



2023

Environmental, Social and Governance Report

Hubei Energy Group Co., Ltd.



About This Report

This Environmental, Social and Governance (ESG) Report intends to present the Company's concepts, policies and practices in environmental, social and governance aspects in a comprehensive and objective manner and strives to provide clear, accurate and valuable ESG information for stakeholders.

Basis for preparation

This Report was prepared according to the *Work Plan for Improving the Quality of Listed Companies Controlled by Centrally Administered State-owned Enterprises (SOEs)* issued by the State-owned Assets Supervision and Administration Commission (SASAC) of the State Council, the *Code of Corporate Governance for Listed Companies* issued by the China Securities Regulatory Commission (CSRC), the *Guidelines No. 1 of the Shenzhen Stock Exchange for Self-regulation of Listed Companies – Standardized Operation of Companies Listed on the Main Board*, and other requirements under the principles of materiality, consistency and objectivity.

This Report also refers to the *GRI Sustainability Reporting Standards* (GRI Standards) and actively responds to the Sustainable Development Goals (SDGs) of the United Nations.

Report scope

This Report is an annual report, covering the period from January 1, 2023 to December 31, 2023. To make the Report more comparable and perspective, some contents may be traced back to previous years or extended to the coming years as necessary. The policies and data provided in this Report cover HBEG and its affiliated companies, and the scope of the Report is consistent with that of the annual report.

Reliability

Data in this Report are mainly derived from the Company's *Annual Report 2023* and relevant documents. All currency amounts mentioned in this Report are in RMB unless otherwise stated. The Company guarantees that there is no false record or misleading statement in this Report, and the Report was released after approval by the Board of Directors.

Terms of address

For ease of presentation and reading, Hubei Energy Group Co., Ltd. is hereinafter referred to as "HBEG", "the Company" or "we" in this Report, depending on the context; HBEG's subsidiaries are mainly denoted in abbreviated forms, and their full names and abbreviated names are shown in the Appendix "Directory of Main Companies".

Availability

This Report was prepared in both simplified Chinese and English and released in a PDF electronic form. It can be downloaded from HBEG's official website (www.hbny.com.cn) and <http://www.cninfo.com.cn/>. In case of discrepancy between Chinese and English versions, the Chinese version shall prevail.

Contents

About This Report	1
Message from the Chairman	4
About HBEG	6
Key Performance in 2023	10
Practice the Sustainable Development Goals (SDGs) of the United Nations	12
ESG Management	14
ESG Risks and Opportunities	18
Communication with Stakeholders	19
Materiality Assessment	20
Topic I: Reinforce Core Functions by Increasing Production and Guaranteeing Supply	22
Topic II: Accelerate Transformation and Development Led by Green Concepts	24
Topic III: Drive the Future Development of Energy Empowered by Intelligence	26
Prospects in 2024	86
Appendix	88



Environmental Management	32
Resource Management	34
Pollution Prevention and Control	36
Climate Change	40
Biodiversity	46



Employee Rights and Interests	50
Product and Service Management	61
Supply Chain Safety and Management	65
Social Contribution	67



Deepening Enterprise Reform	74
Governance Strategy and Organizational Structure	74
Standardized Governance	79
Information Disclosure and Investor Relations	82
Compliance Management and Risk Management	83

Message from the Chairman

Bear duties in mind and fulfill responsibilities in action, boost high-quality sustainable development with ESG practices

First of all, I would like to extend my heartfelt thanks to all stakeholders and all sectors of society for your care and support for Hubei Energy Group Co., Ltd.

2023 is the year of endeavor and harvest for the reform and development of HBEG. We closely follow the new mission and new positioning on the new journey in the new era, put into practice the new development philosophy in a complete, accurate and comprehensive way, and move faster to build a first-class regional integrated energy group. With these efforts, our core functions have been increasingly prominent, operating benefits have been steadily improved, the business layout has been constantly optimized, and corporate governance has continued to be upgraded. We are making new and solid advances in pursuing high-quality development.

Over the past year, in adherence to the corporate spirit of “bearing duties in mind and fulfilling responsibilities in action”, we have been committed to integrating the concept of green transition, shared development, and modern governance into the entire process of high-quality development, actively undertaking environmental, social and governance responsibilities, taking further steps in ESG practices, and focusing on achieving win-win outcomes in ecological benefits, social benefits and economic benefits.

We have paid close attention to ecological protection while pursuing high-quality development. To promote green development, energy is our main battlefield and power serves as the main force. We have earnestly implemented the national “dual carbon (carbon peaking and carbon neutrality)” strategy, proactively integrated it into the construction of a new power system, moved faster in green transition, and promoted green production, in an effort to make our homeland more eco-friendly and strive to build a beautiful China with greater harmony between humanity and nature. The Xiangyang Yicheng Power Plant project has been built with high quality. Two 1,000 MW ultra-supercritical thermal power units using advanced environmentally friendly technologies have been put into production, achieving ultra-clean emissions of air pollutants and zero discharge of wastewater. Greater efforts have been made to facilitate the interconnection between three types of technical transformation of coal power units (i.e., energy-saving transformation, heat supply transformation, and flexibility transformation), with a focus on improving the clean and low-carbon level, flexibility and efficiency. The construction of the 2,100 MW photovoltaic base of Phase I of the Northern Shaanxi-Hubei ±800 kV UHVDC transmission project has been accelerated. Phase I of the renewable energy 1,000 MW base in Yicheng has been connected to the grid, with the controllable installed capacity of renewable energy reaching 4,380 MW, marking our more solid steps in utilizing wind and solar. Clean energy has accounted for more than two-thirds of the Company's installed capacity in operation and under construction. Moreover, we have promoted the coordinated development of pollution control and emission reduction, energy conservation and consumption reduction, biodiversity protection, and addressing climate change. Throughout the year, power generated by clean energy reached 15.8 billion kWh, an increase of 15% and equivalent to reducing 13.03 million tons of carbon dioxide, 1,312 tons of sulfur dioxide, and 2,103 tons of nitrogen oxides.

We have shouldered our responsibility for promoting the benefit sharing of high-quality development. We have been committed to treating serving economic and social development as our conscious action and value pursuit and sticking to play the role of a ballast that guarantees security, a pillar that supports development, and a facilitator of common prosperity while pursuing self-development. Bearing the mission of ensuring energy supply in mind, we have fulfilled our responsibility as an energy security assurance platform in Hubei Province and have done our utmost to ensure sound energy and power production and supply. In the past year, we generated 32.2 billion kWh of electricity, supplied 8.82 million tons of coal, and transmitted and sold 2.06 billion cubic meters of gas within the province, providing safe and reliable energy and power support for regional economic and social development. We have made greater contributions to economic growth, with the investment amount and the amount passing the approval of the investment decision-making committee around the year hitting a new record high. In the past year, we paid taxes of RMB 1.516 billion and provided jobs for more than 6,000 local people, assisting in the recovery and growth of the local economy. We have been staying true to our original aspiration of bringing benefits to the people by investing RMB 24,815,500 in 17 social responsibility projects in industrial assistance, environmental remediation, infrastructure, public services, and other aspects. The Gaoqiao Bridge in Duzhenwan Town, Changyang County, for which we have been providing aid in construction, was open to traffic this year, breaking through the travel bottleneck that has restricted nearly 10,000 local people for many years. Accordingly, the Company was awarded the Medal of Fraternity by the Red Cross Society of China.

We have vigorously motivated the impetus and vitality of high-quality development through innovation. With a focus on reinforcing core functions and enhancing core competitiveness, we have worked harder to deepen reform and innovation and have continued to build a better corporate governance system, thereby making the growth drivers stronger. We have thoroughly implemented the concepts of reform and improvement of the company and have been selected for the extended list of “Double-Hundred Enterprises” of SASAC. The market-oriented operation mechanism has been further improved. Moreover, we have taken major steps to create a sound ESG management system and successfully released the Company's first annual ESG report. We have intensified efforts to improve the quality of listed companies, strengthen investor relations management, and pay attention to investor returns. Since 2015, the average annual cash bonus has accounted for 36.8% of the net profits attributable to the parent company in the same year. Furthermore, we have insisted on innovation-driven development, with the input in technological innovation and the number of patent applications and grants reaching a record level. We have vigorously developed new quality productive forces, launched the three-year action for new business forms and models, and actively opened up new tracks such as carbon assets, virtual power plants, new-type energy storage, and integrated smart energy. In addition, we have forcefully prevented and controlled risks in key areas and sped up to build a sound long-term mechanism for compliance management, in a bid to firmly hold the bottom line for safe development.

We will pursue excellence by living up to our responsibilities while creating a better future with our down-to-earth efforts. We will bear in mind the country's most fundamental interests, fulfill our mission, serve the country and the people with absolute sincerity, and continue to promote the integration of ESG concepts with corporate strategies, values and governance. With these efforts, we aim to move faster to build a first-class regional integrated energy group, keep achieving new accomplishments for high-quality development, and strive to make new and greater contributions to advancing the noble cause of building a strong country and realizing national rejuvenation on all fronts through a Chinese path to modernization.

We are willing to make concerted efforts with all stakeholders to jointly create a greener, more harmonious, and brighter future.

Zhu Chengjun

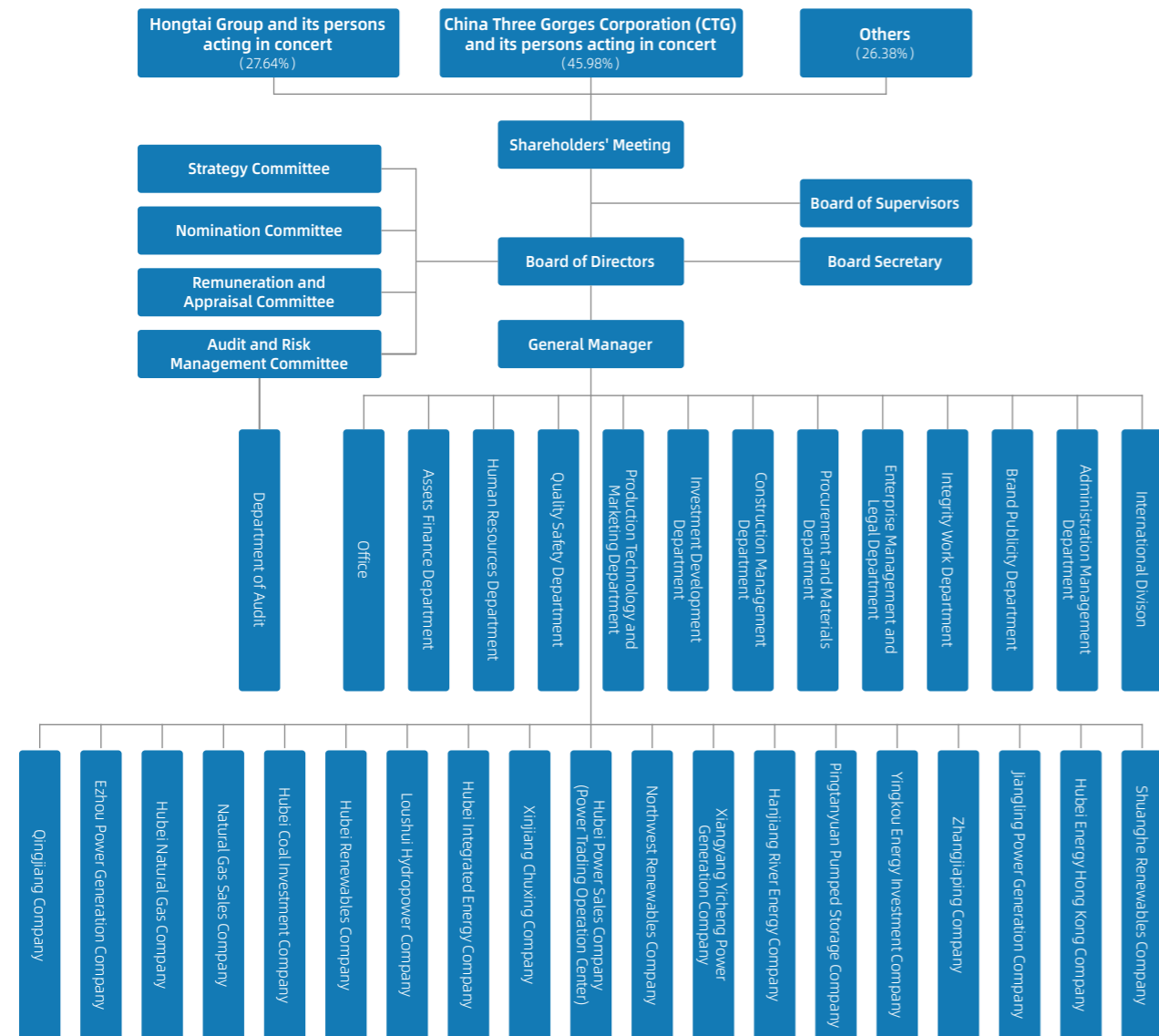
Chairman of Hubei Energy Group Co., Ltd.



About HBEG

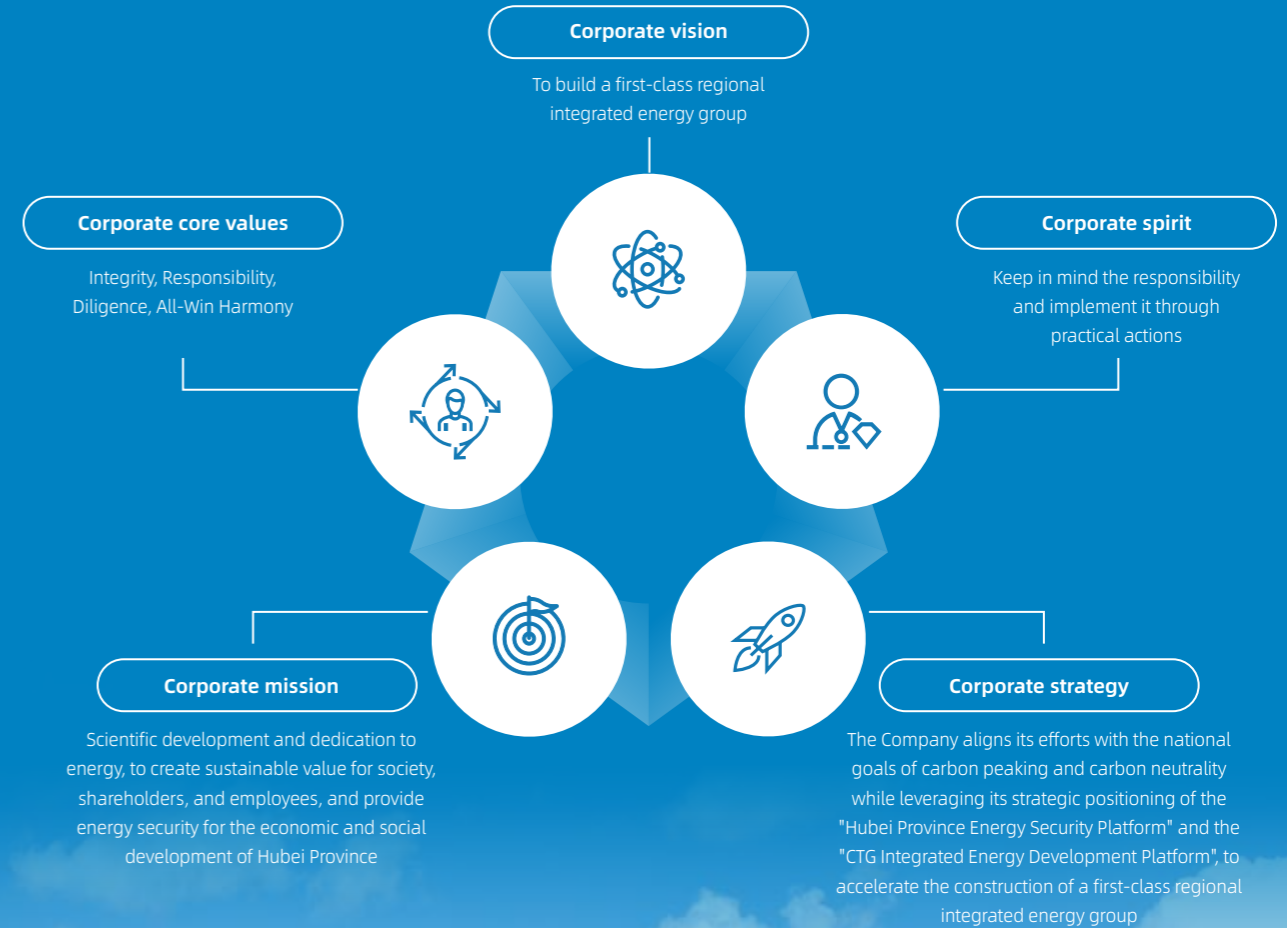
Company Profile

Hubei Energy Group Co., Ltd. was founded in February 2005 by the merger of the former Hubei Qingjiang Hydropower Investment Company and Hubei Electric Power Development Company and was listed on the main board of the Shenzhen Stock Exchange in 2010 with the stock code 000883. In recent years, the Company adheres to the general principle of pursuing steady progress, and fully, accurately and comprehensively implements the new development philosophy to achieve both enterprise development and safety, both the power supply guarantee and enterprise operation, and both the energy security and transformation. Also, the Company focuses on promoting high-quality development, continuously enhances its core functions, improves its core competitiveness, and speeds up building a first-class regional integrated energy group. By the end of 2023, the Company has a controllable installed capacity of 15,671.8 MW, and a controllable installed capacity of 14,333.9 MW in Hubei Province, accounting for 16.15% of the total installed capacity of power generation in the province (excluding the installed capacity of power generation of the Three Gorges hydroelectric power station). The Company has developed into an important energy platform in Hubei Province and a public company with the most complete energy business varieties in China. Furthermore, the Company has won many honors and titles, such as "National May Day Labor Award", "Top 500 Service Companies in China", "Top 100 Enterprises in Hubei Province", and "Best Civilized Unit in Hubei Province".



Equity Structure and Organization Chart of HBEG

Corporate Culture



Business Overview



Hydropower

Installed capacity of 4,657.3 MW, mainly including the Qingjiang Shuibuya Cascade Hydropower Station, Geheyan Hydropower Station, Gaobazhou Power Station, Jiangpinghe Hydropower Station, Dongping Hydropower Station, and other small- and medium-sized hydropower stations in our country and Chaglla Hydropower Station in Peru.



Pumped storage

The Company plans to build pumped storage power stations in three areas (eastern Hubei, western Hubei, and northwestern Hubei) close to the power load center. Among them, Pingtanyuan Pumped Storage Power Station has a power generation capacity of 1,400 MW, Changyang Pumped Storage Power Station has a power generation capacity of 1,200 MW, and Zhangjiaping Pumped Storage Power Station has a power generation capacity of 1,800 MW (all of the above pumped storage power stations are under construction).



Thermal power

Installed capacity of 6,630 MW, mainly including Ezhou Power Plant, Donghu Gas Turbine Power Plant, Chuxing Power Plant, and Yicheng Power Plant.



Coal

In Jingzhou, Hubei, a coal rail-water transportation, storage, and distribution base with an annual transfer volume of 50 million tons of coal will be built in two phases. This project is to build a coal supply guarantee platform in Hubei Province.



Renewable energy

Grid-connected installed capacity of 4,384.5 MW, including 1,214.9 MW of wind power and 3,169.6 MW of photovoltaic power.



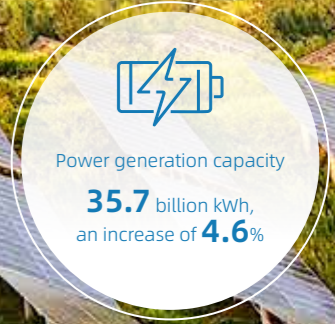
Natural gas

As the natural gas regulation and guarantee platform in Hubei Province, the Company is mainly responsible for offering natural gas midstream pipeline transportation services and urban gas supply services within the province, as well as for the development of LNG and CNG gas stations and other businesses.





Key Performance in 2023



Economic performance

- Total assets
RMB **91.29** billion, with an increase of **14.87%** compared to that at the beginning of the year.
- Asset-liability ratio
57.83%
- Net profit attributable to shareholders of the listed company
RMB **1.749** billion, with a YoY increase of **50.41%**
- Return on equity
5.55%
- Taxes
RMB **1.516** billion
- Labor productivity of all employees
RMB **1.69** million per person, with an increase of **11.31%**
- Since its listing in 2010, the cumulative dividends distributed to small and medium shareholders have exceeded RMB **6.9** billion

- Customer satisfaction
100%
- Percent of female employees
24%
- Employee satisfaction
100%
- Safety production investment
RMB **185** million
- Assistance investment
RMB **24.8155** million
- Technology investment
RMB **436** million
- Domestic patent applications
226 items
- Domestic patent grants
76 items

Social performance

Environmental performance

- The proportion of clean energy in the Company's installed capacity of the projects that have been put into operation and are under construction
68.3%
- The clean energy power generation capacity replaces carbon dioxide emissions of
13.0274 million tons
- Environmental protection investment
RMB **343** million
- Major violations of environmental regulations
No

- Percent of independent directors
37.5%
- Percent of directors with doctoral degrees or above
75%
- Percent of female directors
12.5%
- Selected into the expanded list of **"Double-Hundred Enterprises"** granted by the State-owned Assets Supervision and Administration Commission

Governance performance

Practice the Sustainable Development Goals (SDGs) of the United Nations

The Sustainable Development Goals (SDGs) of the United Nations are an important guide for the Company to carry out sustainable development activities based on the energy transformation strategy. The Company's practice in response to the United Nations SDGs is detailed in the chapters of this report that are related to environment, society, and governance.

Sustainable development goals	Our actions	Corresponding chapters
	Support poverty alleviation activities through public welfare donations and other means, promote rural revitalization Carry out special recruitment for graduates from poverty-stricken families	Social Contribution Employee Rights and Interests
	Intensify employment assistance and further strengthen industrial assistance	Social Contribution
	Strengthen safety production, conduct regular employee physical examinations, prevent occupational diseases, and guarantee the physical and mental health of employees	Employee Rights and Interests Product and Service Management Supply Chain Safety and Management
	Continue to carry out donation-for-education activities to promote community education development Establish a complete employee education and training system, carry out the "Training Quality and Efficiency Improvement Year" activity; and promote employees' career development	Social Contribution Employee Rights and Interests
	Adhere to the principle of getting the same pay for the same job, protect the rights and interests of female employees, and provide equal career development opportunities	Employee Rights and Interests
	Optimize the water use structure, promote the recycling of sewage and wastewater, and improve the water resource use efficiency	Resource Management Pollution Prevention and Control
	Vigorously develop renewable energy businesses, actively promote the construction of pumped storage projects, and continuously optimize the energy structure	Topic II: Accelerate Transformation and Development Led by Green Concepts Climate Change Resource Management
	Provide equal employment opportunities and competitive salaries, promote local procurement, and drive local economic development	Employee Rights and Interests Supply Chain Safety and Management Social Contribution
	Increase R&D investment, encourage management and technological innovation, and implement the "Climbing Plan" for intellectual property rights	Topic III: Drive the Future Development of Energy Empowered by Intelligence

Sustainable development goals	Our actions	Corresponding chapters
	Highly value employee diversity, guarantee equal opportunities for employees Prohibit the use of child labor and forced labor, and prohibit any forms of employment discrimination	Employee Rights and Interests
	Make every endeavor to ensure that all salaries and benefits are paid fully, ensure a stable and secure energy supply Build infrastructure, and carry out emergency relief and community care activities	Topic I: Reinforce Core Functions by Increasing Production and Guaranteeing Supply Social Contribution
	Actively participate in carbon trading, develop the green certificate and green electricity market, and advocate green procurement	Resource Management Supply Chain Safety and Management
	Actively address climate change and continuously push energy conservation and carbon reduction	Topic II: Accelerate Transformation and Development Led by Green Concepts Climate Change
	Implement the ecological flow of hydropower stations, guarantee the water demand of the downstream ecological environment, and increase and restore the number of fish stocks	Biodiversity
	Implement in-situ or ex-situ conservation of important species	Biodiversity
	Deepen enterprise reform, improve corporate governance, intensify compliance management, and promote the construction of clean government	Standardized Governance Governance Strategy and Organizational Structure
	Strengthen communication and cooperation to achieve win-win results for all parties	Communication with Stakeholders Information Disclosure and Investor Relations Standardized Governance



ESG Management

ESG governance structure

The Board of Directors attaches great importance to ESG management, incorporates the ESG concept into the Company's strategic planning and daily operations, and promotes the steady development of the Company's sustainable development practices.

The Company establishes a working mechanism by which the Board of Directors plays the role of leadership and decision-making in individual activities; the ESG working group organizes and coordinates individual activities; and individual functional departments jointly participate in various activities, aiming to improve the standardization, institutionalization, and scientific level of ESG management and drive the transition of the ESG strategy and plan into concrete actions.

Board of Directors

The highest responsible body for ESG matters and the highest decision-making body for ESG activities

Strategy Committee of the Board of Directors

- Reviews the Company's ESG strategy, goals, plans, and related policies and submits them to the Board of Directors for review
- Studies and schedules the Company's progress in achieving ESG goals and evaluates the progress of ESG activities
- Supervises the implementation of the Company's ESG policies and the fulfillment of tasks
- Studies and reviews the ESG annual report and submits it to the Board of Directors for review

ESG working group

- Formulates the Company's ESG strategy, goals, plans, and related policies and submits them to the Strategy Committee of the Board of Directors for review
- Works out the Company's ESG annual work plan, collects and summarizes the progress and results of ESG activities, sums up the operation of the ESG system and the completion conditions of the phased goals for various matters, and reports them to the Strategy Committee of the Board of Directors
- Organizes and coordinates the Company's functional departments to work out specific ESG management indicators and measures, and tracks and supervises the progress of goals and the accomplishment of key tasks
- Pushes forward the implementation of the Company's ESG work management measures, perfects the Company's existing ESG-related management system, and establishes and improves ESG-related management policies and measures in a timely manner as required
- Organizes and conducts stakeholder communication activities and establishes an external communication process
- Gives guidance on collecting ESG annual report information

Office

- Maintains ESG Indicator system and collects progress of goals
- Drafts relevant ESG management policies and improves the ESG management system
- Maintains the ESG policy library
- Maintains the ESG issues library
- Sorts out the Company's stakeholders, establishes channels for daily communication with stakeholders, improves communication mechanisms, and identifies ESG major issues
- Collects and summarizes the ESG annual report information and organizes report preparation activities
- Coordinates the Company's ESG information disclosure work
- Coordinates the Company's response to the stakeholders' ESG demands
- Tracks and grasps the latest external ESG policy requirements and trends, analyzes ESG issues closely related to the Company, and gives suggestions
- Organizes the Company's ESG publicity and training activities, and assists superior units in carrying out ESG publicity and training activities

Functional departments

- Implement the ESG annual plan according to their responsibilities
- Summarize relevant ESG indicator information and submit goal progress and major measures to the Office
- Establish and improve special ESG-related management policies, and assist the Office in maintaining the ESG policy library
- Implement relevant management measures for ESG issues
- Carry out stakeholder communication and respond to their ESG demands according to their responsibilities
- Cooperate with the Office to collect ESG information and submit the information to the Office
- Cooperate with relevant departments to carry out the Company's ESG publicity and training activities and other activities



ESG Actions and Plans

Perfect the system construction



Issue the Company's *Environmental, Social Responsibility, and Corporate Governance (ESG) Management Measures* and specify requirements for the organization, responsibilities, and management mechanism of ESG to achieve the institutionalization and process management of ESG matters.

Organize special training activities



Organize the Company's directors to take part in the training activities sponsored by regulatory authorities on corporate governance, risk compliance, regulatory rules, and industry policies; include ESG-related content in the training programs for middle and senior management personnel; enhance the perception and understanding of middle and senior management personnel on ESG; and improve the Company's ability to drive high-quality development.

Organize management personnel training programs and offer training courses on corporate governance, risk prevention and control, and environmental protection.

The Company's directors and senior management personnel participated in the special training on comprehensive registration system reform organized by the China Association for Public Companies; the Company's chairman, general manager, and independent directors participated in the special sharing meeting on public company governance in Hubei organized by the Hubei Association for Public Companies; and independent directors participated in the 134th independent director training organized by the Shenzhen Stock Exchange; and the Company's board secretary and securities affairs representatives participated in the follow-up training courses for board secretaries organized by the Shenzhen Stock Exchange.

Strengthen ESG communication and information disclosure



Build a diversity of communication channels and mechanisms and timely release ESG-related information through the Company's official website, social media, and other channels to ensure effective transmission and feedback inside and outside the Company. Strengthen communication with ESG professional institutions by various means, such as participating in forums and seminars.



Participate in the ESG report release event organized by CTG



Participate in CTG's Sustainable Development Seminar

Carry out an ESG performance assessment



Incorporate ESG performance indicators (such as safety, environmental protection, compliance, anti-corruption, and technological innovation) into the indicator system for the assessment of senior management personnel, and take ecological and environmental protection indicators as key indicators for the year-end assessment of its affiliated second-tier companies. The assessment results will directly affect the performance bonuses of senior management personnel and affiliated companies, forming an evaluation and incentive system linked to their sustainable development performance.



Honors in 2023



The Hubei Integrated Energy Company's *Case Analysis for Promoting the Green Transition of Hubei Energy Integrated Energy Investment Co., Ltd. Through Green Energy Transition* was rated as an excellent case in the case selection event in the 10th China Quality Academic and Innovation Forum.

Next ESG action plan



ESG management improvement

Improve the ESG management system and related processes, and enhance the scientific, standardization, and institutionalization level of the Company's ESG management.

Perfect the organizational structure and give full play to the functions of the Company's Strategy Committee of the Board of Directors and the ESG Working Group.

Intensify the study and training of relevant professional content, such as ESG information disclosure rules, ESG performance rating, and climate risk analysis, and enhance the Company's ESG professional governance capabilities.

Actively plan relevant publicity activities and showcase the new achievements of the Company's ESG activities.



ESG practice improvement

Environmental Continuously optimize the Company's energy structure and actively promote pollution reduction and carbon reduction.

Social Pay attention to employee welfare, guarantee employee health and safety, strengthen community co-construction and cooperation, and promote the construction of a sustainable supply chain.








Governance Improve the Company's governance mechanism, perfect the market operation mechanism and incentive and constraint mechanism, strengthen compliance management, intensify communication with shareholders and stakeholders, and enhance the quality and transparency of the ESG information disclosure.

ESG Risks and Opportunities

ESG risk and opportunity factors	Description of risks and opportunities	Management actions
E	Climate change Extreme weather events and natural disasters, such as heavy rains, floods, extreme heat, and droughts, may damage power generation facilities, affecting power generation efficiency and power supply stability. Climate change may lead to instability in energy commodity prices and energy fuel supply chains, resulting in increased costs.	Determine the Company's strategies and goals in response to climate change. Carry out climate risk identification, evaluation, and management. Carry out abnormal weather warnings and long-term weather forecasts, reasonably formulate pre-flood water level reduction goals, and scientifically implement reservoir dispatch. Strengthen the response to climate change and work out special emergency plans for flood control and meteorological disasters.
	Low-carbon transition Stricter environmental regulations and carbon emission standards that affect the operating costs of enterprises. Market demand drives the development of renewable energy, giving rise to technological innovation and technological progress.	Increase energy efficiency and reduce carbon emissions. Promote the clean and low-carbon transition of the Company's energy structure. Actively participate in carbon trading, work out corresponding trading strategies, and manage carbon emission risks.
S	Safety production The construction tasks of infrastructure are heavy, the operation links are complex, and there are many participants, posing many safety risks.	Improve the overall on-site construction safety management system, with 10 specific policies revised throughout the year. Strengthen the supervision of the performance of duties of general contractors, supervisors, and construction units, ensuring that safety responsibilities are fully implemented. Carry out safety education and training activities earnestly to enhance employees' safety awareness. Intensify accident prevention measures, and create and perfect emergency plans and rescue systems. Strengthen safety supervision and inspection, and organize more than 100 safety inspection activities throughout the year.
	Human capital development In the process of rapid development, the Company faces the challenge of a shortage of high-quality professional and skilled talents. The country's proactive and open talent introduction and incentive policies encourage and support talent development.	Provide competitive salaries and benefits and career development opportunities, and implement public company equity incentives for core management talents and technical backbones. Establish a sound training and development system and carry out the "Training Quality and Efficiency Improvement Year" program. Conduct more than 60,000 person-times of training activities throughout the year, with a training expenditure of up to RMB 9.216 million. Strengthen human resource planning and management to ensure the effective use of human resources and the balance between supply and demand.
G	Compliance management Violations occurring in the process of business management lead to legal liabilities and cause economic or reputational losses. Good compliance management helps to enhance the Company's competitiveness and market position and promote the Company's sustainable development.	Establish and improve the Company's compliance management system to ensure that compliance management is effectively implemented and supervised. Strengthen the tracking and evaluation of policies and regulations, and timely adjust the Company's business strategies and management measures. Establish a legitimate compliance review mechanism, and achieve a legitimate compliance review rate of 100% for major matters. Establish a rectification mechanism for violations, and block management loopholes by improving rules and regulations and standardizing business processes.

Communication with Stakeholders

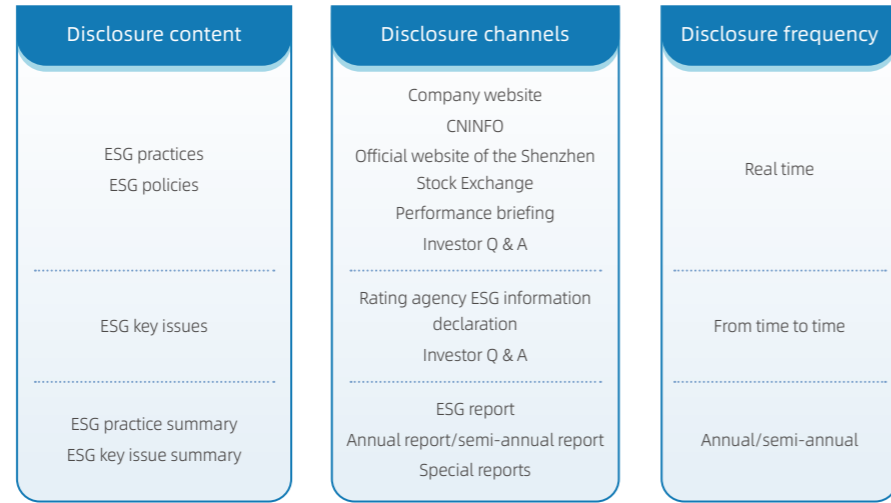
Fully take account of the concerns and demands of stakeholders and take them as important considerations in formulating ESG strategies and optimizing ESG management. Meanwhile, communicate and interact with stakeholders regularly to respond to stakeholders' expectations through responsibility performance practices.

Stakeholders	Issues of concern	Communication methods	Corporate responses
 Government departments and regulatory agencies	Compliance with laws and regulations Development of the local economy Energy supply Energy security	Participation in relevant energy meetings Work reports Information reports Policy consultation	Intensify compliance management Guarantee energy supply Conduct strategic cooperation Promote energy conservation and emission reduction
 Shareholders and investors	Strategic planning Risk management Sustainable development Incomes and returns	Shareholders' meeting Information disclosure Company website	Disclose information on schedule and truly Strengthen ecological and environmental protection Fulfill social responsibilities Strive to enhance its performance and create profits
 Employees	Salaries and benefits Protection of employee rights and interests Career development	Labor contract Employee Representatives Congress Labor union activities	Comply with the terms of the labor contract Improve the salary and employees' rights and interests protection system Improve the system of the Employee Representatives Congress Carry out education and training activities Provide a career development platform
 Customers	Integrity and contract performance Quality service Quality assurance	Entry into contracts and agreements	Strengthen product quality management Guarantee a safe and stable energy supply
 Suppliers and partners	Mutual benefit and win-win cooperation Transparent procurement Business ethics Sustainable supply chain	Entry into contracts and agreements Exchanges and discussions Correspondence Supplier training	Carry out business exchanges and cooperation Fulfill agreements and contracts in a faithful manner Establish long-term cooperative relationships
 Industry	Fair competition Promotion of industry progress Driving of the development of the industrial chain	Participation in industry associations Participation in discussions and seminars	Carry out competition and cooperation Achieve mutual benefit and win-win Promote industry progress
 Local communities	Rural revitalization Charitable donations Driving of community development	Carrying-out of assistance projects Participation in volunteer activities Employment guarantee	Help rural revitalization Conduct volunteer services Visit and exchange

● Information disclosure matrix

Reasonably plan and manage ESG information disclosure activities, expand information disclosure forms, form an effective information disclosure matrix, and ensure ESG information transparency.

To fully, accurately and objectively convey the progress of environmental, social and governance activities to internal and external stakeholders, the Company organizes and coordinates various functional departments and branches to participate in the preparation and review of the annual ESG report. The report is made public after approval by the Board of Directors. In 2023, the first ESG annual (2022) report was released.

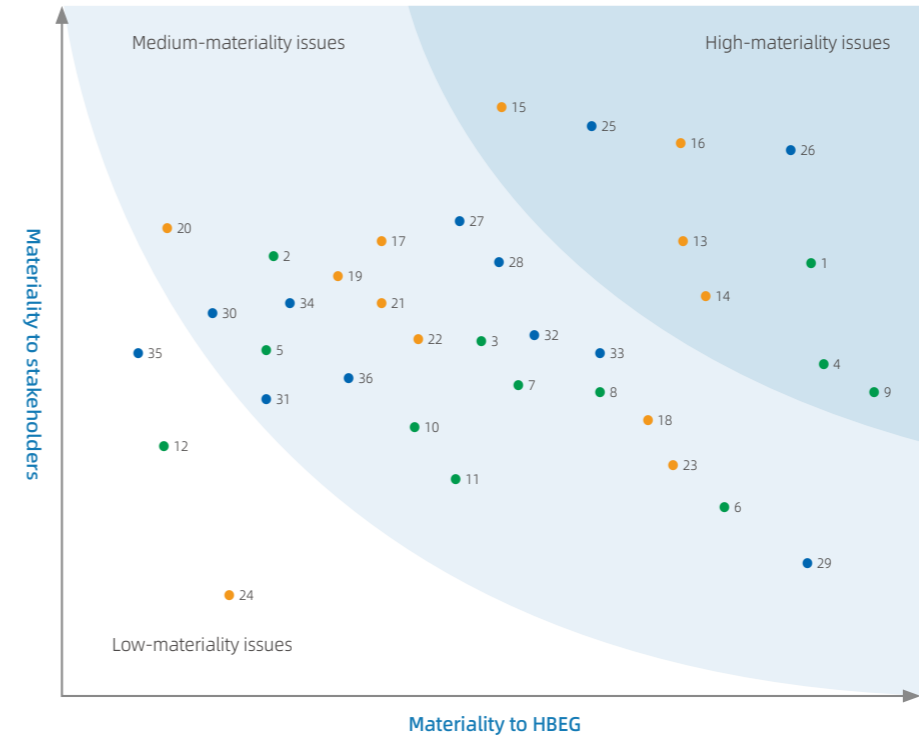


Materiality Assessment

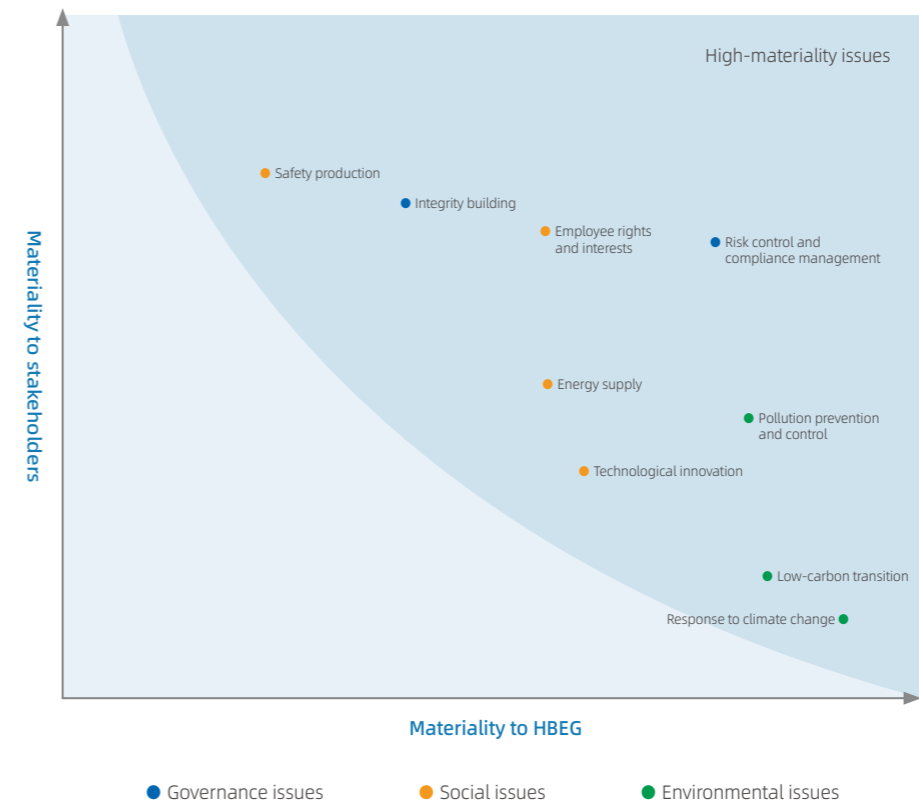
Establish a scientific evaluation mechanism for material issues, and systematically analyze and evaluate material issues involving the Company's strategies, risks, and opportunities.



Matrix of ESG material issues



- Environmental**
- 1 Pollution prevention and control
- 2 Environmental assessment implementation
- 3 Penalties for environmental violations
- 4 Low-carbon transition
- 5 Energy consumption
- 6 Emission reduction management
- 7 Water resources use management
- 8 Green supply chain management
- 9 Response to climate change
- 10 Environmental management system
- 11 "Dual-carbon" planning
- 12 Biodiversity
- Social**
- 13 Energy supply
- 14 Technological innovation
- 15 Safety production
- 16 Employees' rights and interests
- 17 National strategic response
- 18 Digital layout and investment
- 19 Intellectual property protection
- 20 Project investment due diligence and construction quality management
- 21 Supply chain safety and management
- 22 Customer services, rights and interests
- 23 Community co-construction
- 24 Corporate charity activities
- Governance**
- 25 Integrity building
- 26 Risk control and compliance management
- 27 Impact of and response to power market reform
- 28 Communication with stakeholders
- 29 Related transactions
- 30 Fair competition
- 31 Composition of directors, supervisors, and senior management and compensation management
- 32 ESG management
- 33 Internal audit
- 34 Information disclosure transparency
- 35 Enterprise benchmarking management
- 36 Shareholders' rights and interests



● Governance issues ● Social issues ● Environmental issues

Topic

Reinforce Core Functions by Increasing Production and Guaranteeing Supply

Respond to the key issue of "Energy supply"

In 2023, domestic fuel is continuously at a high price, the hydropower water resources are at a low level in the first half of the year, and extreme weather events occur frequently, causing the energy supply task to be under tremendous pressure. The Company scientifically coordinates and strengthens energy dispatch, does a good job in coal resource reconstruction, power supply guarantee, gas transportation, and heat supply, and carries out equipment maintenance, generator set overhaul and technical renovation in a lean manner. Furthermore, the Company makes every effort to ensure the power generation meets the power demand and the power generation systems generate electricity stably and at full loads. The Company resolutely serves as the pillar and ballast stone of energy supply, successfully achieving power supply tasks in a series of important periods, such as the winter peak period and the summer peak period. The coal supply for power plants in Hubei Province is up to 8.82 million tons in the whole year, the power generation in Hubei Province is 32.2 billion kWh, and the gas transportation and sales volume is up to 2.06 billion cubic meters.



Jingzhou Coal Port



Yicheng Power Plant



Ezhou Power Plant

Two 1,000 MW generating units of Yicheng Power Plant are built and put into operation in a safe and high-quality manner as scheduled in July and December 2023, respectively, providing key incremental support for Hubei's power supply during peak periods.

Ezhou Power Plant strengthens the maintenance and overhaul of the generating units, and the equipment reliability reaches a historical high. The power plant maintains a normalized inventory of more than 600,000 tons of power coal, ensuring peak operation and stable and full-load power generation.

Qingjiang Company scientifically responds to the rapid change in water supply, continuously optimizes reservoir dispatch, and coordinates autumn flood prevention and power generation, increasing the power generation by 953 million kWh and making a positive contribution to regional power supply.

Hubei Coal Investment Company strengthens coal storage and transportation and supplies 7.04 million tons of power coal to power plants within the province during the summer and winter peak periods, with an increase of 42.6%. During the coal supply period, the coal reserve remains above 300,000 tons, exceeding the coal storage and supply goal tasks issued by the Hubei Provincial Energy Bureau.

The Natural Gas Company has achieved a gas resource reserve of 300 million cubic meters and has additional gas storage of 10 million cubic meters to meet gas supply demand. The Hubei Natural Gas Company strengthens its natural gas transportation guarantee, effectively meeting gas demand during peak periods.



Topic

Accelerate Transformation and Development Led by Green Concepts

Respond to the key issue of "Low-carbon transition"

In the policy background of the country where it is required to accelerate the achievement of the "dual carbon" goals and actively promote the green and low-carbon transition of the energy industry, the Company optimizes the business layout, continuously increases the percentage of clean energy installed capacity, and contributes to the building of a green, low-carbon and efficient energy system.

In 2023, the Company's renewable energy grid-connected installed capacity achieved an increase of **1,261.3** MW, leading to a cumulative installed capacity of **4,384.5** MW.



Low-carbon strategic goals

The Company grasps the new characteristics, new changes, and new trends of our country's economic and social development in the new era, especially the reform and transformation of the energy industry, and also adheres to the overall principle of maintaining stable and orderly operation.

The Company grasps the development direction toward building an energy industry that is clean, low-carbon, safe, stable, and economical and efficient, adheres to the principle of working out goals before taking actions, consolidates its energy supply guarantee role in clean thermal power, and actively promotes the construction of new power systems. Also, the Company coordinates the development of renewable energy, pumped storage, and other businesses, accelerating its green and low-carbon transition and development.

The Company grasps the development direction of the domestic energy industry and the trend of market-oriented reform, conducts the overall planning of the functional positioning of the "two platforms" and the market-oriented transformation and development, and continuously improves its energy supply capacity and market competitiveness.

Transformation achievements

By the end of 2023, the Company's controllable total installed capacity is up to **15,671.8** MW, of which hydropower, renewable energy, and gas turbine installed capacity totaled **9,411.8** MW, and the clean energy installed capacity accounts for **60.1%**. The installed capacity under construction is **8,240** MW, of which the renewable energy and pumped storage installed capacity under construction totaled **6,920** MW, and the clean energy installed capacity accounts for **84%**. The clean energy installed capacity in production and under construction accounts for **68.3%**. While the Company's energy security guarantee capability has been significantly enhanced, its energy structure has been gradually transitioned towards a green and low-carbon energy structure. The Company has transported green electricity to Hubei, Xinjiang, Shaanxi, Jiangsu, Jilin, and other provinces and regions, consolidating its comprehensive energy advantages of multiple energies and efficient energy synergy.



Development measures

Optimize and develop clean coal power businesses

The Company has fully achieved clean coal power projects for the "14th Five-Year Plan" period. The two ultra-supercritical 1,000 MW thermal power generating units of Yicheng Power Plant have been fully completed and put into operation. The plant has achieved ultra-clean emissions of air pollutants and zero discharge of wastewater. The coal consumption for power generation and the air pollutant emission indicators are superior to the domestic advanced level. The Ezhou Phase IV (equity participation) Coal-electricity Joint-Venture Cooperation Project has been implemented, and the second phase of the Jiangling Power Plant has been approved and commenced.

Vigorously develop the renewable energy business

The Company vigorously advances the construction of "renewable energy plus" projects, focusing on the joint venture projects of renewable energy and coal-electricity and the coordinated development of renewable energy and pumped storage projects. Also, the Company actively explores large-scale base project development modes, such as generation-grid-load-storage integration mode and wind-solar-hydro-thermal power mode. The construction of three large renewable energy 1,000-MW bases (which are located in Yulin, Shaanxi; Yicheng, Hubei; and Jingmen, Hubei, respectively) has achieved remarkable results. The pattern of clustered development and large-scale development of renewable energy has been further consolidated. In 2023, the renewable energy grid-connected installed capacity is up to 1,261.3 MW.

Actively develop hydropower and pumped storage businesses

The Company takes the hydropower business, especially the pumped storage business, as a key point to promote a green and low-carbon transition, specify the Company's plan for the development and optimization of pumped storage projects, and actively integrate these projects into the new power system. The overall progress of the three major pumped storage projects, including the Luotian Pingtanyuan Pumped Storage Project, Nanzhang Zhangjiaping Pumped Storage Project, and Changyang Qingjiang Pumped Storage Project, keeps ahead among similar projects within Hubei Province.

Accelerate the development of new business formats and new business modes

The Company has introduced a three-year action plan for new business forms and models and planned to carry out carbon assets, renewable energy project overhaul and test, virtual power plants, new-type energy storage, integrated smart energy, zero-carbon industrial parks, and other businesses, striving to open up new tracks for the Company's high-quality development, injecting new momentum, and creating new profit growth points.

Case



In 2023, the two ultra-supercritical 1,000 MW thermal power generating units of Yicheng Power Plant have been fully built and put into operation, with the investment in environmental protection equipment and facilities accounting for 20.8% of the total project investment. The environmental protection, economic, and technical indicators of the generating units are higher than the design requirements. The project pursues the goal of clean energy and ultra-low emissions. Thus, it adopts high design standards and advanced performance indicators and features high parameters, a large capacity, and low emissions. The designed power coal consumption is 268.66 grams of standard coal per kWh, which is better than the benchmark level of 273 grams of standard coal per kWh in key fields of clean and efficient utilization of coal. Furthermore, the project is equipped with a flue gas denitrification system, a dust removal system, and a desulfurization system, achieving the "three firsts" (including the "oil-free" power plant, column-tank integration, as well as high efficiency and low carbon), deep peak regulation, ultra-clean emissions, and other 10 innovative technologies.

Case



In 2023, the first batch of generating units of Hubei Renewables Company's Xishui Xima 100-megawatt Agricultural-Photovoltaic Power Generation Project were successfully connected to the grid. The project adopts the "Photovoltaic + Ecological Agriculture" mode for construction. After the completion of the project, it is expected to supply about 109.3 million kWh of green electricity annually. It is planned to plant more than 1,800 mu (120 hectares) of crops, such as rice, rapeseed, and wheat. The project will play a positive role in promoting the low-carbon and green development of the local economy and improving the comprehensive utilization capacity of land.

Topic

Drive the Future Development of Energy Empowered by Intelligence

Respond to the key issue of "Technological innovation"

R&D and Innovation Management System

● Policy construction

On the basis of issuing and implementing 7 policies, such as the *Scientific and Technological Work Management Policy*, the Company has further improved the science and technology management system, revised the *Work Management Measures of the Science and Technology Committee*, optimized the setting of the Professional Sub-committee of the Science and Technology Committee, defined the professional subcommittee members, and established sound rules of procedure. Also, the Company has revised the *Scientific Research Project Management Measures* to encourage front-line scientific and technological workers to carry out independent scientific research projects and has optimized the scientific research project management process. Additionally, the Company has issued the *Rules for Evaluation and Reward of Technological Innovation Results* to intensify the incentives for technological innovation.

● Mechanism innovations

Establish a routine meeting mechanism for technological innovation activities, according to which the Company organizes a technological innovation meeting at least once every two months to regularly study and solve major technological innovation issues.

Establish a leader-responsibility system for scientific research projects, strengthen the management of key projects, keep abreast of project progress timely, and study and solve key and difficult problems in the implementation of projects.

Set up annual performance assessment tasks for technological innovation for 14 subsidiaries. These tasks highlight R&D investment, the completion rate of scientific research projects, and key intellectual property indicators.

Establish a technological innovation inspection and investigation mechanism, track, inspect, and monitor the progress of key technological innovation tasks in a timely manner, summarize good experiences and practices, and promote the implementation of technological innovation policies and measures.

● Training and presentation

We have carried out the publicity and presentation activities for the technological innovation management system and technological innovation policies in a combination of "On-site + Online" mode and have held training courses on the Company's digital transition and new power system construction.



Scientific and technological investment and innovation results

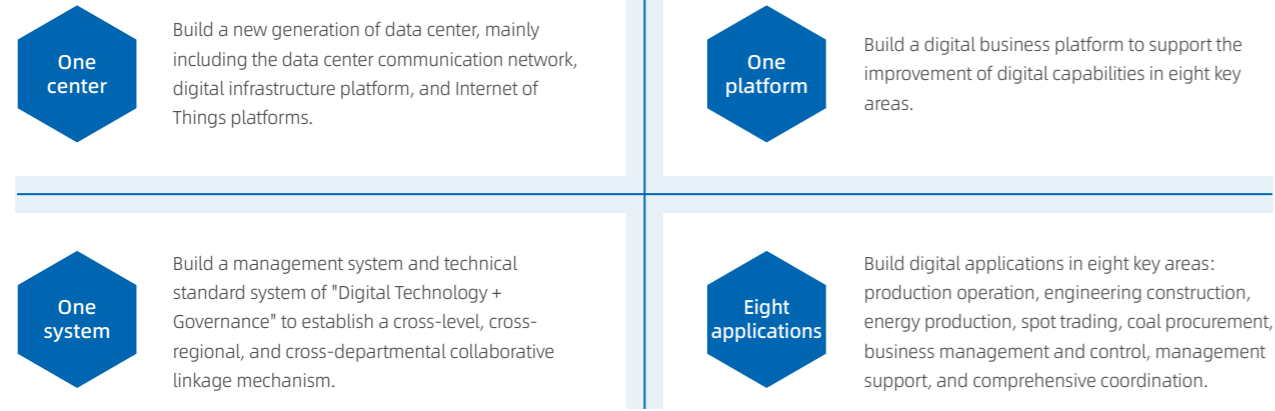


- RMB **436** million of scientific and technological investment
- 226** domestic patent applications, an increase of **335%**
- Including **66** patent for invention applications, an increase of **450%**
- 76** domestic patent grants, an increase of **73%**
- Including **11** patent for invention grants, an increase of **120%**
- 2** international patent applications submitted by means of PCT
- 1** first prize for scientific and technological progress in Hubei Province
- 12** national industry awards for employees' innovation results



Digital Transition

Overall blueprint



Implementation of the informationization plans

In 2023, **93** informationization projects have been implemented with an investment of RMB **77.7978** million.



Key results

Through the site-level data console, three-dimensional digital twin platform, and three application modules (including global monitoring, intelligent analysis, and intelligent operation and maintenance), and by combining intelligent robot patrol inspection and drone patrol inspection, it is possible to perform accurate measurement, full monitoring, and high control of the photovoltaic power station.



Real-time monitoring system at the thermal power plant level

With the big data platform, it is possible to achieve information management in the entire power production process and establish a plant-level real-time monitoring system based on data aggregation, with cloud computing as a link and economic benefits as the center, thus providing detailed and comprehensive information technology support for operation management, overhaul management, and business management.



Intellectual property management

The Company has formulated the *Intellectual Property Management Measures*, established an intellectual property management system, and optimized the intellectual property organizational structure. This effectively motivates scientific and technological talents to track the forefront of technology and carry out research and development activities, and enhances the Company's intellectual property operation and application capabilities.





E nvironmental

Co-build a Green Homeland

Responsibility performance practice

We firmly establish and deeply practice the concept of ecological priority and green development and always stand at the height of promoting harmonious coexistence between humanity and nature to pursue and promote the Company's high-quality development. Also, we actively integrate ourselves into the national "dual carbon" strategy, coordinate the energy structure transformation, pollution control, ecological protection, climate change response, and other matters, and strive to play an important role as an energy and electric power enterprise in the process of building a beautiful China.

Respond to key issues

Response to climate change

Pollution prevention and control


Practice the United Nations Sustainable Development Goals (SDGs)



Environmental Management

Environmental management goals

Emission indicators of air pollutants from thermal power plants meet the pollutant emission requirements <input checked="" type="checkbox"/>	The ecological flow discharge of hydropower plants meets environmental protection requirements. <input checked="" type="checkbox"/>
There are no violations of laws and regulations in the ecological environment and soil or water conservation, and no penalties are imposed by administrative departments <input checked="" type="checkbox"/>	There are no environmental protection liability incidents <input checked="" type="checkbox"/>



Environmental management system

The Company strictly abides by the *Environmental Protection Law of the People's Republic of China* and other environmental management related laws and regulations. The Company has formulated internal policies, such as the *Ecological Environment Protection System of HBEG*, forming an ecological environment management system that is based on the ISO14001 environmental management system and supplemented by the environmental compliance management system, risk and internal control management system, and environmental emergency management system, and establishing an ecological environment protection responsibility system.

Our actions in 2023

- The Company has revised the *2023 Rules for Ecological Environment Protection Assessment and Scoring*, formulated targeted assessment rules, and further improved the environmental protection assessment indicator system.
- The Company has carried out the identification of environmental factors and evaluation of important environmental factors and formulated **44** environmental protection plans. Moreover, the Company conducts follow-up inspections and dynamic analysis on a monthly basis, strengthening closed-loop control over environment protection.
- The Company has passed the re-certification and audit of the environmental management system. Also, **11** of its subsidiaries have independently passed the environmental management system certification.



Environmental risk management

The Company incorporates environmental risks into its comprehensive risk management system and adopts the PDCA management approach to identify risks, formulate plans, implement measures, and make continuous improvements. The Company also performs environmental risk management throughout the project construction and operation process, ensuring that the project fully considers the impact of environmental factors and minimizes potential risks to the environment.

<h3>Project approval and site selection stage</h3> <p>Evaluate the environmental impact of the project, identify possible environmental risks, fully consider geological, climatic, ecological and other factors, and avoid various ecologically sensitive areas in project sites and paths selection according to the management requirements for nature reserves and red lines for ecological protection, and control requirements of national land space planning, and ecological environment zoning.</p>	<h3>Construction and completion stage</h3> <p>The Company performs project construction in strict accordance with environmental protection laws and standards, optimizes construction schemes, and reduces construction wastes and pollutant emissions. The Company intensifies environmental monitoring and management at the construction site to ensure that the impact of construction activities on the environment is minimized.</p>	<h3>Production and operation stage</h3> <p>The Company establishes a complete environmental management system for the operation period, including regular environmental monitoring, risk assessment, and emergency plan formulation, to ensure that the emission of various pollutants, such as wastewater, waste gas, and solid waste, meets national standards.</p>
--	--	---

Compliance with environmental laws and regulations

The Company has formulated the *Emergency Plan of Hubei Energy for Emergent Environmental Incidents* to strengthen environmental risk prevention, carry out emergency drills for emergent environmental incidents, and reduce the impact of emergent environmental incidents.

The Company has formulated the *Measures of Hubei Energy for Environmental Compliance Evaluation Management* to conduct environmental protection compliance evaluation item by item every year in accordance with the list of environmental protection laws, regulations, and normative documents.

In 2023, there were **no** environmental responsibility events and **no** illegal punishment events within the Company. The environmental impact assessment rate of each construction project is up to **100%**, meeting the requirements for "three aspects (i.e., administrative penalties, administrative mediation, and judicial confirmation)" concerning ecological and environmental protection. Furthermore, the Company has paid an environmental protection tax amounting to RMB **9.1119** million.



Resource Management

Water resource management

The Company strictly abides by the *Water Law of the People's Republic of China*, *Measures for the Administration of Water Intaking*, and other relevant laws and regulations, fully considers the water resource carrying capacity and water environment carrying capacity in production and construction, optimizes production processes, strengthens water use monitoring, focuses on water resource recycling, reduces water loss, and continuously improves water resource utilization efficiency.



● Optimize reservoir dispatch

The Company urges its hydropower subsidiaries to continuously optimize reservoir dispatching strategies and pre-plan water levels during key periods, such as at the end of the month and before the flood season, according to the regulation strategies for major reservoirs and the operation mode of generating units during the flood season in 2023. Additionally, the Company coordinates the medium- and short-term regulation of reservoir water levels and real-time adjustment of generating unit operation modes, and optimizes the utilization of power generation head and reservoir water volume. The Qingjiang Cascade Power Station increased its water energy utilization rate by 15.43% in 2023. Hanjiang Company successfully responded to five flood processes in the Nanhe River Basin during the 2023 flood season. The Baishuiyu Power Station increased its water utilization rate from 84.07% to 94.01%.

● Water consumption management of thermal power plants

The cooling water used by condensers accounts for more than 98% of the water intake of thermal power plants. Most newly built units use cooling columns for cooling. Ezhou Power Plant Phase III Project, Donghu Gas Turbine Power Plant, and Yicheng Power Plant use cooling columns to cool down the generating units, greatly reducing water intake volume and water resource consumption.

Water use conditions of the four thermal power plants

	2021	2022	2023
Fresh water consumption (10,000 tons)	2214.22	2169.24	2507.76
Circulating water consumption (10,000 tons)	90695.55	81076.65	108482.87
Percentage of circulating water consumption (%)	97.62	97.39	97.74
Water consumption per RMB 10,000 revenue (m ³ /RMB 10,000)	9.7226	7.8922	12.9112



Energy use and energy conservation management

The Company strictly abides by the *Energy Conservation Law of the People's Republic of China* and other laws and regulations and has issued the *Measures for Monitoring and Statistical Management of Energy Conservation and Emission Reduction* to standardize the statistical records for energy conservation and carbon reduction, as well as incorporate the energy conservation and carbon reduction into the annual performance assessment. By integrating energy conservation and consumption reduction requirements into the entire power production process, the Company expects to promote the interconnection between three types of technical transformation of thermal power units (i.e., energy-saving transformation, heat supply transformation, and flexibility transformation). Also, the Company carries out a number of energy-saving technical transformation projects, such as unit turbine through-flow transformation projects, and W-type boiler quality and efficiency improvement projects, aiming to improve energy utilization efficiency.

	2021	2022	2023
Comprehensive energy consumption (10,000 tons of standard coal equivalent)	42.9091	43.2725	42.4561
Coal consumption (standard coal equivalent) (10,000 tons)	562.15	561.17	572.62
Comprehensive energy consumption per RMB 10,000 revenue (current price) (tons of standard coal equivalent/RMB 10,000)	0.1884	0.1574	0.2186

Case



Ezhou Power Plant has deeply implemented key energy saving and emission reduction transformation projects, promoted a significant increase in the efficiency of clean coal utilization, and continuously reduced nitrogen oxide emissions, achieving synergistic efficiency improvements in energy conservation and pollution reduction. In 2023, the low-nitrogen combustion quality and efficiency improvement transformation of the boiler of Unit 2 (330MW) of Phase I and the flow transformation of Unit 4 (650MW) of Phase II were completed. Calculated based on the annual utilization hours of 4,000h, Unit 2 of Phase I will reduce carbon dioxide emissions by 69,000 tons per year; and Unit 4 of Phase II will reduce carbon dioxide emissions by 61,100 tons per year.



Material use management

According to the *National Central Product Classification and Code* (GB/T7635) and *Power Goods and Materials Code* (DL/T700), the materials used by the Company involve 41 major classifications and 451 secondary classifications.

According to the business segments, the Company has set up hierarchical material reserve bases, established reserve quotas and a safety inventory system. In terms of the geographical distribution of projects in the main business segments, the Company has built 7 secondary material reserve bases (with a total warehouse area of 21,829 square meters) and 60 tertiary material reserve warehouses covering all production and operation subsidiaries. The Company's list for the hierarchical material reserve of spare products and parts includes a total of 10,416 material items, which are continuously and dynamically adjusted according to the Company's actual production needs. Also, the Company works out and implements material procurement plans according to material use needs, reserve quotas, and safety inventory, ensuring stable material supply.

Pollution Prevention and Control

Wastewater management

In strict accordance with the *Law of the People's Republic of China on the Prevention and Control of Water Pollution* and other laws and regulations, the Company performs wastewater treatment. The thermal power enterprises affiliated with the Company have set up domestic sewage treatment systems, industrial wastewater treatment stations, coal-containing wastewater treatment stations, and desulfurization wastewater treatment systems in accordance with the requirements for "separation of rainwater and sewage and separation of clean water and effluent" to achieve quality-based treatment of various types of industrial wastewater and domestic sewage, ensuring the effective reuse of the wastewater.

Ezhou Power Plant

Zero discharge of production wastewater and domestic sewage

Yicheng Power Plant

Zero discharge of production wastewater and domestic sewage

Chuxing Power Plant

Zero discharge of production wastewater and domestic sewage

Donghu Gas Turbine Power Plant

The wastewater discharged to the wastewater treatment plant **meets the discharge standards**



Advanced Desulfurization Wastewater Treatment Plant of Yicheng Power Plant



Wastewater Discharge Conditions of the Donghu Gas Turbine Power Plant

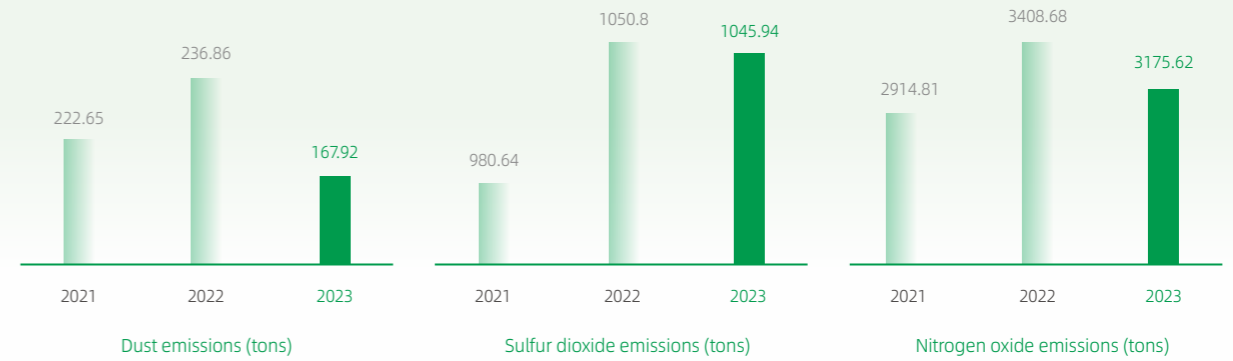
	2022	2023	
Wastewater discharge volume (10,000 tons)	19.70	17.28	
Wastewater discharge intensity (kg/kWh)	0.15	0.22	
Wastewater pollutant discharge volume	Wastewater ammonia nitrogen discharge volume (tons)	0.35	0.36
	Chemical oxygen demand discharge volume (tons)	4.67	4.12
	Actual ammonia nitrogen discharge concentration (mg/L)	1.72	2.3
Wastewater pollutant discharge concentration	Allowable ammonia nitrogen discharge concentration limit (mg/L)	45	45
	Actual Chemical Oxygen Demand (COD) discharge concentration (mg/L)	23.85	23.3
	Allowable chemical oxygen demand discharge concentration limit (mg/L)	500	500

Waste gas treatment

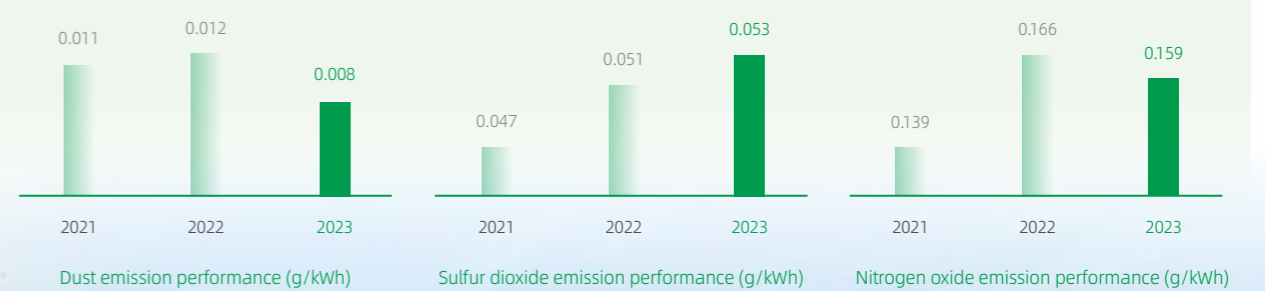
In strict accordance with the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution* and other laws and regulations, the Ezhou Power Plant, Yicheng Power Plant, and Xinjiang Chuxing Power Plant have been all equipped with flue gas online monitoring systems. The flue gas pollutant emission concentration meets the requirements for ultra-low emission limits, except for the Ezhou Power Plant which meets the special NOx emission standards specified in the *Emission Standard of Air Pollutants for Thermal Power Plants* (GB13223-2011) because its Phase I generating units adopt W-type flame furnaces. In 2023, the low-nitrogen combustion transformation of Unit 2 of the Phase I Project of Ezhou Power Plant has been completed and the low-nitrogen combustion transformation of Unit 1 is planned in 2024. After the transformation is completed, all thermal power units of the Company will achieve ultra-low emissions.

In 2023, the dust removal and desulfurization facilities of Ezhou Power Plant, Yicheng Power Plant, and Chuxing Power Plant have been put into operation at an operation rate of 100%.

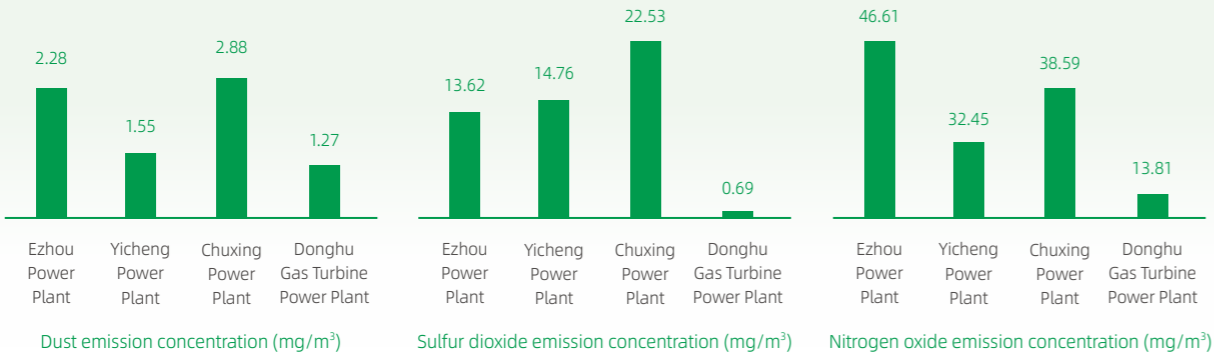
Waste gas pollutant emissions



Emission intensity of waste gas pollutants



Concentration of exhaust gas pollutant emissions



Solid waste

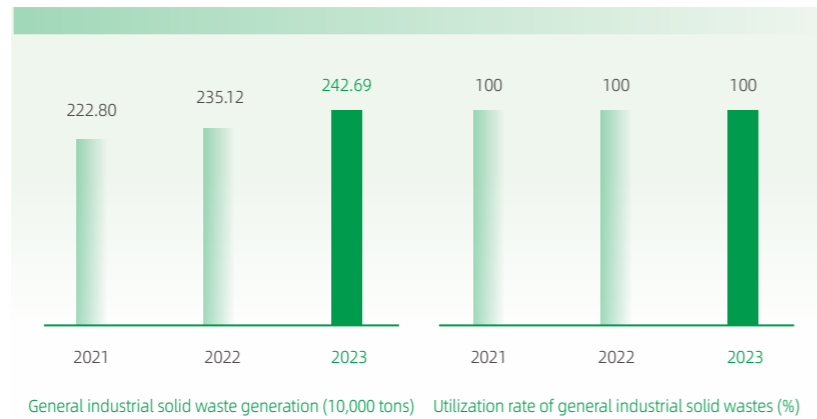
In strict accordance with the *Law of the People's Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Wastes* and other laws and regulations, the Company actively pushes the resource utilization of various types of solid wastes. By adhering to the "reduction in quantity, resource recycling, and harmless treatment" principles, the thermal power companies affiliated with the Company implement the classified collection, disposal, and comprehensive utilization measures for various types of solid wastes, aiming to meet the requirements for the compliance disposal of industrial solid wastes.

General solid waste management

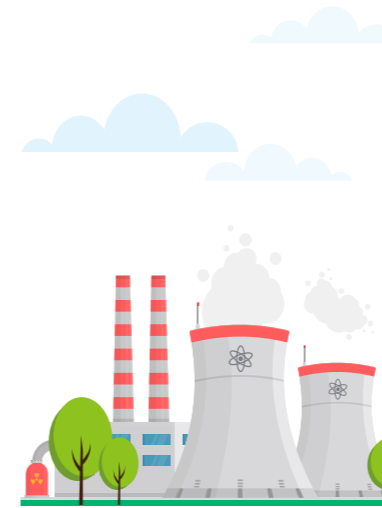
In accordance with the requirements of laws and regulations, industrial wastes are classified, collected, stored, transferred and disposed of. The affiliated thermal power enterprises strengthen the comprehensive utilization of major solid wastes such as fly ash, slag, and desulfurized gypsum and entrust qualified disposal companies to comprehensively utilize by-products such as ash, slag, and gypsum. Establish emergency storage equipment and facilities for temporary stacking and storage of by-products during the off-season to avoid environmental pollution.

Hazardous waste management

All affiliated enterprises at all levels have established a sound hazardous waste management system, strengthened supervision and management throughout the waste treatment process, standardized the collection and storage of hazardous wastes, and entrusted qualified third parties to dispose of the wastes in a rational manner.



Temporary Storeroom of Hazardous Wastes in Gaobazhou Power Station



Generation and disposal of hazardous solid wastes

	2021	2022	2023
Hazardous waste disposal rate (%)*	100	97	99
Including: Hazardous waste generation (tons)	185.61	1161.975 ¹	2418.37 ²
Hazardous waste disposal volume (tons)	185.61	1136.057	2412.402
Including: Disposal of waste storage volume in previous years (tons)	0	5.642	8.48

* Hazardous waste disposal rate = Hazardous waste disposal volume in the current year / (disposal of waste storage volume in previous years + Hazardous waste generation in the current year)

1. The denitrification waste catalyst is a hazardous waste. In 2022, Ezhou Power Plant replaced 834.425 tons of denitrification catalyst.
2. In 2023, Ezhou Power Plant replaced 1,417.6 tons of denitrification catalysts.

Other pollutants

The affiliated enterprises have intensified their efforts in noise control, with the noise emissions meeting the emission limits of the *Emission Standard for Industrial Enterprises Noise at Boundary*.

Case



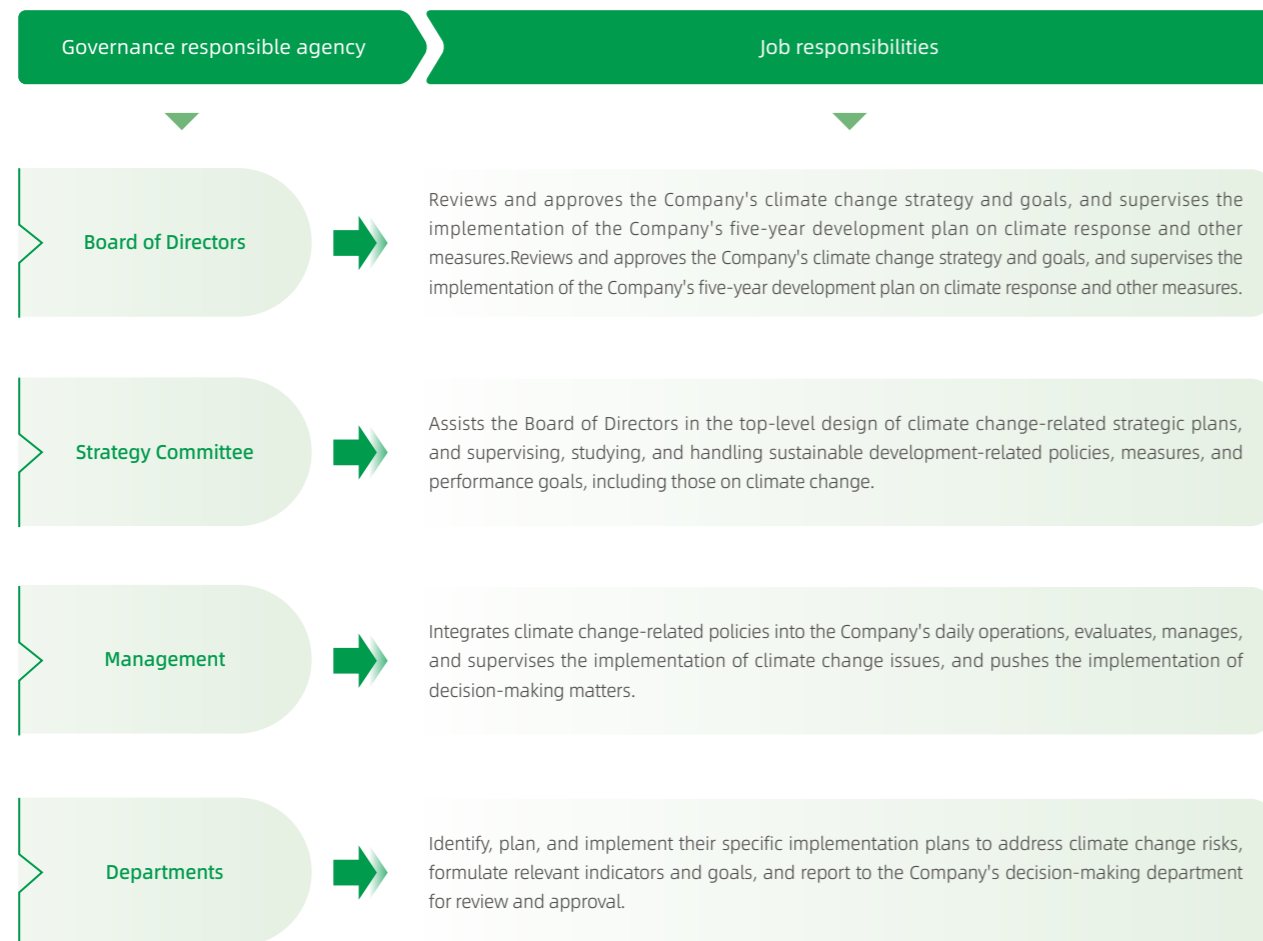
Luotian Pingtanyuan Pumped Storage Power Station has effectively reduced the impact of construction noise by selecting low-noise equipment and construction processes, reasonably arranging the operation time in high-noise areas, and other source control and transmission path attenuation measures, and the noise emissions meet the *Emission Standard of Environment Noise for Boundary of Construction Site*.



Climate change

The Company implements the national "dual carbon" strategy. By referring to relevant international agreements, such as the *United Nations Framework Convention on Climate Change* and the *Paris Agreement*, as well as the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), the Company carries out all-round climate risk assessment and management, continuously improves the climate change response system, and strengthens the management of climate change affairs from four dimensions, including governance, strategy, risk management, indicators and goals.

Governance



Strategy

The Company attaches great importance to the potential impact of climate change risks and raises the issue of addressing climate change to the Company's strategy level. To have a more comprehensive understanding of the potential impact of climate change on the Company's businesses, low-emission scenarios (which are based on RCP2.6 and are sourced from the IPCC Sixth Assessment Report) and high-emission scenarios (based on RCP8.5) are selected under different climate scenario assumptions to analyze the external environment that the company may face, on the basis of comprehensively considering the socio-economic environment, business nature, and geographical location.

Physical factors



RCP8.5

- Average temperature:** It is increased by more than 3 degrees Celsius.
- Extreme weather:** A significant increase in the frequency and intensity of changes in climate factors such as temperature and humidity brings about a greater degree of extreme weather in a more frequent way.

Transition factors

- Greenhouse gas emissions:** By 2100, carbon dioxide concentration will be up to 3-4 times that in the industrial revolution period.
- Climate-related policies:** No strong climate-related policies have been formed.
- Carbon market and low-carbon technologies:** The increase in the carbon price remains small, which cannot effectively stimulate the development of low-carbon technologies.



RCP2.6

- Average temperature:** It is increased by 1.5 degrees Celsius to 2 degrees Celsius.
- Extreme weather:** A limited increase in the frequency and intensity of changes in climate factors such as temperature and humidity brings about a great degree of extreme weather in a frequent way.

- Greenhouse gas emissions:** By 2100, global carbon emissions will become negative.
- Climate-related policies:** Strict climate-related policies have been formed to limit emissions.
- Carbon market and low-carbon technologies:** As the carbon price rises, the demand for low-carbon technologies increases, stimulating the emergence of low-carbon technologies.

Risk management

The Company incorporates climate risks into its comprehensive risk management system, identifies climate risks and determines the intensity and time range of the impact of risks on the Company's assets. The Company uses "Low - Low to medium - Medium - Medium to high - High" to describe the impact intensity of physical risks and uses "Low - Medium - High" to describe the impact intensity of transition risks, as well as uses Carbon Value-at-Risk to quantify the impact of transition risks on the Company's assets, thus formulating corresponding response strategies to manage and prevent risks.



List of Physical Risks of Climate Change

Risk classification	Dimension	Name	Description	Climate scenarios	Time range	Intensity of impact	Response strategies
Climate disasters	Assets and operation side	Drought	1. Drought leads to reduced water inflow and reduced hydropower revenue; 2. Drought and water shortages affect the daily water use of thermal power generation and lower operating efficiency, thus reducing thermal power revenue.	RCP2.6	Short-term	Low to medium	The Company pays close attention to the drought conditions in the basin where the hydropower station is located, formulates emergency plans to maintain the safety inventory of reservoirs, strengthens cooperation with hydrological, meteorological and engineering construction units, optimizes the water level regulation of reservoirs, and fully saves water and increases power production. Also, the Company emphasizes developing new technologies to reduce the water consumption of thermal power plants and improve water resource utilization.
				RCP8.5	Long-term	Medium	
Climate change	Assets and operation side	Water resource shortage	Water resource shortage causes investment projects such as hydropower, pumped storage, and thermal power to be stranded or their returns to decline.	RCP2.6	Short-term	Low	For investment projects, the Company always fully carries out water resource demonstration and avoids water shortage areas as much as possible during the selection of the project sites to prevent the adverse impact of water resource shortage on project investment returns.
				RCP8.5	Long-term	Low to medium	
Climate disasters	Assets and operation side	High temperature heat waves	High temperature reduces operational efficiency and increases operational and labor costs.	RCP2.6	Short-term	Medium	The Company pays close attention to orange and red meteorological warnings and strengthens patrol inspections in high-temperature weather to ensure operational safety.
				RCP8.5	Long-term	Medium	
Climate disasters	Assets and operation side	Flood	Floods affect the construction project schedule and facility safety; affect the transportation of coal for thermal power plants, thereby reducing power generation revenue; and affect the power generation of hydropower stations.	RCP2.6	Short-term	Medium	The Company strengthens reservoir flood control operation, reasonably sets up pre-flood water-level letdown goals, and coordinates project construction schedules. For floods, the Company reduces the water level in advance according to forecasts and makes the best use of rain and flood resources.
				RCP8.5	Long-term	Medium	
Climate disasters	Assets and operation side	Blizzards and other extreme weather events	1. The increased frequency of blizzards and other extreme cold weather events influences project construction time and facility safety, which may cause power generation and dispatch to be affected by policies; 2. Extreme weather events may cause thermal power generation business activities to be overloaded.	RCP2.6	Short-term	Low	The Company strengthens safety risk management and control, regulates special investigations of potential climate risks, performs analysis and governance of potential climate risks as normal work, and regularly carries out natural disaster emergency training, natural disaster warning, and emergency drills.
				RCP8.5	Long-term	Low to medium	

Average physical risk exposures in the main provinces where the Company's assets are located under the RCP8.5 scenario*

Provinces	Rise of the sea level	Water resource shortage	Drought	Flood	High temperature heat wave	Extreme cold	Ecological environment damage
Hubei Province	1	2	3	4	4	2	2
Shaanxi Province	1	3	3	1	3	3	4
Xinjiang Uygur Autonomous Region	1	4	2	3	3	3	1

Legend	Risk level (number)	1	2	3	4
	Risk level (degree)	Low	Low to medium	Medium	Medium to high

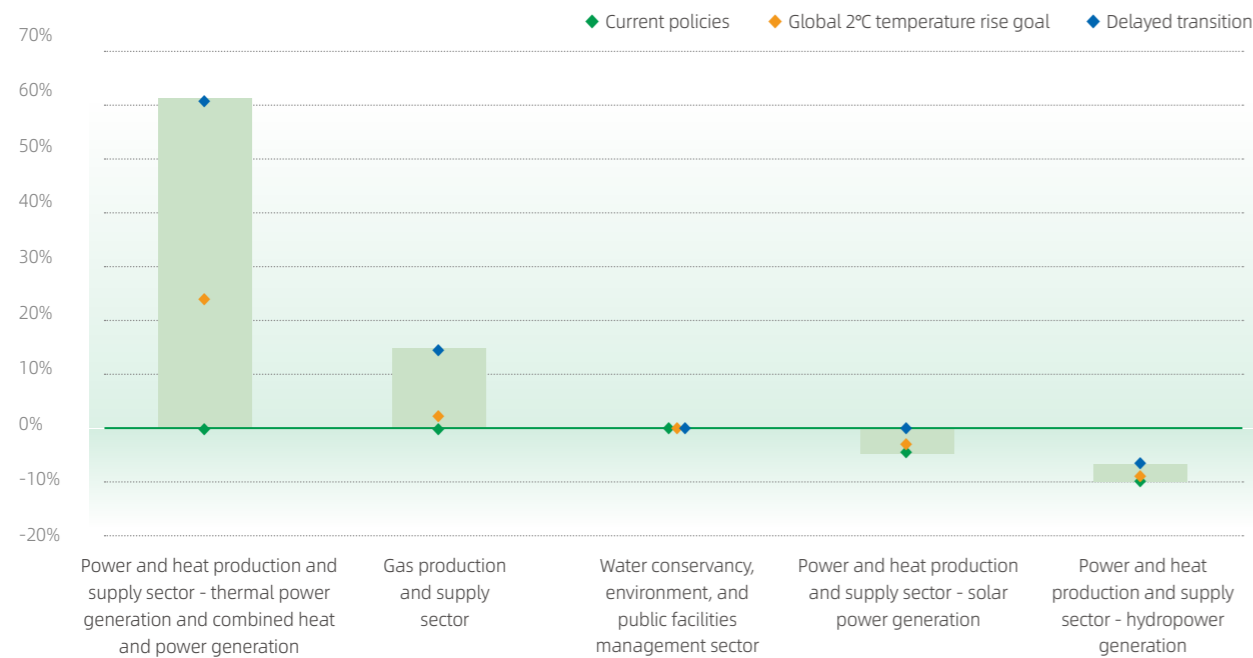
* The physical risk analysis considers absolute value and relative change, with relative change as the main factor. For example, for the drought risk, we mainly refer to the relative difference between the current value and the historical average precipitation level in the same location. The lower the future forecast than the historical average level, the higher the drought risk.

List of Risks and Opportunities of Climate Change Transition

Risk or opportunity classification	Dimension	Name	Description	Time range	Intensity of impact	Response strategies
Policies and legal risks and opportunities	Operation side	Climate policies	1. China has higher requirements for enterprises' greenhouse gas emissions, increasing management costs; 2. Government management departments actively promote the construction of various policies and laws to address climate change.	Medium- and long-term	Low	The Company pays attention to the updates of climate change-related policies and changes in the energy industry policies and the market, adjusts strategic plans in a timely manner, accelerates the layout of clean thermal power and the interconnection between three types of technical transformation of thermal power units (i.e., energy-saving transformation, heat supply transformation, and flexibility transformation), and continues to expand the proportion of clean energy.
Policies and legal risks and opportunities	Operation side	Carbon market price increase and carbon quota reduction	1. Increase thermal power operation costs; 2. Help improve the Company's carbon trading business revenue.	Medium- and long-term	Low	1. The Company continues to promote energy conservation and consumption reduction and reduce carbon emissions; 2. The Company actively participates in carbon trading, accelerates the development of carbon emission reduction projects, takes multiple measures to reduce compliance costs, and does a good job in carbon market compliance; 3. Through strategic cooperation, the Company timely grasps the opportunities of regional industrial transfer and expands its carbon trading business.
Policies and legal risks and opportunities	Assets and operation side	Increase in the financing threshold brought by green finance	1. Increase the financing cost of the thermal power companies; 2. Decrease the financing cost of green and low-carbon industries.	Medium- and long-term	Low	1. The Company strengthens its cost control and enhances its sustainable business development capabilities; 2. The Company expands the layout of clean energy to increase the proportion of clean energy; 3. The Company expands new businesses such as virtual power plants, new-type energy storage, and integrated smart energy.
Policies and legal risks and opportunities	Operation side	Increase in the coal and natural gas prices	The high-quality coal and natural gas are tight in supply and are at higher and significantly fluctuating prices, resulting in a surge in product costs.	Medium- and long-term	Medium	1. The Company continues to strengthen market analysis and investigation, maintains communication and coordination with relevant competent departments and upstream suppliers, keeps abreast of market conditions, and takes proactive countermeasures; 2. The Company intensifies research on relevant policies such as these on the interconnection between three types of technical transformation of coal-fired and gas-fired power units and optimizes its production and operation strategies in a targeted manner; 3. The Company does a good job in signing and performing medium- and long-term contracts to gain profits and reduce risks.
Policies and legal risks and opportunities	Operation side	Increase in information disclosure requirements	The information is of low quality due to the lack of historical data in the regulation of mandatory disclosure of climate-related financial information.	Short-term	Medium	The Company incorporates climate risks into ESG management, discloses relevant data in a timely manner, and intensifies the Company's ESG digital construction and management.
Market risks and opportunities	Operation and product side	Risks of market-traded electricity volume and price	The water and coal prices of hydropower are difficult to predict due to climate change and policy impacts. Additionally, there is a certain degree of uncertainty in the market-based trading of electricity.	Medium- and long-term	Medium	1. The Company strengthens communication and coordination with energy authorities, power grid companies, and various market players; 2. The Company strengthens market investigation and policy analysis and scientifically formulates marketing strategies; 3. The Company does its best to win and maintain high-quality customers to ensure stable electricity volumes and prices.

Risk or opportunity classification	Dimension	Name	Description	Time range	Intensity of impact	Response strategies
Technical risks and opportunities	Operation and product side	Low-carbon renewable energy technologies and changes in market demands	1. The proportion of renewable energy applications gradually increases, while coal consumption decreases and operation revenue declines; 2. The Company must continue to invest in renewable energy technology reserves and keep up with the development of new technologies, increasing its technological costs; 3. The Company's transition to lower-emission products, technologies, and services brings about additional expenses.	Medium- and long-term	Medium	1. The Company pushes forward the research and innovation of energy-saving and consumption-reducing technologies and expands the layout of comprehensive energy projects; 2. The Company intensifies the research and strategic layout of new technologies and new business formats in the energy industry.
Reputation risks and opportunities	Operation side	Company's environmental reputation	If there are bad environmental and climate change behaviors or relatively backward countermeasures, the Company's reputation may be impaired, resulting in the loss of investors and customers, thus affecting the Company's performance.	Long-term	Low	The Company actively communicates and exchanges with stakeholders on climate change response and ESG activities, intensifies its information disclosure, and maintains a good corporate image.

Average carbon value-at-risk (CvAR)*

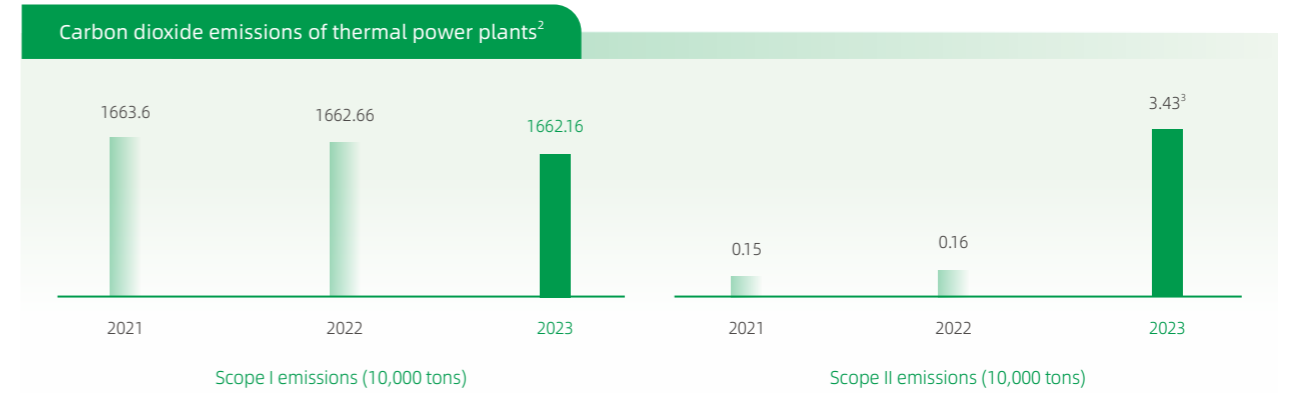


Average CvAR of HBEG's Sectors

* Carbon value-at-risk is used to measure the impact of transition risks dominated by the carbon price on the Company's asset portfolios under different climate scenarios. A positive CvAR represents that the added value of climate-related costs is greater than that of climate-related profits; that is, the potential transition risk outweighs the opportunity. A negative CvAR represents that the potential transition opportunity outweighs the risk. The higher the percentage (%), the greater the transition risk dominated by carbon prices.

Indicators and goals - greenhouse gas emissions

In 2023, the Company's clean energy power generation reaches **15.81** billion kWh, equivalent to an emission reduction of **13.0274** million tons of carbon dioxide, **268.77** tons of smoke dust, **1,312.23** tons of sulfur dioxide, and **2,102.73** tons of nitrogen oxides¹.



Our actions in 2023

Engaging in environmental rights and interests trading activities

The Company actively engages in carbon trading. The first batch of key emission subsidiaries complete the quota clearance in the second compliance season in the national carbon market before November 15, 2023, achieving 100% performance in the second performance season.

The Company is developing the green electricity certificate market, has applied for 136,000 green electricity certificates, and engages in Hubei Province's "Electricity - Carbon - Finance" green electricity trading of 100 million kWh, ranking first in the province in terms of its trading volume.

The Company has sold 106,000 tons of carbon emission quotas, 48,000 international green electricity certificates for hydropower, and 20,700 domestic green electricity certificates for renewable energy, increasing revenue by RMB 7.65 million.

Advocating green office and operation

The Company has purchased 4,089 green electricity certificates from the China Green Electricity Certificate Trading Platform to achieve the green electricity consumption goal in the headquarters' office in 2023. Furthermore, the Company strengthens the promotion of the green environmental protection concept and facilitates employees to shape a green and low-carbon lifestyle; strictly controls air conditioning temperature and promotes the use of energy-saving electrical appliances; purchases and uses office supplies on demand to reduce the consumption of toner cartridges, paper, stationery, and other office supplies; holds video conferences as much as possible to fully promote information-based and paperless office.

1. According to the China Electricity Council's *Report for Annual Development of China's Power Industry 2023*, the national carbon dioxide emission per unit of thermal power generation is about 824 g/kWh, and the smoke and dust, sulfur dioxide, and nitrogen oxide emissions per unit of thermal power generation are 17 mg/kWh, 83 mg/kWh, and 133 mg/kWh, respectively.

2. According to the calculation requirements of the *Enterprise Greenhouse Gas Calculation Method and Reporting Guide for Power Generation Facilities* issued by the Ministry of Ecology and Environment of the P.R.C., the verification of 2023 greenhouse gas emissions shall be completed around June 2024.

3. In 2023, the electricity purchased during the construction period of the Yicheng Power Plant is 56,051.86 MWh, equivalent to 31,900 tons of carbon dioxide in Scope II.

Biodiversity

In strict accordance with the *Law of the People's Republic of China on Environmental Protection* and other national laws and regulations, the Company enhances its awareness of the red line of ecology, integrates the biodiversity protection requirements into project development and construction and daily production and operation stages. Also, the Company carries out in-depth biodiversity surveys and assessments to fully grasp the current situation and trends of biodiversity within the Company's production, construction, and operation scope, providing a scientific basis for the formulation of targeted protection measures.

Management policies

Compliance with laws and regulations

The Company complies with all applicable biodiversity-related laws and regulations, including national, local, and international laws and regulations to avoid the negative impacts of business activities on biodiversity.

Eco-risk assessment

The Company conducts an eco-risk assessment before planning and implementing new projects, aiming to assess the potential impacts of projects on local biodiversity and take necessary measures to reduce risks.

Ecological restoration and protection

The Company actively engages in ecological restoration and protection projects to restore damaged ecosystems, protect endangered species and habitats, and improve biodiversity.

Ecological flow guarantee

All hydropower stations of the Company implement the ecological flow requirements for hydropower stations to guarantee downstream water demand. Therefore, the ecological flow discharge in 2023 meets environmental protection requirements.



Carrying out fish stocking activities

Protection actions



Loushui Hydropower Company

On June 5, 2023, the China Renewable Energy Engineering Institute and the Chinese Society of Hydroelectric Engineering jointly launched the "2023 Fish Stocking Action of Hydropower Industry on World Environment Day", during which the Jiangpinghe Power Plant of the Loushui Hydropower Company served as the branch venue for the opening ceremony to simultaneously carry out the fish stocking activity. On July 20 and November 20 of the same year, the Company worked together with the fish station operation and maintenance unit to organize two fish stocking activities at the Nandujiang Wharf. In the three fish stocking activities, a total of 39,900 *Varicorhinus simuses*, 25,000 *Schizothorax prenantis*, 19,200 Channel catfishes, 47,500 *Sinilabeo tungtingi*s, 45,400 *Siniperca scherzeris*, 27,200 *Siniperca kneri*s, 40,500 grass carps, 41,000 bighead carps, and 42,900 breams were stocked, totaling more than 328,300 fishes. All stocking activities were carried out under the witness and supervision of the local authorities, with the annual fish stocking tasks completed successfully.

Qingjiang Company

The local government has set up a protection zone from the Qingjiang Banyuzui to the Yidu Section of the Gaobazhou Power Plant, where all fishing activities are prohibited for a period of 10 years. Qingjiang Company actively follows the fishing ban within its management scope.

According to the environmental protection acceptance report for the completion of the Gaobazhou project, the *Distylium chinense* is a protected object. Qingjiang Company transplanted and bred the *Distylium chinense* within the reservoir area. At present, the trees are placed in the bonsai garden of Wenfeng Park.

Luotian Pingtanyuan Pumped Storage Company

The Pumped Storage Company optimizes the construction scheme and engineering design, reasonably arranges construction sites such as construction access roads and construction camps to reduce the temporary land occupied, and implements in-situ or ex-situ conservation of ancient trees. Also, the Pumped Storage Company strictly controls and manages the working scope of transportation vehicles and heavy machinery, reasonably plans construction time, and regulates construction behaviors of construction units, aiming to reduce the disturbance of construction noise on wild animals. Meanwhile, the Pumped Storage Company constantly improves the ecological protection awareness of construction personnel and strictly prohibits hunting wild animals.



Social

Share a beautiful life

Responsibility performance practice

By adhering to the people-centered development concept and fully fulfilling the social responsibilities, we effectively safeguard the interests of all parties, such as employees, partners, and localities where the Company develops its businesses. Also, the Company promotes the formation of an integrated, open, cooperative, and shared development ecology, strives to benefit all stakeholders with high-quality development achievements, and continuously improves its social influence and reputation.

Respond to key issues

- Employee rights and interests
- Safety production

Practice the United Nations Sustainable Development Goals (SDGs)





Employee Rights and Interests



The Company cares about and respects the employees' rights and interests, strives to create a safe, healthy, fair, and inclusive working environment for employees, provides competitive salaries and benefits, and continuously invests in employee training and career development.

Employee diversity and equality

● Perform equal employment in accordance with the laws

In strict accordance with the *Labor Law of the People's Republic of China*, *Labor Contract Law of the People's Republic of China*, and other laws and regulations and the legal requirements of the country where the business is located, the Company has formulated the *Employee Management Measures*. By adhering to the principle of equal employment, the Company selects the most suitable candidates based on their skills, experience, and ability during the recruitment process, and does not discriminate against any candidates because of their race, religious beliefs, nationality, gender, age, marital status, or other personal characteristics.

The Company follows the principle of equal pay for equal work to achieve equal base salaries for employees of different genders and ensure that employees have equal opportunities for job promotion. Additionally, the Company strictly supervises and manages labor and employment, and prevents any forms of child labor or forced labor. The Company sets up complaint channels and investigates and follows up on illegal matters in combination with its internal management systems, ensuring that employees' rights and interests are effectively supervised.

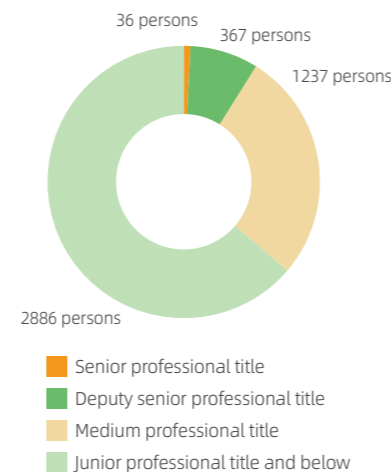
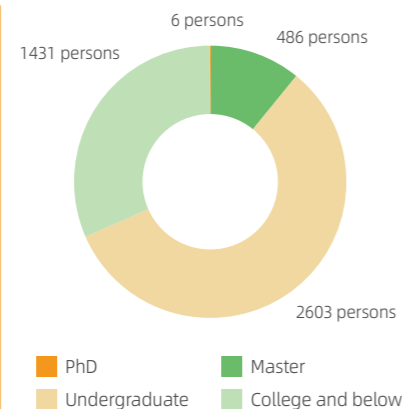
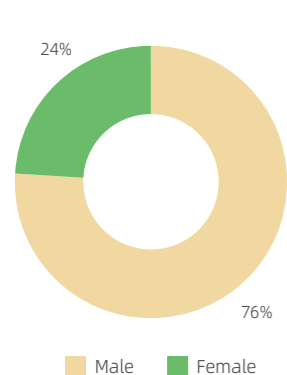
The Company signs labor contracts with employees in accordance with the regulations, with the signing rate of employee labor contracts being up to 100%. There have been no labor disputes in the past three years, and there have been no employment discrimination, harassment, child labor, or forced labor incidents. The proportion of employment by labor dispatch is 5.46%, meeting the requirements of the *Labor Law*.

● Promote talent diversity and combination

The Company adopts diversified recruitment channels and sticks to a talent introduction system combining campus recruitment and social recruitment. The Company intensifies recruitment efforts for scarce professional talents in terms of the progress of key projects.

The Company offers recruitment and job opportunities to groups such as families in difficulty, retired soldiers, and migrant workers. Also, the Company focuses on giving social welfare back to the localities where projects are located, maximizing local employment.

Most of its overseas employees are locals, and international employees account for 93% of the number of employees in overseas branches.



Democratic management

The Company adopts a "1+3" democratic management mode that takes the Employee Representatives Congress as the core and is supplemented by enterprise affairs disclosure, joint meetings, and equal consultation. The Company and its subsidiaries hold the Employee Representatives Congress on schedule, with an establishment rate of 100%. 35 employee proposals are collected throughout the year, with a proposal completion rate of 100%. In the Employee Representatives Congress at all levels, the agenda such as employee directors and supervisors' debriefing reports, and "employees make decisions" trade union satisfaction assessment, are added to continuously promote the standardization of the Company's democratic management. The Company has released more than 300 issues of the Company's affairs disclosure information, protecting employees' rights to know, participate in, and supervise the Company's major matters.



Employee's Salaries and Benefits



Salary guarantee and incentives

The Company continuously improves its salary management system to provide employees with industry-competitive salaries. Employees' salary consists of basic salary, performance bonus, annual bonus, allowances, and special rewards. Salary allocation takes into account employee differences and fairness and highlights job value and performance contribution. Salary allocation is tilted towards key businesses, key posts, and frontline employees, effectively playing the guiding role of salary incentives. The Company also implements the public company's equity incentives for senior executives, core management personnel, and technical backbones to attract, motivate, and retain core talents.



Working hours, off-duty time, and leave

The Company follows the provisions of the *Labor Law* on "working hours, off-duty time, and leave", and arranges compensatory leave or pays overtime wages for employees who have to work overtime. The Company has formulated the *Attendance and Leave Management Measures* and strictly implements the requirements for paid annual leave, marriage and funeral leave, home leave, maternity leave (nursing maternity leave), nursing parental leave, childcare leave, and other leaves.



Collective agreement

The Company signs the *Collective Agreement* on schedule to specify labor salary, labor safety, protection of female employees, and other contents.



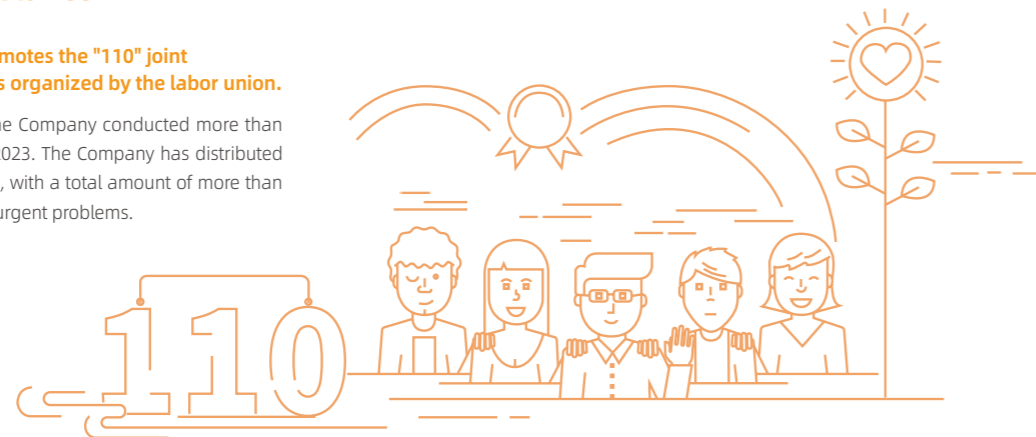
Welfare and security

The Company pays basic endowment insurance, basic medical insurance, unemployment insurance, maternity insurance, work-related injury insurance, and housing provident fund for all employees in full according to laws, establishes an enterprise annuity system, and buys supplementary medical insurance for all employees. Additionally, the Company provides canteen and recuperation facilities, birthday benefits, holiday condolences, and fitness and sports venues, and gives holiday condolences to retirees, fully reflecting its care for employees and retirees.

Employee care and assistance

● The Company implements and promotes the "110" joint assistance and promotion activities organized by the labor union.

With the "110" mutual assistance fund, the Company conducted more than 20 "Four-Season Assistance" activities in 2023. The Company has distributed assistance funds and consolation supplies, with a total amount of more than RMB 1 million, solving employees' various urgent problems.



● Enrich employees' cultural and sports life

The Company holds the Second HBEG Staff Games, with 15 teams from various primary-level subsidiaries of the Company and a total of more than 280 employees competing in the same arena.



The Second Staff Games

The Company takes the lead in establishing the China Employee Calligraphy and Painting Academy (Qingjiang Geheyan Branch) and put it into service. Then, the Company hosted the China Employee Calligraphy and Painting Academy Exchange Meeting, providing a personalized venue for employees' literary and artistic creation and artistic exchange.



The China Employee Calligraphy and Painting Academy Exchange Meeting

The Company has improved the functional settings of the employee cultural center, providing employees with a cultural space for sports, fitness, psychological care, reading, and study. In addition, the Company supports primary-level subsidiaries to enrich employees' cultural life, allocates a total of RMB 100,000 of special funds for the construction of employee centers to five new branches, and encourages all subsidiaries to perfect the setting of employee interest groups. There are more than 70 interest groups within the system, involving fitness, yoga, dance, football, basketball, table tennis, billiards, tennis, etc., and more than 400 activities have been conducted throughout the year.



Employee cultural and sports activities



Clean and tidy factory (site) area



Stable and reliable production and operation



Orderly customized management of tools



Clear visual publicity standards for work teams



Daily safety production



Standardized use of marks and signs



Abundant and diverse facilities for cultural and sports activities



Enhanced employees' sense of ownership



Workers' farms being full of vitality

In terms of relevant requirements for "Workers' Home", team building, and station standardization construction, the Company comprehensively promotes the construction of "Beautiful Stations", encourages employees to keep their belt tightened, does everything themselves, works hard, and optimizes and beautifies stations. At present, the Company has built two benchmark and eight demonstration "Beautiful Stations", including Zaoyang Xinglong Photovoltaic Power Station of Hubei Renewables Company and Huangpi Receiving Terminal of Hubei Provincial Natural Gas Company. The Company has explored and formed the "Five Happiness and Five Beauties" construction experience, which was reported in the *Workers*, the official magazine of the Hubei Federation of Trade Unions, attracting many peers in the industry to visit our stations and learn about our experience, and creating a beautiful brand for the Company's team building. Thus, the sense of belonging, identity, and happiness of all employees has been continuously enhanced, and the talent loss rate of key grassroots stations has been reduced to zero.



Forge a "Wisdom and Happiness" family culture and build "Beautiful Stations" with excellent comprehensive management

Carry forward the "Hard-working and Happiness" family culture and build "Beautiful Stations" with good work performance

Create a "Safety and Happiness" family culture and build "Beautiful Stations" with a solid safety bottom line

Cultivate a "Harmony and Happiness" family culture and build "Beautiful Stations" with a beautiful ecological environment

Enrich the "Warmness and Happiness" family culture and build "Beautiful Stations" with a strong humanistic atmosphere



Case

The long reportage *Qingjiang River Comes Out of the Mountains* was published and included in the National Library

The *Qingjiang River Comes Out of the Mountains*, created by the Company's employees, takes the construction of three large-scale hydropower stations along the Qingjiang River as the main plot, and combs the major achievements in the construction of these stations from the 1980s to the early 21st century from multiple perspectives. Also, this reportage showcases the major decisions made by the country and Hubei Province to develop the Qingjiang River basin and benefit the people living along the Qingjiang River. Additionally, it eulogizes the spiritual quality of the Qingjiang River hydropower station builders who overcome difficulties and pursue excellence and tells the touching stories of hydropower workers and Tujia people in the development of the Qingjiang River basin.



Care for female employees

The Company holds health lectures for female employees from time to time, provides free-of-charge screening services for "two cancers (i.e., breast cancer and cervical cancer)", buys female health insurance, and grants health care allowances. Also, the Company organizes and carries out the reading and sharing activity themed "Pleasant Reading Makes Women Beautiful" for female employees and gifts nearly a thousand books to female employees. Various subsidiaries have organized more than 20 activities for female employees, such as flower art, movie watching, baking, and pottery. The Company has one female employee selected as the female model employee in Hubei Province for her great achievements, and fosters and sets up four "Women's Innovation Studios".



The "Pleasant Reading Makes Women Beautiful" reading activity for female employees



The collective activity for female employees on Women's Day

Employee development and training



Improve the employee promotion mechanism

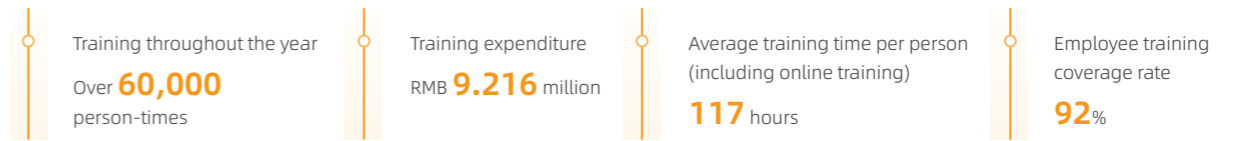
According to the principle of "vertical hierarchization, horizontal categorization, standardized management, and smooth flow processes", the Company has set up channels for talent development in management, skill, and professional sequences. The Company continues to intensify the job competition and gives priority to selecting and appointing employees with outstanding performance in major jobs and employees who are hardworking and willing to work in difficult areas. The Company adopts the pre-examination mechanism for competitive jobs, and the management personnel competition rate within the Company has reached 69.2%. Furthermore, the Company coordinates the training and selection of female management personnel, guaranteeing equal career development opportunities for female employees.



Improve employee capabilities and quality

The Company has formulated the *Employee Education and Training Management Measures* and established an employee education and training system for source training, follow-up training, full-process training, and key training. According to the principles of staff hierarchization and categorization and full-staff training, the Company scientifically formulates annual training plans and conducts management, technical, and professional skills training activities.

The Company carries out the "Training Quality and Efficiency Improvement Year" activity and conducts training around management improvement, outstanding engineers, high-skilled talents, and business ability enhancement. Management personnel of the middle level and above receive training of 190 hours on average, with a participation rate of 95%, and ordinary employees receive training of 115 hours, with a participation rate of 91%.



The Company endeavors to strengthen employees' professional skills training and organizes the title qualification of persons on duty for steam turbine and boiler operation. 180 employees have passed the qualification assessment, with the assessment pass rate increasing from 13.6% to 39.7%. The Company coordinates and promotes professional title qualification and evaluation. Thus, the Company organized 588 employees to participate in the professional title evaluation, of whom 266 employees passed the professional title qualification. HBEG's Labor Union won the Excellent Organization Award of the 9th Employee Skills Competition of the Hubei Federation of Labor Unions.



Employees participating in various professional skills competitions

Case



The Company has built and improved the "Apprentices with two mentors" mechanism to help new employees quickly adapt to their jobs in terms of their technical skills. In 2023, 279 "Agreements for Mentoring Apprentices with Two Mentors" were signed, with an assessment pass rate of 98.7%. The Company selects 13 "Model Mentors" and "Excellent Apprentices", respectively. Two employees won the title of "Famous Mentors" in the Hubei Province, four employees won the title of "Learning-oriented Employees" in the Hubei Province, and four employees won the title of "Technical Experts" and "Young Masters" granted by CTG.

The Company promotes the upgrading of the "Mentor-Apprentice" approach to build a four-dimensional "Mentor-Apprentice" system, including a training mechanism for employee job suitability that takes the mentor-apprentice pairing as the core, a mentor innovation ability improvement mechanism that takes the "Model Mentor (Innovation) Studio" as the core, a mentor-apprentice technical exchange and interaction mechanism that takes workshops for solving difficult, doubt and highlighted problems as the core, and a selection mechanism for outstanding mentors and apprentices that takes mentor-apprentice training sessions as the core. This system was successfully selected as a typical case for the reform of the construction of the industrial workers' teams in Hubei Province.

The Company held the 8th Employee Vocational Skills Competition and "Mentor-Apprentice Drill Show", covering four occupations such as public system network security officer, wind power operation and maintenance on-duty persons, turbine maintenance workers, and maintenance electricians. More than 80 professional and technical personnel participated in the competition, of whom 32 technical experts stood out. Various subsidiaries adopted a combination of competition and training to conduct more than 40 employee skill competitions and job drills, with more than 1,200 employees participating in the event and the number of competitions and participants increasing by 100% year-on-year.



Help employees pursue career development

The Company supports employees in changing their positions according to their career development plans and the Company's needs, and facilitates their career development. For the Company's thermal power positions, renewable energy positions, and other scarce positions, the Company has organized internal open job competitions many times and selected and dispatched 81 personnel to key development projects inside and outside Hubei Province. Meanwhile, the Company has transferred mature professionals to provide technical support for overseas projects and encouraged the flow of existing personnel across subsidiaries and professions to break down barriers to talent flow.



Employee honors

The Yicheng Thermal Power Plant and the Company's pumped storage project were both selected for the first time into the list of leading labor competition projects of the Hubei Provincial Federation of Labor Unions.

One branch won the title of "National Worker Pioneer", and four persons won the title of "Hubei Province Model Worker", "Hubei Province Female Model Worker", "Jingchu Craftsman", and "CTG Model Worker", respectively.

The Company participated in 13 national industry and provincial vocational skills competitions and won 18 national industry awards and 16 provincial awards. The number of participants and award levels reached a record high.

The Company was awarded one "Small Invention, Small Creation, Small Innovation, Small Design, and Small Suggestion" outstanding innovation achievements by the country and Hubei Province, respectively. Also, the Company was awarded 2 first prizes, 4 second prizes, 7 third prizes, and 13 excellence awards in the selection event of employees' technological innovation achievements organized by CTG, with the number of awards increasing by 136% year-on-year.

The Company won 1 international gold medal for employees' QC achievements at the 48th International Quality Management Group Conference and won 5 special prizes, 1 first prize, and 9 second prizes in the selection of employees' QC achievements in national industries.



Employee health and safety

The Company conscientiously implements laws and regulations, such as the *Law of the People's Republic of China on Production Safety* and the *Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases*, and occupational disease prevention measures, and provides equal occupational health and safety protection for all employees to control and eliminate occupational disease risks from the source and protect workers' health rights.

The Company's occupational health examination covers **100%** of employees. The Company has established employee health files and updates them on a regular basis. **No** suspected occupational diseases have been found among current employees, and **no** safety incidents or problems have occurred due to inadequate training, unreasonable personal protection, or insufficient safety investment.

The Company takes the "Safety and Health Cup" competition as the starting point and focuses on improving employees' safety supervision capabilities and participation enthusiasm. The Company has held the first employee safety knowledge competition and carries out regular mass safety supervision and inspection activities, with more than 3,300 employees participating in the competition and the activities. The Company extensively carries out the "Taking Photos of Potential Safety Hazards" campaign and performs mass safety supervision fully covering grassroots teams and stations. Therefore, a total of more than 2,700 potential safety hazards and occupational health risks have been investigated, with a rectification completion rate of 100%, effectively protecting the employees' safety and health rights and interests and helping the Company build a solid production safety line. Two employees were awarded by CTG the Outstanding Contribution award in the "Taking Photos of Potential Safety Hazards" campaign.



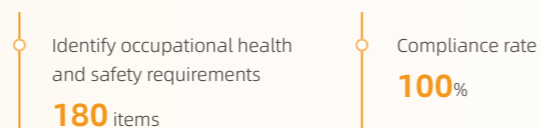
ISO45001 Certificate for occupational health and safety management system recertification



Employees' participation in the "Taking Photos of Potential Safety Hazards" campaign

Occupational health and safety management

The Company has conducted an in-depth study on the latest laws, regulations, and standards issued by the country and the industry, identified 180 laws, regulations, and other requirements on occupational health and safety, and conducted compliance evaluations one by one, with a compliance rate of 100%. Also, the Company has formulated the *Safety Expenses Management Measures* to incorporate occupational health expenses into the annual expense budget.



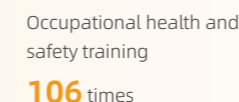
Employee safety risk prevention and control

The Company organizes all subsidiaries to carry out the identification of occupational disease hazard factors and dynamically identifies operations and office spaces against benchmarks based on the *Classification Catalog of Occupational Disease Hazard Factors*, especially identifying new construction, expansion, renovation projects, technological transformation, and technological introduction projects.

The Company carries out hazard source identification and risk assessment regularly every year. The Company, according to the characteristics of its production and operation activities, identifies possible hazardous and harmful factors that may exist in an all-round manner in the entire process, evaluates the identified safety risks, and forms a risk list to formulate and implement corresponding risk management and control measures.

Training on occupational health and safety

The Company organizes various subsidiaries to carry out occupational health and safety training activities. The training content includes emergency escape methods, use of smoke masks, personal protective equipment standards, occupational disease prevention and control laws, disaster prevention and relief, and electric shock first-aid knowledge.



Safety accidents and response to work-related injuries

The Company investigates potential dangers of major accidents and compiles a List of Violations of Commands, Operations and Labor Disciplines as a "red line" that employees cannot cross to prevent habitual violations. The Company signs labor contracts with employees and pays social insurance in accordance with the laws. Also, the Company timely handles the work-related injury identification procedures for employees who are injured at work and cooperates with the work-related injury insurance agencies to give compensation to the injured in terms of the work-related injury identification results. In 2023, **no** employees died on the job and **no** accidents occurred in the workplace.



Product and Service Management

Production specifications

The Company continuously optimizes the maintenance and management process of power generation equipment, intensifies the analysis of important equipment operation parameters, increases equipment patrol inspections, discovers and eliminates potential dangers and defects early, overall considers the renewal and renovation plan of old equipment, revises and improves technological and management measures for non-scheduled shutdown and non-scheduled outage rate of generating units. Combining the innovative topics of reliability management, the Company strengthens the analysis and application of power reliability data, uses reliability indicators as important bases for evaluating maintenance and technical transformation of generating units, and provides reliable data support for maintenance cycles, project arrangements, and the approval of important technical transformation projects. According to the *Twenty-five Key Requirements for Preventing Electric Power Production Accidents (2023 Edition)* revised and issued by the National Energy Administration of the People's Republic of China on March 24, 2023, the Company organizes all power production subsidiaries to conduct comprehensive inspections and rectifications, ensuring that relevant requirements are implemented in the whole process and all links of the power production, such as planning, design, installation, and commissioning, production operation, renewal, and transformation.

Honors in 2023



The Macheng Yanjiaye Photovoltaic Power Station of the Hubei Renewables Company was awarded the title of 2022 Excellent Station in the Labor Competition Among National Large-scale Photovoltaic Stations.



Quality and safety management

The Company insists on putting people and life first, implements the requirements of the ISO9001 management system, continuously strengthens safety management, and keeps an overall stable production safety situation throughout the year.



● Quality management

In strict accordance with the *Law of the People's Republic of China on Product Quality* and other laws and regulations, the Company has formulated the *Quality Management System (Trial)*, and established and improved the quality responsibility system to strengthen its quality management in project construction, maintenance, overhaul, and technical transformation. The one-time acceptance rate of projects undertaken by project construction subsidiaries reaches 100%, and the one-time acceptance rate of divisional and sub-divisional projects reaches 99%. The Company urges its production and operation subsidiaries to strengthen equipment inspection and monitoring and strengthen statistical analysis of defects. The fault elimination rate of various types of business equipment throughout the year remains above 95%, and the non-scheduled shutdown times of the generating units are decreased by 75%, ensuring the safe and stable operation of the equipment and facilities of the generating units.

● Safety management



Safety management system

The Company has established a safety production responsibility system. The Safety Production Committee comprehensively leads the Company's safety production activities, and the Quality Safety Department is the Company's full-time production safety management body. The Company has signed an annual safety production responsibility statement with all subsidiaries to ensure that safety production management fully covers all production and construction subsidiaries. Furthermore, the Company has formulated the *Management Measures for the All-Employee Safety Production Responsibility System* and urges all employees to sign a safety commitment letter. The Company compiles a list of the responsibilities undertaken by individual departments and posts, works out a safety checklist covering all business segments, construction stages, and operation cycles, and assesses the performance of their responsibilities.

Safety management policy

The Company duly implements the *Law of the People's Republic of China on Production Safety* and other laws and regulations and has revised 10 policies to further standardize and improve the safety production supervision and management system. For example, the *Measures for the Management of Rewards and Punishments for Safety Production* explicitly defines the objects of punishment for accidents (incidents), expands the punishment scope, refines the punishment standards, includes new contents on punishment for violations and hidden problems, and further strengthens the safety production assessment, rewards, and punishment. In the *Measures for Classified Control of Safety Risks and Investigation and Governance of Hidden Hazard*, a "clear explanation" and assessment mechanism for hidden dangers is added to strengthen the Company's management and assessment of major accident hazards and typically hidden dangers.

Stakeholders management

The Company supervises and improves the safety management system for production outsourcers and construction contractors. Also, the Company has formulated the *Safety Management Measures for Power Production Outsourcing Projects* to strengthen the management of stakeholders throughout the entire construction process and strictly review qualifications and control access of teams, personnel, and equipment to the construction site. The Company has established a grid management mechanism for project execution in terms of local conditions, covering the general contractors, subcontractors, supervisors, and owners, and built a project management structure of "Functional Department + Project Department + Participating Parties".

Safety supervision system

The Company has organized safety inspection activities more than 100 times throughout the year, with a year-on-year increase of 37%. It has issued 20 inspection reports and put forward 575 rectification suggestions. It supervises the completion of problem rectifications every month, with an on-schedule rectification completion rate of 100%.

On-schedule rectification completion rate
100%

Safety risk prevention and control

The Company has compiled the *Standards of Safety Risks and Measures for Key Control Items (Trial)*, comprehensively identified hazard sources in hydropower, thermal power, renewable energy, natural gas and urban gas, hazardous chemicals, transportation, fire protection, and other sectors, determined 33 safety risks that are under the Company's control, and formulated hierarchical control measures. The *2023 Action Plan of HBEG for Special Investigation and Rectification of Major Accident Hazards* is issued, which explicitly defines 24 key work points and 85 key inspection items. A total of 209 sub-item inspections for major accident hazards have been carried out, and various subsidiaries have carried out 994 sub-item inspections for major accident hazards.

Safety production education and training

The Company organizes and carries out energy safety-themed lectures, holds special lectures on safety management of renewable energy construction projects, and explains the twenty-five key requirements for preventing power production accidents to enhance the safety awareness and capabilities of managers. On the basis of regular training, the Company innovates training means and methods and adopts various forms, such as centralized teaching, online teaching, and case analysis, as well as new training means, such as knowledge competitions, skill competitions, and experience activities, to increase the employee participation rate.

Safety accident emergency management

The Company has formulated the *Emergency Management Policy and Measures for Early Warning Management of Emergencies (Trial)* and other policies, and established a normalized emergency mechanism and an emergency information reporting mechanism to strengthen information sharing, coordination, and linkage. The Company has released meteorological warning information more than 20 times in a timely manner and effectively supervised natural disaster prevention and response. Additionally, the Company has prepared and implemented annual emergency drill plans, innovatively carried out emergency drills, organized employees to watch live broadcasts for study, and tested actual emergency response capabilities through online and offline multi-dimensional supervision activities. The Company has carried out a total of **778** drills, including **512** actual practice drills, which accounts for **65.8%**.



Practice drills
778 times

Customer service and rights and interests

The Company strengthens upstream and downstream customer management and maintenance work and formulates *Marketing and Customer Management Measures* to continuously improve its service quality. It has established multiple communication channels to cover all customers through on-site visits, online return visits, and telephone return visits. The Company promotes and implements national power policies in a timely manner, answers customer questions, handles customer complaints, and protects customers' privacy; strengthens communication, timely grasps customers' use of electricity, well predicts power consumption, and enhances refined service level. In 2023, Ezhou Power Generation Company, Hubei Renewables Company, Hanjiang River Energy Company, Xinjiang Chuxing Company, and the Power Sales Company have issued a total of 173 satisfaction questionnaires, of which 144 copies of questionnaires were collected, indicating customer satisfaction with electricity market transactions is up to 100%.



Supply Chain Safety and Management

Supplier management

In 2023, there are **6,098** suppliers cooperating with the Company



Supplier distribution

Hubei 3,184 52.21%	Beijing 427 7%	Jiangsu 325 5.32%	Henan 274 4.49%	Sichuan 241 3.95%	Guangdong 208 3.41%
Shanghai 161 2.64%	Shandong 158 2.59%	Xinjiang 157 2.57%	Shaanxi 156 2.56%	Hunan 109 1.79%	Zhejiang 108 1.77%
Hebei 97 1.59%	Liaoning 87 1.43%	Anhui 65 1.07%	Tianjin 51 0.84%	Shanxi 39 0.64%	Heilongjiang 37 0.61%
Jiangxi 33 0.54%	Chongqing 32 0.52%	Yunnan 31 0.51%	Jilin 25 0.41%	Fujian 19 0.31%	Ningxia 16 0.26%
Inner Mongolia 14 0.22%	Guangxi 12 0.20%	Gansu 12 0.20%	Guizhou 10 0.16%	Qinghai 9 0.14%	Hainan 1 0.01%

● **Supplier selection and management**

In strict accordance with relevant national laws and regulations, the Company has formulated the *Tendering and Procurement Management Measures*, the supporting *Company Owner Appraisal Management Measures*, *Rules of Procedure of the Company's Tendering Management Committee*, *Tendering and Procurement Supervision and Management Measures* and other series of policies to establish an "Admission -Training-Assessment-Supervision" full-chain supplier selection and management system, regulating the Company's tendering and procurement management.

Supplier admission

The Company confirms information such as supplier qualifications, performance, and contract performance capabilities during the review process according to procurement projects. ESG factors are taken into consideration in the supplier admission link, and suppliers that are subject to punishment due to their environmental violations and have been included in the "List of Enterprises Having Bad Records for Environmental Protection" will be rejected during the bidding and procurement stage. Suppliers included in the "List of Enterprises with Serious Violation of Laws and Dishonesty Records" and the "List of Persons Subject to Enforcement Due to Dishonesty" due to being subject to environmental penalties and other reasons are prohibited from being shortlisted as new suppliers.

Supplier assessment

In accordance with the *Measures Supplier Credit Evaluation Management* and *Credit Evaluation Implementation Rules*, the Company conducts credit evaluations on bids (quotations) and contract performance suppliers participating in the Company's tendering and procurement activities through daily evaluation, annual evaluation, and dynamic evaluation, and publishes supplier evaluation results on time to promote suppliers' honest performance of contracts.

The Company conducts training on the green procurement chain, energy conservation and environmental protection from time to time to guide the suppliers' transition into green and low-carbon businesses.

Supplier supervision

According to the *Measures for Supplier Credit Evaluation Management*, the Company supervises the suppliers' behaviors in aspects such as legal operation, quality assurance, environmental protection, health, and safety. For all procurement contracts, the Company requires the purchasers and the suppliers to sign an integrity agreement that stipulates the responsibilities and obligations of both parties, especially the behaviors that the supplier must not engage in, and the accountability and punishment methods in the event of non-integrity behaviors.

Supplier training



Supply chain management

● **Sustainable procurement**

The Company attaches great importance to the environmental, social, and governance risks in the supply chain, adheres to the sustainable development concept in bidding and procurement, fully evaluates the suppliers' qualifications, and encourages building long-term, stable, and positive relationships with suppliers that perform well in environmental protection, social responsibility, and labor security.

The Company specifies requirements for green procurement in major equipment tendering and procurement documents to guide suppliers in implementing green manufacturing, packaging, logistics, and other activities. All subsidiaries of the Company actively respond to the implementation of national and industry supply chain green and low-carbon management requirements in the building, operation and maintenance of warehouses, internal logistics, and waste disposal.

● **Supply chain security guarantee**

The Company sets up hierarchical material reserve bases and establishes a reserve quota and safety inventory system. The Company also implements classified and hierarchical management of key materials and establishes an emergency procurement mechanism to ensure stable material supply. It maintained a continuous and stable supply of important production materials in 2023, ensuring safety production.



No major supply chain risks occurred

Social Contributions

Community building

Assist in the building of the Gaoqiao Bridge in Duzhenwan Town, Changyang Tujia Autonomous County



At the end of November 2023, the Gaoqiao Bridge was officially open to traffic. Its construction took five years and costed aid funds of RMB 27.5 million, breaking through the traffic bottleneck for nearly 10,000 local villagers.



Gaoqiao Bridge completed and open to traffic

Assist in repairing rural roads in Beizhen Village, Zouma Town, Hefeng County



The Company donates RMB 4 million to help repair 4.5 km of rural roads in Beizhen Village, Zouma Town, Hefeng County. Widening the original road and building guardrails, slope retaining walls, drainage ditches, and grit chambers facilitate the travel of surrounding villagers and solve the traffic difficulties and potential traffic safety hazards on the rural road.



Repaired road of Beizhen Village

Public welfare

By adhering to the tenet of "dedication, friendship, solidarity, and mutual assistance", the Company vigorously carries out volunteer services and actively engages in community welfare activities, contributing to the creation of a harmonious society and beautiful communities.



Employees are actively participating in voluntary public welfare activities

"Environmental Protection Charity Tour" protects the surrounding ecological environment



Ezhou Power Generation Company and Baihu Town Village Committee jointly launched the "Join Hands to Protect the Lucid Water and Lush Mountains - Environmental Protection Charity Tour" activity and cleaned up garbage around villages and towns and along the river section by section. Furthermore, the Company calls on its employees to jointly care for the environment and protect the diversity of the surrounding ecological environment.

Create a volunteer service team



Northwest Renewables Company actively carries out the Youth Volunteer Service Month activities, organizes and implements the "Three Major Actions", including volunteering to serve young people with new ideas, building "Beautiful Stations", and co-offering social services by enterprises and the locals. Also, the Company creates the "Hubei Benyu Volunteer Service Team", and actively carries out various volunteer service activities in beautifying the factory environment, repairing and recycling old equipment to reduce costs and increase efficiency, volunteer charity fairs, and student aid programs.

Response to national strategies

● Rural revitalization

The Company conscientiously implements the strategic plan to promote all-round rural revitalization, and lays a concrete foundation for targeted assistance, counterpart assistance, and public welfare assistance to farmers. In 2023, 17 assistance programs are implemented, with a planned investment of RMB 26.24 million (RMB 24.8155 million of fund was allocated by the end of 2023), and RMB 6.2161 million of agricultural products are purchased through consumption assistance.



Precise assistance provided by Ezhou Power Generation Company

In the past five years, Ezhou Power Generation Company has invested assistance funds totaling more than RMB 6 million in vigorously carrying out assistance programs, such as student aid, poverty alleviation, and rural revitalization programs, and accurately assisting 47 people in 24 poor households that are subject to poverty registration. Also, it has helped Huangji Village to shake off poverty at the end of 2018 and Baihu Town Village to be successfully selected as a demonstration village for rural revitalization in Hubei Province in 2023. In 2023, the Ezhou Charity Federation granted Ezhou Power Generation Company the title of "Caring Enterprise".



Pingtanyuan Pumped Storage Company's immigrant resettlement assistance project

In line with the immigrant resettlement assistance policy, Pingtanyuan Pumped Storage Company has invested more than RMB 4 million to implement beautiful rural construction projects in the Pingtanyuan pumped storage area, thoroughly renovated the environment of the relevant areas, optimized and adjusted the industrial layout, and built a cultural industry center.



Pingtanyuan Pumped Storage Company helps build beautiful countryside

Hanjiang River Energy Company

Focusing on the rural development needs and the expectations of the people in Xiangzhou District, Xiangyang City, assistance projects have been carried out according to local conditions. Also, Hanjiang Energy Company has invested a social responsibility fund of RMB 5 million to implement road hardening, fencing wall renovation, cultural square construction, environmental greening, pedestrian walkways, and drainage pipe construction projects in the Bigang area of Yushan Town. After the completion of the project, it greatly improved the original appearance of the countryside and promoted the contiguous development of the countryside in the Bigang area, gradually achieving common prosperity.



Bigang Village Lotus Pond

Jianggang Village Pastoral Art Studio

Industrial assistance

With enhancing the endogenous driving force for the development of the recipient areas and improving their own hematopoietic function as the core, the Company supports relevant villages and towns to develop characteristic industries in accordance with local conditions in combination with local resource conditions. The Company has invested RMB 2 million to help Liangzui Village, Shuanggou Town, Xiangzhou District get through the whole process of vegetable planting, sorting, storage and transportation through various ways such as aiding the construction of processing and packaging workshops, helping to expand the scale of planting, and supporting the establishment of professional cooperatives, and help Ganjiaping Village, Xiqiwan Township, Badong County to expand the tea planting industry, effectively driving the local people to continue to increase their income steadily.

Overseas responsibility fulfillment

Hanjiang Energy Company respects the laws, regulations, culture, religion, and customs at the place where the business is located, establishes various forms of communication mechanisms with the local government, and gives priority to hiring locals, helping the local government solve local employment problems. The Company also establishes friendly and harmonious relations between the Company and local communities, and safeguards the legitimate rights and interests of local communities and residents.

Huallaga Energy Company

Throughout the year, Huallaga Energy Company supported or funded nearly 160 public welfare activities, such as community sports, traditional cultural celebrations, medical assistance, educational assistance, and infrastructure construction, with a converted amount of approximately RMB 600,000. To strengthen communication between Chaglla Hydropower Station and surrounding communities, the power station establishes a community resident consultation and complaint center and builds a community communication and liaison mechanism. It earnestly fulfills the social responsibilities of a Chinese-funded enterprise and continues to provide free-of-charge commuting vehicle services and water transportation services in the reservoir area to residents in communities surrounding the Chaglla Hydropower Station. Huallaga Energy Company always gives priority to hiring residents from surrounding communities for doing seasonal work at the Chaglla Hydropower Station, such as temporary reservoir cleaning, road maintenance, and afforestation.



Residents in communities around the Chaglla Hydropower Station take the free-of-charge commuting bus



Residents in the Chaglla Hydropower Station reservoir area take the free-of-charge commuting boat



Governance

Create Enterprise Value Together

Responsibility performance practice

We deeply implement the concepts of reform and improvement of the company, and strive to improve the modern corporate system with Chinese characteristics. Furthermore, we continuously perfect the corporate governance system and market-oriented operation mechanism and continue to enhance core functions and improve core competitiveness, empowering high-level value creation with high-efficiency corporate governance and supporting high-quality development.

Respond to key issues

- Integrity building
- Risk control and compliance management

Practice the United Nations Sustainable Development Goals (SDGs)



Deepening Enterprise Reform

The Company has issued in-depth reform and improvement plans such as the Double Hundreds Action and actions of benchmarking first-class enterprise and creating values. Additionally, it prepared a reform task list and working records to explicitly define the "road map" for achieving goals. The Company is successfully selected by the State-owned Assets Supervision and Administration Commission of the State Council into the expanded list of "Double Hundreds Enterprises" for 131 new companies. It strengthens the assessment and supervision of reform tasks, deeply integrates key tasks into the working content of various departments and subsidiaries, and incorporates them into its annual operating performance assessment.

The Company focuses its efforts on functional reforms, enhances its core functions, serves national strategies, and seriously implements tasks such as creating high-level scientific and technological self-reliance, ensuring the stability and smoothness of industrial and supply chains, and guaranteeing the security of energy resources.

The Company deepens the institutional and mechanism reform, improves the term system of management members and the accomplishment of contractual management. It also comprehensively puts market-oriented employment systems into practice, such as job competition, bottom-out adjustment, and incompetent personnel withdrawal.

The Company explicitly defines the development direction of "building a first-class regional integrated energy group" and starts the road to building the Company into a first-class enterprise. Also, the Company lays equal emphasis on its reform & development and the prevention and resolution of major risks, and properly resolves various contradictions and risks through comprehensively deepening reforms, while strengthening comprehensive assessment of and response to risks, ensuring that the reform is carried out actively, orderly, fast, and steadily.

Governance Strategy and Organizational Structure

Governance strategy

The Company strictly complies with the requirements of laws and regulations, such as the *Company Law of the People's Republic of China* and the *Code of Corporate Governance for Listed Companies*, and establishes and maintains effective governance structures and processes to ensure a transparent, conscientious, and efficient decision-making process, protect the rights and interests of shareholders, employees and other stakeholders, enhance the Company's long-term value, and guarantee sustainable development.



By adhering to the principle of information transparency, the Company promptly and accurately discloses important information, such as the Company's operation conditions, financial status, and governance structure, maintains communication and interaction with shareholders, investors, and other stakeholders, and establishes a good relationship of trust.



The Company has established a clear power distribution mechanism to explicitly define the responsibilities and authorities of the management at all levels, ensuring clear responsibilities and a balance of power and preventing corruption and misconduct.



The Company has established a comprehensive risk management and internal control system to evaluate and manage various risks, regulate internal operations and decision-making processes, and prevent and resolve potential risks and problems.



The Company has established an effective supervision mechanism and set up internal supervision bodies, such as the Board of Supervisors and the Department of Audit to supervise and evaluate governance strategies and processes.



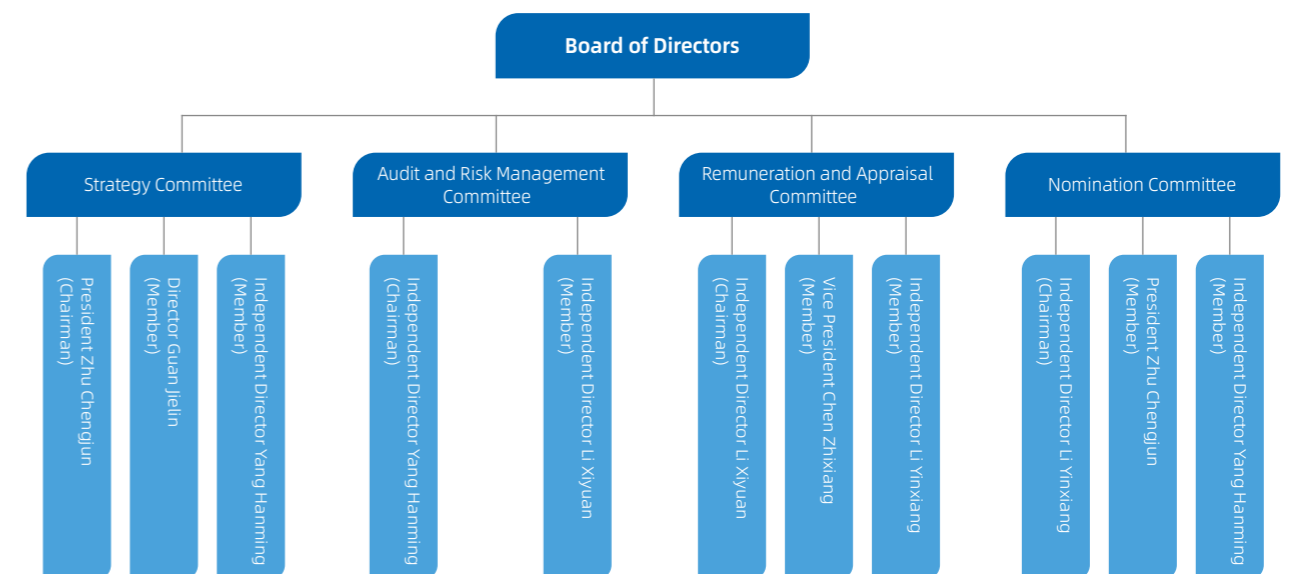
Governance system

Shareholders' meeting

The shareholders' meeting is the Company's highest authority. The Company organizes and convenes shareholders' meetings in strict accordance with the requirements of the *Company Law of the People's Republic of China*, the *Articles of Association*, and the *Rules of Procedure of Shareholders' Meetings* to fully protect the rights of shareholders and treat all shareholders equally. In 2023, the Company held a total of 1 annual shareholders' meeting and 5 extraordinary shareholders' meetings and adopted all 25 proposals reviewed. The general meetings of shareholders are held through a combination of on-site and online voting. All shareholders can participate in the voting, fully safeguarding their rights to know and vote on relevant decisions.

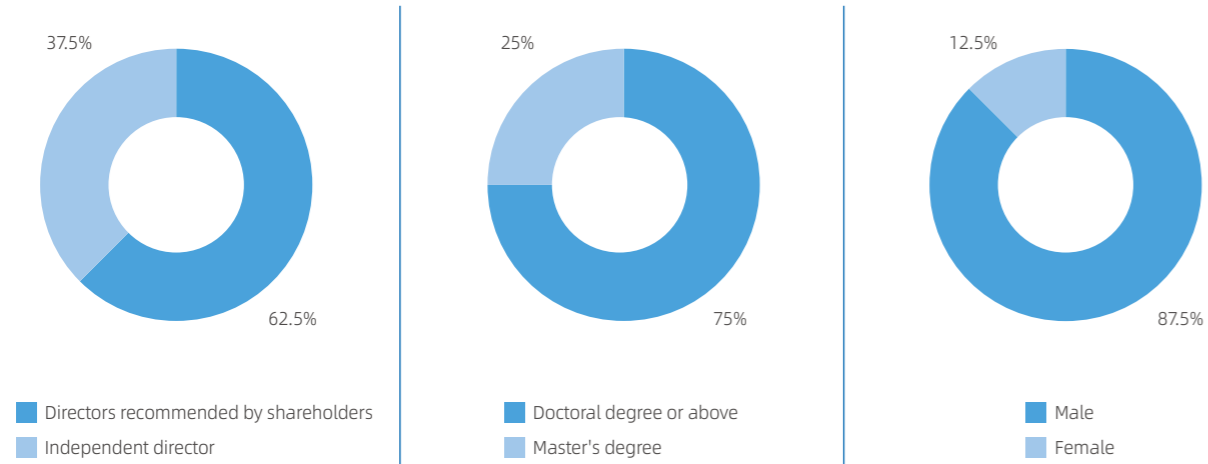
Board of directors

The Board of Directors works with high quality in strict accordance with the provisions of laws and regulations such as the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China*, and the *Guidelines of the Shenzhen Stock Exchange for Standardized Operation of Companies Listed on the Main Board*. All directors work diligently and make scientific decisions, guide and supervise the management to effectively implement the board of directors' resolutions, and effectively safeguard the rights of shareholders.



Board composition

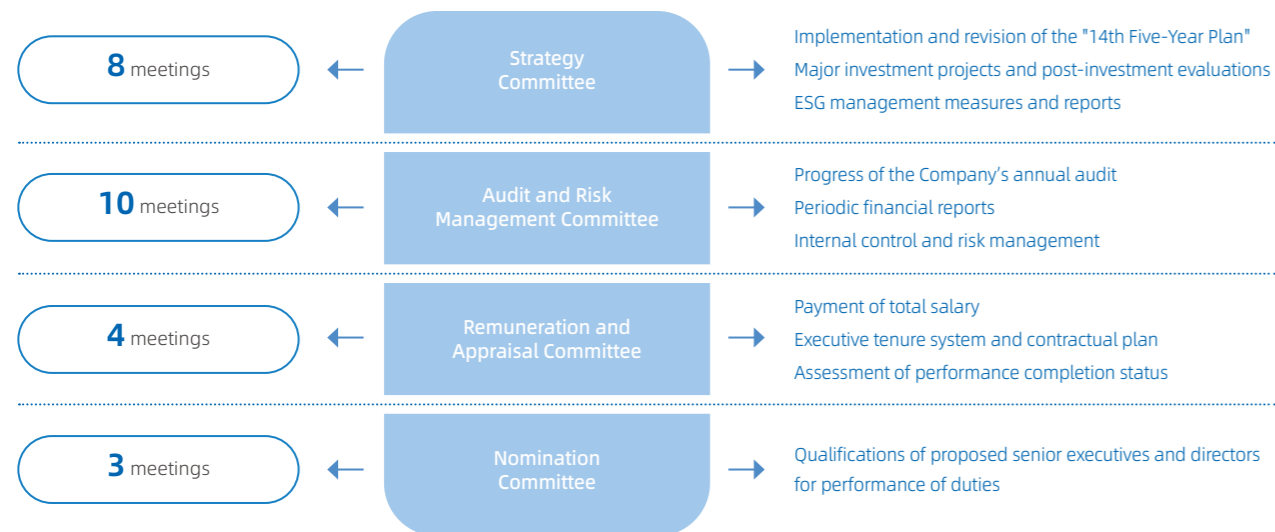
The Board of Directors fully considers the diversity of personnel, including but not limited to gender, age, education, professional background, and other factors. There are 8 current directors, including 5 directors recommended by shareholders and 3 independent directors, covering power engineering, electrical automation, business management, accounting, and other professional fields. There are currently 6 directors with doctorate degrees or above and 1 female director. For details of the Board of Directors, please refer to the Company's 2023 Annual Report.



Performance of duties by the Board of Directors

- Special committees provide professional support

All special committees fulfill their duties diligently, give full play to their professional advantages, and provide support for the Board of Directors' scientific and efficient decision-making.



- Standardized and efficient operation of the Board of Directors

The Board of Directors held a total of 11 meetings, reviewed and approved 84 proposals, such as regular reports, related transactions, budget and final accounting, profit distribution, repurchase and cancellation of restricted stocks, and external investment, and listened to 8 reports, such as management's opinions on the implementation of the board's resolutions and the exercise and execution of the board's rights. The Board of Directors proposed to convene 6 general meetings of shareholders and submitted 25 proposals, including annual reports, related transactions, and profit distribution, to the general meetings for consideration as required.

Continue to strengthen institutional construction and continuously improve governance capabilities

The Board of Directors organizes the revision of the *Articles of Association*, *Rules of Procedure for the Shareholders' Meeting*, *Rules of Procedure for the Board of Directors*, and *Rules of Procedure for the Board of Supervisors* to further accurately define the boundaries of powers and responsibilities of the shareholders' meeting, the Board of Directors, the Board of Supervisors, and the General Manager's Office Meeting in corporate governance and also optimize the Company's governance mechanisms. Also, the Company has revised the *Authorization and Decision-making Plan of the Board of Directors* to dynamically adjust the authorized management authority of the chairman and general manager according to the evaluation results, further standardize the decision-making mechanism, and improve decision-making efficiency. It has revised and improved the working rules of the four special committees, including the Strategy Committee, Nomination Committee, Remuneration and Appraisal Committee, and Audit and Risk Management Committee of the Board of Directors, and standardized the performance of duties by the special committees to give full play to the professional capabilities of the special committees, improve the mechanism for prior research on important matters of the Board of Directors, and continuously improve the quality of the Board of Directors' performance of duties.

Focus on green development and promote the optimization and adjustment of business layout

The Board of Directors has evaluated the implementation of the "14th Five-Year Plan" development plan and revised the Company's "14th Five-Year Plan" on a rolling basis. To accelerate the development of renewable energy businesses, it has reviewed and approved 12 proposals for investment in renewable energy projects.

Enhance the capital market value and inject high-quality development momentum

The Board of Directors has further improved information disclosure and continues to strengthen investor relations management. It has also revised the *Investor Relations Management System* to expand investor communication channels and increase the frequency of interactions. It holds high-quality annual performance briefings, organizes investigation activities for investors, and maintains close communication with the capital market players, industry organizations, and regulatory agencies to enhance investors' understanding and recognition of the Company.



Independence of independent directors

Independent directors, in strict accordance with relevant laws, regulations and the *Articles of Association*, perform their duties faithfully and diligently, exercise their powers independently and responsibly, express their independent opinions objectively and fairly, and safeguard the overall interests of the Company. In 2023, independent directors issued independent opinions on 36 proposals, including the executives' compensation, restricted stock repurchase and cancellation, the appointment of executives, issuance of convertible corporate bonds, and profit distribution. Additionally, the Company organized independent directors to investigate key projects four times.

Director training

All directors participated in one special training on the comprehensive registration system reform organized by the Hubei Securities Regulatory Bureau, participated in the special training on the reform of the independent director system of listed companies within the Hubei jurisdiction for three person-times, participated in the special sharing session on the governance of listed companies within the Hubei jurisdiction for five person-times, and participated in the follow-up training for independent directors of the Shenzhen Stock Exchange for one person-time.

● Board of Supervisors

The Board of Supervisors operates according to relevant specifications and independently and effectively supervises the legality and compliance of the Company's finances and the performance of duties by directors and executives. The Board of Supervisors held 7 meetings in 2023 and reviewed 27 issues. There are 2 employee supervisors, and the remaining directors are designated by external shareholders. There are 2 external supervisors, accounting for 50%.



● Management

The management has rich experience and professional knowledge, and is appointed by and accountable to the Board of Directors. The management faithfully performs its duties and safeguards the best interests of the Company and all shareholders.

Remuneration management

The remuneration plan for directors and supervisors and the allowance plan for independent directors have been submitted to the Company's shareholders' meeting for approval and implementation after being reviewed and approved by the Board of Directors. The remuneration plan for senior executives has been implemented in accordance with the requirements of the *Company's Senior Executive Remuneration Management Measures (Trial)*. Employee supervisors receive remuneration based on their actual positions (posts) in the Company. The allowance for the three independent directors is RMB 100,000/person/year; the remaining external non-independent directors and external supervisors do not receive remuneration from the Company.

The decision-making process, basis for determination and specific amount of remuneration for members of the Board of Directors are publicly disclosed in the Company's annual report. Therefore, shareholders and other stakeholders can clearly understand the remuneration of board members.

The remuneration of the directors is linked to their performance. The Company has established a tenure incentive system that reflects their contribution to their posts and ranks and strengthens the function of assessment in compensation allocation. The annual salary of the person in charge of the subsidiaries is directly linked with the performance assessment of the subsidiaries, the operation performance assessment of management members, and the comprehensive assessment and appraisal results of team members. The remuneration gap can be reasonably widened to achieve the purpose of "Focusing on incentives and imposing rigid constraints" in the assessment.

Standardized Governance

Internal control

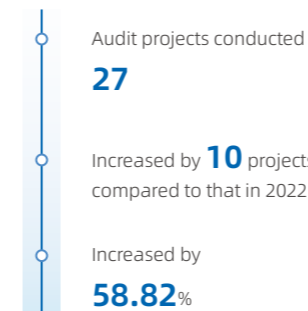
● Internal audit

Audit leadership system

An independent internal audit department has been established. The department of audit carries out internal audits under the leadership of the Board of Directors and is accountable to the Board of Directors. Some second-tier subsidiaries have set up audit offices within their functional departments this year and equipped themselves with full-time auditors to perform their audit duties, ensuring that internal audits can be carried out independently and objectively within the internal audit system. The internal audit management system and other related systems have been set up to ensure that internal audit bodies and personnel are not involved in the review, approval, and decision-making about the operation activities of the audited unit and other work that may affect the independent and objective performance of their audit responsibilities.

Rectification of audit issues

The audit department audited 27 audit projects, an increase of 10 compared to that in 2022, rising 58.82%. The audit rectification is solidly pushed forward and the due rectification rate of issues found in the audit reached 100%.



● Internal control

Internal control system



Institutional process

The Company continuously improves the institutional process system and promptly transforms external regulatory requirements such as laws and regulations into institutional processes, ensuring compliance with laws and regulations. By focusing on key businesses and high-risk areas, the Company explicitly defines the risk points, countermeasures, and internal control requirements for key business links in the formulation, review, and revision of specific business management systems and business processes. Also, it incorporates content about accountability for illegal operations and investments into specific business systems and intensifies the rigid constraints on system execution. In important institutional processes, the Company strictly specifies the rights, responsibilities, and processes for authorization, approval, execution, reporting at all levels, important positions, and key persons, achieving effective separation of responsibilities for the feasibility studies from those for decision approval, the decision approval from the decision execution, and the decision execution from the supervision.

The Company strictly implements institutional processes. Therefore, the executor is responsible for the effective execution of institutional processes, and does not handle business beyond the institutional processes. The Company pushes the organic combination of the execution of institutional processes with the allocation of management authorities and the implementation of job responsibilities. The institutional processes are used as the bases for business handling, standardized management, as well as supervision and inspection.

Supervision and evaluation

The Company strengthens internal control supervision and evaluation, and timely discovers, rectifies, and handles internal control deficiencies, potential risks, and compliance issues in operation and management. It has established and improved its internal control evaluation mechanism to form a closed-loop management mechanism for internal control of construction and operation, supervision and evaluation, rectification and implementation, and improvement management. The Company and its affiliates organize a comprehensive self-assessment of its internal control every year to systematically evaluate the effectiveness of the construction and operation of risk management and internal control systems. On the basis of the comprehensive self-assessment, the Company carries out internal control supervision and evaluation of its affiliates. Furthermore, according to unified requirements and the principle of hierarchical responsibilities, the Company works out working plans to ensure full coverage of centralized supervision and evaluation of its affiliates every three years.


Integrity building

● **Integrity building system specifications**

The Company constantly perfects its integrity building system, achieving the full coverage of anti-corruption supervision for all employees and the supply chain. The Company publishes the telephone number and email address for reports and accusations on the homepage of the Company's website, provides a safe and confidential channel for complaints, intensifies the investigation and judgment of complaints, and regulates the handling of reports and accusations.



● **Integrity education**

 <p>Pilot the "Oversight Panel for Integrity Projects" mechanism</p> <p>▼</p> <p>The "Oversight Panel for Integrity Projects" mechanism has been piloted in the construction projects undertaken by three subsidiaries, paying close attention to key links such as engineering construction project decision-making, bidding, implementation, and acceptance, and strengthening supervision through on-site inspections, supervision, rectification, and warning education.</p>	 <p>Establish an integrity talk system</p> <p>▼</p> <p>The Company has established a system of integrity talks with management personnel at the same level and lower levels, and explicitly defines the conditions, frequency, and content of integrity talks. Through pre-appointment integrity talks, daily integrity talks, and interviews, the Company carries out the integrity education of employees to prevent corruption behaviors.</p>	 <p>Play a warning role with typical cases</p> <p>▼</p> <p>Every year, the investigated violations of regulations and laws are reported in details. Typical cases are selected and compiled into the warning record which is distributed to all management personnel and employees. For educational purpose, we filmed documentary to accurately clarify the warning significance.</p>
--	--	--

● **Supply chain anti-corruption management**

The Company conducts due diligence and assessment of suppliers to assess their business ethics, compliance, and risk levels, and specifies anti-corruption provisions in contracts. In addition, it carries out anti-corruption training for relevant personnel in the supply chain to enhance anti-corruption awareness and compliance capabilities and ensure understanding of and compliance with the Company's anti-corruption policies.

Fair competition

● **Training education**

The Company conducts training on business ethics and confidentiality for all new employees. It also carries out professional training and continuing education for financial personnel. In 2023, the average training time for financial personnel is 64 hours. It holds training courses on legal compliance and internal control seven times and organizes employees to take part in audit training for 264 hours.

● **Related transactions**

The Company has formulated and implemented the *Related Transaction Management System*. In 2023, related transactions of deposits and loans occurred based on the needs for the Company's normal production and operations, which meet the principles of fairness, openness and impartiality, and do not affect the Company's independence or harm the interests of the Company and shareholders (especially the small and middle shareholders). There is no non-operating capital occupation by related parties and no related-party guarantees. For specific relevant information, please refer to the Company's 2023 Annual Report.

Information Disclosure and Investor Relations

Transparency of information disclosure

The Company strictly abides by laws, regulations, and the requirements of securities regulatory agencies, continues to improve the standardized preparation, multi-level review, and timely disclosure mechanism, and has revised and perfected the *Information Disclosure Management System* and *External Information Submission and Use Management System*. In 2023, the Company released 194 copies of information disclosure materials, conveying the Company's development strategy, production operations, and major investments. Additionally, it continues to increase information disclosure carriers, uses digital means to display the Company's development highlights through multiple channels, fulfills information disclosure obligations in a true, accurate, complete, timely and fair manner, and maintains the transparency of the Company's operations and management.

The Company audits financial statements at least once a year. Da Hua Certified Public Accountants (special general partnership) is hired as the auditor to audit the Company's 2023 Annual Report and overall annual financial statements, and key audit matters, with the annual audit fee amounting to RMB 1.85 million.

Investor relations

The secretary of the Board of Directors is fully responsible for the Company's investor relations management. The Board of Directors Office is the specific executive department for the Company's investor relations management. The office strengthens communication with investors and potential investors by facilitating the exercise of shareholders' rights and by conducting information disclosure, interactive communication and complaint handling.

The Company treats all investors equally and has revised the *Investor Relations Management System* and formulated an annual investor relations management plan. It actively builds a proactive investor relations management model and establishes a multi-level positive interaction mechanism. Additionally, it does a good job in communication and exchange with investors in many forms, such as performance briefings, road shows, investor visits, reception day activities, brokerage strategy meetings, and forums, as well as through approaches such as investor hotline, email, and website. In 2023, the Company received visits from 9 institutional investors, including CITIC Securities and Harvest Fund, conducted high-quality annual performance briefings, and maintained close communication and positive interaction with the capital players. The Company is awarded the "Excellent Practice Award for the 2022 Annual Report Performance Briefings" by the China Association for Public Companies.

The Company actively fulfills the responsibilities of a public company and focuses on investor returns. In August 2023, the Company completed the 2022 dividend distribution with an amount of RMB 391 million, and the cash dividend ratio accounted for 33.66% of the net profit attributable to the public company that year.



Creditors' rights

As of December 31, 2023, the balance of bonds issued in the interbank market was RMB 3.47 billion. The Company has good financial status and a stable and sufficient cash flow, maintains its financial leverage at a low level in the industry, and does not have any debt defaults. It has a good reputation in the capital market and maintains an AAA credit rating. Moreover, smooth fund-raising channels, and a rational selection of safe and reliable financing combinations help the Company reduce its comprehensive financing costs.

Compliant Management and Risk Management

Compliance management

Compliant management policy

The Company has formulated the *Compliance Management Measures* to explicitly define the key contents, such as compliance management leadership responsibilities, organizational system, working mechanism and compliance operation. The compliance requirements are embedded into key business processes to improve the effectiveness of the compliance management system, and promote the effective implementation of compliance management. The Company also prepares a compliance risk identification list, a list of compliance responsibilities for important positions, and a key business process control list, and strengthens the identification and management of key compliance risks.

- Identify **32** categories of first-level risks
- Identify **103** categories of second-level risks (key areas)
- Identify **240** categories of third-level risks (key links)
- Involve **210** key business processes

Compliance system construction status

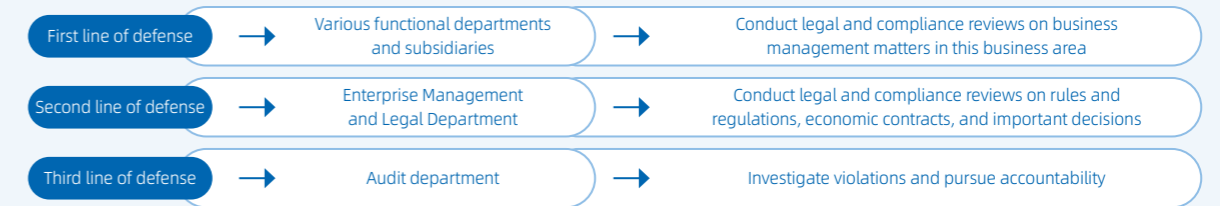
Compliance management system

The Company implements the first responsible person mechanism, and has established a compliance management and organization system in which the main person in charge of a unit acts as the leader in compliance management, the general legal counsel (chief compliance officer) takes the lead in compliance management, and compliance management is centralized in the Enterprise Management and Legal Department and coordinated by relevant departments.

The Company sets up the Compliance Committee to coordinate and carry out key tasks of legal and compliance management and organizes research and discussion on major matters related to legal construction, compliance management, and internal risk control.

The Company and its subsidiaries have set up a total of 29 chief compliance officers. The Company's chief compliance officer attends important decision-making meetings, such as board meetings, and general manager's office meetings, and conducts legal and compliance reviews of major decision-making matters.

The Company consolidates and strengthens "three lines of defense", i.e., various departments and subsidiaries; legal and compliance departments; and audit departments.



Compliance review process

The Company has established a clear and complete compliance review process and conducts compliance review of rules and regulations, legal compliance review of contracts, compliance review of major decisions, and compliance form review.

Compliance management operation mechanism



Preventive mechanism

The Company has established a compliance risk identification, assessment, and early warning mechanism, regularly organizes and carries out all-level, all-field, and all-round operation compliance risk inspections, formulates a problem rectification list, proposes targeted rectification measures, and issues compliance risk revelation letters.

The Company has established a legal and compliance review mechanism and embeds the legal and compliance review as a necessary procedure into the operation and management process. The management systems, economic contracts, and important decision-making matters registered a legal and compliance review rate of 100%.



In-process control mechanism

The Company has established a compliance risk incident management mechanism and explicitly defined the response and disposal of compliance risk incidents, management and control supervision, and quarterly and annual reporting mechanisms.

The Company has established a rectification mechanism for violations and adopted sound rules and regulations for violations discovered during special compliance inspections. Also, it standardizes business processes and other methods to block management loopholes and improve the legal and compliant management level.

The Company has established an accountability mechanism for violations, strictly carried out supervision and accountability and established and improved the long-term mechanism of "Promoting management through cases" to form a closed loop for compliance management.



Post-hoc evaluation mechanism

The Company has established a compliance management assessment mechanism, incorporates the effectiveness requirements of compliance management into annual performance assessment goals, specifies a certain assessment proportion, evaluates the compliance management and performance of duties of the subsidiary and staff, and uses the assessment results as important bases for employee assessment, management appointment, and staff rating.

Risk management

● Risk management system

The Company has established and improved its internal risk control system. Through the *Risk Management and Internal Control System*, the Company definitely specifies the responsibilities of the first person responsible for the construction of the internal risk control system. Also, it forms the working mechanism according to which internal risk control is pushed by the internal risk control department and coordinated by the business functional departments, and establishes "three lines of defense" for risk management.

● Significant risk assessment

In 2023, the Company assessed 17 major annual risks in 8 categories, formulated 59 executable, testable, and assessable risk management and control measures. For a special list of possible risks that may exist in main businesses such as thermal power, hydropower, and renewable energy, the Company effectively prevents and controls risks on a quarterly basis. Focusing on key areas and key links, the Company conducts internal risk control supervision and evaluation of all secondary subsidiaries to achieve full coverage of the Company's systems. The Company has worked out a major risk contingency plan. Thus, after a risk event occurs, the relevant responsible departments and subsidiaries will immediately start a risk management plan according to corresponding control measures to reduce risk losses.

● Strengthen risk management throughout the process

Summary

Focusing on the development strategy and action plan, as well as the completion of production and operation goals and risk management and control conditions in the previous year, the Company conducts an in-depth analysis of the risk factors that have an important impact on the Company's development.

Mechanism improvement

By upholding the combination of comprehensiveness and focus, the Company improves the risk assessment mechanism that combines "specific points, categories, and the whole field" to better support the risk assessment at "the whole field" through risk identification at "specific points" and special risk assessments in "categories", and improves the scientificity and effectiveness of risk assessment.

Risk identification

The Company carries out an in-depth analysis of the domestic and foreign macroeconomic environment, laws and regulations, industry policies, market supply and demand, technological revolution, and other external environment changes, collection and integration of large amounts of data information, scientific research and judgment of internal and external key risks that may have an impact on the achievement of this year's management objectives, and quantification of potential risk impact.

Response to risks

The Company analyzes the correlation between risks and the Company's strategy, business model, and values, works out targeted response strategies, and implements management measures.

Regular monitoring and evaluation

The Company regularly monitors and updates assessment results to respond to new risks in a timely manner, ensuring the Company's sustainable development.



Prospects in 2024

2024 is the critical year for the implementation of the "14th Five-Year Plan". HBEG will focus on its primary task of high-quality development and adhere to the general tone of making progress while maintaining robust operations. Also, it will strive to enhance its core functions, improve its core competitiveness, and accelerate building it into a first-class regional integrated energy group.

The Company will more proactively improve the quality and efficiency of development. It implements the requirements for "stable growth in its profit rate and continuous optimization of its five rates (i.e., return on net assets, total-employee labor productivity, operating cash ratio, R&D investment intensity and technological output efficiency, and overall asset-liability ratio)". Furthermore, it focuses on the energy industry chain, continuously promotes layout optimization and structural adjustment, and coordinates the relationship between development scale, speed, quality, and benefit, striving to enhance its value creation capabilities.

The Company will more proactively integrate itself into the construction of new power systems. It adapts to the characteristics of stability, flexibility, cleanliness, and intelligence of new power systems, develops clean coal power and pumped storage businesses in an orderly manner, vigorously develops renewable energy businesses, boosts the construction of new power systems, grasps the smart integration development trend of new power systems, and explores new business formats and models such as new-type energy storage, zero-carbon parks, virtual power plants, and integrated smart energy.

The Company will more proactively deepen reform and innovation. It also vigorously implements actions to deepen and improve the reform insists on the direction of market-oriented reform, and continues to enhance the internal vitality and market competitiveness of enterprises. By focusing on key areas such as green, low-carbon, digital transition, and strategic emerging industries, the Company strengthens its forward-looking layout, makes every effort to support key research and development projects, and continuously enhances the supporting and driving role of scientific and technological innovation in its high-quality development.

The Company will more proactively fulfill corporate responsibilities. It always takes on heavy responsibilities, and integrates the enterprise spirit of "bearing duties in mind and fulfill responsibilities in action" into the whole process of the Company's production, operation, reform and development. Also, it shoulders the mission of ensuring energy supply, actively protects the ecological environment, promotes the all-round development of employees, safeguards the legitimate rights and interests of stakeholders, serves local governments to pursue high-quality local development, and strives to create win-win comprehensive value for the economy, ecology, and society.

The Company will more proactively prevent and resolve major risks. We always attach great importance to potential risks in the Company's rapid development, strengthen our bottom-line thinking, continue to improve our comprehensive risk management and internal control system, strengthen the identification, analysis, evaluation, and prevention of major risks to resolutely prevent the occurrence of systemic and disruptive risks, and maintain the safety bottom-line for our high-quality development.

Annual performance

Economic performance	Unit	2021	2022	2023
Operating revenue	RMB	22,628,852,706.05	20,578,214,751.99	18,668,672,883.26
Total profit	RMB	3,006,603,799.18	1,625,728,236.98	2,273,626,824.12
Asset-liability ratio	%	50.25	53.79	57.83
Earnings per share	RMB	0.36	0.18	0.27
Taxes paid	RMB	1,830,293,483.40	2,052,753,678.44	1,515,890,381.13*
Cumulative number of patents granted throughout the year	Items	42	46	76
Customer satisfaction	%	97.49	97.93	100
Total installed capacity of domestic power generation	10 MW	1123.26	1195.45	1521.58
Total installed hydropower capacity	10 MW	465.73	465.73	465.73

Environmental performance	Unit	2021	2022	2023
Environmental protection input	RMB 10,000	16451.3	31026.42	34265.52
Comprehensive energy consumption	10,000 tons of standard coal equivalent/year	42.9091	43.2725	42.4561
Coal consumption (standard coal equivalent)	10,000 tons	562.15	561.17	572.62
Natural gas consumption	100 million cubic meters	3.47	3.14	1.86
Energy consumption per RMB 10,000 of output value	Ton of standard coal equivalent/RMB 10,000	0.1884	0.1574	0.2186
Fresh water consumption	10,000 tons	2214.22	2169.24	2507.76
Circulating water consumption	10,000 tons	90695.55	81076.65	108482.87
Proportion of circulating water consumption	%	97.62	97.39	97.74
Water consumption per RMB 10,000 of output value	Cubic meters/RMB 10,000	9.7226	7.8922	12.9112
Wastewater discharge	10,000 tons	19.71	19.70	17.28
Wastewater discharge intensity	Kg/kWh	0.14	0.15	0.22
Ammonia nitrogen emissions of wastewater	Ton	0.45	0.35	0.36
Chemical oxygen demand emissions	Ton	5.12	4.67	4.12

Environmental performance	Unit	2021	2022	2023
Actual emission concentration of ammonia nitrogen	mg/L	2.28	1.72	2.3
Actual emission concentration of chemical oxygen demand	mg/L	25.98	23.85	23.3
Smoke and dust emissions	Ton	222.65	236.86	167.92
Sulfur dioxide emissions	Ton	980.64	1050.8	1045.94
Nitrogen oxide emissions	Ton	2914.81	3408.68	3175.62
Smoke and dust emission performance	g/kWh	0.011	0.012	0.008
Sulfur dioxide emission performance	g/kWh	0.047	0.051	0.053
Nitrogen oxide emission performance	g/kWh	0.139	0.166	0.159
General industrial solid waste generation	10,000 tons	222.80	235.12	242.69
Utilization of general industrial solid wastes	%	100	100	100
Hazardous waste disposal rate	%	100	97	99
Hazardous waste generation	Ton	185.61	1161.975	2418.37
Hazardous waste disposal volume	Ton	185.61	1136.057	2412.402
Scope I emissions	10,000 tons	1663.6	1662.66	1662.16
Scope II emissions	10,000 tons	0.15	0.16	3.43
Greenhouse gas emissions	10,000 tons	1663.75	1662.82	1665.59

Social performance	Unit	2021	2022	2023
Number of employees	Persons	4348	4507	4526
Including: female employees	Persons	1123	1104	1065
Male employee	Persons	3225	3403	3461
Number of ethnic minority employees	Persons	725	748	668
Number of overseas employees	Persons	117	122	140
Proportion of female managers	%	7.1	7.8	7.5

* Relevant taxes and fees in the fourth quarter of 2022 and taxes and fees put into the national treasury for the final settlement of corporate income tax in 2022 decrease year-on-year. Relevant taxes in the fourth quarter of 2022 and the enterprise income tax for the final settlement for the year 2022 are recorded in 2023. Due to the year-on-year decrease in the Company's profit in 2022, the related taxes and fees in 2023 decreased year-on-year.

Social performance	Unit	2021	2022	2023
Social insurance coverage rate	%	100	100	100
Labor contract signing rate	%	100	100	100
Employee turnover rate (active)	%	1.84	2.24	1.04
Employee satisfaction	%	100	100	100
Labor issues and complaints handling rate	%	100	100	100
Total input in employee training	RMB 10,000	688	515.43	921.6
Employee training coverage rate	%	93	80	92
Employee training person-times	Persons	35820	30986	61990
Major safety incident	Times	0	0	0
Number of work-related fatalities among employees	Persons	0	0	0
Local procurement ratio	%	58.8	10.5	40.6
Total number of work-related injuries	Persons	0	0	0
Added occupational diseases	Persons	0	0	0
Employee health examination rate	%	100	100	100
Support and assistance investment	RMB 10,000	1842.62	2135.26	2481.55*
Governance performance	Unit	2021	2022	2023
Number of board meetings	Times	10	11	11
Number of directors	Persons	8	8	8
Number of female directors	Persons	1	1	1
Number of independent directors	Persons	3	3	3
Information disclosure documents published	Copies	122	155	194
External audit fees	RMB 10,000	56.17	129.91	216.65

* Fund actually allocated by the end of 2023

List of Internal ESG-related Policies within the Company

Policy name	Corresponding GRI disclosure items
Articles of Association	GRI 2: General Disclosures
Rules of Procedure for the Shareholders' Meeting	GRI 2: General Disclosures
Rules of Procedure for the Board of Directors	GRI 2: General Disclosures
Working Rules of the Strategy Committee of the Board of Directors	GRI 2: General Disclosures
Important Information Internal Reporting System	GRI 2: General Disclosures
Information Disclosure Management System	GRI 2: General Disclosures
Related Transaction Management System	GRI 2: General Disclosures
Management Measures for Fulfilling Social Responsibility Projects	GRI 203: Indirect Economic Impacts
External Donation Management System	GRI 203: Indirect Economic Impacts
Compliance Management System	GRI 205: Anti-corruption GRI 308: Supplier Environmental Assessment
Tax Administration Measures (Trial)	GRI 207: Tax
Measures for Energy Saving and Emission Reduction Monitoring and Statistical Management	GRI 302: Energy
Management System of Ecological Environment Protection	GRI 303: Water and Effluents GRI 304: Biodiversity GRI 305: Emissions GRI 306: Waste

Policy name	Corresponding GRI disclosure items
Environmental Factors Identification, Evaluation, and Management Methods	GRI 303: Water and Effluents GRI 304: Biodiversity GRI 305: Emissions GRI 306: Waste
Environmental Protection Plan and Statistical Management Measures	GRI 303: Water and Effluents GRI 304: Biodiversity GRI 305: Emissions GRI 306: Waste
Employee Recruitment Management Measures	GRI 401: Employment
Labor Contract Management Measures	GRI 401: Employment
Employee Attendance and Leave Management Measures	GRI 401: Employment
Employee Welfare Fees Management Measures	GRI 401: Employment
Management Measures for Occupational Health and Safety Performance Monitoring and Compliance Evaluation	GRI 403: Occupational Health and Safety
Safety Production Management Measures	GRI 403: Occupational Health and Safety
All-employee Safety Production Responsibility System	GRI 403: Occupational Health and Safety
Measures for the Management of Rewards and Punishments for Safety Production	GRI 403: Occupational Health and Safety
Employee Education and Training Management Measures	GRI 404: Training and Education
Safety education and training management system	GRI 404: Training and Education

Indicator Index List

Report contents	GRI Standards(2021)	Reference Index System on ESG Reports for Listed Companies Controlled by Centrally Administered State-owned Enterprises (SOEs)	
About This Report	GRI 2-2/GRI 2-3/GRI 2-14	Basic Information About the Company and Reports	
Message from the Chairman	/	/	
About HBEG	GRI 2-1/GRI 2-6	Basic Information About the Company and Reports	
Key Performance in 2023	GRI 201-1	/	
Practice the Sustainable Development Goals (SDGs) of the United Nations	/	/	
ESG Management	GRI 2-9/GRI 2-10/GRI 2-12/GRI 2-13/ GRI 2-14/GRI 2-17/GRI 2-18/GRI 2-22	ESG Management	
ESG Risks and Opportunities	GRI 201-2	ESG Risks and Opportunities	
Communication with Stakeholders	GRI 2-16/GRI 2-26/GRI 2-29	Communication with Stakeholders	
Materiality Assessment	GRI 2-14/GRI 2-29/GRI 3-1/GRI 3-2/GRI 3-3	Materiality Assessment	
Topic I: Reinforce Core Functions by Increasing Production and Guaranteeing Supply	/	S.4.4	
Topic II: Accelerate Transformation and Development Led by Green Concepts	GRI 2-6	E.5.1/E.5.4/S.4.4	
Topic III: Drive the Future Development of Energy Empowered by Intelligence	GRI 302-4	S.2.3/S.4.4	
Environmental Co-build a Green Homeland	Environmental Management	/	E.5.5/E.5.6
	Resource Management	GRI 302-1/GRI 302-3/GRI 302-4/GRI 303-1/ GRI 303-3/GRI 303-5/GRI 305-5	E.1.1/E.1.2/E.1.3/E.5.2/E.5.3
	Pollution Prevention and Control	GRI 303-2/GRI 303-4/GRI 306-1/GRI 306-2/ GRI 306-3/GRI 306-4/GRI 306-5	E.2.1/E.2.2/E.2.3
	Climate Change	GRI 201-2/GRI 305-1/GRI 305-2/GRI 305-5/ GRI 305-7	E.3.1/E.3.2/E.3.3/E.3.4/E.5.4
	Biodiversity	GRI 304-2 /GRI 304-3	E.4.1

Report contents	GRI Standards(2021)	Reference Index System on ESG Reports for Listed Companies Controlled by Centrally Administered State-owned Enterprises (SOEs)
Social Share a Beautiful Life	Employee Rights and Interests GRI 2-7/GRI 2-8/GRI 2-30 GRI 201-3 GRI 401-1/GRI 401-2/GRI 401-3 GRI 403-2/GRI 403-3/GRI 403-5/GRI 403-6/ GRI 403-8/GRI 403-9/GRI 403-10 GRI 404-1/GRI 404-2/GRI 405-1/GRI 406-1	S.1.1/S.1.2/S.1.3/S.1.4/S.1.5
	Product and Service Management GRI 403-1/GRI 403-2/GRI 403-4/GRI 403-5/ GRI 403-7/GRI 403-8 GRI 2-26/GRI 2-29	S.2.1/S.2.2
	Supply Chain Safety and Management GRI 308-1/GRI 308-2	E.5.4/S.3.1/S.3.2
	Social Contributions GRI 203-1/GRI 203-2	E.5.4/S.4.1/S.4.2/S.4.3/S.4.4
Governance Create Enterprise Value Together	Deepening Enterprise Reform /	/
	Governance Strategy and Organizational Structure GRI 2-9/GRI 2-10/GRI 2-11/GRI 2-12/ GRI 2-13/GRI 2-17/GRI 2-18/GRI 2-19	G.1.1/G.1.2/G.1.3/G.3.2
	Standardized Governance GRI 2-19/GRI 2-20/GRI 205-2/GRI 205-3	G.2.1/G.2.2/G.2.3
	Information Disclosure and Investor Relations GRI 2-29	G.3.1/G.3.3/G.4.1/G.4.2
	Compliant Management and Risk Management GRI 2-27	G.5.1/G.5.2
Prospects in 2024	/	/
Appendix	/	/

Directory of Main Companies

Serial Number	Full Name	Abbreviation
1	Hubei Qingjiang Hydropower Development Co., Ltd.	Qingjiang Company
2	Hubei Energy Group Ezhou Power Generation Company,Ltd.	Ezhou Power Generation Company Ezhou Power Plant
3	Hubei Province Natural Gas Development Co, Ltd.	Hubei Natural Gas Company
4	Hubei Province Natural Gas Development & Sales Co., Ltd.	Natural Gas Sales Company
5	Hubei Province Coal Investment & Developing Co.,Ltd.	Hubei Coal Investment Company
6	Hubei Energy Group Renewables Development Co., Ltd.	Hubei Renewables Company
7	Hubei Energy Group Loushui Hydropower Co., Ltd.	Loushui Hydropower Company
8	Hubei Energy Integrated Energy Investment Co., Ltd.	Hubei Integrated Energy Company
9	Xinjiang Chuxing Energy Development Co., Ltd.	Xinjiang Chuxing Company Chuxing Power Plant
10	Hubei Energy Group Power Sales Co., Ltd.	Hubei Power Sales Company
11	Hubei Energy Group Northwest Renewables Development Co.,Ltd.	Northwest Renewables Company
12	Hubei Energy Group Xiangyang Yicheng Power Generation Co., Ltd.	Xiangyang Yicheng Power Generation Company Yicheng Power Plant
13	Hubei Energy Group Hanjiang River Energy Development Co., Ltd.	Hanjiang River Energy Company
14	Hubei Energy Group Luotian Pingtanyuan Pumped Storage Co., Ltd.	Pingtanyuan Pumped Storage Company
15	Three Gorges Group (Yingkou) Energy Investment Co., Ltd.	Yingkou Energy Investment Company
16	Hubei Energy Group Nanzhang Zhangjiaping Pumped Storage Co., Ltd.	Zhangjiaping Company
17	Hubei Energy Group Jiangling Power Generation Co.,Ltd.	Jiangling Power Generation Company Jiangling Power Plant
18	Hubei Energy International Investment (HK) Co., Ltd.	Hubei Energy Hong Kong Company
19	Hubei Energy Group Shuanghe Renewables Development Co., Ltd.	Shuanghe Renewables Company

Feedback

Is there any information in this report that you are concerned about but do not find in the report? If any, write it down what you are concerned about.

Which parts of the Report are you most interested in?

If you like, please leave your contact information.

Name: _____

Profession: _____

Telephone: _____

E-mail: _____



This Report is printed on environmentally friendly recycled papers.



Address: Energy Building, No. 73, Xudong Street, Wuhan City, Hubei Province

Postcode: 430063

Fax: 027-86606666

Telephone: 027-86606117

E-mail: yang_yijing@ctg.com.cn



Scan this QR code to follow
the HBEG WeChat account