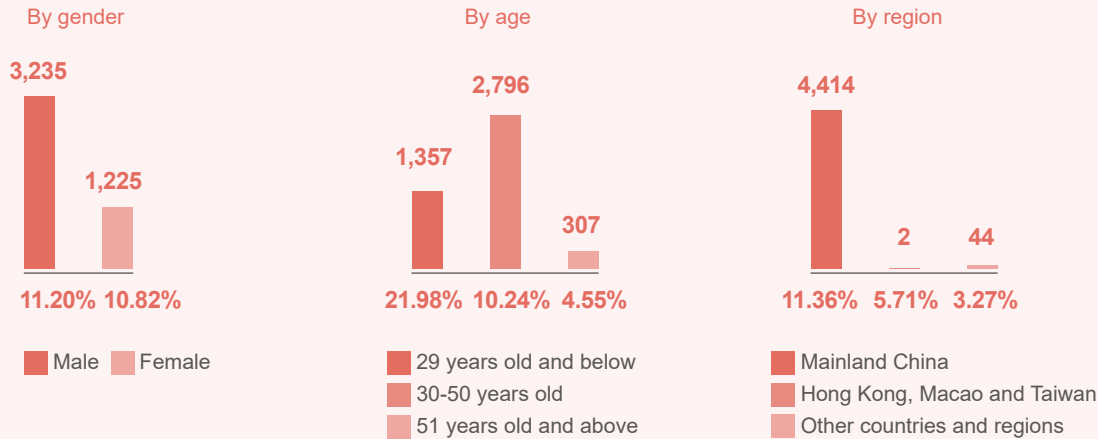
As of the end of the Reporting Period, BEHL signed labor contracts with 35,760 employees. We have tracked the employee turnover, summarized the reasons for turnover, and made targeted optimization and improvement efforts to retain key talents. In 2021, BEHL's total number of employee turnover was 4,460 and the employee turnover rate was steady at 11.09%.

As of the end of the Reporting Period, BEHL had a total of

**35,760** employees.



Number and Percentage of Employee Turnover at BEHL in 2021



<sup>17</sup>Note: This data only includes the number of employees who have signed labor contracts

# Remuneration and Benefits Optimization

BEHL offers insurance for pensions, unemployment, work-related injury, and medical maternity needs along with a housing provident fund for employees in accordance with national regulations. We also provide reasonable remuneration pursuant to a sound salary management system. Following policies on personnel and labour and relevant regulations on salary and welfare of the Central Government and the local government and based on BEHL's actual conditions, we formulated the *Remuneration Management System of Beijing Enterprises Holdings Limited* and developed a welfare system for all employees. In 2021, we optimized the supplementary medical insurance scheme for employees and standardized the unified management of supplementary medical insurance by formulating the *Management Measures for Corporate Supplementary Medical Insurance of Beijing Enterprises Holdings Limited* and *Implementation Rules for the Supplementary Medical Insurance Scheme of the Beijing Headquarters of Beijing Enterprises Holdings Limited (for Solicitation of Opinions)*. In 2021, the coverage of social insurances among employees was 100%.

# Employee Care

BEHL advocates work-life balance and makes employee care part of its daily work. By continuing to carry out employee-caring activities, helping employees in need, caring for female employees, etc., we strive to create a corporate atmosphere of caring and equality, provide employees with comprehensive and practical benefits, and continue to boost employees' cohesion and happiness.

We have set up baby care rooms and organized physical examinations for female employees and satisfied the special needs of female workers. We care for employees in need, and established a targeted assistance policy to ensure delivery of the care and assistance. In 2021, BEHL applied for assistance funds for 107 employees in need, which totalled RMB842.7 thousand.

## Case: BEHL organized outward bound team building activities for Hong Kong staff

On October 22, 2021, BEHL organized an outward-bound trip for Hong Kong employees in Wong Yi Chau, Sai Kung. Themed "strengthening willpower and team spirit", the activity aimed at helping employees build better willpower and become better team players in more cohesive teams. The diverse activities not only effectively trained employees' ability to solve problems and overcome difficulties but also enhanced teamwork and cohesion, having a positive impact.



The Executive Director and CEO of BEHL was presenting honorary gifts to employees that had worked for BEHL for 20 years or more



The team building activity



### Case: Beijing Tong Ren Tang gave a health and wellness lecture

On June 25, 2021, to improve the immunity of employees during the pandemic, address their confusion and misunderstandings in health and wellness and to better care for employees, we invited experts from Beijing Tong Ren Tang to give a health lecture close to everyday life and provide free consultation services for employees.



The health and wellness lecture and the free consultation services

## Labour Rights and Interests

BEHL is committed to providing an equal and friendly workplace environment, implementing human rights protection, encouraging and respecting diversity of talent, and protecting the legitimate rights and interests of employees. We have channels for communication, grievance and whistleblowing, and maintain two-way and adequate communication with employees to address their practical needs in a timely manner.

### Formulation of Human Rights Policy

BEHL recognizes and supports the spirit and basic principles of human rights protection as enshrined in international human rights conventions such as the *Universal Declaration of Human Rights*, the *United Nations Guiding Principles on Business and Human Rights*, and the *Declaration on Fundamental Principles and Rights at Work* adopted by the International Labour Organization, and is committed to respecting all internationally recognized human rights related to its business.

BEHL resolutely prohibits child labour and forced labour, among others, and guarantees employees' remuneration and fair promotion, and improves the democratic management system with the staff and workers' congress as the basic form to fully listen to employees' opinions and suggestions, builds career development pathways and growth platforms for employees, and protects employees' legal rights. In 2021, in order to further reinforce the principle of labour rights and interests protection at BEHL, we publicly released the *Labour Rights and Interests Guidelines of Beijing Enterprises Holdings Limited*, which is applicable to all employees of BEHL and all its domestic and overseas subsidiaries.

In order to enable both suppliers and BEHL to comply with the relevant principles of labour rights and interests, we have formulated the *Sustainable Supply Chain Management Policy*, which elaborates on our commitment to strengthening the management of suppliers in terms of labour rights requirements and the focus placed on assessing the performance of suppliers in terms of labour rights and interests protection when we procure products or services to guide them to pay attention to human rights issues.

Meanwhile, BEHL's subsidiaries have developed their own human rights commitment system in accordance with their business characteristics and the legal requirements on their operation, such as the *BE Water Statement on Employee Rights and Interests*, which covers BE Water's respect of the basic rights and interests of employees, its commitment to respecting human rights in its own operations and in its provision of products and services, its requirement for its suppliers and partners to respect human rights, and the actions it will take and the procedures it will follow to honour its commitments.

#### We are committed to:

- Prohibiting forced labour and child labour
- Avoiding discrimination and harassment
- Setting reasonable remuneration and enabling fair promotion
- Ensuring thorough communication between employees and the Company
- Protecting privacy
- Safeguarding employee benefits
- Creating a safe and healthy workplace

# Legal and Equal Employment

To safeguard employees' legitimate rights and interests and establish good employee relations, in such aspects as recruitment, dismissal, leave and working hours, BEHL strictly abides by laws and regulations including the *Labour Law of the People's Republic of China* and the *Labour Contract Law of the People's Republic of China* and formulated relevant systems such as the *Regulations on the Management of Labour Contracts and Personnel Files of Beijing Enterprises Holdings Limited* and the *Regulations on Recruitment Management of Beijing Enterprises Holdings Limited*, *Regulations on Paid Annual Leave for Employees of Beijing Enterprises Holdings Limited* and the *Guidelines at Hong Kong Headquarters on Equal Opportunity and Privacy of Beijing Enterprises Holdings Limited*.

We encourage and respect diversity of talent and prohibit discriminatory behaviour and differential treatment in recruitment, remuneration, training and promotion on the basis of gender, region, ethnicity, religion, age, pregnancy or marital status, disability and political stance, etc. We actively create a diverse, harmonious and relaxed work environment to give full play to the personality traits and personal value of our employees. As of the end of the Reporting Period, the Company had 1,815 ethnic minority employees and 1,300 overseas employees, which indicates its pursuit of diversity in recruitment. Ethnic minorities accounted for 4.82% of all personnel holding management positions and overseas employees accounted for 0.94%.

We actively safeguard the legitimate rights and interests of female employees, strictly comply with the *Constitution of the People's Republic of China*, the *Law of the People's Republic of China on the Protection of Women's Rights and Interests*, the *Special Rules on the Labour Protection of Female Employees* and other relevant laws and regulations, strictly implement the provisions on leave for female employees during pregnancy, maternity and breastfeeding, and ensure that female employees have equal opportunities in terms of remuneration, benefits and career development. We ensure equal opportunities in the promotion, ranking, evaluation of professional and technical positions, and remuneration structure setting, and strive to enhance the representativeness of women in management. As of the end of the Reporting Period, the percentage of female employees in management positions at BEHL was 18.36%, the percentage of women in revenue-generating positions was 18.82% and the percentage of women in STEM-related positions was 37.88%.

As of the end of the Reporting Period, BEHL had

1,815

ethnic minority employees



1,300

overseas employees



In all personnel holding management positions,

ethnic minorities accounted for

4.82 %



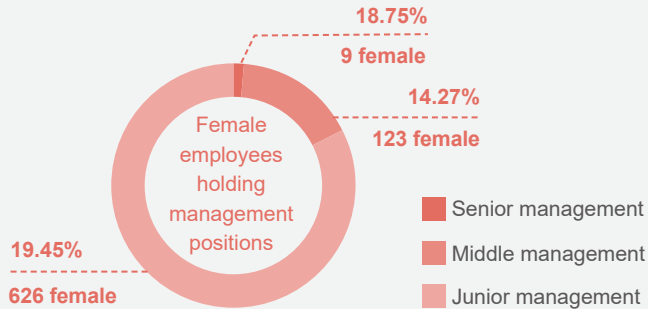
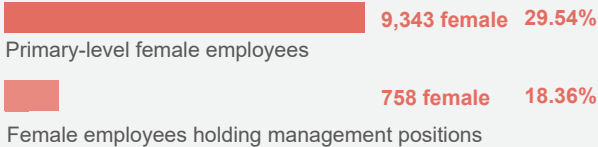
overseas employees accounted for

0.94 %



## Statistics on Female Employees at BEHL in 2021

Number and percentage of female employees by employee type



2,511

female employees in revenue-generating positions

Percentage

18.82%

889

female employees in STEM-related positions

Percentage

37.88 %

# Strengthening Employee Communication

We upgraded the labour mediation committees of our subsidiaries and set up labour law supervisors to listen to the opinions and demands of employees and safeguard their legitimate rights and interests. We also put in place whistleblowing channels for employees who have suffered discriminatory treatment at work. Employees can report related issues to our legal department safe in the knowledge that we will keep their information confidential to protect their privacy when handling the case.

BEHL established the *Employee Satisfaction Survey Management System of BEHL* and conducts an employee satisfaction survey every two years. The survey is about training and suggestions, performance management, career development, and personal conditions. In this way, we can better understand employee needs and spot, identify and resolve issues based on survey results and find the basis for us to upgrade our employee management system and improve our employee management.

## Case: BEHL was awarded the “Good MPF Employer” honour by MPFA of Hong Kong for two years consecutively

The Good MPF Employer recognition program was launched by the Mandatory Provident Fund Scheme Authority, Hong Kong (MPFA) in 2015. It aims to cultivate employers’ responsibility under the law and encourage employers to provide employees with better retirement benefits and to commend model employers who are committed to enhancing employee retirement benefits.

On October 5, 2021, the seventh Good MPF Employer recognition program held the awarding ceremony, and BEHL, by virtue of its continuous efforts in enhancing employee retirement benefits and fulfilling strong provident fund responsibilities, was awarded the Good MPF Employer honour for the second year consecutively, which proved employees’ satisfaction with the retirement benefit scheme of BEHL.



BEHL Hong Kong employees took a picture with the award certificate



# Employee Growth

We pay attention to the development needs of our employees at different stages, attach importance to their career planning, continuously innovate the environment and institutional mechanism for talent growth, and focus on the construction of systems for guaranteeing resources needed for talent growth, providing a broad stage for employees to realise their personal value.



# Smooth Promotion Pathways

BEHL attaches importance to the performance evaluation management of its subsidiaries and has formulated the *Management Measures for the Evaluation of the Business Performance of the Subsidiaries of BEHL (Trial)* and *Implementation Measures for the Vigorous Implementation of the Tenure System and Contractual Management of the Manager-level Staff of BEHL*. In order to further establish and improve a sound incentive and disincentive mechanism for the heads of BEHL's subsidiaries, in 2021, we formulated the *Management Measures for Tying Remuneration to Performance for Heads of Subsidiaries of Beijing Enterprises Holdings Limited (Trial)* and the *Management Measures for Remuneration of Heads of Subsidiaries of Beijing Enterprises Holdings Limited (Trial)* to boost the awareness of the performance-oriented management, link performance-based bonus and performance results, and reasonably adjust the income distribution relationship between the heads of subsidiaries and the employees.

In order to ensure that outstanding employees are duly recognised and motivated, BEHL conducts scientific performance evaluation, formulates quarterly evaluation plans, and conducts comprehensive reviews and evaluations of employees' work results, abilities and work performance measured against their job responsibilities and annual priorities, in an effort to achieve a virtuous cycle in which BEHL and employees' performance are mutually reinforcing. In 2021, we formulated the *Provisional Measures for Employee Performance Management at the Beijing Headquarters of Beijing Enterprises Holdings Limited*, evaluates employees based on the principles of comprehensive and multi-dimensional assessment, open communication, fairness, justice and transparency, clear rewards and punishments and reasonably differential results, and explicitly adopts a performance-oriented assessment and management mechanism to promote the performance improvement of employees and standardize employee performance management.

In addition, we set up incentives such as year-end bonuses, presidential special awards, and engagement awards for employees to encourage them to improve their professional capabilities, commend outstanding employees, and give due rewards to their hard work.

# Sound Training System

Based on the *Training Management Regulations of Beijing Enterprises Holdings Limited* and other institutional requirements, we have established a sound training system, enriched training content, innovated training forms and implemented differentiated vocational training, so that the competency and capability of our workforce could be effectively enhanced. In 2021, we carried out various forms of training online or offline, including on-boarding training for new entrants at headquarters, staff outward bound training, professional skills training, and professional technical talents training for subsidiaries.

## BEHL Performance and Spending on Employee Training in 2021

Total attendances of trainees <sup>18</sup>	Percentage of trainees
87,664 person-time	99.83%
Total training hours	
1,047,839.50 hours	
Training hours per person	Spending on training
29.30 hours	RMB 12.08 million

<sup>18</sup>Note: Among the total attendances of trainees, the data of beer business segments only covers Beijing.

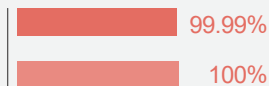
Training Classification of BEHL in 2021

By gender

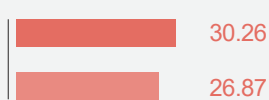
Attendances (person-time)<sup>19</sup>



Ratio (%)



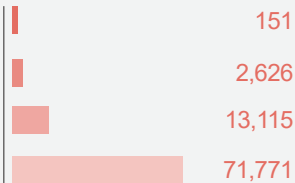
Training hours per person  
(hours / person)



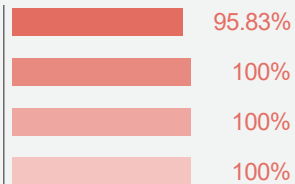
Male  
Female

By employee type

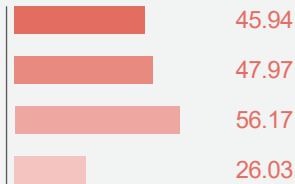
Attendances (person-time)<sup>19</sup>



Ratio (%)



Training hours per person (hours / person)



Senior management Junior management  
Middle management Primary-level staff

<sup>19</sup>Note: Among the attendances of trainees, the data of beer business segments only covers Beijing.

Case: BEHL held a special production safety training with demonstrations in real scenarios

On September 23, 2021, BEHL held a special training on production safety with demonstrations in real scenarios. In the indoor lecture session, the trainer elaborated on the concept of confined space, safety management requirements, operation organization process and emergency rescue and handling, etc. In the live demonstration session, while staff demonstrated the whole process of operation under confined space, the trainer simultaneously explained the key points and precautions during the operation, which trainees could watch in real time on an display thanks to a live streaming device installed specially for this purpose in the well. This training comprehensively improved the capability of BEHL's subsidiaries in safety management under confined spaces and strengthened employees' professional skills and emergency handling ability, which effectively contributed to the prevention of accidents under confined spaces.



The special production safety training with demonstrations in real scenarios

Case: the headquarters of BEHL conducted professional competency training

In 2021, the headquarters of BEHL conducted a series of professional training successively through such courses as asset management pre-assessment, legal and risk control compliance, disciplinary inspection, human resources, internal audit, finance, administration, security management and leadership, covering more than 80% of the headcount of the Beijing and Hong Kong headquarters with attendances reaching 653.

# Health and Safety

BEHL always upholds a safety-first and preventive approach to workplace safety and practices comprehensive management for it; it continues to improve workplace safety management and carries out various activities to that end. We attach great importance to the safety and health of employees in the workplace, provide comprehensive occupational health and safety services and foster a safety culture to protect the occupational health and safety of our employees.

## Strengthening safety management

Based on laws and regulations including the *Workplace Safety Law of the People's Republic of China* and the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*, BEHL formulated safety management systems, including the *BEHL Workplace Safety Management Regulations*, the *BEHL Administrative Measures for Investigation and Management of Hidden Dangers of Workplace Safety Accidents* and the *Emergency Management System* in a bid to regulate workplace safety.

In 2021, we continued to promote safety standardisation management and continued to promote the effective operation of systems by conducting internal and external reviews and assessments. A total of 97 subsidiaries of BEHL completed the workplace safety standardisation assessment. Beijing Gas completed the annual audit and re-evaluation of workplace safety standardisation and, in accordance with the implementation measures of the safety director system for production and operation units in Beijing, fully implemented the safety director system internally, improved the safety management system and

enhanced its management capabilities and performance in this regard.

BEHL established a Workplace Safety Management Committee, which is responsible for the day-to-day management of workplace safety and supervises, guides and assesses the workplace safety efforts of the subsidiaries. To establish and improve the safety responsibility network, BEHL focuses its efforts on building a responsibility system that factors into “annual key tasks + characteristics of the business segment”, has the letter of workplace safety responsibility signed at all levels so that the safety responsibilities are clarified all the way down to the minimum management unit, and also conducts a closed-loop assessment of the execution. In this way, BEHL has built a responsibility network featuring “horizontal and vertical integration” to make sure that safety responsibility runs through all aspects of production and operation. In 2021, BEHL had 3 serious injury or death accidents with 21,669 working days lost due to industrial injury.

According to the *Implementation Plan for the Three-year Special Rectification of Workplace Safety*, BEHL has been pushing forward the three-year special rectification campaign for workplace safety and is currently implementing the key tasks of the second stage, and it has formed a list of risks and hazards at the headquarters level for both the Beijing and Hong Kong headquarters. In 2021, BEHL invested a total of RMB911 million in safety, and investigated 31,168 hazards in total.



In 2021, BEHL invested a total of

RMB **911** million in safety

## Work-related Deaths at BEHL in the Past 3 Years<sup>20</sup>


Indicator	Unit	2019	2020	2021
The number of work-related deaths	person	1	0	5
The rate of work-related deaths	%	0.002%	0	0.01%

<sup>20</sup>Note: There were 3 work-related deaths of Beijing Gas and 2 work-related deaths of Solid Waste Treatment Platform in 2021. Also, the data was corrected for 2019. There was 1 work-related death of Solid Waste Treatment Platform in 2019.




Thanks to years of explorations, Beijing Gas has developed an effective leak prevention and control program. In 2021, it developed a special rectification program for gas safety, focusing on seven key tasks: responsibility fulfilment, system implementation, construction process safety management, special rectification for gas supply safety, special rectification for gas use safety, emergency response capability enhancement, and more effective training and publicity. To that end, Beijing Gas carried out multiple rounds of hazard investigation and handling as well as special rectification actions to effectively eliminate safety hazards.

Leak Prevention and Control Program of Beijing Gas




**To strengthen whole-chain anti-corrosion**

To increase investment in corrosion control technology improvement, install additional cathodic protection equipment and facilities, strengthen anticorrosive layer detection and repair, timely eliminate stray current interference to effectively put in place a pipeline anticorrosive defence.



**To strengthen pipeline network operation and leakage inspection and detection**

To deploy high precision inspection vehicles in each unit and combine daily perforation inspection, five-metre line inspection, anticorrosion layer inspection and high precision inspection to carry out pipeline inspection in an all-round and systematic manner to detect and eliminate potential leakage hazards at an early stage.



**To control construction damage**

To enhance communication with the community, fix ground markings and strengthen the operation of the pipeline network to reduce gas leaks caused by external damage.

For gas use safety, Beijing Gas carries out no less than two household inspections per year for residential customers in rural “coal-to-gas” areas, and at least one household inspection every six months for non-residential pipeline gas customers. The problems spotted during the inspections are classified into three levels according to the *Guidelines for the Classification, Control and Rectification of Safety Hazards in Households*, and rectification measures have been formulated for each level.

In order to improve the emergency response capability, all business segments of BEHL continued to improve the construction of their emergency rescue system for workplace safety, intensify drills and exercises, and enhance the emergency rescue capability of frontline enterprises. In 2021, all the business segments carried out 1,279 emergency drills of various types, such as fire, confined space, fall from height and epidemic prevention and control, effectively improving their safety emergency response, handling and rescue capability.

In 2021, Beijing Gas carried out

4,415,135 household inspections for residential customers

Increasing the inspection rate to

75.4%

A total of

217,865

inspections were carried out for all the non-resident customers

The inspection arrival rate was

100%

The inspection completion rate was

88.29%

Case: Beijing Gas conducted safety inspection of facilities and improved emergency management to ensure gas safety

In 2021, Beijing Gas launched a special campaign to inspect the hazards of its pipeline network, equipment and facilities and conducted safety inspections of gas supply facilities, thoroughly inspecting 10 city gate stations, more than 20,000 gas regulator boxes and more than 20,000 kilometres of pipelines. In order to ensure that nothing would go wrong with gas supply, Beijing Gas improved its emergency management by deploying 130 stations and more than 400 emergency response personnel on duty 24 hours a day to ensure emergency handling capability.

### Case: BE Environment organized emergency practical drills for all project companies

BE Environment, part of the Solid Waste Treatment Platform, organised a total of 53 practical drills and 68 tabletop drills for all project companies through activities such as “Work Safety Month” and the “Ankang Cup” competition.

- On March 20, the Wuhan Project organized personnel on duty to participate in an emergency response drill for acid tank leakage in the water purification room;
- On March 29, the Huai'an Project organised an emergency handling drill for liquid alkaline leakage by simulating scenarios such as liquid alkaline leakage, leak stoppage by personnel and emergency transfer of liquid alkaline;
- On April 26, an emergency drill for explosion of pressure pipelines injuring people was carried out in Gao'antun;
- On May 11, a drill for fire in the oil tank area of boilers was carried out in Gao'antun;
- On June 9, the Tai'an Project and Shandong Daiyue Economic Development Zone jointly held the 2021 annual firefighting drill and drill of emergency plan for accidents under confined spaces, which improved the emergency handling capability of the project company;
- In June, an integrated water pump room flooding emergency drill was conducted in Gao'antun.

### Case: The Solid Waste Treatment Platform successfully held “Ankang Cup” Competition

In 2021, the Solid Waste Treatment Platform successfully held the “Ankang Cup” Competition at Xixian New Area BE Environment Technology Co., Ltd. Thirteen companies in Solid Waste Treatment Platform participated in the competition. In the competition, a total of 1,403 people took the comprehensive safety examination, with a pass rate of 96% and an average score of 90.53; a total of 831 people took the production technology examination, with a pass rate of 95% and an average score of 89.61. The competition basically achieved full coverage, with basically all staff studying for and taking the examination.

The “Ankang Cup” Competition put on full display the positive vibe and energy in the Solid Waste Treatment Platform, boosted the awareness of workplace safety, and strengthened the technical exchanges.



The “Ankang Cup” Competition

## Fostering Safety Culture

BEHL attaches importance to the fostering of a safety culture and actively carries out safety education and training that cater to the actual needs of different positions so as to instill safe work awareness in employees and improve their ability to prevent and handle safety accidents. In 2021, BEHL carried out online and offline safety training and organised a series of activities in the “Work Safety Month” under the theme of “Fulfilling Safety Responsibility and Promoting Safe Development”. During the Reporting Period, attendances of the safety education and training activities organized by BEHL reached 198.0 thousand.

### Safety Training of BEHL in 2021



Total hours of safety training

407,661



Total attendances of safety training

197,975



## Occupational Health

BEHL strictly abides by laws and regulations including the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*, improves our occupational health management system, stresses the importance of occupational hazard prevention and control and implements the measures for that in earnest. We continue to improve the occupational health management mechanism and formulated the *Management Regulations for Employee Accident Emergency Responses of Beijing Enterprises Holdings Limited*, and Yanjing Brewery formulated internal systems such as the *Job Standard System*. On this basis, we continued to increase our investment in occupational health and safety, draw on advanced occupational health management systems at home and abroad to safeguard the health and safety of our employees.

BEHL regularly detects occupational hazards, provides employees with free personal protection supplies appropriate to their positions in accordance with regulations, and requires employees to wear and use appropriate personal protection supplies when engaging in work activities in accordance with the potential occupational hazards involved in the operations to eliminate or mitigate the effects of occupational hazards. At the same time, we actively organize health examinations for the employees, for example, routine medical check-ups for employees every two years and screening for occupational diseases for employees in positions with occupational hazards every year.



In 2021,  
the coverage rate of medical  
check-ups for employees in  
BEHL reached

**100%**



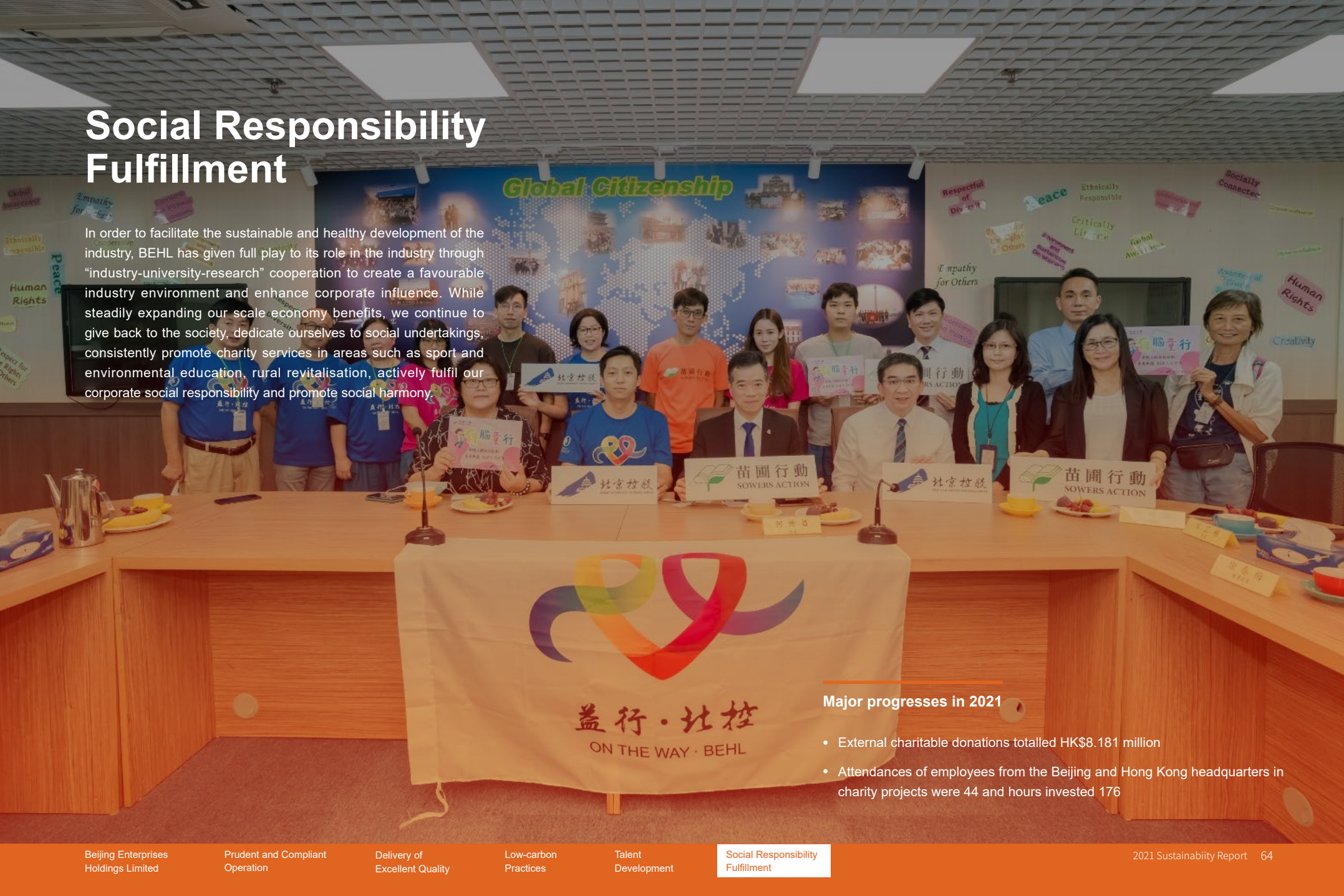
the investment for employees'  
health was

RMB **69.77** million



In order to facilitate the sustainable and healthy development of the industry, BEHL has given full play to its role in the industry through “industry-university-research” cooperation to create a favourable industry environment and enhance corporate influence. While steadily expanding our scale economy benefits, we continue to give back to the society, dedicate ourselves to social undertakings, consistently promote charity services in areas such as sport and environmental education, rural revitalisation, actively fulfil our corporate social responsibility and promote social harmony.

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- External charitable donations totalled HK\$8.181 million
- Attendances of employees from the Beijing and Hong Kong headquarters in charity projects were 44 and hours invested 176

# Cooperative Development of Industry

BEHL is committed to promoting the synergistic development of the industry by establishing close cooperation with our peers. We actively participate in R&D activities within the industry and consistently improve our core technologies by joining business alliances or associations and facilitating the establishment of industry standards. In this way, we empower the industry to upgrade itself sustainably. In 2021, Yanjing Brewery helped draft and provide feedback on eight national standards, three industry standards and two group standards, among which a total of 31 comments were adopted.

## Incomplete Industry Standards Yanjing Brewery Contribute to in 2021

Time	Standard Number	Standard Name
February, 2021	GB/T 7416-2008	Malting barley
February, 2021	GB/T 20886.1-2021	Quality Requirements for Yeast Products Part 1: Yeast for Food Processing
February, 2021	GB/T 41219-2021	Methods for Identification of Saccharomyces Cerevisiae and Kluyveromyces Lactis
February, 2021	GB/T 40361	Beer, Carbonated Beverage Cans Filling Production Line. General Technical Specifications
March, 2021	DB37/T 4063-2020	Evaluation Requirements for Green Factory in the Beer Industry
March, 2021	Group Standard	Alcohol-free Beer
March, 2021	Group Standard	Sour Beer
August, 2021	GB 2758	National Food Safety Standard - Fermented Alcoholic Beverages and Their Integrated Alcoholic Beverages (Draft)
September, 2021	GBT 4927-2008	Quality Requirements for Beer

## Case: Beijing Gas actively cooperated with other parties to jointly promote methane emission reduction

In 2021, Beijing Gas and the International Gas Union (IGU) released the report *IGU Position on Climate Change and Future Role of Gas*. It aims to enhance the role of natural gas in coping with climate change and global energy transition and to accelerate the transformation of Chinese oil and gas companies to meet international standards.

At the same time, in response to the government's policy on "methane emission control", Beijing Gas joined the Methane Emission Control Alliance set up by Chinese oil and gas enterprises, and signed the *Chinese Urban Gas Enterprise Methane Emission Control Proposal* together with other Chinese urban gas companies. In the future, Beijing Gas will cooperate with members of this alliance to promote the incorporation of "methane emission control" into its company development goals.



Site of signing the Chinese Urban Gas Enterprise Methane Emission Control Proposal

## Case: BE Water and Minzu University of China officially signed an agreement on talent cooperation

On October 10, 2021, the signing and inauguration ceremony of the talent cooperation agreement between BE Water and Minzu University of China was held at Minzu University of China. According to the cooperation agreement, the two sides will cooperate in the areas of industry-university-research exploration, scientific research, discipline advancement and exchange mechanisms between the university and the enterprise, in a bid to create a dual base for "industry-university-research" and "talent training" and continuously promote the creation of social value, transforming economic value and amplification of cultural value.



### Case: Yanjing Brewery actively carried out industry research projects

Yanjing Brewery actively engages in academic exchanges with universities and research institutes at home and abroad. Domestically, Yanjing Brewery works closely with institutions such as China Food and Fermentation Institute and Jiangnan University. Internationally, it consistently communicates with and learns from world-renowned institutes of brewing such as ASBC, MBAA in the US and FlavorActiV in the UK.

- Cooperation project of “Selection and Breeding of Low-Acetaldehyde-Production Yeast Strains” with Jiangnan University
- Cooperation project of “Study on the Optimization of Yeast Strains (68obg) in Yanjing Original White Beer and the Regulation of Higher Alcohols Metabolism” with Tianjin University of Science and Technology
- Cooperating with China National Research Institute of Food and Fermentation Industry for joint development of projects such as “Development of High-end Beer Products Brewed from Chinese Barley” and “R&D of Rapid Fermentation Process”

In addition, Yanjing Brewery is active in applications for key industry research projects sponsored by the Ministry of Science and Technology, the National Development and Reform Commission and the Ministry of Industry and Information Technology of the Chinese government. In 2021, Yanjing Brewery took the lead in formulating Group Standard for Beer Flash-Pasteurization, which is currently in the public announcement stage. In doing so, Yanjing Brewery attempts to address issues common to the beer industry, promote the development of China's beer industry and contribute more to the national economy.



## Corporate Citizenship

Over the years, BEHL has put great efforts into promoting social development. As a corporate citizen, we facilitate the community development and aid underprivileged areas in healthy economic development so as to create an equal society. We also work together with parties from all walks of life to participate in charitable activities and do our best to spread love and warmth as we promote social progress. By 2021, BEHL has donated a total of HK\$8.181 million to external charities. For the participation of our employees from the Beijing and Hong Kong headquarters in charity projects, the attendances totalled 44 and hours invested 176.

BEHL makes continuous contributions to projects such as youth development, rural revitalization, and environmental protection. Through Mingxi Charity Foundation (hereinafter referred to as “Mingxi”) and its affiliated organization Mingxi Volunteer Team, BEHL has carried out a number of charity services to facilitate the development of our society. In 2021, BEHL was awarded the Caring Company logo by Hong Kong Council of Social Service for the fourth consecutive year. This award is an affirmation of our commitments to practicing social responsibilities.



In 2021, BEHL was awarded the Caring Company logo



# Contribution to Rural Revitalization

As the first year of the “14<sup>th</sup> Five-Year Plan”, 2021 signifies the year of a new journey to build a modern socialist country in an all-round way. At present, our country is on the phase of transition from prevention of relapse into poverty to rural revitalization. BEHL has made its contributions in various aspects such as industry development, employment, consumption, and charitable services, and has offered assistance to paired areas in Inner Mongolia, Xinjiang, Qinghai, and other regions.

In our pairing-assistance areas, BEHL, based on our main businesses, conducted businesses in various areas including energy, water, solid waste treatment, environment and photovoltaics in a way that boosts local development of relevant industries, facilitated the smooth execution of such industrial projects, and promoted local economic and social development. Meanwhile, we encourage all subsidiaries to establish long-term procurement relationships with areas paired with us so as to procure agricultural products from underprivileged areas on a regular and long-term basis; for areas paired with us for support and areas paired with us for assistance in Beijing, we continue our cooperation with Beijing Instrumentation Senior Technical School in dual-system order-based training project to provide training, education and employment assistance to those on the verge of poverty and those who can easily relapse into poverty again, and students from low-income families.

## Assistances Provided by BEHL in 2021

### Industrial assistance

- BE Water has invested a total of RMB12 billion in 11 existing and planned projects in Inner Mongolia Autonomous Region, which has so far created 411 jobs, generated an output of RMB133 million by September, and elevated the total investments made by BE Water in TOT projects for urban sewage treatment in Hailar District, Hulunbuir City to RMB349 million.

### Consumption assistance

- As of November 2021, BEHL has invested a total of RMB1.656 million in consumption assistance.
- The overall consumption of welfare products by northern region of BE Water amounted to RMB31,800.

### Employment assistance

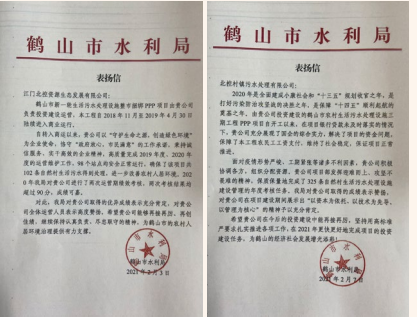
- In September 2020, BE Water (Northern Region) provided pro bono job assistance in Baoding and Chifeng City. BE Baoding Water Environment Technology Co., Ltd. and Chifeng Regional Centre have each agreed to pay for 20 pro bono positions. By September 30, 2021, a total expenditure of RMB16,000 yuan has been incurred for such assistance.

### Charitable donations

- BEHL, in accordance with the requirements of the “BEHL Work Plan for Assisting Villages with Underdeveloped Collective Economy in Fengjiayu Town, Miyun District”, has assisted Zhujiayu Village with a donation of RMB6 million.

## Case: BE Water launched the rural domestic sewage treatment facility project in Heshan City

In March 2021, the Heshan Rural Sewage Treatment Project Company under BE Water received a letter of commendation from the Heshan Municipal Water Conservancy Bureau. The project, Phase 1 has been operating steadily and with high quality for two years. When carrying out Phase III of the project, the project company was confronted with many unfavourable factors such as the pandemic and tight construction schedule. Even so, the project company completed the construction of 325 domestic sewage treatment facilities in natural villages in time and significantly improved the local rural living environment.



The letter of commendation BE Water received from Heshan Municipal Water Conservancy Bureau

# Environmental Protection Activities

## Case: BEHL has been implementing the “On the Way-BEHL” Green Seeds Project for years

Since 2018, BEHL has been implementing the Green Seeds Project “On the Way-BEHL” annually. In December 2021, BEHL officially launched its Green Seeds Project “On the Way-BEHL” of the year. In this project, BEHL donated teaching supplies and books for environmental protection courses and teacher award funding worth over RMB270,000 to education and sports bureaus in Laishui County, Gaoyang County, and Wei County in Hebei Province. It also assists these counties in formulating scientific teaching plans on environmental protection so as to improve the quality of environmental protection courses. Meanwhile, BEHL carried out Green Seeds Project in an all-round way: by combining courses on environmental protection knowledge and relevant social practices, we spread the awareness of environmental protection among those children.



Official launching ceremony of Green Seeds Project - “On the Way-BEHL”

BEHL integrates platform resources with its strengths and takes the initiative to cooperate with local communities in environmental knowledge popularisation, education, and campaigns on environmental protection by means of community publicity, reception of visitors, and university-enterprise cooperation. In this way, we raise local residents’ awareness of environmental protection and promote their public engagement in ecological and environmental protection.

## Case: Low-Carbon Campus Smart Greenhouse Project with Hong Kong Pui Kiu Middle School

In December 2021, we cooperated with Hong Kong Pui Kiu Middle School to carry out the “Low-Carbon Campus” Smart Greenhouse Project. In addition to the company’s ESG programs, the Hong Kong headquarters donated a total of HK\$100,000 to support Pui Kiu Middle School in carrying out the project of environmental education on campus. This project adopted a school-enterprise cooperation model to implement environmental protection knowledge popularization, education, and campaigns in aspects such as energy conservation and emission reduction, low-carbon campuses, and solid waste treatment. In doing so, we not only raised the environmental protection awareness of young people in Hong Kong, but also actively responded to the national call for leading a “energy-saving, emission-reducing, and low-carbon life”.

In the same month, at the 75<sup>th</sup> Anniversary Ceremony of Pui Kiu Middle School, BEHL received the “Platinum Sponsorship” Certificate of Appreciation from Pui Kiu Middle School.



“Platinum Sponsorship” Certificate of Appreciation for Pui Kiu Middle School Education Fund

## Case: BE Water carried out environmental protection education in primary and secondary schools in Minning Town

In February 2021, BE Water held the “First Class” on environmental protection at Gengbiao Hongjun Primary School in Minning Town. BE Water also built a “Environmental Protection Education Demonstration Base”, sponsored the opening of a “Chuxin Book House” and established a special fund for environmental protection education targeting primary school students. In the future, we will continue to take practical and persistent actions to promote environmental protection education.

### Case: BEHL organized its employees in Hong Kong to provide public service of cleaning the coast

On November 5, BEHL, in response to the Hong Kong SAR Government's call for "Leave No Trace", organized a beach clean-up activity for its employees in Hong Kong on Lamma Island. With the theme of "protecting the ecological environment of the beautiful Lamma Island", this activity aims to reduce the impact of coastal plasticization and protect the ecological environment of Hong Kong. In this event, BEHL employees cleaned and sorted about 20 kilograms of plastic waste such as disposable plastic bags, straws, and discarded plastic bottles, as well as cigarette cases and cigarette butts. This social service activity not only raised our employees' awareness of environmental protection, but also demonstrated BEHL's commitment to public services and giving back to the society.



Employees were picking litter on the shore of Lamma Island

## Support to Young People's Development

Mingxi Charity Foundation provides a variety of social services which include holding an innovation and entrepreneurship competition and formulating entrepreneurship funding plans. Through this project, BEHL strives to provide a better social environment and opportunities for young people to grow and thrive. It also enables BEHL to give back to Hong Kong by making outstanding young people in Hong Kong and Beijing stand out and strengthening their communications. In 2021, we continued to sponsor Mingxi Scholarship to subsidize students and encourage the recipients to actively contribute to the society.

### Case: Mingxi supported and sponsored the 7<sup>th</sup> Hong Kong University Student Innovation and Entrepreneurship Competition

On May 28, the 7<sup>th</sup> Hong Kong University Student Innovation and Entrepreneurship Competition was held in Hong Kong. Mingxi has supported and sponsored this competition for five consecutive years, which has spotted and nurtured a batch of outstanding teams in innovation and entrepreneurship. In the future, Mingxi will continue to recommend promising projects to "Beijing-Hong Kong Youth Innovation and Entrepreneur Cup", and organize regular exchanges on this topic between Hong Kong, Beijing, and the Guangdong-Hong Kong-Macao Greater Bay Area. In doing so, it aims to develop Hong Kong into an "international innovation and technology centre" and a talent incubator as well as promote the communication and interaction between talents in Beijing and Hong Kong.



Group photo of the final of the 7<sup>th</sup> Hong Kong University Student Innovation and Entrepreneurship Competition

### Case: Mingxi participated in the "Funding Scheme for Youth Entrepreneurship in the Guangdong-Hong Kong-Macao Greater Bay Area"

On June 11, supported by the Youth Development Fund issued by the Youth Development Commission of the Hong Kong SAR Government, Mingxi, the Hong Kong New Generation Cultural Association and the Hong Kong Beijing Association jointly organized the "NewGen Funding Scheme for Youth Entrepreneurship in the Guangdong-Hong Kong-Macao Greater Bay Area".

After selecting out quality projects in Beijing and Hong Kong for funding, Mingxi and partner institutions will jointly build a platform to support, connect and serve those young entrepreneurs and innovators. It will organize young makers from Hong Kong to go to Beijing and the Guangdong-Hong Kong-Macao Greater Bay Area for training, exchanges and tours. In doing so, it not only supports and promotes innovation and entrepreneurship among young people in Hong Kong, but also facilitates the exchange and development of innovation and technology in Beijing, Hong Kong, and the Guangdong-Hong Kong-Macao Greater Bay Area.



Overall Review of "Funding Scheme for Youth Entrepreneurship in the Guangdong-Hong Kong-Macao Greater Bay Area"



# Supporting Sports

BEHL attaches great importance to supporting the development of sports. Mingxi participated in organizing activities including the 2<sup>nd</sup> HK InnoVision Hong Kong Basketball Open and Meeting and Exchange with Wang Zheng Badminton Academy to nurture outstanding sportsmen and women and to support the development of sports in Hong Kong. For the eighth consecutive year, Yanjing Brewery, and the China Football Association (CFA) have jointly carried out Seeds Project campus charity event to strengthen children's physical fitness and contribute to the development of sports in China.

## Case: Mingxi supported the final of the 2<sup>nd</sup> HK InnoVision Hong Kong Basketball Open

On 22 August, the final of the 2<sup>nd</sup> HK InnoVision Hong Kong Basketball Open was held at the Southern Stadium in Hong Kong. As popular as the first Open, the 2<sup>nd</sup> Open was one of the highest-level amateur basketball tournaments in Hong Kong and had a strong social influence.

Mingxi sponsors and supports this tournament with a view to promoting exchanges among young people by encouraging young people from all walks of life in Hong Kong to participate in such events. In doing so, it unites and brings together like-minded youngsters to build a positive and harmonious Hong Kong society.



Group photo of the guests and the champion team at the final of the 2<sup>nd</sup> HK InnoVision Hong Kong Basketball Open

## Case: Yanjing Brewery 2021 CFA Cup Seeds Project implemented at the primary school affiliated to Chengdu Qingyang Experimental Middle School

On the morning of January 9, 2022, Yanjing Brewery 2021 CFA Cup annual charity event “Seeds Project” was carried out in the primary school affiliated to Chengdu Qingyang Experimental Middle School. The “Seeds Project Campus” aims to enable more children to experience the joy and vigour of playing football to the fullest.

Yanjing Brewery donated 120 footballs to the primary school affiliated to Chengdu Qingyang Experimental Middle School, with a view to helping students grow healthily and happily. Meanwhile, it also hopes to take this opportunity to facilitate the development of Chinese football by encouraging football activities at primary schools.



Yanjing Brewery donated footballs to the primary school affiliated to Chengdu Qingyang Experimental Middle School

# Public Welfare Undertakings

BEHL adheres to the principle of providing social services wholeheartedly and has been committed to charity and public welfare for a long time. We meanwhile encourage our staff to participate in volunteer services; when they offer help to others, they also pass on love and inspire more people to engage in charity activities.

## Case: BEHL organized a charity event of “Self-service Frozen Meal”

On the morning of September 6, 17 staff members from BEHL's Hong Kong headquarters participated in the “Self-service Frozen Meal” event organized by Food Angel in Hong Kong. The event aims to help 18,000 people who are unemployed, underemployed, or unable to receive government and other regular food assistances due to the pandemic to go through this transitional period.

On the day of the event, we produced a total of 6,241 nutritionally balanced meals, all of which were in boxes of 100% naturally biodegradable advanced materials. We also applied Food Angel's quick-freeze technology to freeze those ready meals from 90°C to 4°C so that the nutrition of each meal could be preserved intact. This event is in line with Food Angel's call for “Waste Not - Hunger Not - With Love”.



Staff in uniforms of Food Angel were ready to work in the central kitchen

# ESG Key Performance Data

Key Performance Indicator	2019	2020	2021
Revenue (HK\$ billion)	67.78	68.41	80.44
Basic earnings per share (HK\$/share)	6.38	4.19	7.86
R&D investment (RMB 100 million)	15.6	16.7	16.7
Safety investment (RMB 100 million)	9.67	9.18	9.11
Greenhouse gas emissions (10,000 tonnes of CO <sub>2</sub> e)	112.0	111.0	89.8
Greenhouse gas emissions per HK\$ 10,000 of revenue (kg/HK\$ 10,000)	165.2	162.3	111.6
Energy consumption (10,000 tonnes of standard coal, including: coal, electricity, natural gas, gasoline and diesel)	34.8	38.4	35.1
Energy consumption per HK\$ 10,000 of revenue (kg/ HK\$ 10,000)	51.4	56.1	43.6
Fresh water consumption (10,000 tonnes)	2,213.4	2,250.8	2,460.3
Fresh water consumption per HK\$ 10,000 of revenue (kg/ HK\$ 10,000)	3,265.5	3,290.2	3,058.6
Hazardous waste emissions (10,000 tonnes)	48.0	53.7	52.9
Hazardous waste emissions per HK\$ 10,000 of revenue (kg/ HK\$ 10,000)	70.8	78.6	65.7
Non-hazardous waste emissions (10,000 tonnes)	240.2	240.7	308.8
Non-hazardous waste emissions per HK\$ 10,000 of revenue (kg/ HK\$ 10,000)	354.3	351.8	383.9
Total number of regular employees	41,454	39,833	35,760
Employee training hours	9,281,893	601,096	1,047,839.5
Percentage of employee physical examination (%)	100	99	100
Number of suppliers	3,434	2,150	2,670
Donations (HK\$ 10,000)	482	2,574.4	818.1

# HKEX ESG Reporting Guide

Environmental, Social and Governance Areas, General Disclosures and Key Performance Indicators (KPIs)		Responses
A.Environmental		
Aspect A1: Emissions		
General Disclosure		P35
KPI A1.1	The types of emissions and respective emissions data.	P45
KPI A1.2	Direct (Scope 1) and indirect (Scope 2) greenhouse gas emissions in total and intensity.	P46
KPI A1.3	Total hazardous waste produced in total and intensity.	P45、 P47
KPI A1.4	Total non-hazardous waste produced in total and intensity.	P45、 P74
KPI A1.5	Description of emissions target(s) set and steps taken to achieve them.	P38-P44
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.	P38-P42
Aspect A2:Use of Resources		
General Disclosure		P42
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total and intensity.	P39-P40、 P74
KPI A2.2	Water consumption in total and intensity.	P39、 P74
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	P38-P43
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.	P42、 P46
KPI A2.5	Total packaging material used for finished products and, if applicable, with reference to per unit produced.	P45
Aspect A3:The Environment and Natural Resources		
General Disclosure		P36
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P37

Environmental, Social and Governance Areas, General Disclosures and Key Performance Indicators (KPIs)		Responses
A.Environmental		
Aspect A4: Climate Change		
General Disclosure		P47
KPI 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.	P48-P51
B. Social		
Aspect B1: Employment		
General Disclosure		P52-P59
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	P53
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	P53
Aspect B2: Health and Safety		
General Disclosure		P63
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	P60
KPI B2.2	Lost days due to work injury.	P60
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	P60-P63
Aspect B3: Development and Training		
General Disclosure		P58



Environmental, Social and Governance Areas, General Disclosures and Key Performance Indicators (KPIs)		Responses
B. Social		
Aspect B3: Development and Training		
KPI B3.1	The percentage of employees trained by gender and employee category.	P59
KPI B3.2	The average training hours completed per employee by gender and employee category.	P58
Aspect B4: Labour Standards		
General Disclosure		P55
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	P55
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	P55
Aspect B5: Supply Chain Management		
General Disclosure		P20-P21
KPI B5.1	Number of suppliers by geographical region.	P21
KPI 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.	P21
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	P20
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	P20-P21
Aspect B6: Product Responsibility		
General Disclosure		P22-P26、P30-P33

Environmental, Social and Governance Areas, General Disclosures and Key Performance Indicators (KPIs)		Responses
B. Social		
Aspect B6: Product Responsibility		
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	P30-P33
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	P30-P33
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	P27-P29
KPI B6.4	Description of quality assurance process and recall procedures.	P20
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	P19
Aspect B7: Anti-corruption		
General Disclosure		P18
KPI 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.	P18
KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	P18
KPI B7.3	Description of anti-corruption training provided to directors and staff.	P18
Aspect B8: Community Investment		
General Disclosure		P66
KPI B8.1	Focus areas of contribution.	P65-P70
KPI B8.2	Resources contributed to the focus area.	P67、P70



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