



哈尔滨电气股份有限公司  
HARBIN ELECTRIC COMPANY LIMITED

# 2023

## Harbin Electric Company Limited Environmental, Social and Governance Report



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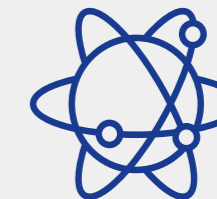
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## About this Report

### Reporting Period

This is an annual report covering the period from January 1, 2023 to December 31, 2023. To improve the completeness of the report, some contents have been extended.

### Appellation

For the convenience of expression and reading, Harbin Electric Company Limited is referred to as "the Company", "Company", "We", and "Us" in the report.

### Description

The content disclosed in this report involves the policies, practices, and performances of the Company in fulfilling its environmental, social, and governance responsibilities in 2023. The basic information is all sourced from the Company's documents and reports. The historical data referenced in this report are final statistical figures. If there are discrepancies between the financial data presented here and those in the annual report, the latter shall prevail. The financial data is denominated in RMB unless otherwise specifically stated.

### Scope

The content of this report covers the environmental, social, and governance performance of Harbin Electric Company Limited and its subsidiaries, with the scope consistent with the Company's annual report.

### Reference Standards

This Report is prepared in accordance with the requirements of the Environmental, Social and Governance Reporting Guide as set out in Appendix C2 of the *Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited* (hereinafter referred to as "Hong Kong Stock Exchange") and the *Reference of ESG Indicators System for ESG Reporting of Listed Companies Controlled by Central Enterprises* issued by the State-owned Assets Supervision and Administration Commission (SASAC) of the State Council. Based on the reality of the Company, it is written according to the principles of importance, quantification, balance, and consistency.

### Approval of Report

This report was approved for issue by the Board of Directors of the Company in March 2024.

### Language Versions and Access

This report is provided in Chinese and English, both in electronic form. The Chinese version shall prevail in case of any questions about the content. More information is available on the Company's official website (<https://www.hpec.com/>).

## Message from the Chairman

2023 was a pivotal year for China's *14th Five-Year Plan* to bridge the past and the future, in which our Company steadfastly advanced reforms and expeditiously transformed and upgraded our operations. Throughout this pivotal year, we rallied our staff and guided them with unwavering determination to surmount challenges and propel the company onto a trajectory of accelerated and high-quality development. We made significant strides in pursuing a green and low-carbon transformation, exhibiting remarkable vitality and establishing fresh advantages for sustainable development across all fronts. Remaining steadfastly committed to our responsibilities as a central enterprise, we fulfilled our social obligations and collaborated with diverse parties to chart a sustainable future.

Taking innovation as our guiding beacon and performing a green and low-carbon transition. Guided by the national goals of "carbon peaking and carbon neutrality", we maintained a futuristic strategic perspective. In 2023, we intensified strategic planning and issued pivotal guidance documents, including the *Green and Low-Carbon Transition Development Outline* and the *Development Plan for Strategic Emerging Industries*. We refined our green and low-carbon management and assessment system, achieving an 11% YoY decrease in comprehensive energy consumption per RMB ten thousand of output value and a 28% YoY reduction in carbon dioxide emissions per RMB ten thousand of output value. Unwavering in our innovation efforts, we accelerated the construction of an innovation system centered on the "One Center and Four Platforms". Two national key laboratories underwent restructuring, and we were honored with 33 provincial and ministerial science and technology awards. We drafted and revised 25 national and industry standards and spearheaded three projects, including the "High Strength and Toughness Manufacturing Technology and Equipment for 500MW Class Impulse Water Turbine Runner", which were approved as National Key Research and Development Program of China.

Remaining true to the original intention of a central enterprise and serving national strategies. Guided by the spirit of the 20th National Congress of the Communist Party of China, we always regarded serving the country and the people as our mission. In 2023, we adhered to serving national strategies through major projects and helped the Baihetan Hydropower Plant win the FIDIC Excellent Engineering Project Award for 2023. We also won the bid for the Zhala 500MW Giant Impulse Turbine Project with the world's largest single-unit capacity. All four units of the Dubai Hassyan Power Plant Project were put into commercial operation and we received the 2023 International Safety Award, providing services for high-quality development of the Belt and Road.

Advancing reform, tackling key challenges, and continuously enhancing internal vitality. In the new journey of promoting high-quality development, we always regarded advancing reform as the overarching approach to enhancing corporate governance. In 2023, we formulated implementation plans and a comprehensive work account and identified 11 projects, 12 tasks, and 353 work measures. We consolidated and enhanced the achievements of the three-year reform of state-owned enterprises, with three pilot enterprises receiving recognition as one benchmark and two excellent enterprises in the "Double Hundred Action" and "Science and Technology Reform Action". Subsidiaries such as Harbin Electric Machinery Company Limited and Harbin Power Plant Valve Company Limited were selected as demonstration companies for creating world-class professional leaders, and the Company's the overall labor productivity reached RMB 462,309.72 per person, a YoY increase of 24%.

Looking ahead to 2024, we will continue to uphold the corporate mission of "Bearing hopes of the national industry, highlighting glamour of China power". We will integrate ESG concepts into all aspects of our production and operation. Aiming for sustainable development, guided by national strategies, and driven by reform and innovation, we will steadily move forward towards our corporate vision of "build a power carrier of equipment manufacturing industry in the world", we will strive to create a brilliant chapter of sustainable development.

Cao Zhian  
Chairman of the Board  
April 22, 2024

## About the Company

Founded in October 1994, Harbin Electric Company Limited (hereinafter referred to as the "Company") is a key member of Harbin Electric Corporation (hereinafter referred to as "HE"), a centrally-administered enterprise in China. It is one of the largest manufacturing, integration, and export bases for power generation equipment in China.

The Company has been always committed to the revitalization and development of China's equipment manufacturing industry and has actively promoted a new leap in China's power generation equipment manufacturing level and independent innovation capability. Some of its technologies have met the international advanced level. Adhering to the concept of sustainable development, the Company continues to strengthen the development of high-efficiency clean energy and new energy power generation equipment to achieve the coordinated development of enterprise and environmental protection.

The Company brings together domestic first-class scientific research, technology, and management elites, owns advanced production and scientific research test equipments, and has a perfect quality assurance and quality control system. Its research and development capabilities, manufacturing capabilities, and power station construction capabilities rank at the top among manufacturers of power plant equipment in the PRC.

Based on the domestic market, the Company actively carries out the "Going Global" strategy and implements the "Belt and Road" initiative. Our hosts and matching auxiliaries of thermal power, hydropower, and nuclear power have been exported to more than 50 countries and regions in Asia, Africa, Europe, and the Americas. Meanwhile, the Company also launches EPC, BOT, and BOO businesses of mechanical and electrical equipment as well as power transmission and transformation projects in thermal power stations, wind farms, and hydropower stations both at home and abroad.

In 2023, the Company saw operating revenue of RMB 28,840.86 million, a YoY increase of 17.03%, and the total number of employees was 11,283.



## ESG Governance Statement from Board of Directors

The Board of Directors oversees, leads, and supervises environmental, social and governance (ESG) efforts. The Board of Directors annually monitors the overall progress and performance of our ESG objectives, deliberates the effectiveness of our ESG policies, practices, and goals, and ensures sufficient resource support for our ESG governance. Under the leadership of the Board of Directors, the management implements relevant work, establishes necessary working institutions, and organizes various professionals to continuously provide necessary human and financial resources to support ESG governance.

Practicing the social responsibility concept of "Friendly Environment, Warm Home", we promote the integration of the sustainable development concept of "innovation, coordination, green, open, and sharing" into the Company's development. The Board of Directors formulates and continuously improves ESG strategies based on a deep understanding of the possible ESG risks and opportunities related to our business. We implement ESG strategies through such means as resource coordination, capacity building, and process monitoring, ensuring the sustainable development of our business while creating greater value for stakeholders, customers, employees, and the public.

Our ESG process covers a series of steps, including topic identification, goal setting, and experience summarization. We effectively communicate with stakeholders such as suppliers, customers, investors, and employees, combining quantitative and qualitative methods to identify and assess the importance of ESG issues. We implement applicable laws and regulations of the state and regulatory agencies and industry standards, formulate ESG governance goals and plans based on identified key ESG topics, and promote their enactment. While summarizing excellent ESG cases and typical experiences within the Company, we encourage management and employees to actively participate in ESG training and discussions to enhance their ESG capabilities and awareness. At the same time, we have established a comprehensive value creation and assessment system to promote the linkage between salary distribution and ESG performance.

The Company has detailed ESG work goals at different levels and a continuous and effective working mechanism. We implement ESG widely across various professional fields, management levels, and positions, achieving comprehensive coverage of production and operation systems, asset management, economic activities, and functional management systems. This Report provides a detailed disclosure of our practices, progress, and achievements in ESG, and the effectiveness of the related work has been reviewed and approved by the Board of Directors.



## Identifying Material Topics



Valuing the identification and analysis of material ESG topics, the Company has standardized the process for identifying material topics, actively understanding and responding to the suggestions and expectations of stakeholders. By referencing macro policies, ESG evaluation system indicators, and industry trends, the Company has ultimately identified 18 material topics that require particular attention. Through surveys among internal employees as well as external stakeholders such as governments, shareholders, and the public, the Company prioritizes the material topics and focuses on them in ESG management efforts accordingly.

### Analysis of Macro Policies

The Company understands the guidance of national policies to provide a reference for identifying material topics by learning the national "14th Five-Year" Plan, the policy system of "carbon neutrality and carbon peaking", and industry policies such as the *Standardization and Quality Improvement Plan of the Equipment Manufacturing Industry and Made in China 2025*.

### Requirements for Social Responsibility Information Disclosure by SASAC and Hong Kong Stock Exchange

Documents such as the *Research on the Compiling of ESG Reports for Listed Companies Controlled by Central Enterprises, the Guidance on Climate Disclosures*, and the *Listing Committee Report 2022* provide a basic reference for listed companies to identify ESG topics and disclose information.

### GRI Standards

The disclosure items of the GRI Standards issued by the Global Sustainability Standards Board (GSSB) are widely referenced by mainstream ESG information disclosure guidelines and ESG ratings, serving as an important reference for companies in compiling their ESG reports.

### MSCI ESG Rating

MSCI ESG Rating is one of the most widely used ESG rating systems globally. It focuses on 35 key ESG topics encompassing such aspects as pollution and emissions, human capital, data security, and business ethics. These topics reflect the international capital market's primary concerns regarding the Company's ESG, assisting the Company in better identifying material topics that require their attention.

### ESG Topics Identified by Peers

Based on the main business, the Company benchmarks ESG topics identified by domestic and foreign peers and verifies and reviews the ESG topics identified by itself.



## Communication with Stakeholders

During the development, the Company has profoundly recognized the importance of maintaining efficient communication and exchange with stakeholders. To ensure timely and effective communication with stakeholders, the Company has established diversified communication channels. This allows us to better respond to the suggestions and expectations of our stakeholders, thereby supporting the achievement of our strategic objectives and enabling us to better fulfill our corporate social responsibilities.

Analysis Matrix of ESG Material Topics of the Company



**General**

- Assistance for Community Development
- Response to Climate Change
- Waste Management
- Advocator for Industrial Development
- Pollutant Management

**Important**

- Protection of Employees' Rights and Interests
- Employee Development and Training
- Supply Chain Management
- Resource Utilization and Management
- Corporate Governance

**Very important**

- Protection of Investors' Rights and Interests
- Compliance and Risk Control
- Energy Consumption and Transition
- Customer Services
- Anti-corruption
- Occupational Health and Safety
- Product R&D and Innovation
- Product Quality and Safety

Stakeholders	Ways of Communication	Material Topics
Government	<ul style="list-style-type: none"> <li>High-level Meetings</li> <li>Communication and Exchange Meetings</li> <li>Information Submission</li> <li>Attendance at Meetings</li> <li>Company Announcement</li> <li>Information Disclosure</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Governance</li> <li>Compliance and Risk Control</li> <li>Anti-corruption</li> <li>Advocator for Industrial Development</li> </ul>
Shareholders/investors	<ul style="list-style-type: none"> <li>Information Disclosure</li> <li>General Meeting of Shareholders</li> <li>Official Website and Wechat Official Account</li> <li>On-site Visits</li> <li>Research Meetings</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Governance</li> <li>Protection of Investors' Rights and Interests</li> </ul>
Employees	<ul style="list-style-type: none"> <li>Open Governmental Affairs</li> <li>Information Disclosure</li> <li>Symposium</li> <li>Staff and Workers' Representative Congress</li> <li>Training Activities</li> </ul>	<ul style="list-style-type: none"> <li>Protection of Employees' Rights and Interests</li> <li>Occupational Health and Safety</li> <li>Employee Development and Training</li> </ul>
Customers	<ul style="list-style-type: none"> <li>Power Plant Service Platform</li> <li>Hotline</li> <li>Business Exchange</li> <li>Business Communication Meetings</li> </ul>	<ul style="list-style-type: none"> <li>Customer Services</li> <li>Product Quality and Safety</li> </ul>
The public	<ul style="list-style-type: none"> <li>Information Disclosure</li> <li>Petition</li> <li>Reporting Energy Conservation and Emission Reduction Information</li> </ul>	<ul style="list-style-type: none"> <li>Response to Climate Change</li> <li>Energy Consumption and Transformation</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>Supplier Conference</li> <li>Publicity of Bidding and Tendering Information</li> <li>Strategic Cooperation and Agreements</li> </ul>	<ul style="list-style-type: none"> <li>Supply Chain Management</li> </ul>
Community and NGOs	<ul style="list-style-type: none"> <li>Community Publicity</li> <li>Symposiums</li> <li>Public Welfare Activities</li> </ul>	<ul style="list-style-type: none"> <li>Assistance for Community Development</li> </ul>

# 01

## Corporate Governance

### Taking Compliance as the Foundation for Excellent Development

The Company firmly adheres to the principle of the rule of law and consistently enhances the integrated framework of legal compliance, risk management, and internal control mechanisms to guarantee that all operations and management align with legal and regulatory requirements. In 2023, we further reinforced our commitment to compliance and risk control and comprehensively facilitated the implementation of compliance management systems, thereby effectively elevating the standards of risk management and internal control practices.



## Standardized Governance

The Company continuously standardizes corporate governance to ensure operational compliance, promoting sustainable development through robust and honest business practices. Striving to improve our corporate governance system, we strengthen the protection of investors' rights and interests, heighten compliance management, and continuously improve the effectiveness of corporate governance.

## Corporate Governance System

The Company has established a corporate governance system centered on the Articles of Association according to the *Company Law of the People's Republic of China* and other applicable laws and regulations. We are committed to setting appropriate corporate governance structures, improving internal control mechanisms, and enhancing stakeholder engagement and supervision to drive continuous progress in corporate governance standards.

<b>General Meeting of Shareholders</b>	The General Meeting of Shareholders, as the governing authority of the Company, exercises its powers according to the law to decide on the Company's business policies and investment plans, as well as to elect and replace directors.
<b>Board of Directors</b>	<p>The Company has a Board of Directors that is accountable for and reports to the General Meeting of Shareholders. The Board of Directors is set with five special committees, namely, Review Committee, Supervision Committee, Remuneration Committee, Nomination Committee, and Strategic Development Committee. These committees provide advisory opinions and suggestions to the Board of Directors on relevant matters for decision-making, with the Supervision Committee and Review Committee operating in an integrated manner. In 2023, the Company held many meetings, including nine meetings of the Board of Directors, nine of the Review Committee, two of the Supervision Committee, three of the Remuneration Committee, two of the Nomination Committee, and six of the Strategic Development Committee.</p> <p>The independent non-executive directors of the Company possess diverse business expertise and have extensive experience in managing and making decisions for large enterprises. They can provide suggestions and opinions from different perspectives during the decision-making process of the Board of Directors on various important matters of the Company. In 2023, the Board of Directors consisted of seven directors, including four independent non-executive directors, accounting for 57%, ensuring the independence of the Board of Directors.</p>
<b>Board of Supervisors</b>	The Company has established a Board of Supervisors to ensure transparent and fair operations of the Company. The employee representative supervisors are democratically elected and dismissed by the Company's employees, while the remaining supervisors are elected and dismissed by the General Meeting of Shareholders. In 2023, the Board of Supervisors consisted of four supervisors, including two shareholder representative supervisors and two employee representative supervisors.
<b>Senior Management</b>	At the executive level of production, operation, and management, the Company has a president, senior vice presidents, and vice presidents, who are appointed or dismissed by the Board of Directors and accountable to it.

The Company improves its relevant systems for the operation of the Board of Directors and continuously revises and improves them according to relevant regulatory requirements, providing effective safeguards for the standardized operation and compliant decision-making of the Board of Directors. These systems include the *Working Rules of Board of Directors*, the *Working Rules of Special Committees of Board of Directors*, the *Measures for Authorization Management of Board of Directors*, and the *Working Regulations of Company Secretary*. The Board of Directors also exercises its powers and performs its duties in strict accordance with relevant systems and regulations.



Members of Board of Directors

### Case: Training on enhancing the performance abilities of directors

The Company continuously enhances the development and standardized operation standards of its Board of Directors. From March to April 2023, the Company organized independent non-executive directors to participate in the Seminar on Learning and Following the *Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era* and the Spirit of the 20th National Congress of the Communist Party of China organized by the Party Committee of SASAC to further understand and follow the *Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era* and the Spirit of the 20th National Congress of the Communist Party of China. In July, the Company organized independent non-executive directors to participate in the A+H Share Board Secretary/Independent Director Joint Training organized by the Hong Kong Chartered Governance Institute, as well as the *70th Lecture on Strengthening Continuous Professional Development for Corporate Governance Professionals*. The training included *Information Disclosure and Governance Compliance*, the interpretation of the *Measures for the Administration of Independent Directors of Listed Companies*, an analysis of cases of sustained responsibility and violation penalties of listed company directors, and the overview of the *Guidelines on Practices of Directors of Mainland Companies Listed in Hong Kong by the Hong Kong Chartered Governance Institute*, the role and practice of liability insurance from claims cases, updates to information disclosure management regulations for companies listed in Chinese Mainland and Hong Kong, and violation cases.

## Protection of Investors' Rights and Interests

To reinforce our investor relations management, cultivate positive relations with investors, and facilitate the achievement of our market value, the Company adheres strictly to laws, regulations, and normative documents, including the *Securities Law of the People's Republic of China*, *Opinions of the State Council for Further Improving the Quality of Listed Companies*, *Work Plan for Improving the Quality of Listed Companies Controlled by Central Enterprises by SASAC of the State Council*, *Guidelines for Investor Relations Management of Listed Companies by the China Securities Regulatory Commission*, *Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited*. In 2023, we formulated the *Regulations for Management of Investor Relations of Harbin Electric Company Limited* to further reinforce our investor relations management.

## Information Disclosure

Open and transparent information disclosure is an important measure for listed companies to respect and safeguard investors' right to know. The Company continues to strengthen information disclosure and enhance investors' trust and confidence. We fulfill our information disclosure obligations according to laws and regulations, strictly follow the accounting standards for enterprises, and promptly issue performance reports. In 2023, the Company issued 65 announcements.

The Company emphasizes improving the professional ability of its work team to strengthen information disclosure and better protect investors' rights and interests. We provide professional skills training for personnel related to investor relations management, including the Secretary of the Board of Directors, in aspects such as industry information, listing supervision, and corporate governance, effectively enhancing the professionalism of the team. In 2023, the Company actively participated in and conducted four times of training for personnel related to investor relations management.

## Communication with Investors

The Company actively strengthens communication with investors and establishes a multi-channel and multi-level interactive mechanism to exchange with investors. In 2023, the Company held two performance conferences, three on-site and online roadshows, 13 research meetings with analysts and institutions, and responded to over 100 inquiries.



**Convening general meeting of shareholders**

We invite shareholders to participate in the general meeting of shareholders through various means such as on-site invitations, video conferences, and telecommunications, aiming to create more opportunities for face-to-face communication between shareholders and the Company's management. We treat all shareholders equally, ensuring their right to know and make decisions on material matters of the Company.

**Utilizing media for publicity**

Fully utilizing our official website, WeChat official account, and other media channels, we publicize the Company so that investors can learn about the daily business information of listed companies promptly. Investors can contact the Company through various ways such as phone, fax, and email.

**Inviting for on-site visits**

We proactively invite shareholders holding a substantial amount of tradable shares in listed companies or those who frequently contact and show a high level of interest in the Company to visit us at an appropriate time. Under the premise of complying with information disclosure regulations, we communicate in detail about the Company's production and operation. Whenever conditions permit, we also arrange for shareholders to visit our facilities.

**Conducting research meetings**

The Company proactively gathers professional analysts in the machinery industry to issue research reports, actively cooperates with institutions and investors to conduct research, and records the entire process of the research.

## Compliance Management

As an essential part of corporate governance, compliance management is a crucial means for a company to enhance its core competitiveness, prevent market and legal risks, and firmly fulfill its corporate social responsibilities. In 2023, the Company continued to further improve compliance governance efforts. Taking the establishment of a compliant institutional system as the foundation, the Company leveraged a compliance review mechanism as a guarantee and emphasized compliance training and legal education as key areas of focus, continuously improving our compliance management.

### Development of Compliance System

The Company has established and improved a stratified and classified "three horizontal and three vertical" system under the Articles of Association. The Company horizontally classifies business according to categories and vertically stratifies business according to the system effectiveness, achieving standardized system audits and focusing on improving system standardization and effectiveness. In 2023, the Company and its subsidiaries comprehensively reviewed their systems. Based on the requirements for internalization of external regulations and the development needs of the Company, they added 296 items, revised 624, and abolished 137. There are currently 2,476 effective items.

The Company has a compliance management system composed of the Company's Party Committee, Board of Directors, management, and Risk Control and Compliance Management Committee. The Company's Party Committee plays a leading role, while the Board of Directors determines strategies, makes decisions, and prevents risks. The management focuses on planning operations, implementing strategies, and strengthening management. The Risk Control and Compliance Management Committee coordinates and oversees the compliance management efforts, study and respond to key challenges and difficult issues.

To ensure that the compliance system is in line with reality and operates smoothly, the Company insists on annually evaluating the effectiveness of compliance management. In 2023, the Company established 44 annual evaluation indicators for the effectiveness of its compliance management system. We conducted self-inspection and self-evaluation throughout the entire system and guided subsidiaries to rectify any identified issues within a specified time frame. After rectification, the average score increased from 71.17 points at the beginning of 2023 to 95.85 points. The Company and its subsidiaries have all established Chief Compliance Officers to ensure that compliance management is highly valued.

## Compliance Review Process

The Company's compliance review encompasses various aspects such as authorization approval, contract approval, legal review of significant decisions made by the president's office meeting, and system review. For significant and complex legal issues, the Company organizes relevant experts to conduct legal compliance demonstrations as needed. All important matters are required to be submitted to the Chief Legal Counsel (Chief Compliance Officer) for approval and issuance according to processes and procedures.

The Company has established a "3+X" operational mechanism for compliance management and integrated legal compliance reviews into business approval processes, improving the legal compliance review mechanism for major decisions. Through the "3+X" joint review for major decisions related to the Company's reform and development, we effectively ensure that all business activities are conducted according to laws and regulations. In the future, the Company will continue to strengthen its legal efforts and further integrate legal management with business management to ensure 100% legal compliance in the reviews of regulations, systems, economic contracts, and major decisions.

The Company has continuously advanced its compliance management information system, with all compliance reviews now conducted online. In 2023, Phase I of the compliance management information system achieved preliminary results, with the completion of projects such as a compliance risk database, a compliance system database, and a typical case database, providing solid data support for compliance management. In the future, the Company aims to further enhance its legal information system, finalize the functional module specification for the legal compliance risk control information project, and consistently bolster its compliance governance capabilities through technological means.

## Compliance Training and Legal Education

In 2023, the Company actively carried out various compliance training, legal publicity, and education activities to strengthen compliance awareness among leaders and employees.

### Training for Leaders

The Company has conducted two rounds of specialized training courses for enterprise leaders to enhance their ability to govern enterprises according to law, with more than 100 people trained in a single session. The Company has invited renowned legal experts from China University of Political Science and Law as trainers. In the training, the focus went to hot issues related to the compliance management systems of state-owned enterprises to enhance the understanding and execution ability of managers towards compliance management.

The Company has issued a *List of Party Regulations and National Laws that Leaders Should Know and Apply*, compiled a collection of national laws and Party regulations applicable to the Company's business operations, and encouraged leaders to take the lead in studying and applying the laws.

### Training for Legal Personnel

Through a combination of encouragement and evaluation, the Company organized the legal advisers of its subsidiaries to participate in the Fifth Session of the Training Course for Senior Legal Management Personnel of State-owned Enterprises held by SASAC of the State Council. This was aimed at enhancing their ability to make decisions using legal thinking and methods.

The Company actively follows the requirements of SASAC regarding comprehensively strengthening the foreign-related legal work of central enterprises under the new situation. The Company organized twenty personnels specializing in foreign-related legal affairs to participate in a two-month training program consisting of eight courses on basic knowledge of foreign-related legal professionalism.

### Legal Education and Publicity

The Company has carried out three rounds of regular legal education and publicity, promoting the concept of "everyone, everything, and always" according to law and regulations deeply rooted in our minds.

## Risk Management

Continuously improving the risk prevention and control system, the Company makes efforts in risk identification and investigation, risk control, risk reporting, and early warning. We integrate risk management awareness into every aspect of our production and operation, comprehensively enhancing the Company's ability to respond to risks. According to the *Risk Management Regulations* and the *Detailed Rules for Reporting Major Operational Risk Events*, the Company strictly implements the mechanism of "pre-event audit, in-event tracking and control, and post-event supervision and evaluation" to fully cover the entire risk prevention management process.

### Risk Identification and Investigation

The Company continuously improves risk identification and strengthens the identification and evaluation of major risks in advance. In 2023, the Company adjusted and updated its three-level risk database and conducted a comprehensive risk scan of its entire operational process. It identified a total of 152 potential risks, with special emphasis on the daily tracking and monitoring of the top few material risks, including investment risks, execution risks in overseas projects, parent company guarantee risks, cash flow risks, compliance risks, and work safety risks. The Company ensured the effective implementation of countermeasures against these risks.

In response to financing trade risks and foreign-related risks, the Company has made specialized risk investigation and prevention efforts. In 2023, the Company formulated and issued the *Notice on Further Strengthening the Risk Control of Financing Trade* and effectively prevented and responded to risks such as accounts receivable and taxation based on the conditions of projects and market development. The Company organizes special investigations related to risks in foreign affairs, including those involving sensitive countries, overseas business collaborations, industrial chain security, and export controls. We regularly identify and assess risks such as trade restrictions and sanctions imposed by the World Bank, and formulate targeted response plans accordingly.

### Risk Control

The Company fully follows the requirements of the *Internal Control Manual*, improves the internal control system, and actively carries out self-evaluation and improvement related to internal control. The Company also leverages incentive measures and corporate culture to embed risk management awareness into the daily work of employees, ensuring the integrity and effectiveness of the Company's internal control system. In 2023, the Company did not see any significant or material deficiencies in its internal control system.

### Risk Reporting and Early Warning

The Company has established and improved a comprehensive reporting and responsibility system for major operational risk events, which covers both vertical communication and horizontal collaboration. This system ensures the implementation of various tasks related to major operational risk events, including analysis and reporting, response and disposal, tracking and monitoring, warning and notification, as well as accountability and rectification measures. The Legal Department of the Company manages the reporting of major operational risk events. It is responsible for collecting, organizing, and analyzing information on major risk events submitted by the departments within the Headquarters and enterprises. The Company's business departments and affiliates are responsible for reporting, disposing of, and resolving their major operational risk events. The heads of departments within the Company's Headquarters and the principals of affiliates are responsible for the authenticity and timeliness of major operational risk events reported by their respective organizations.

## Anti-corruption

The Company is committed to playing a leading role as a central enterprise, continuously strengthening anti-corruption management, and improving whistleblowing and supervision mechanisms. We promote an integrity culture and adhere to the bottom line of integrity. We comply with applicable laws and regulations, including the *Supervision Law of the People's Republic of China*, the *Regulations of the Communist Party of China on Disciplinary Sanction*, and the *Rules for Handling Reports and Accusations by Disciplinary Inspection and Supervision Agencies*. We steadfastly carry out anti-corruption according to the relevant requirements of the Central Commission for Discipline Inspection of the Communist Party of China and the State Supervision Commission of the People's Republic of China. We have issued the *Measures for Decisions on Disciplinary and Administrative Sanctions* to strengthen and standardize the execution of decisions on disciplinary and administrative sanctions, ensuring that the decisions are fully and promptly implemented according to regulations, disciplines, and laws.

### Whistleblowing and Supervision Mechanism

The Company has established a power operation restraint and supervision mechanism led by internal Party supervision, with various types of supervision interconnected and coordinated. We effectively prevent corrupt practices among leaders, employees, and business partners by conducting supervision of "decision on major issues, appointment and dismissal of important officers, investment decision of major projects, and use of large amount of funds" issues, supervision on *Enforcement of the Central Party Leadership's Eight-Point Decision on Improving Work Conduct*, and supervision of key production and operation processes. In 2019, we established the Office of Supervisory Commissioner of State Supervision Commission stationed in the Company according to law. Adopting supervisory measures such as detention, inquiry, freezing, search, and retrieval, the Supervisory Commissioner has jurisdiction over 101 types of job-related crimes, effectively preventing criminal acts such as bribery and extortion. The Company provides safe, fair, and confidential whistleblowing channels, including mail, visit, phone, and online complaint reporting channels, to ensure smooth communication and whistleblowing. We handle complaints and reports in strict accordance with procedures and strengthen protection for informers.

**Supervision of "decision on major issues, appointment and dismissal of important officers, investment decision of major projects, and use of large amount of funds" issues**

Reinforcing political supervision, the Company encourages Party members and leaders to strictly adhere to the "decision on major issues, appointment and dismissal of important officers, investment decision of major projects, and use of large amount of funds" issues. Decisions must be made through collective discussion.

**Supervision on "Enforcement of the Central Party Leadership's Eight-Point Decision on Improving Work Conduct"**

The Company supervises the *Enforcement of the Central Party Leadership's Eight-Point Decision on Improving Work Conduct*, implements disciplinary supervision for Party members, and strictly prohibits improper behaviors such as giving gifts with public funds and seeking personal gain through official duties. It also vigorously rectifies any disciplinary violations.

**Supervision of key production and operation processes**

The Company supervises the key production and operation processes such as tendering, bidding, and material procurement. It enhances the integrity supervision of both employees and partners and severely investigates and punishes illegal and disciplinary violations such as "exploiting the Company for personal gain" and tunneling. This ensures the prevention and control of integrity risks in production and operation.

### Integrity Culture

According to the requirements of the *Company's Measures on Strengthening the Development of Integrity Culture in the New Era*, the Company actively carries out anti-corruption training and warning education activities to further strengthen the development of integrity culture. The Company has not only organized entrusted training sessions and invited experts from the provincial Party school to deliver special lectures, but also encouraged its affiliated discipline inspection institutions to conduct learning and educational activities at martyrs' cemeteries and integrity education bases, fully integrating ideological and political education with disciplinary warning education. In 2023, the Company selected disciplinary inspection and supervision officers to participate in relevant training courses organized by the China Academy of Discipline Inspection and Supervision and SASAC, with attendance reaching 21 times.

## Leading Role of Party Building

The Company firmly adheres to the leadership of the Party, continuously enhances Party building efforts, and leverages high-quality Party building to drive its high-quality development. Carefully understanding and following the spirit of the 20th National Congress of the Communist Party and the spirit of General Secretary Xi Jinping's important speeches, instructions, and directives, we fully implement various decisions and deployments of the Central Committee of the Communist Party of China and the State Council and sincerely follow the general requirements for Party building in the new era. We adhere to the leadership of the Party, enhance Party building, and seriously fulfill the main responsibility for comprehensively and strictly governing the Party.

Always taking political development as the priority, we profoundly understand the decisive significance of "the establishment of both Comrade Xi Jinping's core position on the Party Central Committee and in the Party as a whole", strengthen our consciousness of the need to "maintain political integrity, think in big-picture terms, follow the leadership core, and keep in alignment", strengthen "our confidence in the path, theory, system, and culture of socialism with Chinese characteristics", and "resolutely uphold Comrade Xi Jinping's core position on the Central Committee and in the Party as a whole and uphold the Central Committee's authority and its centralized and unified leadership". In 2023, the Company issued implementation opinions to strengthen and maintain the centralized and unified leadership of the Central Committee of the Communist Party of China. We studied

105 important speeches, instructions, and directives from General Secretary Xi Jinping and formulated 309 measures to follow and carry them out. We issued over 10 documents, including the *Decision on Fully Studying and Respecting the Important Speeches and Instructions of General Secretary Xi Jinping during His Inspection of Heilongjiang*.

The Company strengthens the political, ideological, and organizational development of the Party, integrating Party leadership into corporate governance. In 2023, we unwaveringly adhered to the spirit of General Secretary Xi Jinping's important speeches, instructions, and directives as our fundamental guide, focused on the new mission and positioning of state-owned enterprises and central enterprises. We further improved our development strategy and formulated over 20 systems and plans centered on the "Seven Key Areas for Strengthening the Company" and the "Seven Critical Factors for Revitalizing the Company".

The Company furthers its theories and strengthens its political and ideological guidance. In 2023, the Company achieved full coverage of training for its leaders and all Party members in the spirit of the 20th National Congress of the Communist Party of China. Focusing on 21 measures in six key areas, the Company thoroughly respected the spirit of the CPC's National Conference on Organizational Work. We also researched two Party building and political research topics at the central enterprise level and nine at the group level, publicizing over 180 times in national mainstream media.

### Case: Demonstration training course for understanding and following Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era

In August 2023, the Company's Party School held a Demonstration Training Course for Understanding and Following Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, with participation from Party Committee members, primary Party organization secretaries, and part-time Party officers. The training focused on key tasks of company reform and development as well as Party building, playing a positive role in further improving the quality of Party officers.



# 02

## Environmental Protection

### Green Operation for Sustainable Development

Companies face more compliance risks as environmental regulations continue to strengthen and supervision efforts intensify. Continuously strengthening environmental management efforts, the Company enhances emergency response capabilities for environmental risks, invests more in environmental protection, and actively fulfills environmental responsibilities.



## Environmental Management System



Quality, Environment, and Occupational Health and Safety Management Manual



Measures for Management of Energy Conservation and Environmental Protection

In strict accordance with the *Environmental Protection Law of the People's Republic of China* and other environmental protection laws and regulations, the Company has formulated an environmental protection system to strengthen environmental risk management and achieve sustainable development of its economy and environment. The environmental protection system is dominated by *Measures for Reporting and Investigating Production Safety Accidents, Measures for Management of Energy Conservation and Environmental Protection, Measures for Safety and Environmental Protection Rewards and Punishments*.

The Company and its affiliates have compiled environmental and occupational health and safety management manuals and procedures following the ISO14001 environmental management system, standardized management workflows, and optimized environmental management quality. The Company has established regulations to thoroughly assess and analyze its environmental impact factors, aiming to enhance environmental management standards and operational efficiency. These regulations include the *Quality, Environment, and Occupational Health and Safety Management Manual, Measures for Management of Energy Conservation and Environmental Protection, Management Measures for Occupational Health and Safety, Energy Conservation and Environmental Protection Responsibility System, Measures for Safety and Environmental Protection Rewards and Punishments, Management Plan of Occupational Health and Safety and Environmental Protection, and Control Procedures for Environmental Management and Operation*.

Prioritizing environmental risk management, the Company actively identifies crucial environmental factors, compiles a comprehensive list of key pollution sources, and continuously enhances risk control measures in alignment with environmental protection laws, regulations, and the standards set by the environmental management system. The Company complies with the *Technical Guidelines for the Development of Emergency Emission Reduction Measures for Key Industries in Heavy Pollution Weather (2020 Edition)* issued by the Ministry of Ecology and Environment of the People's Republic of China and the *Emergency Plan of Harbin City for Heavy Pollution Weather*. Based on these documents, the Company organizes its main manufacturing enterprises to compile the *Emergency Plan for Heavy Pollution Weather* based on their respective reality and strictly implements emission reduction and production reduction measures according to the heavy pollution weather warnings issued by the emergency command office for heavy pollution weather of the local government. The Company organized its affiliates to formulate emergency response plans for sudden environmental events based on their circumstances. In 2023, all such plans formulated by the Company were approved and registered with the local ecology and environment bureaus. In 2023, the Company continued to increase its investment in environmental protection, with a total expenditure of RMB 25 million for green technological upgrades and recycling utilization.



Environmental Management System Certificate

In 2023, the Company did not record any violations of laws and regulations related to the environment.



## Response to Climate Change

The Company actively promotes green and low-carbon transition and development, and identifies relevant risks and opportunities caused by climate change. We have formulated the *Management Measures for Occupational Health and Safety, Energy Conservation and Environmental Protection Responsibility System, Measures for Management of Energy Conservation and Environmental Protection and other systems*, to ensure the orderly development of energy conservation and environmental protection, and strive to transform into a greener, win-win and sustainable "zero-carbon" enterprise.

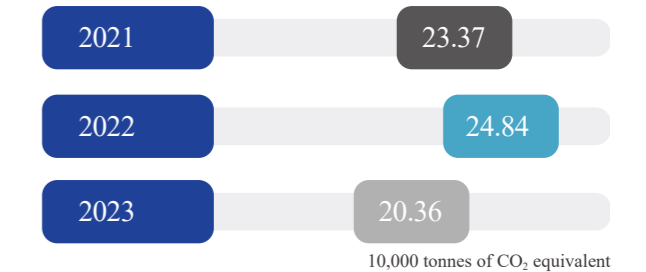
## Carbon Emission Management

The Company completed the energy consumption and carbon emission assessment indicators formulated by the SASAC of the State Council in 2023 with high quality, making contributions to reducing the environmental impact of enterprise production and operation. In 2023, the Company earnestly implemented the responsibility of energy conservation and emission reduction, promoted internal management, and constantly explored the potential of internal energy conservation. We have established the *Update Record of Equipment in Key Areas*, for the list-, record- and grid-based management of equipment. We organized enterprises to examine more than 65,000 sets of equipment, and found 283 sets of high-energy equipment and facilities below the national access standard for energy efficiency, and updated and phased out 205 sets of equipment.

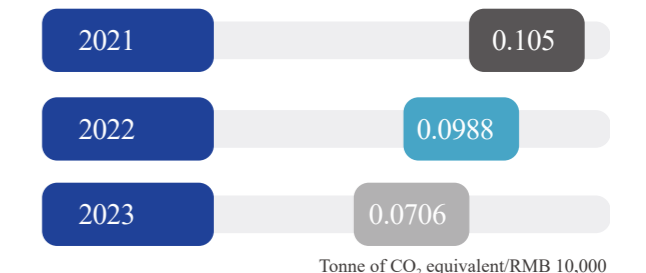
The Company also advocates and publicizes energy saving and carbon reduction. We actively publicize the national energy conservation and emission reduction policies, and popularize the basic knowledge of energy conservation and emission reduction, to create a strong energy-saving atmosphere within the enterprise. We also disseminate the advanced experience and practical technologies of energy saving and emission reduction. For example, with the office automation system, we have realized the online processing of document distribution, various administrative approvals, car application and other processes, effectively reducing carbon emissions. At the same time, the Company also adopted energy-saving measures such as turning off lights upon leaving, saving water and more, to practice the concept of green and low-carbon life.

In 2023, the Company's energy consumption was 55,600 tonnes of standard coal, down by 5.44% year-on-year, and the comprehensive energy consumption of RMB 10,000 output value was 0.0193 tonnes of standard coal per RMB 10,000, down by 28.86% year-on-year; carbon dioxide emissions were 203,600 tonnes, down 18.04% year-on-year; and the carbon dioxide emission per RMB 10,000 output value was 0.0706 tonnes per RMB 10,000, down 28.55% year-on-year.

Total GHG emissions (Scope I + Scope II) (as per Chinese mainland, market-based)



GHG emission intensity (Scope I + Scope II) (Unit operating revenue) (as per Chinese mainland, market-based)



## Energy Management

The Company attaches great importance to energy management, formulated the *Outline of Company Energy Plan*, and requires all its subsidiaries to establish an energy management system. All affiliates have prepared the *Energy Management Manual* according to the relevant management requirements of the *Law of the People's Republic of China on Energy Conservation and Energy Management Systems - Requirements with guidance for use* (GB/T23331—2020/ISO50001:2018), and continuously update and improve the contents of the Manual.

The Company conducts energy management in respect of reducing energy consumption and expanding the deployment of clean energy. The affiliates of the Company analyze and evaluate energy consumption and utilization of key energy-using units of the Company, and compile the analysis reports on energy utilization, the self-inspection reports on energy conservation, etc., providing reference for formulating and adjusting energy policies and improving energy utilization efficiency. At the same time, the Company strengthened the management of key energy-using equipment and energy metering facilities, and further regulated the basic work of energy consumption data monitoring, metering and statistics, to provide convenience for timely understanding of energy use and formulating scientific and reasonable energy-saving measures. The Company also strengthened the energy inspection, as well as the on-site lean management, and further intensified the rectification of air release or leakage, water dripping and leaking, to reduce unnecessary energy consumption.

In terms of energy types, the affiliates of the Company all adopt clean energies, mainly purchased electricity and natural gas. The affiliates have built several distributed PV power generation projects with an installed capacity of 2,500 kilowatts (kwp) and accumulated power generation of 1.14 million kWh. The Company continuously optimizes energy utilization and controls and reduces energy consumption intensity. **In 2023, the Company purchased 7.8 million kWh of green electricity throughout the year.**

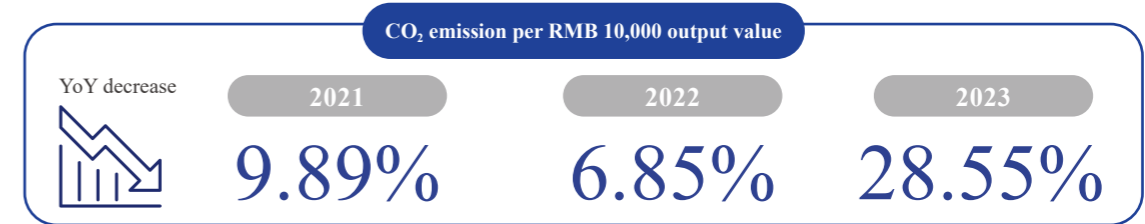
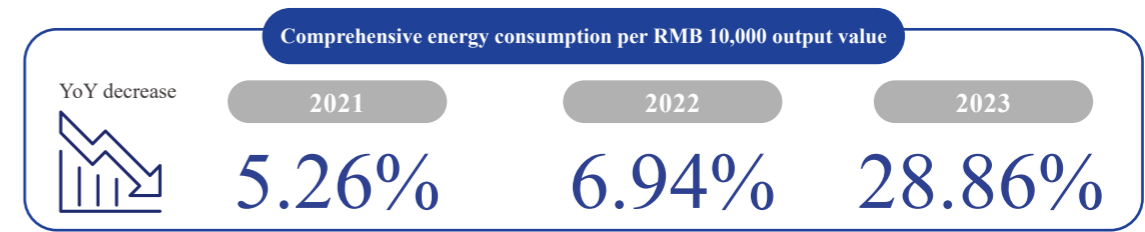
### Case: Creating “Green Factory” and “Green Workshop”

In 2023, the Company vigorously promoted the qualification of green factories of its manufacturing enterprises, and all its manufacturing enterprises have passed the national audit of “Green factory”. Meanwhile, we comprehensively sorted out the evaluation standards of energy consumption, pollutant control and comprehensive utilization of resources, formulated and published the evaluation standards of green workshops, and organized our affiliates to evaluate green workshops according to the evaluation standards, and selected 5 up-to-standard workshops and 5 qualified workshops.

### Case: The “5MWe Supercritical Carbon Dioxide Boiler” Project was included in the list of “World Advanced Clean Energy Equipment”

In 2023, the “5MWe Supercritical Carbon Dioxide Boiler” Project of the Company was included in the list of “World Advanced Clean Energy Equipment”, marking the position of the Company at the forefront of the world’s thermal power generation technology. The power generation technology adopted in the Project is the key research content of the *14th Five-Year Plan* of energy technology innovation. Compared with the conventional power generation technology, it features the advantages of high thermoelectric conversion efficiency, good flexibility, and wide practicability, with broad application prospects in coal-fired power generation, solar power generation, nuclear power generation, ship power and residual heat utilization.

Indicator	Unit	2021	2022	2023
Comprehensive energy consumption	Tonnes of standard coal	56,400	58,800	55,600
Comprehensive energy consumption intensity	Tonnes of standard coal/ RMB 10,000	0.029	0.0271	0.0241
Consumption of self-generated renewable energy	kWh	—	—	1,140,000
Quantity of green electricity and green electricity purchased with Green Certificate	kWh	—	—	7,800,000
Natural gas consumption	m <sup>3</sup>	13,590,000	14,090,000	15,860,000
Gasoline consumption of official vehicles	Tonne	284	264	373



## Pollutant and Environmental Impact Management

The Company attaches great importance to management of wastewater, waste gases and solid wastes, adopts scientific and effective management measures to reduce the discharge of pollutants, and strives to protect the environmental quality of water, atmosphere and soil for building a good ecological environment.

According to *Environmental Protection Law of the People's Republic of China*, *Law of the People's Republic of China on Prevention and Control of Water Pollution*, *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution*, *Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Wastes* and other laws and regulations, the Company has formulated *Management Measures for Occupational Health and Safety*, *Energy Conservation and Environmental Protection Responsibility System of Harbin Electric Company Limited* and *List of Main Responsibilities for Energy Conservation and Environmental Protection of the Company*, for regulating its waste management.

The Company endeavors to cause its affiliated enterprises to firmly establish the awareness of ecological environmental protection. The Company actively conveyed the spirit of the Central Enterprise Ecological Environment Protection Work Meeting and Warning Education Meeting of SASAC, the State Council, and issued the *Notice on Effectively Strengthening Protection of Ecological Environment*, requiring all enterprises to thoroughly study Xi Jinping's Thought on ecological civilization, deepen the battle against pollution, increase the efficiency of pollution reduction system and improve the environmental protection supervision system.

We signed the responsibility agreement for safety and environmental protection with the affiliates, and incorporated the energy consumption intensity and carbon emission intensity indicators into the business performance assessment of the enterprises. We also strengthen the process supervision and accountability of the affiliates, and include the failure in performing the responsibilities of energy conservation and ecological environmental protection, poor performance of duties and sudden environmental pollution incidents into the accountability matters.

### Case: The Company held the meeting of the Committee on Work Safety, Occupational Health and Environmental Protection.

In 2023, the Company held the meeting of the Committee on Work Safety, Occupational Health and Environmental Protection, and more than 50 people attended the meeting. At the meeting, the Company reviewed and approved the key work arrangements for safety and environmental protection in 2023, and signed the responsibility agreement for energy conservation and environmental protection with its affiliates, defining the binding indicators for energy conservation and environmental protection in 2023. All employees were also organized to sign the responsibility agreement for safety and environmental protection, requiring strict performance and accountability according to the list of responsibilities.



## Wastewater Management

The Company ensures that wastewater discharge meets the relevant national and local standards and policies. The affiliates of the Company apply for the wastewater discharge permit according to laws, and regularly entrust the qualified third-party testing company to conduct testing according to the requirements of the wastewater discharge permit, to ensure compliant wastewater discharge.

In 2023, the Company took comprehensive measures for wastewater management. The Company encourages its affiliates to build or renovate water treatment facilities, and expand the application scope of water treatment, for treatment of harmful substances in wastewater. At the same time, the Company attaches great importance to water pollution control, and does not adopt any high-pollution process. The main water consumption process of the affiliates is the product pumping test, and the wastewater is discharged to the wastewater treatment plant through the municipal pipeline network, which complies with the requirements of *Integrated Wastewater Discharge Standard*.

In 2023, the Company's wastewater discharge was 676,200 tonnes, a decrease of more than 29,800 tonnes compared with the same period in 2022.

Indicator	Unit	2021	2022	2023
Industrial wastewater discharge	m <sup>3</sup>	674,500	706,000	676,200
Chemical oxygen demand (COD) emissions	Tonne	19.66	20.95	19.2
Ammonia nitrogen (NH <sub>3</sub> -N) emissions	Tonne	0.65	0.68	0.63
Wastewater discharge compliance rate	%	100	100	100

## Waste Gas Management

The Company ensures the air pollutant emission meets relevant national and local standards and policies. The affiliated manufacturing enterprises of the Company apply for the pollutant discharge permit in accordance with the *Measures for the Administration of Pollutant Discharge Permits (Trial)*, relevant regulations of local environmental protection authorities and relevant national standards, and engage qualified testing companies to conduct regular testing on relevant pollutants, to ensure that the exhaust emission meets the limit standards.

In 2023, the Company actively implemented exhaust gas management. We organized affiliates to vigorously rectify smoke and dust generated in the welding process, and invested more than RMB 5.8 million for local control of welding smoke and dust in the Boiler Company and Electric Machinery Company, achieving significant results. We have also taken various rectifying measures, such as promoting the use of copper-free welding materials, installing dust collectors on fixed welding equipment and workstations, introducing mobile dust collectors and building cleaning rooms, which effectively control the unorganized emission of welding smoke and dust, and tremendously improve the on-site working environment.

Meanwhile, we actively respond to the "Car Free Day" activities, advocating green travel, and transport products by railway as much as possible, to reduce exhaust emissions. We have also built a seaport base in Qinhuangdao, which further reduced the emissions during transportation, making positive contribution to promoting the green development of the Company.

Indicator	Unit	2021	2022	2023
Nitrogen oxide (NO <sub>x</sub> ) emissions	kg	26,000	25,000	30,000
Sulfur oxide (SO <sub>x</sub> ) emissions	kg	30	30	28

## Waste Management

The Company attaches high importance to waste management. The solid wastes of the Company are mainly generated from machining, repair and maintenance, welding, sand blasting and other processes. The Company collects solid wastes generated to the solid waste site for temporary storage according to relevant national standards and requirements, and entrusts the disposal companies with relevant qualifications for compliant disposal. Our temporary storage sites for solid wastes meet the relevant technical requirements of the *Technical Guidelines for Solid Waste Treatment and Disposal Project*.

For hazardous wastes generated in our operating activities, we will collect them to the special warehouse for temporary storage, and then deliver them to the qualified third-party hazardous waste disposal companies for transfer and disposal. The collection, storage, transfer and disposal of hazardous wastes meet the requirements of relevant national laws and regulations. In 2023, the hazardous waste disposal rate of the Company was 100%.

The Company took a series of measures for solid waste reduction management. Through improvement of the production process of products, we improved the utilization rate of raw materials and product quality, thus reducing the rejection rate. Meanwhile, we indicated the technical and environmental protection standards for purchased products and materials in detail, and stipulated to give priority to products with energy efficiency labeling, green water-saving certification and environmental labeling, in the bidding documents of procurement projects, which effectively reduced over-packaging and the use of disposable products. We also actively promoted the application of water-based paints. Compared with conventional solvent-based paints, water-based paints are more environmentally friendly, contain no harmful substances and have less impact on human body and the environment. In 2023, the Company promoted the application ratio of water-based paints in key enterprises, with coverage of over 80%, and actively developed new products jointly with suppliers, to gradually expand the application scope. The application of water-based paint can reduce the generation of hazardous wastes and pollutants, and also reduce the safety risk level of the operation site.

Indicator	Unit	2021	2022	2023
Total volume of non-hazardous wastes	Tonne	3,487	11,000	12,000
Total volume of hazardous wastes	Tonne	2,428	1,700	1,662
Total volume of harmful wastes	Tonne	—	—	1,662

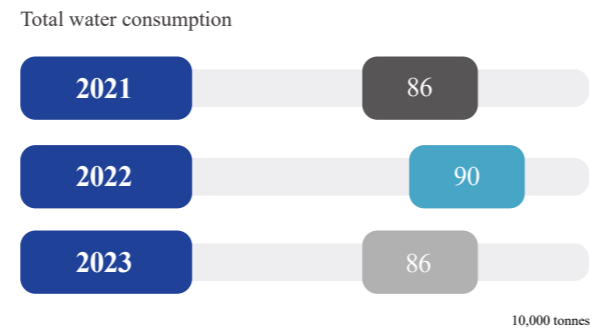


## Resource Utilization Management

The Company continuously pays attention to the utilization of resources, and strictly regulates the management of water resources, energy and materials, to realize the effective utilization and conservation of resources, and promote sustainable development.

### Water Resources Management

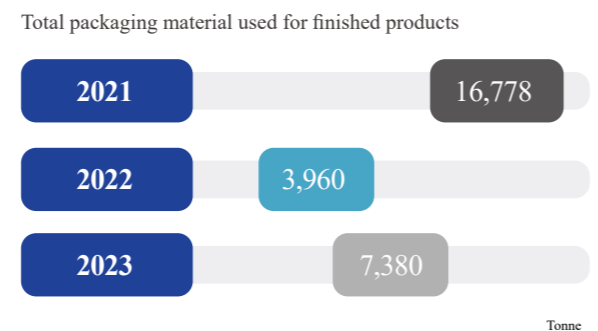
We focus on the management of water resources. In 2023, the Company further strengthened the dynamic identification and control of measures for energy use, formulated the water-saving report, intensified management of the energy consumption of key water users, and implemented the water-saving requirements in all production processes of the Company and its affiliates, focusing on the analysis and evaluation, measuring management and on-site supervision. At the same time, we actively organized activities of the Energy-saving Week and the Water-saving Week, posting the messages on the significance and skills of water-saving in various information groups and public big screens of all units of the Company; and actively participated in energy-saving and water-saving activities sponsored by the Harbin Municipal Government, disseminating the concept of green and low-carbon production and lifestyle to the society, to perform the responsibility of the central enterprise.



In 2023, to improve the utilization efficiency of water resources, we further increased the utilization of industrial circulating water, reduced the taking and use of new water, optimized the recycling of water for the pumping test, and encouraged available affiliates to build or renovate water treatment facilities, and expand the application scope of water reprocessing. The affiliates have prepared the water-saving self-inspection reports as required, implemented quota management and set the water quota, and received the assessment of the water resources management authorities of the local government. We also used air-cooled air compressor to replace water-cooled air compressor in the production process, and used recycled circulating water in product test water and intermediate frequency welding process to minimize water consumption.

### Material Management

We are aware that material management is an important part in our operation, and our affiliates have formulated relevant management systems such as procedures for material procurement management and standard for material warehouse management, to improve the material management level.



The main materials used in the Company include raw materials, accessories, packaging materials, etc. All our affiliates have developed the management procedures and standards for material entry, warehousing, safe storage, receiving and release of materials, etc., so as to regulate the management of materials. For material storage, we have formulated rules and regulations to clearly define the classified storage, storage conditions, safe storage, storage standards, palletizing standards, maintenance standards, identification, records and other aspects of materials, to facilitate management of material demand, and improve material utilization.

For the use of packaging materials, we actively implement the strategy of lightweighting, reduction and recycling of packaging materials. Through continuous improvement of design and process, we have improved the material utilization rate. Electric Machinery Company, through its elastic coating technology team, has achieved significant technical breakthroughs in replacing wooden cases with cartons in air transport projects. This innovation improves the weather resistance of outdoor storage of packaging boxes, and reduces the workload for unpacking, repairing, repeated packaging, etc. and the use of wood. The Company also made the innovative design of the oil-water combination for "dual use of one row", directly using the bottom row of the product for design and manufacture of packing boxes, which greatly reduced the manufacturing weight of the metal bottom row and energy-consuming operations such as blanking, cutting, welding, etc. By improving the structure and optimizing the bottom row of magnetic yoke stamping package, the consumption of solid wood in the bottom row is also reduced.

## Biodiversity Protection

The Company continuously promotes the smooth process of regional ecological balance and biodiversity protection in the areas of the projects by rationally employing responsible biodiversity management approaches, boosts the development of resource-saving and environment-friendly society, and contributes to realizing the vision of harmonious coexistence between man and nature with constant efforts.

We actively implement the *Convention on Biological Diversity* and participate in the initiatives for biodiversity protection. During the construction of the Manzanillo Combined Cycle Project in Mexico, the Company, adhering to the concept of sustainable development, replanted trees in the plant area, and donated trees to the government, to improve the local air quality and provide valuable habitats and abundant food sources for local wildlife. To protect local wild animals, the Company also established a professional team for regular patrol in the areas of the Project, prepared the plan for the activities and migration of animals affected by construction activities, and provided necessary food and protection measures, thus creating more favorable conditions for the sustainable development of the ecosystem. In Ecuador, the area of the Minas-San Francisco Hydropower Plant, built by Harbin Electric International Company Limited, a subsidiary of the Company, is rich in animal and plant resources. The Company took the initiative to implement the animal and plant rescue plan, and transferred, protected and relocated 141 species of plants and a large number of rare animals in the reservoir area, building a new image of the Company in overseas green construction.

### Case: The Company carried out biodiversity protection in Manzanillo Project

In 2023, during the construction of Manzanillo Project Phase 3, Mexico, the Company took measures such as planting trees and helping rare animals move to their new homes, to minimize the impact of construction of the Project on local biodiversity. The Project Department of the Manzanillo Project also actively organized the World Environment Day, biodiversity conservation publicity and other activities, to convey the importance of environmental protection and biodiversity to local employees, and encouraged them to participate in the conservation initiatives.



### Case: The Company actively participated in ecological protection at Hassyan Power Plant in Dubai.

Hassyan Power Plant in Dubai was designed with the state-of-art combustion, desulfurization, denitrification and dust removal technologies, with the emission indexes higher than those of similar units in the world. To protect the local ecosystem, Harbin Electric International Company Limited transplanted 28,850 corals in the construction area safely to the adjacent waters suitable for growth as scheduled. To protect endangered and rare species, the Company released 2,066 beautiful fishes of 26 species in a lagoon in the construction marine area into the sea, and collected the water quality and marine meteorological parameters day and night for real-time monitoring.



Hassyan Power Plant in Dubai





# 03

## Products & Services

Quality First, Innovative  
Development

As the earliest research and manufacturing base of power generation equipment in China, Harbin Electric has always adhered to the object of "Best in China and leading the world". We firmly believe that science and technology is the primary productive force, and promotes scientific and technological innovation with abundant talents, to achieve the sustainable development, and lead the development of the industry with cutting-edge products. In terms of the services, we strictly control product quality and provide clients with excellent products.



## Advocating Technological Innovation

As a leading energy equipment manufacturer in China, Harbin Electric always adheres to the basic principles of green, low carbon, high-end digital, collaborative innovation and open cooperation, and has formulated *Measures for Management of Scientific and Technological Activities*, *Measures for Management of Technical Transfer and Technical Cooperation*, *Detailed Rules for Management of Scientific Research Projects*, *Detailed Implementation Rules for Post-evaluation of Scientific Research Projects* according to the "Fourteenth Five-Year Plan" of the Company, and established a sound scientific and technological innovation system, to facilitate the systematic management of scientific and technological innovation, and support the high quality development of the Company.

Now we have fully established the scientific and technological innovation system consisting of three segments: new power system, green low-carbon drive system and clean and efficient industrial system.

## Research Innovation System and Results

As stated in the Report of 20th CPC National Congress, "We must regard science and technology as our primary productive force, talent as our primary resource, and innovation as our primary driver of growth. We will fully implement the strategy for invigorating China through science and education, the workforce development strategy, and the innovation-driven development strategy." We always abide by the innovation-driven strategy to promote the efficient development of the Company. Relying on "1 center and 4 platforms", we speed up the construction of the innovation system, and increase investment in scientific research to nurture our endogenous motivation.

Indicator	Unit	2021	2022	2023
R&D investment intensity	%	6.37	5.20	5.53
Proportion of R&D staff	%	21.36	23.69	25.31
Total technology investment	RMB 100,000,000	13.34	12.69	15.84
Number of R&D staff	Person	2,673	2,893	2,895
Number of new product development projects	No.	254	166	249
New product output rate	%	61.5	53.3	69.8

In 2023, the Company's total technology investment was RMB 1,584.13 million, and has 2,895 scientific research staff, including 6 national high-level talents, 1 "National Outstanding Engineer", 2 included in national "New Century Hundred, Thousand and Ten Thousand Talent Program", 23 experts with special government subsidies from the State Council, 102 professor level senior engineers and 1,604 senior engineers. With the support of the innovation system and the increased investment of the Company, we have achieved many scientific research and innovation results.

### National Key Laboratories

2

State Key Laboratory of Hydro-Power Equipment, State Key Laboratory of Low-carbon Thermal Power Generation Technology and Equipment

### Source of Original Technologies

1

Source of Original Technologies of Power Equipment (Hydropower Equipment)

In 2023, "Research and Application Innovation Platform of Key Digital Twin Technology for Power Generation Industry" of the Company was successfully included in the first batch of "Horse Racing" innovation platforms in the "14th Five-Year Plan" of the National Energy Administration. In December 2023, the Company successfully organized the 5th Board of Directors meeting of the 11th China Power Engineering Society, and Electric Machinery Company applied and successfully obtained the approval for "Heilongjiang Key Laboratory of Large-scale High-performance Water Pump Equipment".

## Outstanding Product Innovations in 2024

### 14 Projects Approved as National Research Projects

Fourteen projects led and participated by the Company, including "High Toughness Manufacturing Technology and Equipment of 500MW Impulse Turbine Runner", "Development of Pressurized Oxygen-enriched Combustion Heat Transfer Prototype of Pulverized Coal Boiler Coupled with Supercritical Carbon Dioxide Cycle" and "Large-area High Power Pulsed Ion Beam Modified Mechanical Seal Technology and Equipment", were approved as national key R&D programs or national research projects.

### 3 Projects Listed as "Top 10 Innovations of National Power Generation Equipment Industry in 2023"

The scientific and technological innovation results of 3 projects led or participated by the Company, i.e. the world's first 4th generation nuclear power plant Huaneng Shidaowan High Temperature Gas-cooled Reactor Nuclear Power Plant, the world's largest 500MW impact hydropower project Zhala Hydropower Plant, and the world's first demonstration project of Yingcheng 300MW Compressed Air Energy Storage Power Plant in Hubei, were successfully included in "Top 10 Scientific and Technological Innovations in the National Power Generation Equipment Industry in 2023".

### Other Results:

- "MW Turbine Generator Unit" was included in the catalogue of recommended scientific and technological innovation achievements of central enterprises.
- "Large-scale Impact Turbine Generator Unit" was listed as the "One-stop" application demonstration direction of the Ministry of Industry and Information Technology and the SASAC.
- Completed the prototype test of the first large-scale variable-speed pumped storage real machine proportional rotor model without power supply in China.
- Successfully signed the contract for Zhongdong 400MW variable speed pumped storage unit in Huizhou with the largest single unit capacity in China.

Award	Technology	Awarded by
Gold Award of China Good Design	"700m-Head 400MW High-speed Pumped Storage Generator Unit", "Development and Application of 600-1000MW Ultra-supercritical Secondary Reheat Boiler"	Sponsored by Innovation Design Industry Strategic Alliance of China and organized by Chinese Mechanical Engineering Society
Silver Award of China Good Design	"Research and Application on Key Technologies of 660MW Ultra-supercritical High-position Turbine"	
First Prize of Hydropower Science and Technology Award	Key Technology and Application of 400,000 kW 700-meter High Stability Pumped Storage Generator Unit	Chinese Society of Hydroelectric Engineering
First Prize of Electrical Science and Technology Award	Key Installation Technology and Application of Huge Francis Turbine Unit	Chinese Society of Electrical Engineering (CSEE)
First Prize of Boiler Science and Technology Award	"Development and Application of 600MW High-efficiency Supercritical II Boiler Burning Ultra-high Moisture Inferior Coal", "Characterization Technology and Key Equipment Development of Hydrogen Storage and Transportation System Materials in the Presence of Hydrogen"	China Electrical Science and Technology Award Office
Second Prize of Hebei Science and Technology Progress Award	Manufacturing Technology Research and Engineering Application of Steam Generator for High Temperature Gas Cooled Reactor	Hebei Provincial People's Government
Others	In January 2023, received the Special Prize of CNNC Science and Technology Award in the construction of the first reactor of Hualong No.1, an independent third-generation nuclear power technology in China. In November 2023, received the Third-class Merit in the construction of Unit 1 of the demonstration fast reactor.	

Moving forward, Harbin Electric will continue to optimize and improve the scientific and technological innovation system, further promote the construction of two national key laboratories, speed up key core technology research, and increase investment in strategic emerging industries and future industries, to improve the level of transformation and application of scientific and technological results across the board.

## Intellectual Property Protection

The Company attaches high importance to the protection of its intellectual property rights, and has formulated management systems such as *Detailed Rules for Management of Patents*, *Detailed Rules for Management of Trademarks*, and *Measures for Protection of Trade Secrets and Work Secrets*, to safeguard its technological innovation.

In 2023, the Company and its affiliates continuously strengthened the protection of intellectual property rights, and obtained 331 patents, including 148 invention patents.

Indicator	Unit	2021	2022	2023
Number of valid patents per RMB 10,000 operating revenues	No.	0.001897	0.00172	0.001427
Number of software copyrights per RMB 10,000 operating revenues	No.	0.000019	0.000016	0.000014
Number of software copyrights in reporting period	No.	40	40	40
Number of software copyright registration in reporting period	No.	40	40	40
Number of trademarks, software copyrights, and other IPRs in reporting period	No.	51	51	51
Number of patent licenses in reporting period	No.	536	409	331
Number of trademarks approved during reporting period	No.	0	0	0
Number of valid patents during reporting period	No.	4,027	4,239	4,117

## Digital-intelligent Transformation

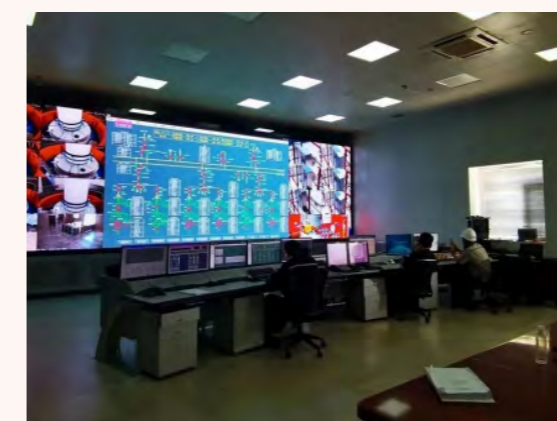
Developing digital economy is of great significance to the rapid development of enterprises, and the digital transformation of equipment manufacturing industry is a realistic need to promote the high-quality development of the Company. The Company has continuously accelerated the digital and intelligent transformation of its conventional industries, implemented digital transformation as a major strategy with current benefits and long-term value, and constantly studied and explored the deep integration of digitalization and manufacturing, thus opening up a new development path for the Company to realize the transformation and upgrading of conventional industries and high-quality development.

According to the *14th Five-Year Plan for the Development of the Digital Economy*, the Company has formulated *Management Measures for Cybersecurity and Digitalization*, *Management Measures for Cybersecurity* and other system documents, so as to regulate the digital construction of the Company. The Company adopts digital production, intelligent equipment and IT-based management as its direction for digital transformation. At present, we are vigorously exploring innovative applications of new generation information technologies such as 5G, cloud computing, big data and AI, and comprehensively promoting the construction of digital workshops, intelligent equipment and smart power plants.

In 2023, the Company accelerated the digital transformation and utilized digital technology to empower advanced manufacturing, achieving outstanding results. 4 scenarios, namely "Production Plan Optimization" and "Digital Process Design" of Boiler Company, and "Flexible Production Line Configuration" and "Dynamic Process Optimization" of Turbine Company, were included in the 2023 List of Excellent Demonstration Scenarios of Intelligent Manufacturing of the Ministry of Industry and Information Technology.

### Case: Turbine Company optimized management process through MES system (Manufacturing execution system)

Turbine Company under the Company completed construction of MES Phase 2 Project in 2023. With the MES system, the Company vigorously promoted optimization and innovation of the management process, further improved the cooperation efficiency between departments, effectively implemented the operating guidelines for business and finance integration, and boosted the digital workshop construction of the Blade Factory.



### Case: Electric Machinery Company has built a hydropower cloud service platform to provide intelligent operation and maintenance services

Electric Machinery Company, a subsidiary of the Company, has built an intelligent and digital twin system of power equipment centering on the hydropower cloud service platform, which integrates intelligent fault diagnosis, product maintenance, after-sales service, spare parts management and product optimization, providing efficient, reliable and intelligent operation and maintenance services for power plant operation, filling a long-term gap in remote intelligent operation and maintenance of power plants in China.

## Leading Industrial Development

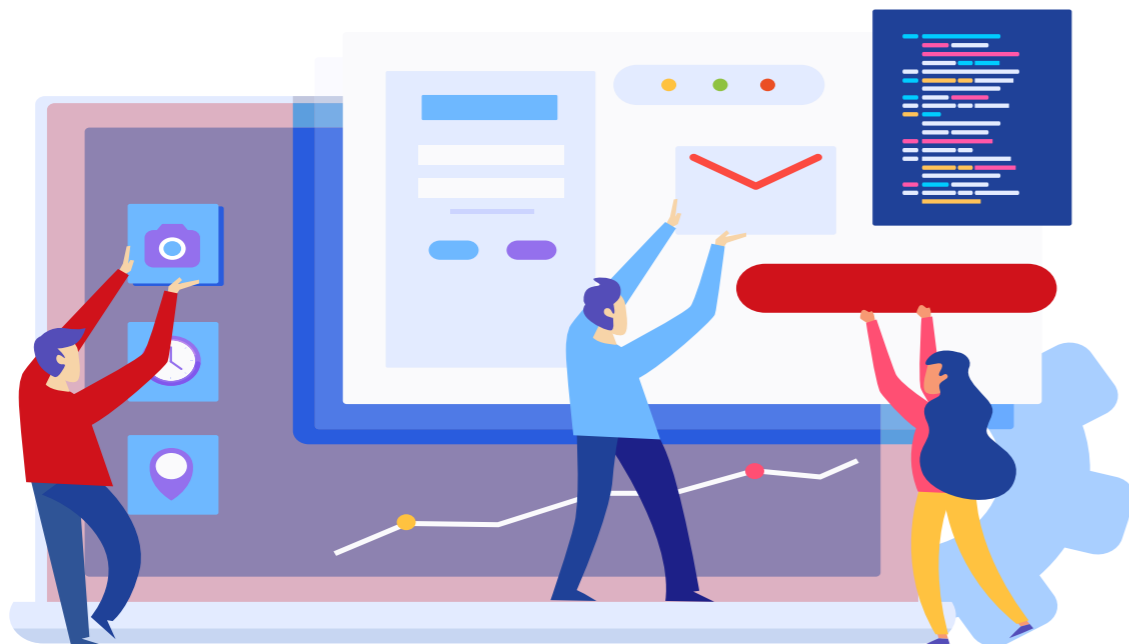
Adhering to the purpose of "to provide power for the world and bring brightness to human being", we are always committed to making the development of the Company provide kinetic energy for the development of the industry. Based on our scientific research and technical foundation, talent and resource advantages, we have been actively participating in the formulation of industry standards and carrying out university-enterprise cooperation for a long time along with our development, leading the healthy and sustainable development of the industry.

### Preparation of Industrial Standards

In 2023, we and our affiliates participated in the formulation of 1 national standard and revision of 5 national standards, among which the *Code for Quality Control of Gas Turbines* was the national standard we participated in the formulation, and the *Basic Technical Requirements for Hydro-generators* and *Model Acceptance Test for Hydroturbines, Storage Pumps and Pump-turbines* was the national standard we led for revision. We also participated in the formulation of 6 industry standards and revision of 3 industry standards, among which *Guidelines for Selection of Three-way Valve for High Pressure Heater in Power Station* and *Technical Specification for Waste Heat Recoverer of Kettle Fire Tube* were the industry standards we led for formulation.

### University-Enterprise Cooperation

The Company places high importance on the cultivation of future talents in the industry. In 2023, the Company and Harbin Institute of Technology (HIT) jointly established the Research Institute of Green Low-carbon Energy Innovation for cooperation in scientific research, personnel training, result transformation, construction of innovation platform and experimental base, etc. in the field of green low-carbon energy. Both parties will focus on the key technologies, core processes and common problems of the Company's transformation and development, and utilize the advantages and characteristics of Harbin Institute of Technology, to carry out scientific research cooperation, jointly build an innovation platform, further deepen cooperation in personnel training, strengthen the transformation of scientific and technological results, and get through the "last mile" of scientific and technological result transformation. The Institute also helps HIT promote talent development based on the advantages of the Company.



## Product Quality Assurance

Product quality is the basis for serving customers and building the corporate reputation. The Company adheres to the strategic roadmap of "Build China Power by Manufacturing and Quality", and implements the quality policy of "Quality First, Excellence, Integrity and Customer Success" in performing internal quality management.

For quality assurance and improvement of products and services, the Company has formulated *Management Measures for Quality Improvement*, *Management Measures for Quality Responsibility Assessment*, *Management Measures for Quality Responsibility*, *Management Measures for Customer Complaints and Quality Information* and other policies in accordance with *Product Quality Law of the People's Republic of China*, *Nuclear Safety Law of the People's Republic of China*, *Requirements for Quality Management System* and *Quality Assurance for Safety in Nuclear Power Plant* and other laws, regulations, standards and codes.

### Quality Management System

The Company implements the management principle of full coverage of quality responsibilities, and defines all-round quality responsibilities in the whole process for all staff, from the Board of Directors to specific functional departments, so that any matter shall be attended, and the work goes on in a coherent and orderly manner, to avoid any responsibility void, and ensure the orderly process of quality activities of the Company.

1<sup>st</sup> level

#### Chairman of the Board

- Comprehensively lead the quality affairs of the Company
- Support preparation of the medium and long-term plan for quality development of the Company
- Lead to establish the quality management organization, assign the quality responsibilities of all departments and personnel at all levels, and provide necessary resources for the effective operation of the quality management organization
- Lead to establish, operate and maintain the quality management system, approve and issue the quality policies, quality manual and quality assurance outline, preside over the management review, and be responsible for the effectiveness of the system
- Lead the construction of the quality culture and nuclear safety culture of the Company, sign the statement of nuclear safety culture policy, publicize and implement the bottom line thinking of two zero-tolerances (illegal operation, concealment and misrepresentation) for nuclear power products.
- Be responsible for the final product quality and service quality, and ensure that the product quality meets national laws, regulations, standards and specifications and customer requirements.

2<sup>nd</sup> level

**Executive director responsible for quality affairs**

- Implement specific quality work under the leadership of the chairman and general manager of the Company, and be responsible for overall coordination and comprehensive supervision and management of the quality work in the Company
- Be responsible for organizing the formulation and implementation of the Company's medium and long-term plans, rules and regulations for quality development.
- Be responsible for organizing the establishment, operation and maintenance of the quality management system, examine and approve the quality manual and quality assurance outline, approve and issue the annual quality management work plan, implement the quality policies and quality objectives, preside over the internal audit, organize the implementation of the management review resolution, and directly report the operation of the quality management system and the improvement opportunities to the chairman
- Be responsible for all quality-related work, including construction of the quality culture, investigation of quality accidents and rewards and punishments related to quality
- Be responsible for the final product quality and service quality, and ensure that the product quality meets national laws, regulations, standards and specifications and customer requirements.

**Other executive directors**

- Perform the dual responsibilities of direct leadership, supervision and management for the quality control of the business system according to the division of duties
- Support the work of Chairman, Executive Director in charge of quality control and quality management departments
- Organize business systems and departments to formulate and implement quality policies, laws, regulations and standards, the Company's quality policy objectives, rules and regulations, and specific measures for quality layout and requirements

3<sup>rd</sup> level

**Heads of departments at headquarters**

- Be fully responsible for the quality control within the scope of business under their jurisdiction, and be the first person responsible for quality control of their departments
- Implement national quality policies, laws and regulations, the Company's quality policies, quality objectives and rules and regulations, refine and implement the quality responsibilities of their departments required for the operation of the quality management system
- Supervise and inspect the quality publicity, education and training of their respective departments
- Be liable for the management of product and service quality accidents caused by the management of their respective departments
- Strictly execute other quality tasks assigned by leaders of the Company

**Headquarters staff**

- Implement national quality policies, laws and regulations, the Company's quality policies, quality objectives and rules and regulations, implement the quality responsibilities of their position, and take direct responsibility for the quality control within the business scope
- Receive quality education and training, master the quality knowledge of their position, and improve the level of business capability
- Obey the supervision, management and guidance of the quality management departments and personnel
- Strictly abide by the quality control rules and regulations of the Company and their departments
- Take corrective and preventive measures timely in case of quality non-conformities related to their position
- Participate in quality activities and constantly improve quality awareness and personal quality
- Strictly execute other quality tasks assigned by department heads

**Under the strict requirements and the full implementation of regulations by departments, the Company has obtained ISO9000 quality management system certification.**



## Product Quality Inspection

The Company attaches great importance to the quality and safety of products, to the extent that all affiliates are required to set up a special quality inspection department for systematic inspection, strengthen the quality risk investigation in advance, and identify problems, priorities and details to root out quality hazards and adverse effects.

### Product quality inspection stage



Highly qualified and demanding personnel are required for accurate product quality inspection. As requested by the Company, those engaged in product quality inspection in affiliates must be trained and authorized, and maintain the inspection records in the product quality inspection process, including which links the product has been inspected and the person in charge of product inspection and validation. The quality inspection department shall conduct acceptance in accordance with the inspection and acceptance rules.

## Quality Accountability Mechanism

From the production stage, the consciousness of "quality responsibility" is deeply rooted in the hearts of every employee to effectively ensure product quality. The Company has formulated the quality accountability mechanism according to the principles of "Prevention First, Big Rewards and Penalties, Reasonable Fault Tolerance". In the event of quality problems, this mechanism can secure timely traceability, pinpoint the cause, and reduce subsequent quality problems.

- **Quality responsibility traceability**  
In the process of product realization, the Company realizes the record and storage of personnel information through product identification, so that they are sourced, traced and blamed. When necessary, the responsible parties can be identified efficiently and accurately, with clear responsibilities and well-founded investigation.
- **Division of quality responsibilities**  
The quality accidents and quality management problems should be traced back to the specific responsible departments and ultimate persons liable. The primary and the secondary responsible departments are clearly determined by following the principle of "focusing on the principal contradiction". In case of failure to identify the responsible department and ultimate person liable for quality problems, main managers and competent executives shall bear the relevant responsibilities.
- **Quality loss recovery**  
If the enterprise suffers economic losses due to quality problems, the economic liability shall be pursued and decomposed stepwise to the responsible departments and ultimate persons liable.
- **Lifelong accountability for quality**  
The ultimate persons liable who meet the penalty standards for quality accidents and quality problems shall be held accountable for life, and shall not be exempted from punishment due to job adjustment, transfer and

## Product Quality Improvement

The Company strives for excellence and constantly improves the quality of products to provide customers with quality products. The Measures on the Management of Quality Improvement Project is issued to standardize the continuous improvement of product quality of the Company and affiliates.

The quality improvement and resource allocation are coordinated by the Safety and Environmental Quality Department. Superior resources are leveraged to solve typical product problems. This can promote system rectification in all areas by the experience gained on key points, and facilitate the rectification of root causes of "common problems and frequent failures".

### Management process for quality improvement project

- Project application: Quality improvement projects are planned and prepared at the end of each year
- Project approval: The Company approves the quality improvement projects submitted according to the principles of necessity as deemed by the results of quality statistical analysis, strong urgency for the enterprise, and concentrated customer complaints.
- Project startup: Upon the completion of project approval, the Company sets up a project team to officially start quality improvement
- Planning: The project team makes a reasonable quality improvement schedule
- Project implementation: The project team breaks down the project objectives and organizes the implementation. In the process, advanced quality improvement models may be applied such as technical zero and management zero, Lean Six Sigma, eight disciplines problem solving (8D), and quality control circle (QCC)
- Project monitoring: The Quality Management Department supervises and evaluates the project team's plan implementation and work quality. The Safety and Environmental Quality Department conducts quarterly and critical node checks on the implementation of group-level quality improvement projects. Each project team fills in the Summary of Quarterly Implementation for Quality Improvement Projects and submits the project implementation report before the end of the last month of each quarter. After the project is completed, the project team submits the acceptance application to the Quality Management Department in a timely manner, and submits the project summary report
- Project acceptance: Upon the completion, the Quality Management Department accepts the project using defense review, document audit and other ways

For excellent product quality improvement projects, the Company will give cash incentives and certificates, forming a lean product quality atmosphere and constantly grinding to bring better products to customers and the market.

**In 2021-2023, the Company had 0% of total products sold or shipped subject to recalls for safety and health reason.**

## Supplier's Product Quality Improvement

Besides the internal control of product quality, the Company encourages suppliers to get involved in the process of product quality improvement. Proceeding from the fully enhanced construction of supplier team, the Company adheres to the principle of "Whoever chooses/purchases will be in charge", and strives to solve prominent contradictions and problems in supplier management, and constantly promotes the integration of supplier resources, high quality and preferential prices of products to facilitate the Company's high-quality development.

The Company extends the quality management system to the suppliers, constantly improves the suppliers' awareness of quality, risks and responsibility, and increases the control of critical products and crucial links. According to different product characteristics, the control of supplier design and development, special process, first article inspection, secondary subcontracting and other links is strengthened to keep the critical processes under control. For suppliers with prominent quality problems and high frequency of problems, the Company gives priority monitoring, and ensures clear rectification of problems, proper and favorable measures, and obvious improvement effects through qualification review, special inspection, unannounced inspection, etc.

In 2022-2023, the Company systematically sorted out the existing supplier resources. The Company strives to cultivate and manage strategic suppliers, adopts supportive and incentive policies, strengthens the "price-driven to value-driven transformation" in the procurement of materials to ensure stable and controllable supply quality. Such efforts are made to establish a long-term strategic alliance of mutual learning, mutual support and common development. At least one supplier meeting is organized every year. Any suppliers with quality problems will be put on the Negative List, and in principle, no new procurement is allowed before the quality problems are rectified. Those who refuse to make rectification will be included in the blacklist. Blacklisted suppliers shall, in principle, be vetoed by one vote, and be imposed with company-wide restrictions to achieve zero tolerance.

By the above means, the Company continues to improve the quality control level of suppliers, achieve stable and controlled product quality, enhance customer satisfaction, and promote the continuous improvement of the corporate product quality and quality brand.



## Protection of Customer Rights

Customers are the important support and core resources for the development of enterprises, and the Company attaches great importance to safeguarding customer rights and interests. By building a sound customer service system, the Company is committed to accurately serving customer requirements and enhancing customer satisfaction. Applicable regulations are formulated to build and maintain customer trust in the Company. All business departments are strictly required to protect customer privacy, sincerely listen to customer feedback on services and products, and based on this, constantly optimize our work.

### Customer Service System

The Company is missioned to serve, facilitate and meet customer requirements and treat every customer sincerely. The Company has established a sound customer service management system, and set up a full-time department for customer communication, so that their pre-sales, in-sales, and after-sales problems can be solved in a timely manner.

### Protection of Customer Privacy

Maintaining customer privacy is an inevitable requirement for enterprises to abide by laws and regulations, and even an important basis for building trust and enhancing brand image. The Company attaches great importance to the strict protection of customer information in all services.

With a view to protecting customer privacy and security, the Company has formulated the *Management Measures for the Operation of Customer Relationship Management System*. These Measures emphasize that the system contains a large number of customer contacts and business opportunities, so that all personnel must keep it confidential and shall never disclose the information. These Measures clearly stipulate specific measures to protect customer information in the use of the customer relationship management system, such as sending random SMS verification codes to confirm the logged-in identity, restricting the authorized user from logging in to the device.

#### Number of confirmed cases of leakage, theft or loss of customer information

2021

0

2022

0

2023

0



## Smooth Feedback Channel

Customer demand and evaluation allow a company to improve its service. The Company attaches importance to smooth customer feedback channels, and receives customer comments in the first place. In 2019, the Company's power station service platform was officially launched, realizing the organic combination of "Internet + service", and providing users with efficient and authoritative problem communication and solutions and a full range of system services. Thanks to the comprehensive strength of the Company's key enterprises, the platform addresses user needs and provides users with quality and satisfactory services.

In 2022, the Company opened a 400-156-1234 customer hotline to accept and resolve all matters of dissatisfaction perceived by customers with the products and services provided by the Company throughout the product life cycle, and to provide a full range of pre-sales, in-sales, and after-sales service consulting answers and solutions.

Picture of Power Station Service Platform    Customer Hotline Picture

## Resolution of Customer Complaints

The Company resolves customer complaints by following the working principles of "Customer First, Standard, Efficient and Expedient Handling". The Company collects customer complaint information from the "cloud customer service" hotline, power station service platform, ERP information platform system, written letters, meetings and interviews, Internet mail and other channels.

In response to customer complaint information, the primary responsible department will convey it to the affiliates within one business day, complete customer contact confirmation, further exchange and inquiry (if necessary) and inform the preliminary work plan within two business days. For routine issues, the settlement plan or program shall be made within ten business days, and be agreed by customers; for complicated matters, the settlement plan or program shall be made within twenty business days, and be agreed by customers. All affiliates should work in strict accordance with the milestones of the settlement plan or program. In order to effectively ensure the resolution of customer complaints, the Company has incorporated the closure rate of customer complaints and the satisfaction rate of customer complaints handling into the assessment of relevant departments as important metrics.

Indicator	Unit	2021	2022	2023
Product quality complaint	No.	—	5	0
Service complaint	No.	—	10	1
Complaint handling rate	%	—	100	100
Satisfaction rate	%	—	100	100

## Supply Chain Management

Supply chain management is essential for modern business operation. The Company is committed to building an efficient supply chain management system to increase productivity, shorten lead times, and foster a healthier and more sustainable supply chain.

Indicator	Unit	2021	2022	2023
Number of incidents with significant risks and impacts in the supply chain	No.	0	0	0
Those involved in the incidents with significant risks and impacts in the supply chain	No.	0	0	0

By taking Quality First as the value orientation, the Company actively develops, cultivates and expands domestic and foreign high-quality supplier resources, establishes long-term and stable partnership with suppliers, builds a communication mechanism with the senior management of suppliers, and improves their awareness of social responsibility. To standardize supplier management, the Company continues to strengthen the supplier process control, supervision and inspection, performance evaluation, and promote the improvement of supplier control. We have formulated the *Measures for the Management of Supplier Qualification* and the *Regulations on Supply Chain Management* to make detailed provisions on the responsibilities of departments, the classification and certification evaluation, assessment and punishment of suppliers, promote the normalized and systematic prevention and control of procurement risks, and ensure the safety and stability of the supply chain. The Company constantly relies on the construction of information management platform to actively promote the standardization of supplier management.

The Company organizes affiliates to prepare autonomous and controllable work plans, actively promotes autonomous and controllable work, increases the promotion and application of localized projects, and does a good job in the reserve of imported important raw materials. In 2021-2023, the Company completed a total of 82 localization projects.

### Case: Carrying out supplier quality management improvement actions to keep quality of outsourcing products stable and controlled

To further improve the quality control level of suppliers and achieve stable and controlled quality of outsourcing products, the Company has formulated the *Supplier Quality Management Improvement Action Plan* to effectively solve the pain points and difficult quality problems. The Action Plan was implemented in 2023. Following the special supervision of organizational planning, program decomposition, and goal setting, and the organization of key enterprises to exchange management experience, the Company organized a phased evaluation in February 2023 to ensure the effectiveness of work. At the end of 2023, this action entered the stage of acceptance of results. The Company summarized the practices and experience of supplier management improvement actions, conducted a comprehensive and in-depth inspection and evaluation of the improvement effect, established a long-term mechanism for the improvement of supplier management, and continuously strengthened the level of supplier management.

### Case: Sorting out major risks in the supply chain, and completing 100% of risk control

In early 2023, the Company organized affiliates to sort out major risks in the supply chain, assess risk sources and potential impacts, break down key tasks, and formulate work plans for risk response in supply chain management. Steady progress was made in dealing with major risks in the supply chain. The Company re-evaluated whether the risk control objectives had been completed at the end of the year, and re-evaluate the risk sources and potential impacts. All the 7 risk control tasks in supply chain management were completed in 2023.

In the future, the Company will actively advocate and promote the concept of green, low-carbon and environmental protection, encourage affiliates to expand the procurement scope of green raw materials and green products, advocate lean production and cleaner production, promote recyclable logistics packaging, and carry out green recycling of waste materials. The Company will increase investment in R&D of energy saving, emission reduction and decarbonization technologies, and encourage affiliates to go through green supply chain management enterprise certification.

Indicator	Unit	2021	2022	2023
Number of qualified suppliers	No.	5,266	4,565	3,530
Number of qualified suppliers in Chinese mainland	No.	—	4,187	3,238
Number of qualified suppliers overseas	No.	—	378	292

During the reporting period, there were 312 qualified suppliers with access ratio of 8.8%.





# 04

## Talent Growth

People-oriented and Concerted Development

The Company has always been adhering to the core concept of "Employees and Strength for Long-term Development", striven for the well-being of employees, and constantly improved the democratic management system, salary incentive mechanism and employee welfare system to effectively enhance the sense of belonging and happiness of employees. The Company insists that talent is the first resource, and gathers an inexhaustible motive force of strong enterprise with talent by establishing a sound system for developing talent in the new era and skills training mechanism.



## Employee Rights, Interests and Welfare

Management is the foundation of enterprise survival. The Company adheres to the concept of "people-oriented, scientific and standardized" business management, regards employees as the most important wealth, strives to build a harmonious, healthy and efficient organizational environment, and constantly promotes the innovation and improvement of management methods, to achieve the common growth and win-win results of business and employees.

In 2023, the Company was named "Harmonious Labor Relations Demonstration Enterprise in Heilongjiang Province".

### Equal Employment by Law

The Company strictly abides by the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China* and other laws, prohibits child labor and forced labor, and signs labor contracts with all workers. In 2023, the Company did not employ child labor and forced labor, and all the employees signed their labor contracts. On the basis of legal employment, the Company follows the principle of fairness and justice in the recruitment and follow-up development of employees, treats all employees equally, and does not discriminate against employees based on gender, race, ethnicity, age, and disability.

Indicator	Unit	2021	2022	2023
Total number of employees	Person	12,425	12,171	11,283
Number of male employees	Person	10,538	10,343	9,510
Number of female employees	Person	1,887	1,828	1,773
Number of full-time employees subject to labor contracts	Person	11,875	11,676	11,017
Number of full-time employees subject to labor contracts	Person	550	495	266
Number of part-time employees	Person	0	0	0
Number of employees aged over 50	Person	2,769	2,843	2,235
Number of employees aged 30-50	Person	8,596	7,874	7,367
Number of employees under 30	Person	1,060	955	1,861
Number of employees working in Chinese mainland	Person	12,425	12,171	11,283
Number of employees working in Hong Kong, Macao and Taiwan (China), and overseas	Person	0	0	0
Number of cases punished for violations against employee employment and labor laws and regulations	No.	0	0	0
Number of cases punished for violations against laws and regulations related to recruitment and dismissal of employees	No.	0	0	0
Number of cases punished for violations against laws and regulations related to working hours and vacations of employees	No.	0	0	0

Indicator	Unit	2021	2022	2023
Number of cases punished for violations against laws and regulations related to promotion and equal opportunities of employees	No.	0	0	0
Number of cases punished for violations against laws and regulations related to anti-discrimination and diversity of employees	No.	0	0	0

### Protecting Employee Rights and Interests

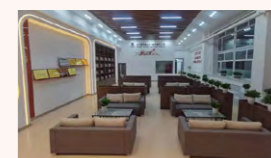
The Company has established a sound compensation and performance appraisal management system. The Company firmly establishes the "performance-oriented" compensation concept, and dynamically adjusts employee compensation levels according to corporate profitability and performance. Meantime, the Company insists on an 8-hour workday system and pays overtime according to the overtime of employees. To protect employees' right to paid leave, the Company issued the *Implementation Rules for Employees' Paid Annual Leave* on November 6, 2023. A portfolio of "unified centralized annual leave + overall arrangement for annual leave + individual flexible annual leave" is implemented within the Company. In addition, the Company focuses on human rights violations at work and effectively protects the rights and interests of every employee.

### Enhancing Employee Welfare

The Company has set up a sound welfare system for employees. In addition to compensation, the Company pays social insurance and housing provident fund for employees, establishes a system of enterprise annuity and supplementary medical insurance, and purchases commercial insurance for employees. The Company attaches great importance to the interests of employees, carries out "heart-warming" activities, and gives out consolation money in the marriage, childbirth, hospitalization, and death of immediate family members. On traditional festivals, the Company provides holiday benefits to employees. Every year, the Company carries out the "Cool Summer" activity, and distributes tea drinks, popsicles and other materials for front-line production workers to ensure the health of employees during the summer vacation. Meanwhile, the Company attaches great importance to the physical and mental health and legitimate rights and interests of female employees, and protects the rights and interests of female employees effectively by holding lectures on female employees' mental health knowledge and purchasing fraternal insurance for specific diseases.

#### Case: Turbine Company exhibited the thematic practice of "Putting the People First and Bringing Tangible Benefits to the People"

In order to enhance the workers' sense of gain, happiness and security, Turbine Company exhibited the thematic practice of "Putting the People First and Bringing Tangible Benefits to the People". Around the breakdown of the Party committee and administrative priorities in 2023, the thematic practice is committed to improving the quality of life and enriching the life of employees, including 11 actions such as new welfare care program, special fun activities for female employees, bathroom landscaping, optimization of rest environment for shifts/teams, construction of staff fitness facilities, financial sponsorship for innovation studio, and "heart-warming" campaigns for employees. These efforts have comprehensively improved the employee benefits and pooled staff strength.



### Improving the Democratic Management System

Guided by the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, the Company thoroughly implements the spirit of the 20th National Congress of the Communist Party of China, and perfects the democratic management system in the basic form of the Staff and Workers' Representative Congress in accordance with the *Constitution of the People's Republic of China*, the *Labor Law of the People's Republic of China*, the *Trade Union Law of the People's Republic of China*, the *Constitution of the Chinese Trade Unions* and other laws and regulations. Through a variety of forms and means, the majority of workers can give full play to their role in the democratic decision-making, management, and supervision of the enterprise.

The Company guides its affiliates to hold the second-level congress of employees of enterprises and departments in a standardized manner, and disclose timely their production and operation and the decision-making matters on "major issues, important appointments and removals, major projects, and the use of large amounts of money". Key affiliates establish a leading group for the open and democratic management of enterprise and factory affairs headed by main leaders of the party and government administration, with an office responsible for routine work. Meantime, a leading group for open and democratic management of factory affairs and a leading group for open and democratic management of shift/team affairs in front-line units are established stepwise, forming a work system of leadership by the Party Committee, liability of the Party and Government Administration, supervision by the Commission for Discipline Inspection, implementation by Labor Union, and mass participation.

In addition, the Company holds irregular symposiums of the masses and workers' representatives, extensively collects the hot spots and bottlenecks strongly reflected by the masses and workers, and studies the solutions carefully to stimulate the enthusiasm, initiative and creativity of the majority of workers to participate in the Company's democratic management.

Indicator	Unit	2021	2022	2023
Number of Staff and Workers' Representative Congress held	/	1	1	1
Number of Labor Union members	Person	11,875	11,676	11,017
Percentage of employees in Labor Union members	%	100	100	100

### Case: The Company held the 5th session of the First Congress of Employees to call for and handle proposals

In order to promote the democratic management in the enterprise and fully mobilize employee representatives to offer suggestions for the Company's reform and development, the Working Committee of the Labor Union held the 5th session of the First Congress of Employees to call for and handle proposals. A total of 88 proposals were collected and 49 were filed, with a filing rate of 55.7%. Of the 49 proposals filed, 43 had been completed by the end of 2023, and 6 were included in the work plan for sustained progress. Those not filed were transferred to the relevant departments for careful study, thus broadening the working ideas.

## Occupational Health and Safety

The Company always adheres to the concept of life supremacy, and attaches great importance to the life health and safety of employees. The Company understands and grasps work safety from the political perspective, regards the "No Production, Construction and Commencement until Safety" as the basic principles, and strikes a balance between development and safety, so as to improve the standard, quality and safety across the chain, throughout the process, and at a deeper level.

### Securing the Defense Line for Work Safety

The Company has formulated the *Regulations on Occupational Health and Safety Management, Measures for Reporting, the Investigation and Handling of Work Safety Accidents, the Rules for the Management of Production Safety Expenses* and other documents to standardize and manage work safety related matters. In 2023, the Company insisted on putting safety in a more prominent position, and completed all 100 tasks of the "Year of Strengthening Safety Management" of the SASAC of the State Council. No safety liability accidents occurred throughout the year, and the safety level was continuously improved.

The Company always adheres to the concept of safe development, and carries out training for different levels, positions and personnel. In 2023, the Company conducted safety training involving more than 70,000 attendances; compiled and distributed more than 17,000 copies of Employee Green Safety Manual, and collected over 150 works in the innovative "Micro-video Contest for Green and Safe Development". In order to actively promote the implementation of responsibility system for work safety, the Company focused on the safety responsibility of front-line positions such as shift/team leaders, summarized and promoted the construction experience of lean safety team and "12-type team" in branches/subsidiaries; the Measures for Safety and Environmental Protection Rewards and Punishments were revised to guide officers and workers to raise their safety awareness from the ideological level.

In order to prevent the risk of safety accidents, the Company continues to deepen the improvement in key areas. In 2023, the Company carried out special rectification of eight major risks such as hazardous chemicals, hoisting machinery, stakeholder safety, gas safety, and fire risk for a specific theme every month. Meanwhile, the Company further strengthened the construction of work safety mechanism, improved the safety and environmental protection system, and clarified the mandatory accident reporting matters and the safety and environmental protection "one-vote veto" matters. The Company helped 10 major manufacturers complete the standardized self-assessment to further consolidate the foundation for the safe development of enterprises.

The Company has obtained occupational health and safety management system certification, and always put work safety in the first place of enterprise management. In 2023, the Company further grasped the basic capacity of work safety, clarified the qualifications of full-time work safety supervision and management personnel at all levels, and enriched the Group's database of safety and environmental protection experts. By the end of 2023, the Company had 31 registered safety engineers. We continued to increase investment in work safety, focusing on potential accidents such as gas safety, old buildings, and storage of hazardous chemicals. In 2023, the Company coordinated and organized affiliates to carry out more than 900 emergency drills, involving more than 20,000 participants, with full coverage of practical drills for site disposal plans in places of greater risk. As a result, a strong work safety atmosphere is built within the Group.

Indicator	Unit	2021	2022	2023
Percentage of employee deaths due to work-related injuries	%	0	0	0
Number of employee deaths due to work-related injuries	Person	0	0	0
Number of employees in positions with occupational disease risks	Person	2,415	2,404	2,698
Number of employees suffering from occupational diseases	Person	0	0	0
Working days lost due to work-related injuries	Day	1,651	762	230

### Caring for the Health and Well-being of Employees

The Company cares about the health of employees, actively carries out staff activities, strengthens the employee health management, and effectively protects the health of employees through special lectures on health education knowledge, the building of a healthy dining environment and a comfortable rest environment for employees.

### Case: Building a healthy staff restaurant

The Company has issued the *Staff Restaurant Assessment Measures* to effectively maintain the health of employees and provide a safe and hygienic dining environment for the majority of employees. These Measures made clear provisions on the satisfaction of the staff restaurant, food safety, environmental health, equipment maintenance, price control, cost and energy consumption control and other items. The Company strives to build a safe, hygienic and comfortable staff restaurant, which effectively promotes the health of employees and increases employee satisfaction and happiness.



Occupational Health and Safety Management System Certificate

### Affiliates actively carried out employee activities

In July 2023, Boiler Company held the Second Business Open Day of "Together for a Shared Future with You", inviting a total of 260+ participants from 96 employee families. The activity carefully planned the visiting route with the corporate characteristics for employees and their families, and set up a variety of colorful games for children, which was highly recognized by the employees and their families.

Turbine Company is committed to solving the problem of "urgent difficulties and worries" concerned by employees, continuously increasing capital investment, further improving the working lounge environment of front-line shift/team employees, and effectively boosting the happiness index of employees.

Valve Company is highly concerned about the physical and mental health of employees, and has held a number of special lectures on health education knowledge, and invited experts from the Safety and Health Education Center to teach employees on site. The lectures include emergency handling of accidents, prevention and treatment of cardiovascular and cerebrovascular diseases, healthy diet and other aspects. They are conducive to improving employees' awareness of health prevention and healthcare, and play a positive role in guiding employees to form a scientific and healthy lifestyle, and shaping a healthy physique.



## Strengthening Vocational Skills Training

The Company attaches great importance to the improvement of employees' vocational skills. The Company clearly stipulates that each affiliate shall formulate a work plan for the identification of vocational skill levels at the beginning of each year, which shall be summarized by the Corporate Identification Center, reported to the Headquarters Certification and Guidance Center, and announced after filing with the Provincial Human Resources and Social Security Department.

In 2023, the Company actively carried out key business training and focus-specific training sessions online and offline, and successfully completed the annual training plan. For example, the Safety and Environmental Quality Department focused on the strategic arrangements and control requirements of "carbon peaking and carbon neutrality", the Planning and Finance Department focused on hot issues including the new tax policies, tax reform, and changes in collection and management technology, and the Legal Compliance Department aims to improve the priorities like legal operation and compliance management capability. By actively partnering with external universities and inviting internal and external experts to give lectures, the Company carried out effective thematic training with outstanding results.

Indicator	Unit	2021	2022	2023
Total number of training attendances	Person	50,344	64,052	31,380
Employee training coverage	%	98	98	98
Total expenditure on employee training	RMB 10,000	909	819	1,007

## Talent Development and Training

The Company actively promotes the implementation of the "1610" strategy for developing enterprise by talent management in a new era: "1" is to improve a system, i.e., "strengthen the Party's overall leadership over talent work, establish and improve a new system for Party management of talent work"; "6" is to deepen "six reforms of talent development system and mechanism"; "10" is to implement the "10 major talent projects", accelerate the construction of talent centers and innovation hubs in the fields of electric power equipment, power equipment and industrial equipment, and effectively transform talent advantages into innovation, competitive and development advantages.

### Perfecting the Talent Development System

In order to highlight the strategic orientation and service industrial landscape, the Company has optimized the construction of the talent development system and classification and grading evaluation criteria of "three categories, three levels and multiple ranks" based on the characteristics of technology, management and skills teams.

#### Three categories

"Three categories" refer to the talent development system of "three teams" corresponding to the technology, management and skills sequences.

#### Three levels

"Three levels" refer to the leading experts in the industry at the headquarters level, the leading professional personnel at the affiliate level, the key professional personnel and reserve talent at the front-line unit level

#### Multiple ranks

"Multiple ranks" refer to the multi-rank talent development channel from the front-line unit to the headquarters, and the highest rank can correspond to the principal of the headquarters department and the head of affiliates.

In early 2023, the Company issued implementation opinions to promote the establishment of a talent development system of "three categories, three levels and multiple ranks" in the new era with longitudinal penetration, horizontal connectivity and two-way adjustment.

#### Case: The Company held 2023 talent training course with "three focuses"

In order to fully meet the objective requirements of enterprise transformation and development, the Company held special training sessions on financial leading reserve talents, digital intelligence and energy storage in 2023, in an effort to further increase the training of leading personnel and urgently needed talents in short supply. Starting from serving the Company's overall development strategy, the training sessions focused on improving the quality of the accounting team, and cultivating versatile digital intelligence and energy storage talents. A total of 134 employees were trained.



#### Case: Dong Litao from Turbine Company was awarded the "Great Country Craftsman Person of 2023"

Co-organized by the All-China Federation of Trade Unions and the China Media Group, the "Great Country Craftsman Person of 2023" was unveiled in Chengdu on March 1, 2024, and 10 "Great Country Craftsman Persons of the Year" were announced at the scene. Our highly skilled expert Dong Litao was successfully elected. This is the result of his personal efforts, and even an affirmation of our talent training.

For more than 30 years, Dong Litao has stuck to the production line, obtained more than 20 national patents, completed more than 300 technological innovations, and created over RMB 80 million of economic benefits for the Company. His team was awarded "Dong Litao's National Master Studio of Milling Skills".



# 05

## Social Contribution

### Responsibility Leads to Development

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As one of the largest power generation equipment manufacturing, package and export bases in China, the Company has actively undertaken social responsibilities, and responded to the national rural revitalization strategy. With the export of technology, capital and management experience, the Company supports local industrial development, infrastructure construction and personnel training so as to facilitate the rural economic development, improvement of people's livelihood and ecological protection. Moreover, the Company is deeply involved in public welfare charities, and participates in loving public welfare activities at home and abroad, making positive contributions to the harmonious development of society.



## Rural Revitalization

Since 2013, the Company has actively responded to the call of the Party Central Committee and insisted on paired assistance for Wenshan City, Yunnan Province. The Company takes serving the national poverty alleviation strategy and rural revitalization strategy as an important political task. By taking advantage of our central enterprise platform, overall planning and coordination, industrial structure, regional disparity, Party building and co-construction, and human capacity building in rural revitalization, we helped Wenshan City coordinate a lot of resources, funds, and projects, and made outstanding contributions to the economic and social development, infrastructure construction, establishment of industrial system, improvement of social livelihood, talent team training and other aspects in Wenshan City.

In terms of assistance projects, the Company implemented a total of 45 assistance projects including industrial, infrastructure, rural construction, and assisted the construction of 2 poverty alleviation workshops in Hongdian Township and Matang Town; supported the high-quality rice development in Binglie Township, the construction of yam processing plant in Hongdian Township, and the construction of school safety food base; built road hardening projects in Xinzhai Village, Xinping Sub-district Office, Xigu Township, Gaodeng Community, Wolong Sub-district Office, and Reshui Village, Matang Town; and built three beautiful countryside projects: Gunachong Village in Xigu Township, Xicaozhai Village in Hongdian Township, and Shalaozhai Village in Pingba Town.

In the aspect of Party building, the Company assisted 19 training sessions of municipal departments, involving more than 1,500 attendances; donated RMB 1.33 million of party membership dues for poverty alleviation. In terms of people's livelihood, the Company invested RMB 8 million in the establishment of industrial poverty alleviation fund for state-owned parking space projects, supported 27 schools to improve their weaknesses, and donated RMB 440,000 of ventilators and pulse oximeters to the Municipal People's Hospital and township clinics.

In terms of industry revitalization, the Company further consolidated the industry based on "two no worries", and introduced assistance funds to help local enterprises to grow in Wenshan City. Furthermore, the Company selected 11 outstanding officers to assume temporary posts in Wenshan City or as the First Secretaries of the CPC Village Committees. They accomplished a lot of fruitful work, and were highly recognized and praised by the officers and the masses in the city. In July 2023, the Company donated RMB 11 million of paired assistance funds to Wenshan City.

### Case: The Company set up a direct-sale store of Wenshan specialty products in Harbin

The Company set up a direct-sale store of Wenshan specialty products in Harbin, partnered with the Shanrong business platform of China Construction Bank to realize online and offline sales, and expanded sales channels through joint exhibitions, etc. On average, the Company helps Wenshan City sell about RMB 10 million of agricultural specialty products every year, which effectively solves the sales problem and greatly increases the income of farmers in Wenshan.



### Case: Facilitating education development in Wenshan Reshui Primary School

In 2023, the Company launched the "Three Ones" education activities in Reshui Primary School, Matang Town, Wenshan City, Yunnan Province. With the portfolio of a vivid patriotic education lesson, a donation drive, and a legal education campaign, the Company helped students enhance their sense of patriotism, effectively improved the material conditions of the school, and made positive contributions to the development of local education.



## Public Charity

The Company has always been concerned with public charity, and actively fulfilled corporate social responsibility and the mission of "Giving Back to Society and Benefiting Mankind". The Company encourages employees at home and abroad to actively participate in charity activities, including voluntary blood donation, poverty alleviation, and post-disaster assistance, to practice social responsibility with concrete actions and contribute to social harmony and stability.

### Domestic Performance

The Company keeps in mind its mission as a state-owned enterprise, and regards public charity as an important part of corporate development. On the way to social responsibility, the Company adheres to the concept of "People-oriented and Giving Back to Society", constantly innovates the public welfare model, guides employees to get involved in volunteer services, and creates a public welfare atmosphere with full participation.

### Case: The Company organized the "Voluntary Blood Donation" activity

From May 29 to June 1, 2023, the Company set up six blood donation rooms to organize and carry out voluntary blood donation activities. In just 4 days, a total of 1,345 employees from the headquarters and affiliates successfully donated blood, ending up with 322,060 mL blood. HE workers spread love and refuel for life with trickles of blood, demonstrating the commitment of Harbin Electric Company Limited with practical actions.



### Case: The youth volunteer service team of Harbin Electric International Company Limited went to Harbin Special Education School for care and sympathy

On June 1, 2023, the youth volunteer service team of Harbin Electric International Company Limited went to Harbin Special Education School. They brought toys, cakes and other gifts, and decorated the venue carefully to celebrate the Children's Day with kids. This is the second time they came here to show care and sympathy since the youth volunteer service team of Harbin Electric International Company Limited established ties with Harbin Special Education School in March 2023.



**Case: Turbine Company organized “Learning from Lei Feng” activity**

In 2023, the Turbine Company actively planned, mobilized and set up 29 volunteer service teams, launched 106 volunteer service projects. More than 700 youth members were organized to register as volunteers to learn from Lei Feng, and 30 employees signed up for the Company's "Youth Home" volunteer service team, thus forming a good atmosphere for learning from Lei Feng.



**Overseas Fulfillment of Responsibility**

Over the past 10 years, the Company has actively responded to the Belt and Road Initiative, focused on the main responsibility and main business, and constantly explored the overseas engineering contracting and power equipment market. The formal contract signed overseas reached more than RMB 100 billion. Meantime, the Company actively undertakes social responsibilities, participates in the public welfare activities in the project location, exerts a wide social impact, and has made outstanding contributions to improving the lives of local people, increasing employment, and promoting environmental protection.

- In Ecuador, the Company created nearly 2,700 jobs for local residents during the construction period, and trained a number of engineering and technical personnel, effectively driving local economic and social development.
- Turkey was hit by two 7.8-magnitude earthquakes in early 2023. After the earthquake, Harbin Electric International Company Limited had, despite the adverse effects of the earthquake, actively mobilized all the resources, and prepared commuter buses and necessary supplies for the China's Blue Sky Rescue Team that arrived in Istanbul. Moreover, the staff of Project Departments actively collected supplies for the local victims.
- In Pakistan, Harbin Electric International Company Limited was working with local people to fight the flood and providing emergency assistance to those who have lost their homes.
- In Indonesia, we invested in local education and sports, and built Muslim mosques for local people.



**Case: The Company participated in the 22nd “Clean UAE” public campaign**

In December 2023, the 22nd "Clean UAE" public environmental protection campaign was held in Dubai. Five Chinese and foreign employees from the HEI Dubai Hassyan Power Station Project Department and nearly 100 volunteers from Chinese-funded institutions in UAE worked together with local people to clean the desert in Al Marmoom Desert Conservation Reserve. The "Clean Desert" public campaign helps improve the surrounding environmental problems, spreads the concept of green environmental protection, and contribute to the construction of a green ecological earth environment.

**Outlook for the Future**

Looking forward to the future, the Company will uphold the guidance of the national strategy, unswervingly take the road of sustainable development, adhere to social responsibility, and drive the progress of the industry. The year 2024 is crucial for the 14th Five-Year Plan. We will continue to deepen reform, accelerate transformation and upgrading, and work with all stakeholders to build a beautiful China.

Bearing in mind the mission of "Bearing hopes of the national industry, highlighting glamour of China power", we will focus on green and low-carbon transformation, continue to innovate and provide strong support for the Company's sustainability and industry transformation. Duty-bound to build a harmonious society, we serve the overall national strategy, and contribute to the building of a community with a shared future for mankind. Being a central enterprise, we are committed to promoting party building and internal reform to escort the robust operation and long-term development of enterprises.

In 2024, the Company will continue to fulfill its corporate social responsibility with concrete actions, actively respond to the challenges of the times, and contribute to the sustainable economic and social development. We'll strive to be an industry leader and a model of sustainable development, and endeavor to build a better tomorrow.



## Awards



Award certification	Winner/project/technology	Awarded by
<b>Project certification</b>		
National Key Research and Development Program and other national scientific research projects	High Strength and Toughness Manufacturing Technology and Equipment of 500MW Impulse Turbine Runner Development of a Heat Transfer Prototype for Pressurized Oxygen-enriched Combustion of Pulverized Coal Boiler Coupled with Supercritical Carbon Dioxide Cycle Mechanical Seal Technology and Equipment Modified by Large-area High-power Pulsed Ion Beam and other 11 projects	Ministry of Science and Technology of the People's Republic of China
Top 10 Scientific and Technological Innovations of National Power Generation Equipment Industry in 2023	China's Shidaowan High Temperature Gas-cooled Reactor (HTGR) Nuclear Power Plant, the world's first fourth-generation nuclear power plant Zhala Hydropower Station, the world's largest 500MW impulse hydropower project The World's First 300MW Compressed Air Energy Storage Power Station Demonstration Project in Yingcheng, Hubei	Machinery Industry Power Generation Equipment Center, Newspaper Planning Department of China Energy Media Group
Excellent Demonstration Scenarios for Intelligent Manufacturing in 2023	Boiler Company "Optimization of production planning" "Digital process design" Turbine Company "Flexible configuration of production line" "Dynamic process optimization" Four scenarios	Ministry of Industry and Information Technology of the People's Republic of China
World Advanced Clean Energy Equipment	5MWe Supercritical Carbon Dioxide Boiler	Organizing Committee of the World Conference on Clean Energy Equipment
Recommended Catalogue of Scientific and Technological Innovation Achievements of Central Enterprises	1GW Turbine-generator Unit	Science and Technology Innovation Bureau of SASAC of the State Council
"One-stop" Application Demonstration Direction	Large Impulse Turbine-generator Unit	General Office of the Ministry of Industry and Information Technology General Office of SASAC of the State Council
The Third Batch of the First Major Technical Equipment in the Energy Sector	Total Heat Recovery Technology and Key Facility of Large Entrained-flow Coal Gasification New Efficient and Flexible Coal-fired Generating Unit Guohe No. 1 Shielded Motor Main Pump	China National Energy Administration
Gold Award of China Good Design	700m Head 400MW High-speed Pumped Storage Unit Development and Application of 600-1000MW Ultra-supercritical Secondary Reheat Boiler	Sponsored by Innovation Design Industry Strategic Alliance of China and organized by Chinese Mechanical Engineering Society

Silver Award of China Good Design	Research and Application on Key Technologies of 660MW Ultra-supercritical High-position Turbine	Sponsored by Innovation Design Industry Strategic Alliance of China and organized by Chinese Mechanical Engineering Society
First Prize of Hydropower Science and Technology Award	Key Technology and Application of 400,000 kW 700-meter High Stability Pumped Storage Generator Unit	Chinese Society of Hydroelectric Engineering
First Prize of Electrical Science and Technology Award	Key Installation Technology and Application of Huge Francis Turbine Unit	Chinese Society of Electrical Engineering (CSEE)
First Prize of Boiler Science and Technology Award	Development and Application of 600MW High-efficiency Supercritical $\pi$ -type Boiler Burning Inferior Coal with Ultra-high Moisture Hydrophilicity Characterization Technology and Development of Key Equipment for Hydrogen Storage and Transportation System Materials	China Boiler and Boiler Water Treatment Association
First Prize of Electrical Science and Technology Award	Key Technology of Supercritical Carbon Dioxide Cycle Power Generation and Demonstration Application of the World's First 5MW Unit Key Technology and Application of Green Design and Manufacturing of New High-end Boiler	China Electrical Science and Technology Award Office
Second Prize of Hebei Science and Technology Progress Award	Manufacturing Technology Research and Engineering Application of Steam Generator for High Temperature Gas Cooled Reactor	Hebei Provincial People's Government
Key Laboratory of Large High-performance Pump Equipment in Heilongjiang Province	Electric Machinery Company	Science and Technology Department of Heilongjiang Province
2023 FIDIC Project Excellence Award	Baihetan Hydropower Station	FIDIC
The First Batch of "Horse Racing" Innovation Platforms in the "14th Five-Year Plan"	Digital Twin Key Technology Research and Application Innovation Platform in Power Generation Industry	China National Energy Administration
Grand Prize of Science and Technology Award of the China National Nuclear Corporation	China's First Hualong One Reactor Project with Indigenous Third-generation Nuclear Power Technology	China National Nuclear Corporation
Third-class Merit in the Construction of Unit 1 of the Demonstration Fast Reactor	The Group	Joint Committee on Engineering Party Building of Demonstration Fast Reactor
Harbin Advanced Unit of Collective Bargaining Quality and Effectiveness Evaluation	Turbine Company	Committee of CNNC Xiapu Nuclear Power Co., Ltd. (stamp by proxy)
Excellent Organizational Unit of Open Democratic Management Knowledge Competition on Harbin Factory Affairs	Turbine Company	Harbin Federation of Trade Unions
International Safety Award 2023	HEI Hassyam Power Plant in Dubai	British Safety Council
Top 10 Outstanding Cases of "International Image Construction of Chinese Enterprises 2023"	HEI Power Station Builders Devote themselves to Environmental Protection: China's Construction and Green Development	Sponsored by China International Publishing Group
Excellent cases of the Blue Book on Overseas Social Responsibility of Central Enterprises (2023)	HEI Biodiversity Conservation: Building a Beautiful Ecological Environment	Social Responsibility Bureau of SASAC of the State Council
Gold Award of Outstanding Supplier "Outstanding Performance" in 2023	HEI Bin Qasim Phase III Project	K-Electric



Pakistan IPP Power Station 2023 at the 19th Asia Pacific Energy Awards Pakistan ESG Power Station 2023 at the 19th Asia Pacific Energy Awards	HEI 1,180MW Combined Cycle Power Plant in Bhikki, Pakistan	Energy Asia
Pakistan Science and Technology Innovation Award 2023 at the 19th Asia Pacific Energy Awards	HEI's First Class H Combined Cycle Training Hall HEI's First Innovative Intelligent Inspection Robot Project	Energy Asia
"Model Case of Business Innovation" at the 2023 China International Service Demonstration Case Award	HEI	China International Fair for Trade in Services
World-class Professional Leading Demonstration Enterprises	Electric Machinery Company, Valve Company, etc.	SASAC
Harmonious Labor Relations Demonstration Enterprise in Heilongjiang Province	The Group	Heilongjiang Human Resources and Social Security Bureau
<b>Awards by cadres taking a temporary post in Wenshan City of paired assistance</b>		
Wenshan May 4th Youth Medal	Guo Bo Temporary Vice Mayor of Wenshan City	Wenshan City
2022 "Pacesetter of Seven Townships"	Sun Xianda First Secretary of CPC Village Committee in Wenshan City	Wenshan Municipal Party Committee, Wenshan Municipal People's Government
2021-2023 First Secretary of CPC Village Committee	Sun Xianda First Secretary of CPC Village Committee in Wenshan City	Organization Department of The CPC Yunnan Provincial Committee, Rural Revitalization Bureau of Yunnan Province
<b>Other awards</b>		
"Great Country Craftsman Person of the Year" 2023	Dong Litao Skills Expert of Turbine Company	All-China Federation of Trade Unions
Dong Litao's National Master Studio of Milling Skills	Dong Litao's team	All-China Federation of Trade Unions

## Key Performance Tables

### Environmental Performance

Topic	Indicator	Unit	2021	2022	2023
Green innovation	Investment expenditure for green technical transformation and recycling	RMB 10,000	1,218	1,673	2,500
Greenhouse gas emission	Total GHG emissions (Scope I + Scope II) (as per Chinese mainland, market-based)	10,000 tonnes of CO <sub>2</sub> equivalent	23.37	24.84	20.36
	GHG emission intensity (Scope I + Scope II) (Unit operating revenue) (as per Chinese mainland, market-based)	Tonne of CO <sub>2</sub> equivalent/ RMB 10,000	0.105	0.0988	0.0706

Topic	Indicator	Unit	2021	2022	2023
Energy consumption	Comprehensive energy consumption	Tonnes of standard coal	56,400	58,800	55,600
	Comprehensive energy consumption intensity	Tonnes of standard coal/ RMB 10,000	0.029	0.0271	0.0193
	Consumption of self-generated renewable energy	kWh	No statistics	No statistics	1,140,000
	Quantity of green electricity and green electricity purchased with Green Certificate	kWh	No statistics	No statistics	7,800,000
	Natural gas consumption	m <sup>3</sup>	13,590,000	14,090,000	15,860,000
	Gasoline consumption of official vehicles	Tonne	284	264	373
Wastewater Management	Industrial wastewater discharge	m <sup>3</sup>	674,500	706,000	676,200
	Chemical oxygen demand (COD) emissions	Tonne	19.66	20.95	19.2
	Ammonia nitrogen (NH <sub>3</sub> -N) emissions	Tonne	0.65	0.68	0.63
	Wastewater discharge compliance rate	%	100	100	100
Waste Gas Management	Nitrogen oxide (NO <sub>x</sub> ) emissions	kg	26,000	25,000	30,000
	Sulfur oxide (SO <sub>x</sub> ) emissions	kg	30	30	28
Waste Management	Total volume of non-hazardous wastes	Tonne	3,487	11,000	12,000
	Total volume of hazardous wastes	Tonne	2,428	1,700	1,662
	Total volume of harmful wastes	Tonne	No statistics	No statistics	1,662
Water Resources Management	Total water consumption	10,000 tonnes	86	90	86
Material Management	Total packaging material used for finished products	Tonne	16,778	3,960	7,380

### Social Performance

Topic	Indicator	Unit	2021	2022	2023
Scientific and technological innovation	R&D investment intensity	%	6.37	5.2	5.53
	Proportion of R&D staff	%	21.36	23.69	25.31
	Total technology investment	RMB 100,000,000	13.34	12.69	15.84
	Number of R&D staff	Person	2,673	2,893	2,895
	Number of new product development projects	No.	254	166	249
	New product output rate	%	61.5	53.3	69.8
Intellectual property protection	Number of valid patents per RMB 10,000 operating revenues	No.	0.001897	0.00172	0.001427
	Number of software copyrights per RMB 10,000 operating revenues	No.	0.000019	0.000016	0.000014
	Number of software copyrights in reporting period	No.	40	40	40

Topic	Indicator	Unit	2021	2022	2023
Intellectual property protection	Number of software copyright registration in reporting period	No.	40	40	40
	Number of trademarks, software copyrights, and other IPRs in reporting period	No.	51	51	51
	Number of patent licenses in reporting period	No.	536	409	331
	Number of trademarks approved during reporting period	No.	0	0	0
	Number of valid patents during reporting period	No.	4,027	4,239	4,117
Protection of customer privacy	Number of confirmed cases of leakage, theft or loss of customer information	No.	0	0	0
Handling of customer complaints	Product quality complaint	No.	—	5	0
	Service complaint	No.	—	10	1
	Complaint handling rate	%	—	100	100
	Satisfaction rate	%	—	100	100
Supply chain	Number of incidents with significant risks and impacts in the supply chain	No.	0	0	0
	Those involved in the incidents with significant risks and impacts in the supply chain	Person	0	0	0
	Number of qualified suppliers	No.	5,266	4,565	3,530
	Number of qualified suppliers in Chinese mainland	No.	—	4,187	3,238
	Number of qualified suppliers overseas	No.	—	378	292
Recruitment and employment	Total number of employees	Person	12,425	12,171	11,283
	Number of male employees	Person	10,538	10,343	9,510
	Number of female employees	Person	1,887	1,828	1,773
	Number of full-time employees subject to labor contracts	Person	11,875	11,676	11,017
	Number of full-time employees subject to labor dispatching	Person	550	495	266
	Number of part-time employees	Person	0	0	0
	Number of employees aged over 50	Person	2,769	2,843	2,235
	Number of employees aged 30-50	Person	8,596	7,874	7,367
	Number of employees under 30	Person	1,060	955	1,861
	Number of employees working in Chinese mainland	Person	12,425	12,171	11,283
	Number of employees working in Hong Kong, Macao and Taiwan (China), and overseas	Person	0	0	0
	Number of employees working in Hong Kong, Macao and Taiwan (China), and overseas	Person	167	87	103
	Turnover number of male employees	Person	143	75	79
Turnover number of female employees	Person	24	12	24	

Topic	Indicator	Unit	2021	2022	2023
Recruitment and employment	Turnover number of employees aged over 50	Person	1	2	2
	Turnover number of employees aged 30 to 50	Person	102	55	70
	Turnover number of employees under 30	Person	64	30	31
	Turnover number of employees working in Chinese mainland	Person	167	87	103
	Turnover number of employees working in Hong Kong, Macao and Taiwan (China), and overseas	Person	0	0	0
	Number of employees in other forms of employment	Person	0	0	0
	Employee turnover rate	%	1.34	0.71	0.85
	Turnover rate of male employees	%	1.15	0.62	0.65
	Turnover rate of female employees	%	0.19	0.1	0.20
	Turnover rate of employees aged over 50	%	0.01	0.02	0.02
	Turnover rate of employees aged 30 to 50	%	0.82	0.45	0.58
	Turnover rate of employees under 30	%	0.52	0.25	0.25
	Turnover rate of employees working in Chinese mainland	%	1.34	0.71	0.85
Protection of Employee Rights and Interests	Turnover rate of employees working in Hong Kong, Macao and Taiwan (China), and overseas	%	0	0	0
	Number of cases punished for violations against employee employment and labor laws and regulations	No.	0	0	0
	Number of cases punished for violations against laws and regulations related to recruitment and dismissal of employees	No.	0	0	0
	Number of cases punished for violations against laws and regulations related to working hours and vacations of employees	No.	0	0	0
	Number of cases punished for violations against laws and regulations related to promotion and equal opportunities of employees	No.	0	0	0
	Number of cases punished for violations against laws and regulations related to anti-discrimination and diversity of employees	No.	0	0	0
	Number of labor disputes	No.	0	0	0
	Number of Staff and Workers' Representative Congress held	No.	1	1	1
	Number of Labor Union members	Person	11,875	11,676	11,017
	Percentage of employees in Labor Union members	%	100%	100%	100%
Occupational health and safety	Percentage of employee deaths due to work-related injuries	%	0	0	0
	Number of employee deaths due to work-related injuries	Person	0	0	0
	Number of employees in positions with occupational disease risks	Person	2,415	2,404	2,698
	Number of employees suffering from occupational diseases	Person	0	0	0
	Working days lost due to work-related injuries	d	1,651	762	230

Topic	Indicator	Unit	2021	2022	2023
Talent development and training	Total number of training attendances	Person	50,344	64,052	31,380
	Employee training coverage	%	98	98	98
	Total expenditure on employee training	RMB 10,000	909	819	1,007
Social public welfare	Percentage of total community welfare investment in operating revenue	%	0.11	0.06	0.08
	Total community welfare investment	RMB 10,000	2,266	1,557	2,440
	Community welfare investment (rural revitalization)	RMB 10,000	2,266	1,557	2,440
	Charitable donations	RMB 10,000	511.88	11.86	0.64

### Governance Performance

Topic	Indicator	Unit	2021	2022	2023
Corporate Governance	Proportion of female directors in the Board of Directors	%	0	0	0
	Proportion of independent non-executive directors in the Board of Directors	%	57	57	57
	Number of members in the Board of Directors	Person	7	7	7
	Number of female directors	Person	0	0	0
	Number of independent non-executive directors	Person	4	4	4
	Number of executive directors	Person	3	3	3
	Number of non-executive directors	Person	0	0	0
	Number of directors aged over 50	Person	7	7	7
	Number of directors aged 30 to 50	Person	0	0	0
	Number of directors under 30	Person	0	0	0
	Average tenure of directors	Year	4	2	3
	Number of members in the Board of Supervisors	Person	5	5	4
	Number of external supervisors	Person	0	0	0

### Economic Performance

Topic	Indicator	Unit	2021	2022	2023
Business performance	Operating revenue	RMB 10,000	2,122,531	2,464,379	2,884,086
	Annual tax payment	RMB 100 million	94,276	110,757	132,142

## Index of Environmental, Social and Governance Reporting Guide by HKEX

	Mandatory disclosure requirements	Location in this Report
Governance Structure	A statement from the board containing the following elements: (i) a disclosure of the board's oversight of ESG issues; (ii) the board's ESG management approach and strategy, including the process used to evaluate, prioritise and manage material ESG-related issues (including risks to the issuer's businesses); and (iii) how the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer's businesses.	ESG Governance Statement from Board of Directors
Reporting Principles	A description of, or an explanation on, the application of the following Reporting Principles in the preparation of the ESG report: Materiality: The ESG report should disclose: (i) the process to identify and the criteria for the selection of material ESG factors; (ii) if a stakeholder engagement is conducted, a description of significant stakeholders identified, and the process and results of the issuer's stakeholder engagement. Quantitative: Information on the standards, methodologies, assumptions and/or calculation tools used, and source of conversion factors used, for the reporting of emissions/energy consumption (where applicable) should be disclosed. Consistency: The issuer should disclose in the ESG report any changes to the methods or KPIs used, or any other relevant factors affecting a meaningful comparison.	About this Report
Reporting Boundary	A narrative explaining the reporting boundaries of the ESG report and describing the process used to identify which entities or operations are included in the ESG report. If there is a change in the scope, the issuer should explain the difference and reason for the change.	About this Report

### "Comply or Explain" provisions

Aspect	Indicator	Description	Location in this Report
<b>A Environmental</b>			
A1: Emissions	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Pollutant and Environmental Impact Management
	KPI A1.1	The types of emissions and respective emissions data.	Pollutant and Environmental Impact Management
	KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	Response to Climate Change
	KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Pollutant and Environmental Impact Management

Aspect	Indicator	Description	Location in this Report
A1: Emissions	KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Pollutant and Environmental Impact Management
	KPI A1.5	Description of emissions target(s) set and steps taken to achieve them.	The Company has no established emission targets but will set relevant targets within 2 years.
	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.	Pollutant and Environmental Impact Management
A2: Use of Resources	General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Resource Utilization Management
	KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Response to Climate Change
	KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Resource Utilization Management
	KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	Response to Climate Change
	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.	The Company has no established emission targets but will set relevant targets within 2 years.
	KPI A2.5	Total packaging material used for finished products (in tonnes), and, if applicable, with reference to per unit produced.	Resource Utilization Management
A3: The Environment and Natural Resources	General Disclosure	Policies on minimizing the issuer's significant impact on the environment and natural resources.	Response to Climate Change
	KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Response to Climate Change
A4: Climate Change	General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	The Company has taken action and will gradually improve within 2 years.
	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.	The Company has taken action and will gradually improve within 2 years.
<b>B. Social</b>			
<b>Employment and Labor Practices</b>			
B1: Employment	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	Employee Rights, Interests and Welfare

Aspect	Indicator	Description	Location in this Report
B1: Employment	KPI B1.1	Total workforce by gender, employment type (for example, full-time or part-time), age group and geographical region.	Employee Rights, Interests and Welfare
	KPI B1.2	Employee turnover rate by gender, age group and geographical region.	Employee Rights, Interests and Welfare
B2: Health and Safety	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	Occupational Health and Safety
	KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Occupational Health and Safety
	KPI B2.2	Lost days due to work injury.	Occupational Health and Safety
B3: Development and Training	KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Occupational Health and Safety
	General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Talent Development and Training
	KPI B3.1	The Percentage of employees trained by gender and employee category (e.g. senior management and middle management).	Talent Development and Training
B4: Labor Standards	KPI B3.2	The Average training hours completed per employee by gender and employee category.	Talent Development and Training
	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labor.	Employee Rights, Interests and Welfare
	KPI B4.1	Description of measures to review employment practices to avoid child and forced labor.	Employee Rights, Interests and Welfare
B5: Supply Chain Management	KPI B4.2	Description of steps taken to eliminate such practices when discovered.	Employee Rights, Interests and Welfare
	<b>Operating Practices</b>		
B5: Supply Chain Management	General disclosure	Policies on managing environmental and social risks of the supply chain	Supply Chain Management
	KPI B5.1	Number of suppliers by geographical region.	Supply Chain Management; Key Performance Tables
	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.	Supply Chain Management
	KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Supply Chain Management
	KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Product Quality Assurance

Aspect	Indicator	Description	Location in this Report
B6: Product Responsibility	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labeling and privacy matters relating to products and services provided and methods of redress.	Product Quality Assurance
	KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Product Quality Assurance
	KPI B6.2	Number of products and service related complaints received and how they are dealt with.	Protection of Customer Rights
	KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Advocating Technological Innovation
	KPI B6.4	Description of quality assurance process and recall procedures.	Product Quality Assurance
B7: Anti-corruption	KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	Protection of Customer Rights
	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Standardized Governance
	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.	Standardized Governance
	KPI B7.2	Description of preventive measures and whistleblowing procedures, how they are implemented and monitored.	Standardized Governance
B8: Community Investment	KPI B7.3	Description of anti-corruption training provided to directors and staff.	Standardized Governance
	<b>Community</b>		
B8: Community Investment	General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its business activities take into consideration the communities' interests.	Rural Revitalization
	KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	Rural Revitalization
	KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Rural Revitalization

## Index of Reference Indicators for ESG Reporting of Listed Companies Controlled by Central Enterprises

Environmental		
Primary indicators	Secondary indicators	Sections
E.1 Energy consumption	E.1.1 Water resources	Resource Utilization Management
	E.1.2 Materials	Resource Utilization Management
	E.1.3 Energy	Response to Climate Change
	E.1.4 Packaging materials	Resource Utilization Management
E.2 Pollution control	E.2.1 Wastewater	Pollutant and Environmental Impact Management
	E.2.2 Exhaust gas	Pollutant and Environmental Impact Management
	E.2.3 Solid wastes	Pollutant and Environmental Impact Management
E.3 Climate change	E.3.1 Greenhouse gas emission	Response to Climate Change
	E.3.2 Emission reduction management	Response to Climate Change
	E.3.4 Climate risk management	Response to Climate Change
E.4 Biodiversity	E.4.1 Impacts of production, services and products on biodiversity	Biodiversity Protection
E.5 Resource and environmental management system measures	E.5.1 Low-carbon development goals and strategic measures	Response to Climate Change
	E.5.2 Resource management practices	Response to Climate Change
	E.5.3 Statistical monitoring of energy conservation and carbon reduction and assessment reward and punishment system	Response to Climate Change
	E.5.4 Green actions and measures	Pollutant and Environmental Impact Management
	E.5.6 Environmental compliance	Environmental Management System
Social		
Primary indicators	Secondary indicators	Sections
S1 Employee rights and interests	S.1.1 Employee recruitment and employment	Employee Rights, Interests and Welfare
	S.1.2 Employee remuneration and welfare	Employee Rights, Interests and Welfare

Social		
Primary indicators	Secondary indicators	Sections
S1 Employee rights and interests	S.1.3 Employee health and safety	Occupational Health and Safety
	S.1.4 Employee development and training	Talent Development and Training
	S.1.5 Employee satisfaction	Employee Rights, Interests and Welfare
S2 Product and service management	S.2.1 Product safety and quality	Product Quality Assurance
	S.2.2 Customer service and rights	Protection of Customer Rights
	S.2.3 Innovative development	Advocating Technological Innovation
S3 Supply chain safety and management	S.3.1 Supplier management	Supply Chain Management
	S.3.2 Supply chain link management	Supply Chain Management
S4 Social contribution	S.4.1 Tax payment	Key Performance Tables
	S.4.2 Community co-building	Rural Revitalization
	S.4.3 Social activities for public good	Public Charity
	S.4.4 National strategic response	Rural Revitalization

Governance		
Primary indicators	Secondary indicators	Sections
G1 Governance strategy and organizational structure	G.1.1 Governance policies and processes	Standardized Governance
	G.1.2 Organizational structure and functions	Standardized Governance
	G.1.3 Remuneration anagement	Standardized Governance
G2 Standardized Governance	G.2.1 Internal control	Risk Management
	G.2.2 Political integrity	Anti-corruption
G3 Investor relations management and shareholder equity	G.3.1 Investor relations management	Standardized Governance
	G.3.2 Shareholders' equity	Standardized Governance
G4 Transparency of information disclosure	G.4.1 Information disclosure system	Standardized Governance
	G.4.2 Information disclosure quality	Standardized Governance
G5 Compliant operation and risk management	G.5.1 Compliant operation	Standardized Governance
	G.5.2 Risk management	Standardized Governance

## Reader Feedback

Dear readers,  
Thank you for taking time out of your busy schedule to read the 2023 Environmental, Social and Governance (ESG) Report of Harbin Electric Company Limited. In order to continuously improve the report preparation and enhance the performance ability and level of Harbin Electric Company Limited, we sincerely invite your valuable comments and suggestions on this Report. You may send us the relevant information by post or by filling out the form.

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 Tel: +86-451-58590223  
 Email: gaosl@harbin-electric.com  
 Contact: Board of Directors' Office



Scan the QR code to share your suggestions with us.

1. For Harbin Electric Company Limited, your stakeholder category is

- Government   
  Customers   
  Employees   
  Partners   
  Environmental protection organizations  
 Community and the public   
  Others (\_\_\_\_)

2. Your general impression of this Report is

- Good   
  Not bad   
  Moderate

3. How do you rate the clarity, accuracy and completeness of the information, data and indicators disclosed herein?

- Good   
  Not bad   
  Moderate

4. What do you find most satisfying about this Report?

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5. Do you have any valuable comments or suggestions for report preparation or performance practice?

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6. What would you like to know more about?

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