



**HUADIAN POWER INTERNATIONAL CORPORATION LIMITED**

Stock Code: SH.600027, HK.1071



**2021**

**HUADIAN POWER INTERNATIONAL CORPORATION LIMITED**

Environmental, Social and Governance Report  
(Corporate Social Responsibility Report)

## About the Report

This Environmental, Social and Governance (“**ESG**”) Report or Corporate Social Responsibility Report (the “**Report**”) is the sixth annual standalone ESG report published by Huadian Power International Corporation Limited (the “**Company**” or “**Huadian Power International**”) and its subsidiaries (collectively refer to the “**Group**”), which aims to report the relevant information on the Group’s fulfillment of ESG responsibilities in 2021 and respond to the ESG issues that are of major concern to stakeholders. The Report is to be read in conjunction with the “Corporate Governance Report” section of *Huadian Power International Corporation Limited 2021 Annual Report* (“**2021 Annual Report**”), to provide a more comprehensive overview on the ESG performance of the Group.

## Reporting Scope

Unless otherwise stated, the organizational scope of the Report covers the Company and its subsidiaries. The reporting period covered in the Report is consistent with that stated in the 2021 Annual Report, which is from 1 January 2021 to 31 December 2021 (the “**Reporting Period**”). Where necessary, some of the contents goes beyond the aforesaid period so as to enhance the comparability of the Report.

## Reporting Guideline

The Report is prepared in accordance with the *Environmental, Social and Governance Reporting Guide* (the “**Guide**”) under Appendix 27 to the *Rules Governing the Listing of Securities of Stock Exchange of Hong Kong Limited* issued by the Stock Exchange of Hong Kong Limited (the “**SEHK**”), and the *Guidelines on Preparation of Corporate Social Responsibility Report* and “Chapter 8 Social Responsibility” in the *No. 1 Self-Regulatory Guidelines for Listed Companies of Shanghai Stock Exchange - Standardized Operation* issued by the Shanghai Stock Exchange. It also takes a reference to the *Electric Utilities & Power Generators Sustainability Accounting Standard* issued by the Sustainability Accounting Standards Board (SASB), the *Recommendations of the Task Force on Climate-related Financial Disclosures* issued by the Task Force on Climate-related Financial Disclosures (TCFD) and the *GRI Sustainability Reporting Standards* issued by the Global Reporting Initiative (GRI). The Report complies with the mandatory disclosure requirements and “comply or explain” provisions set out in the *Guide*, and is prepared based on the four reporting principles of “materiality”, “quantitative”, “balance” and “consistency”.

During the preparation of the Report, the Group applied the reporting principles as follows:

**Materiality:** identify material issues within the Reporting Period based on the results of stakeholder questionnaires, and then compile the Report around these material issues. Please refer to the content in “Materiality Assessment” in the Report for details.

**Quantitative:** disclose the standards, methodologies and applicable assumptions used for quantitative information where appropriate.

**Consistency:** where feasible and unless otherwise stated, the disclosure and statistical methods is consistent with previous reports to ensure meaningful comparisons.

## Information Description

The information contained in the Report is sourced from the Group’s formal documents and statistical reports. Unless otherwise specified, the currency mentioned is accounted by RMB. The board of directors of the Company (the “**Board**”), the Supervisory Committee and the directors, supervisors and senior management of the Company warrant that the Report does not contain any misrepresentations, misleading statements or material omissions, and are jointly and severally liable for the authenticity, accuracy and completeness of the information contained in the Report.

## Release Form

The Report is published in both Chinese and English. In case of any discrepancy, the Chinese version shall prevail. You are welcome to access the Chinese and English version of the Report in a PDF format through the Company’s website (www.hdpi.com.cn), website of the Shanghai Stock Exchange, and SEHK’s HKEx news website.

## Feedback

Your feedback is immensely important for the Group to continually enhance its environmental and social performance. If you have any questions or suggestions regarding the Report, please contact the Company via the following ways:

Address: No. 2 Xuanwumennei Street, Xicheng District, Beijing Postal code: 100031

Tel: 8610-8356 7888

Fax: 8610-8356 7963

Email: hdpi@hdpi.com.cn

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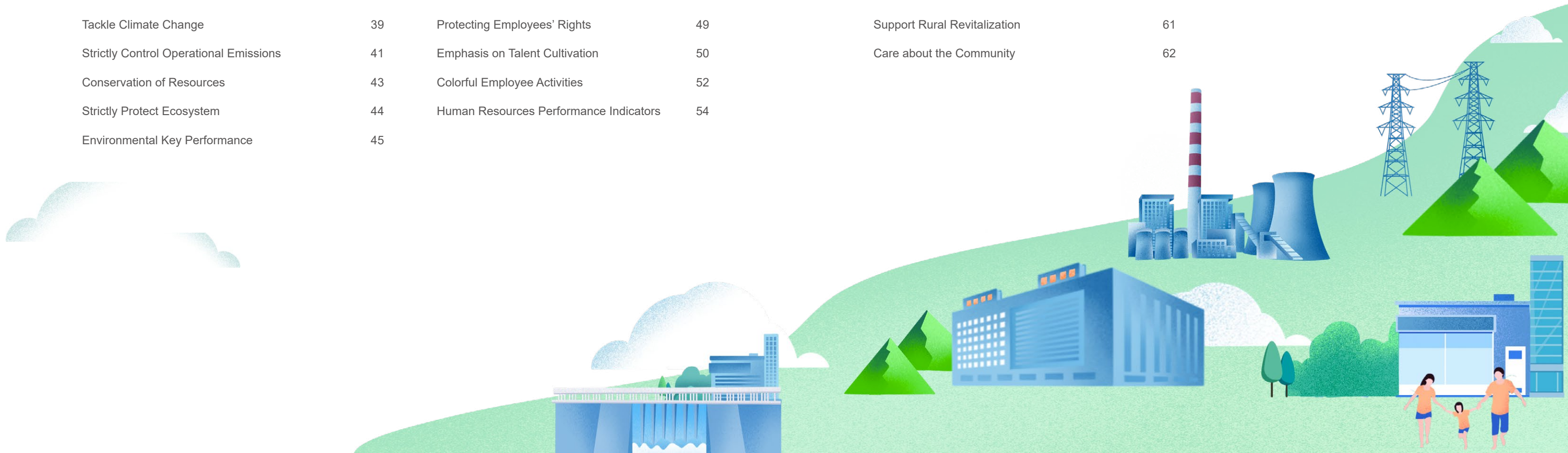
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## Message From the Management

2021 was a milestone year, marking the successful conclusion of the “13<sup>th</sup> Five-Year Plan” and the start of the “14<sup>th</sup> Five-Year Plan”. Throughout years of development, the Group has gradually grown from a regional single power generator under the planned economy system to a national listed power generation company with a consolidated installed capacity of 53,356 megawatt (“MW”) and with both domestic and overseas financing channels. In 2021, the Group comprehensively and deeply understood and mastered the “14<sup>th</sup> Five-Year Plan”, and concentrated its efforts to promote and implement the plan. Meanwhile, the Group was keenly aware of the uncertainties brought about by the changes of the pandemic and the external environment, and made solid efforts to work safety and ecological and environmental protection, making new contributions to the sustained and sound economic growth and social harmony and stability.

**Take responsibility to heart and prudent corporate management.** The Group has always adhered to the concept of law-based governance of enterprises, enhanced risk awareness, continued to promote the standardized operation, constantly improved the quality of legal audit and check, and strengthened the construction of institutional system to eliminate compliance risks. At the same time, the Group continues to improve its social responsibility management system, strengthen the subject of responsibility for social responsibility management, and actively prepare and carry out ESG strategic planning, policy formulation, target setting and other related work according to relevant requirements, the actual development of the enterprise and the expectations of its stakeholders.

**Well-run operations and promote high-quality development.** With the proposal and implementation of the “3060” carbon peaking and carbon neutrality goals, the energy and power industry has been undergoing profound changes. The new era of low carbon has accelerated the transformation of energy structure, giving rise to new industries, new formats, and new models. In this regard, the Group continues to strengthen policy research and the strategy of purchasing and inventory management, firmly establishes market awareness, proactively adapts to new requirements of power marketization reforms, strengthens the control of key performance indicators, optimizes strategies and improves marketing, continuously advances scientific research and stimulates technological innovation, and comprehensively promotes the quality and efficiency of work. In 2021, the Group successfully generated 232.8 million megawatt-hours (“MWh”) of electricity, representing a year-on-year increase of 7.52%; and also completed 154 million gigajoules (“GJ”) of heating supply, representing a year-on-year increase of 4.82%.

**Safety first and ensure safe operations.** Building an intrinsically safe enterprise is the basic guarantee for the Group to provide stable energy to the society, and also the fundamental requirement for the Group to adhere to the people-oriented principle and achieve comprehensive, coordinated and sustainable development. In 2021, the Group formulated and issued work plans for seasonal inspection, flood prevention and control, “Safety Production Month”, and power safety production and energy supply guarantee in winter, and urged all regions to do a solid job in the implementation of production safety responsibilities, the investigation and management of potential hazards, emergency management, and safe and reliable energy supply. In addition, the Group strengthened the management and control of key potential safety hazards, put forward management advice and continued to follow up and implement, which effectively promoted the management of potential safety hazards.

**Develop harmoniously and protect lucid waters and lush mountains.** The Group diligently pursues “good results in performance indicators and leading in environmental protection”. In 2021, the Group fully fulfilled its responsibility of environmental protection management of the investor, strengthened the supervision and inspection of environmental protection, and achieved pollutant discharge in accordance with laws and standards; actively followed up the supervision work of the central government on ecological and environmental protection, and there was no environmental protection incident affecting the corporate image; strengthened the research on carbon emission policies and regulations, tracked the trading of carbon emission rights, and supervised the management of carbon emissions in various regions; and also, strengthened the supervision of major energy consumption indicators and the implementation of energy consumption reduction measures, which continuously optimized the energy efficiency level of units, and reduced the coal consumption for power supply by 2.8 grams per kilowatt-hour (“g/kWh”) year-on-year.

**United team and develop and move forward.** A strong cohesive team provides important support for the Group’s sustainable development. The Group adheres to human resources philosophy of “recognizing talents through performance, selecting talent through competition, and rewarding those according to their achievements”, continuously improves human resources management rules and regulations, protects the rights and interests of employees, and continuously strengthens talent cultivation to promote the mutual sustainable development of employees and the enterprise. At the same time, the Group also strives to create a dynamic and comfortable working environment for its employees and works together for the future to build a first-class team and a first-class power generation enterprise.

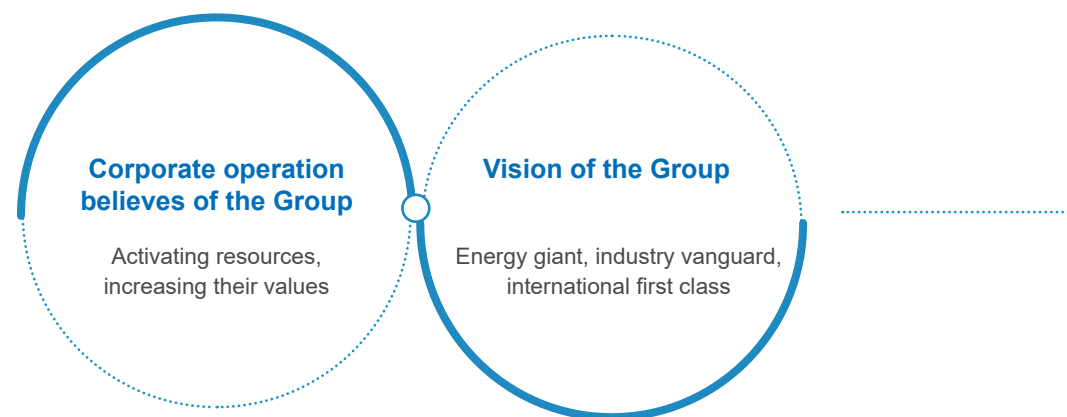
**Support prosperous community and implement the spirit of caring everywhere.** As a power generation enterprise, the Group not only shoulders the responsibility of stabilizing power generation and ensuring stable energy supply, but also needs to build a harmonious relationship with the community, promote the positive energy of the enterprise and pass on the “Huadian warmth”. The Group always keeps in mind its corporate social responsibility, actively understands the needs and interests of the community, practices the responsibility concept of “caring everywhere” and gives back to the society with gratitude through voluntary services, charity donations and targeted assistance to help rural revitalization.



## About Huadian Power International

### Company Profile

The Company is a power generation enterprise incorporated in Jinan, Shandong Province, the People's Republic of China (the "PRC"). After years of development, the Group has become one of the largest comprehensive energy companies in the PRC. The Group is primarily engaged in the construction, operation and management of power plants, including large-scale efficient coal-fired, gas-fired and hydro-electric generating units. Over the years, the Group has always adhered to the scientific outlook on development, highlighted value-based thinking idea, and taken company strategies as the guide to speed up structural adjustment, and made persistent efforts in seizing development opportunities, improving efficiency, reinforcing management and leading working teams. With the building up of its overall strength, the Group's power generating assets are located in 12 provinces, autonomous regions and municipalities across the PRC at the prime location, mainly in the electricity and heat load centres or regions with abundant coal resources.



### Business Overview

For a long time, in line with the direction of clean, low-carbon, safe and efficient, the Group has actively promoted comprehensive energy service projects, paid close attention to the development of emerging technologies, actively studied and explored emerging industries such as energy storage and geothermal energy, strived to promote technological application innovation and resource management innovation, improved resource integration and utilization efficiency, expanded space and dimensions of development, and enhanced development performance.

During the Reporting Period, the Group actively adjusted its energy structure to promote the development of new energy:

**Firstly, vigorously develop hydropower projects.** The Group actively promoted the development of cascade power stations in Shuiluo River, Sichuan Province that two hydropower units with 112 MW at Bowa Hydropower Station were put into operation; and seized the opportunity released by the national medium and long-term development plan for pumped storage, actively expanded the pumped storage power station resources, laying a foundation for accelerating the development of hydropower in the next step.

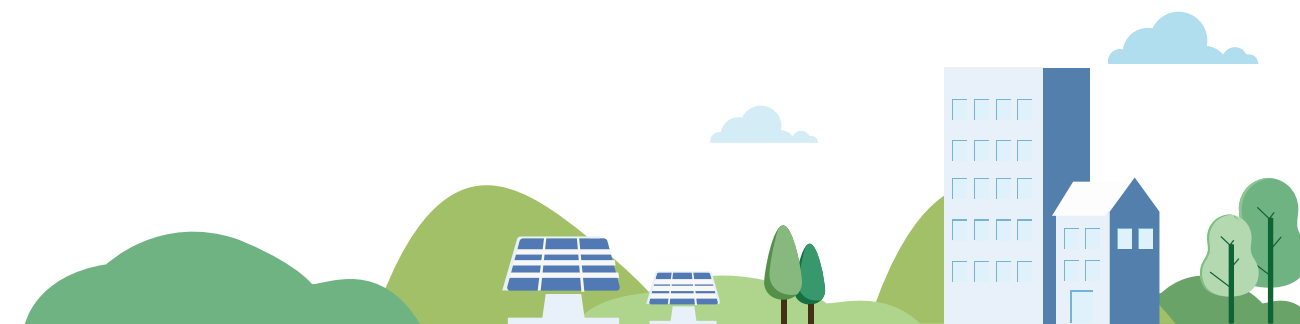
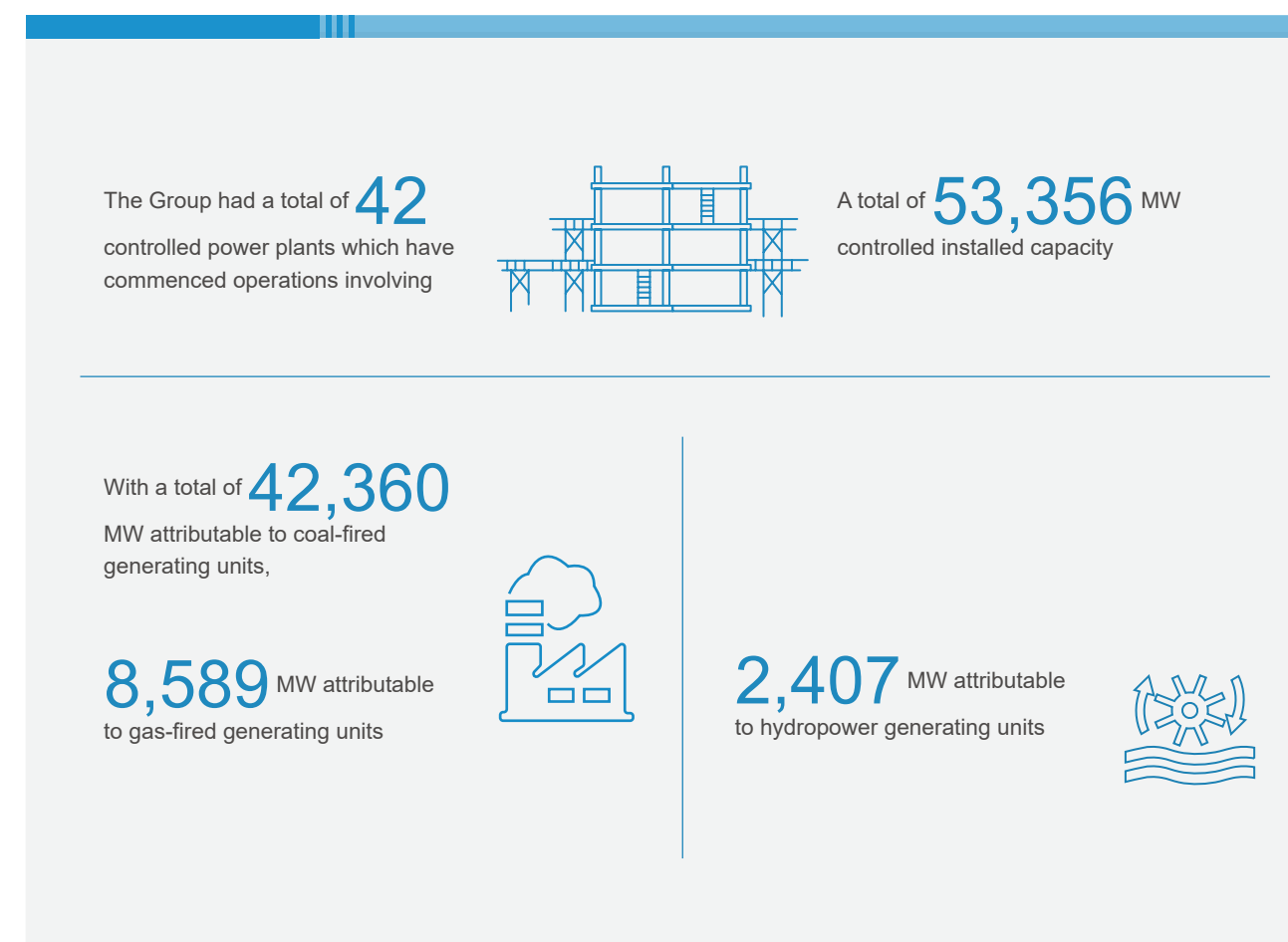
**Secondly, orderly develop gas-fired power projects.** In areas with guaranteed natural gas supply and favorable supporting policies, and on the basis of ensuring income from investment, the Group steadily and orderly promoted the development of gas-fired power projects that two 9F gas turbines in Yingde, Qingyuan, Guangdong Province and two 9E gas turbines in Fancheng, Hubei Province were put into operation.

**Thirdly, strengthen the development of emerging energy projects.** The Group implemented the new development philosophy, strengthened policy research on the renewable energy industry, and stepped up efforts to develop advanced energy storage, geothermal energy, and incremental distribution networks.

In addition, in order to further accelerate the strategic transformation, the Group injected capital into Huadian Fuxin Energy Development Company Limited<sup>1</sup> ("Fuxin Development"), disposed of all its renewable energy assets such as wind power and solar power, realizing a large proportion of equity participation in the integrated platform of China Huadian for renewable energy development, and the sharing of renewable energy development dividends through the form of investment and equity participation, thus contributing to the realization of the "3060" carbon peaking and carbon neutrality goals.

As of the end of the Reporting Period, the Group had a total of 42 controlled power plants which have commenced operations involving a total of 53,356 MW controlled installed capacity, with a total of 42,360 MW attributable to coal-fired generating units, 8,589 MW attributable to gas-fired generating units and 2,407 MW attributable to hydropower generating units.

1. China Huadian Corporation Limited ("China Huadian") is the controlling shareholder of the Company. Fuxin Development and its subsidiaries are subsidiaries of China Huadian.



## 27-Year Development

**On 4 December, 2006**, the first batch of domestic ultra-supercritical units, each with a capacity of 1,000 MW was put into production in Huadian Zouxian Power Limited Company, and became the national "863" science and technology key project, the imported and domesticated support construction project, and the 2005 national annual key construction project. These units set a new record among the national same-type units with regards to the security status, construction speed, engineering quality, debug time, commissioning index, and energy conservation and environmental protection. The total controlled installed capacity of the Group amounted to 10,000 MW.

**On 3 February, 2005**, the Group's A share, the first stock issued to the public for price inquiry in China, was officially listed on the Shanghai Stock Exchange.

**On 28 December, 2004**, Huadian Qingdao Heating Company Limited, the first heat company of the Group, was officially registered and found.

**On 18 November, 2003**, the construction of two 300 MW power generating units in Chizhou City, Anhui Province, with the relative controlling shares officially began to be constructed, marking the Company's entry into Anhui's market.

**On 28 August, 2003**, Huadian Xinxiang Power Generation Company Limited was registered and founded. Two 660 MW supercritical coal-fired generating units were constructed in the first phase. The development area of the Company was expanded to Henan Province.

**On 1 November, 2003**, Shandong International Power Development Co., Ltd. was renamed as Huadian Power International Corporation Limited.

**On 1 April, 2003**, China Huadian became the controlling shareholder of the Company.

**On 9 May, 2003**, the Company acquired 80% equity interest in Sichuan Guang'an Power Limited Liability Company, officially entering into Sichuan market.

**On November 21, 2002**, the Company bought 20% of the shares of Ningxia Zhongning Power Generation Company, which marked its official entry into the market of the Ningxia Hui Autonomous Region and its first step to develop into a nationwide power generation company from a regional one.

**On 30 June, 1999**, the Company issued H-stock and got listed on the SEHK.

**On 30 June, 1994**, Shandong International Power Development Co., Ltd., the precursor of the Group, was registered and officially founded.

**In 2007**, the "Tens of Millions of Kilowatt" project was carried out. The installed capacity of 6,095 MW during the year was realized and the Group's total installed capacity amounted to 20,000 MW.

**In 2008**, the Company acquired 82% of the shares of Hebei Shijiazhuang Thermal Power Limited Company formerly possessed by China Huadian, 100% of the stock rights of Hebei Huadian Hybrid Storage Hydropower Limited Company, 64% of the stock rights of Hangzhou Huadian Banshan Power Limited Company, and 49% of the stock rights of Sichuan Huadian Zagunao Hydropower Development Limited Company, marking the Company's expansion to Hebei and Zhejiang and new breakthroughs in hydropower project and gas turbine project.

**On May 21, 2010**, the Company acquired the stock rights of Guangdong Shaoguan Pingshi Power Company (Factory B), marking its expansion to Guangdong.

**In 2011**, unit 3 and 4 of Sichuan Huadian Luding Hydropower Company Limited, the first independently constructed hydropower project, smoothly went through its first 72-hour operation. The installed capacity of 1,949.5 MW was put into production, indicating that the Company's controlled installed capacity amounted to 30,000 MW.

**In September, 2012**, the first generating unit with capacity of 415 MW for Phase 2 of the gas turbine project in Hangzhou Huadian Banshan Power Company was handed over for production. It was the Group's first independently constructed gas turbine project.

**On April 16, 2013**, the Group held the opening ceremony of the technical service center, marking its expansion into the field of power technical service and consulting.

**On 10 September, 2013**, the distributed energy project of Shenzhen Huadian Pingshan was approved, the first distributed energy project approved in Shenzhen, marking the Company's new breakthrough from "zero" in Shenzhen's energy market.

**In September 2014 and November 2014**, two gas-steam combined cycle power generator units of Tianjin Huadian Fuyuan Thermal Power Company Limited, each with a capacity of 200 MW, were officially put into commercial operation, the Group's first power project operated in Tianjin.

**In July, 2015**, the Company successfully acquired 82.56% of the stock rights of Huadian Hubei Power Limited Company formerly possessed by China Huadian, Leading the Company's controlled installed capacity to increase by 5,120 MW to 400,000 MW and marking the Company's expansion to Hubei.

**In 2021**, the Group's operating revenue reached RMB 104.347 billion, exceeding 100 billion for the first time.

The Group added 1,360 MW installed capacity which has been put into operation, 2,520 MW installed capacity which has been merged and acquired, bringing the controlled installed capacity to a total of 53,356 MW. The newly installed units which have been put into operation includes: two 9F gas turbines in Yingde, Guangdong Province, two 9E gas turbines in Fancheng, Hubei Province, and two hydropower units in Bowa Hydropower Station on Shuiluo River, Sichuan Province.

**In 2020**, as of the end of 2020, the controlled installed capacity of the Group reached 57,699.3 MW, of which 14,539.3 MW was generated by the clean energy, and the proportion rose from 23.57% at the end of 2019 to 25.20%.

**In December**, the Group's Hebei Huadian Shijiazhuang Thermal Power Company Limited gas turbine #1 unit was put into operation. The unit uses clean energy and natural gas as fuel, and its installed capacity of the unit is 2×453.6 MW, with a maximum heating capacity of 627 MW. It undertakes the industrial steam load and civil heating takes in the central urban area of Shijiazhuang City.

**In 2019**, the total installed capacity of the Group exceeded 50,000 MW, and the proportion of controlled installed capacity of clean energy increased to 24%.

**In December, 2018**, the #3 power generating units of Shenzhen Company and the #1 and #2 power generating units in Guangdong Province that the Group invested was put into commercial operation in succession, making the Group's breakthrough of gas-fired power generation projects in Guangdong Province.

**In 2017**, the controlled installed capacity of the Group generated by clean energy exceeded 10,000 MW, accounting for a record high of 20.53%.

**On 24 November, 2016**, Huadian Guangdong Energy Marketing Limited Company, the first power marketing company solely invested by the Group, was officially registered and founded, marking the Group's business expansion to the power marketing side.

The Group's Chongqing Fengjie Power Plant put two supercritical condensing coal-fired generating units with a capacity of 600 MW into production for Phase 1, the Group's first supercritical "W-type" flame furnace project in progress that can meet ultralow emission standards, marking the Group's breakthrough from the "zero" in Chongqing.





Good corporate governance is vital to the growth and sustainable development of the Group's business. Throughout the years of development, while achieving overall business growth, the Group has always pursued the core values of "conscientiousness, integrity, innovation and harmony", kept in mind its social responsibilities, continued to strengthen the construction of social responsibility management system, and built consensus and promoted sustainable development through multi-channel and regular communication with stakeholders.

01



# Take Responsibility to Heart, Prudent Corporate Management

-  Corporate Governance
-  Risk Management and Control
-  Social Responsibility Management
-  Stakeholder Communication
-  Materiality Assessment



## Corporate Governance

The Company has always attached great importance to the corporate governance and constantly promoted management innovation. By acting in strict compliance with the *Company Law of the PRC*, the *Securities Law of the PRC*, the *Rules Governing the Listing of Stocks on Shanghai Stock Exchange*, the *Rules Governing the Listing of Securities of SEHK* and relevant provisions promulgated by domestic and overseas securities regulatory institutions, the Company continues to improve its governance structure and enhance its governance level, and strives to achieve a coordinated development between the growth of the Company and the interests of shareholders.

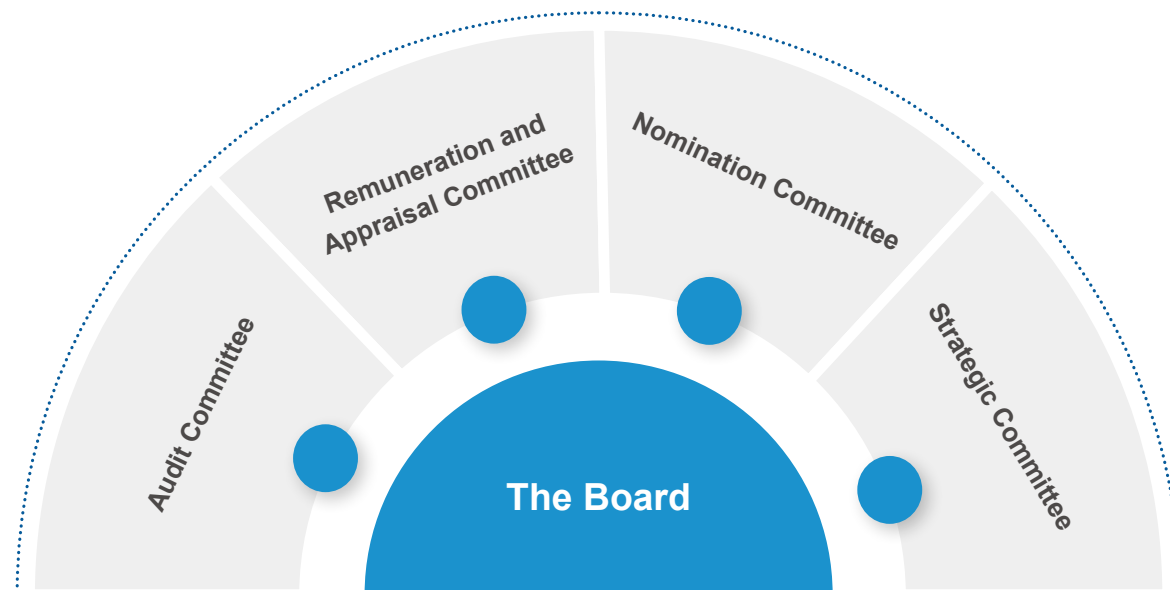


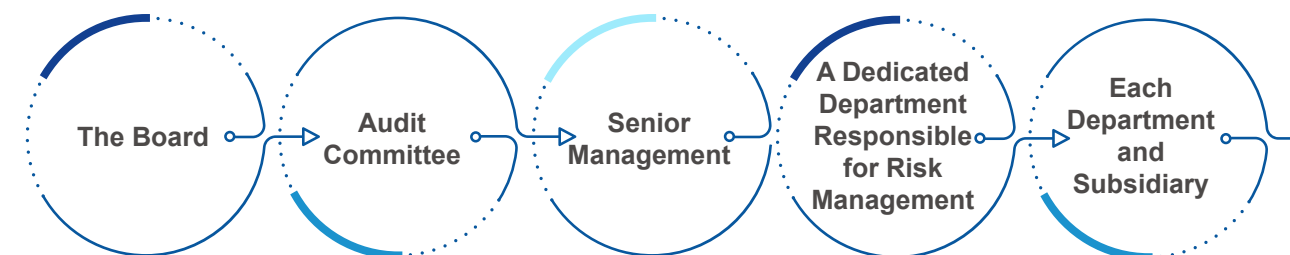
Chart of the Board's Working Bodies

After years of exploration and practice, the Company has established a relatively mature corporate governance structure and corresponding organizational regulations, which specifies the responsibility and rights of the general meetings of shareholders, the Board and the Supervisory Committee. To ensure good corporate governance, the Board has established four specified working bodies, including the Audit Committee, the Remuneration and Appraisal Committee, the Nomination Committee and the Strategic Committee, and formulated their terms of reference in accordance with relevant regulations. During the Reporting Period, the general meetings of shareholders, the Board, the Supervisory Committee and other decision-making and supervisory bodies of the Company operated in a regulated and effective manner, and all the specialized working bodies performed their respective duties well.

## Risk Management and Control

Effective risk management and internal control is an important support and basic guarantee for the sustainable development of an enterprise. In view of this, the Company has formulated a relatively sound risk management and internal control system based on the Group's business scope and operational status. The Board is responsible for the ongoing supervision of the Company's risk management and internal control system and for reviewing and confirming the effectiveness of the system for Group's risk management and internal control. The Company also has a dedicated department to regularly review the adequacy and effectiveness of the Group's risk management and internal control system, and the Audit Committee reviews the department's work reports and recommendations on the effectiveness of the primary control system. In the process of risk assessment, as the first responsible layer of risk identification, the business departments and main subsidiaries that face risks need to identify the major risks to achieve the goal. After considering the countermeasures against major risks, they will make a secondary assessment of the remaining risks and report to the Company's management and decision-making level.

### Structure of Risk Management and Control



The Group has incorporated ESG risks into its risk management and internal control systems. During the Reporting Period, the Group carried out risk identification and assessment for 2021, formed a risk management list, and identified the top ten operational risks, including the social responsibility risk. In order to effectively control the social responsibility risk, the Group continues to improve the system and operating mechanism for fulfilling social responsibility, including establishing a sustainable corporate development strategy, implementing the fulfillment of social responsibility into all aspects of production and operation, and clarifying the responsible management department for social responsibility, and paying great attention to the monitoring and implementation of relevant work.

## Social Responsibility Management

While practicing corporate social responsibility, the Group has gradually developed a set of promotion mechanisms for social responsibility management with clear responsibilities and linkage at all levels, forming a hierarchical management system with the Board, the Strategic Committee, senior management, leading departments, followed by departments and subsidiaries as the structure, so as to give full play to the management functions of corporate social responsibility at all levels and further improve the systematization and specialization level of social responsibility management.

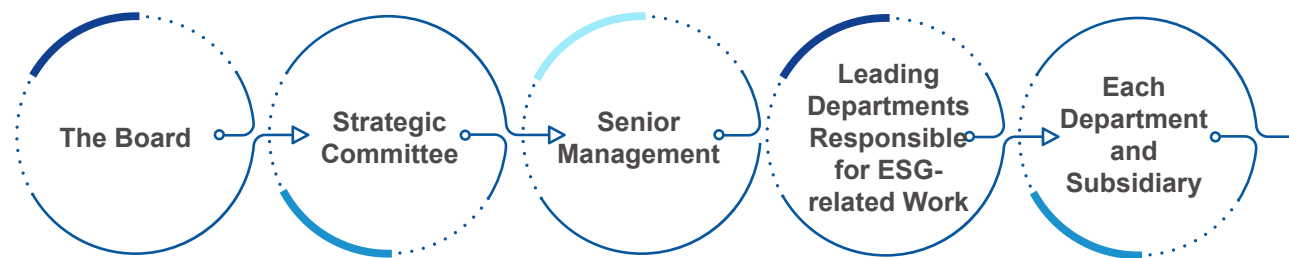
In terms of the social responsibility management system, the Board supervises and manages the Group's ESG-related issues through its Strategic Committee, assumes the overall responsibility for the Group's ESG strategy and reporting, and has the overall responsibility for evaluating, prioritizing and managing material ESG-related issues (including risks to the Group's business). The Strategy Committee of the Company is responsible for the Group's ESG strategic planning, policy formulation and target setting, and reports and reviews the progress to the Board in a timely manner. The senior management of the Company is responsible for following up the implementation progress of the Group's ESG strategic plan, policies and targets, reviewing the material ESG issues of the Group at the same time, and reporting to the Strategy Committee in a timely manner to actively promote the deep integration of ESG and corporate operation.

In the future, the Group will continue to unswervingly fulfill its corporate social responsibility and simultaneously, continue to review and improve the promotion mechanism of social responsibility management based on its own operation status as well as the relevant requirements of the SEHK and the Shanghai Stock Exchange for ESG management, strengthen the management responsibilities of the Board and the Strategy Committee of the Company on ESG-related matters, and further promote the implementation of the concept of responsibility.





## Structure of Social Responsibility Management



## Focus

### Huadian Power International won the “Best ESG Award 2021” at the “China Financial Market Awards”

On 24 December 2021, the winners list of the “China Financial Market Awards 2021”<sup>2</sup>, organized by the financial magazine China Financial Market were announced. Huadian Power International won the “Best ESG Award 2021” for its outstanding performance in ESG. The award reflects the capital market’s high recognition of Huadian Power International’s performance in ESG strategy, corporate governance and information disclosure.

2. The “China Financial Market Awards” is jointly organized by the Listed Companies Council of Hong Kong Chinese Enterprises Association, the Chinese Securities Association of Hong Kong, the Chinese Asset Management Association of Hong Kong, the Hong Kong Institute of Financial Analysts and Professional Commentators and other authoritative organizations.



## Stakeholder Communication

The Group always seeks to establish mutual, transparent and regular communication and contact with stakeholders through diversified channels. The Group identifies the main stakeholder categories by taking into account both the “degree of influence by the enterprise” and the “degree of influence on the enterprise”, and understands their expectations and demands for the Group’s sustainable development through questionnaires, communication meetings and other forms so that the Group can review and revise its work plan as appropriate and respond with practical actions. By virtue of the benign communication mechanism of “identification - communication - evaluation - response - report”, the Group’s responsible communication during the Reporting Period was as follows:

Stakeholders	Expectations	Communication Methods	Communication Frequency	Actions of the Group
 Government and regulatory authorities	<ul style="list-style-type: none"> <li>Discipline</li> <li>Compliant operations</li> <li>Compliant tax payments</li> <li>Safe energy supply</li> <li>Optimizing structure</li> <li>Energy saving and emission reduction</li> <li>Ecological protection</li> </ul>	<ul style="list-style-type: none"> <li>Stipulate policies</li> <li>Work reporting</li> <li>Information reports</li> <li>High-level meetings</li> </ul>	<ul style="list-style-type: none"> <li>Regular</li> <li>Irregular</li> </ul>	<ul style="list-style-type: none"> <li>Strictly comply with national laws and regulations;</li> <li>Timely advocacy and implementation of laws and regulations;</li> <li>Proactively cooperate with the regulatory department;</li> <li>Guarantee electricity and heating supply;</li> <li>Proactively respond to national strategy, improve self-discipline of ecological and environmental protection</li> </ul>
 Shareholders	<ul style="list-style-type: none"> <li>Sales revenue</li> <li>Company profit</li> <li>Corporate governance</li> <li>Regular communication</li> </ul>	<ul style="list-style-type: none"> <li>Shareholders' meetings</li> <li>Company announcements</li> <li>Regular reports</li> <li>Roadshows</li> </ul>	<ul style="list-style-type: none"> <li>Annual</li> <li>Seasonal</li> <li>Irregular</li> </ul>	<ul style="list-style-type: none"> <li>Improve economic performance;</li> <li>Improve quality and efficiency, elevate effectiveness;</li> <li>Continuously improve risk management and internal control systems;</li> <li>Strengthen information disclosure and improve information transparency;</li> <li>Communicate on a regular basis and hold communication events</li> </ul>
 Employees	<ul style="list-style-type: none"> <li>Employees' rights and benefits</li> <li>Occupational Health</li> <li>Educational Training</li> <li>Colorful life</li> </ul>	<ul style="list-style-type: none"> <li>Meetings</li> <li>Communication with employees</li> <li>Labor Contract</li> <li>Employee Activities</li> </ul>	<ul style="list-style-type: none"> <li>Regular</li> <li>Irregular</li> </ul>	<ul style="list-style-type: none"> <li>Improve human resource management system and protect employees' rights and benefits;</li> <li>Ensure intrinsic safety work, implement employee occupational health and safety work;</li> <li>Improve talent training mechanism and the knowledge and technical level of employees</li> </ul>
 Customers	<ul style="list-style-type: none"> <li>Stable supply</li> <li>Customer service</li> <li>Quality and safety management</li> </ul>	<ul style="list-style-type: none"> <li>Contracts and agreements</li> <li>Customer services</li> <li>Company Website</li> <li>Communication meetings</li> </ul>	<ul style="list-style-type: none"> <li>Annual</li> <li>Seasonal</li> <li>Irregular</li> </ul>	<ul style="list-style-type: none"> <li>Improve quality and efficiency and ensure the stable and safe supply of electricity and heating;</li> <li>Provide sound customer service on the sale of electricity and heating;</li> <li>Improve operation management system;</li> <li>Promote scientific and research innovation to increase production efficiency</li> </ul>
 Suppliers and other partners	<ul style="list-style-type: none"> <li>Fair and just</li> <li>Win-win cooperation</li> </ul>	<ul style="list-style-type: none"> <li>Contracts and agreements</li> <li>Products services</li> </ul>	<ul style="list-style-type: none"> <li>Annual</li> <li>Irregular</li> </ul>	<ul style="list-style-type: none"> <li>Ensure fair and transparent bidding and procurement processes</li> <li>Adhere to the fulfillment of contracts and agreements</li> </ul>
 Community	<ul style="list-style-type: none"> <li>Stable energy supply</li> <li>Community development</li> <li>Rural revitalization</li> <li>Environmental protection</li> </ul>	<ul style="list-style-type: none"> <li>Visit communities</li> <li>Assistance work</li> <li>Charitable donations</li> <li>Environmental protection activities</li> <li>Public open day activities</li> </ul>	<ul style="list-style-type: none"> <li>Regular</li> <li>Irregular</li> </ul>	<ul style="list-style-type: none"> <li>Ensure the stable supply of energy;</li> <li>Engage in harmonious community development;</li> <li>Proactively organize volunteering activities;</li> <li>Implement environmental protection measures;</li> <li>Organize public open day activities, and strengthen community awareness on the operation of power plants</li> </ul>



## Focus

**Huadian Power International has won the  
“Outstanding Enterprise in Responsible Communication and Innovation”  
Award among enterprises in China’s power industry for two consecutive years**

In recent years, Huadian Power International attaches great importance to the management of corporate social responsibility and investor relations, actively responds to the call of the SEHK and the Shanghai Stock Exchange, continues to innovate communication methods, and focuses on a series of work such as information disclosure, shareholder communication, institutional investor communication, and investor protection, and has achieved remarkable results in the practice of improving corporate transparency. During the Reporting Period, adhering to the concept of high-quality development, the Company has achieved functional transformation, and its market value has been greatly improved. The work has not only been highly recognized by experts and peers in the power industry, but also widely recognized by investors in both domestic and overseas markets.



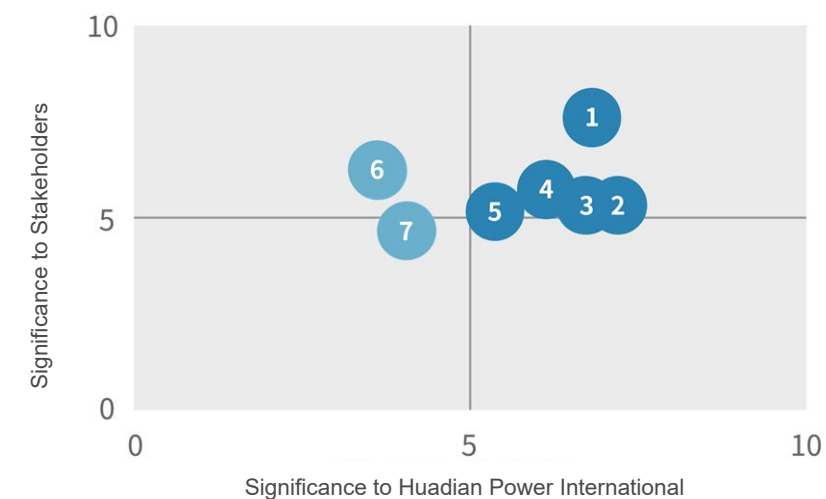
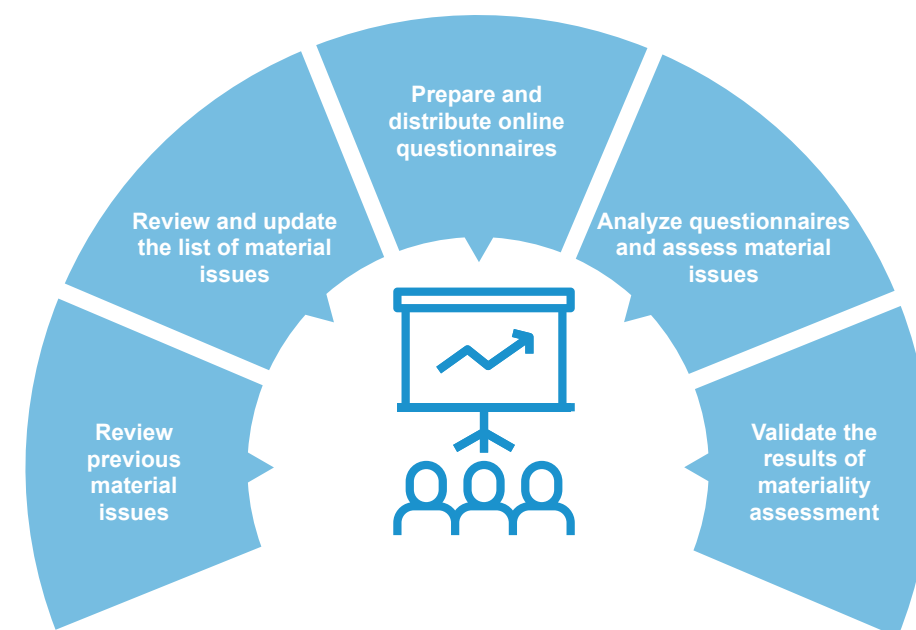
## Materiality Assessment

Different stakeholders may have different priorities for the Group’s sustainable development. During the Reporting Period, in order to deeply understand the important views of stakeholders on the Group’s ESG issues, respond to the material issues of their concern and demonstrate the corresponding performance in a targeted manner, the Group conducted the materiality assessment of ESG issues according to the principle of “materiality”.

In preparation for the materiality assessment, the Group reviewed the material issues in previous years and further established a list of potential material issues within the Reporting Period based on the disclosure requirements set out in the *Guide* under Appendix 27 to the *Rules Governing the Listing of Securities of Hong Kong Limited* issued by the SEHK and simultaneously, with reference to the *Electric Utilities & Power Generation Sustainability Accounting Standards* issued by the Sustainability Accounting Standards Board (SASB), the *Recommendations of the Task Force on Climate-related Financial Disclosures* issued by the Task Force on Climate-related Financial Disclosures (TCFD), main concerns of public utilities in the MSCI’s ESG ratings, the *GRI Sustainability Reporting Standards* issued by the Global Reporting Initiative (GRI), the *Guidelines on Preparation of Corporate Social Responsibility Report* issued by the Shanghai Stock Exchange as well as those issues of concern to peer enterprises.

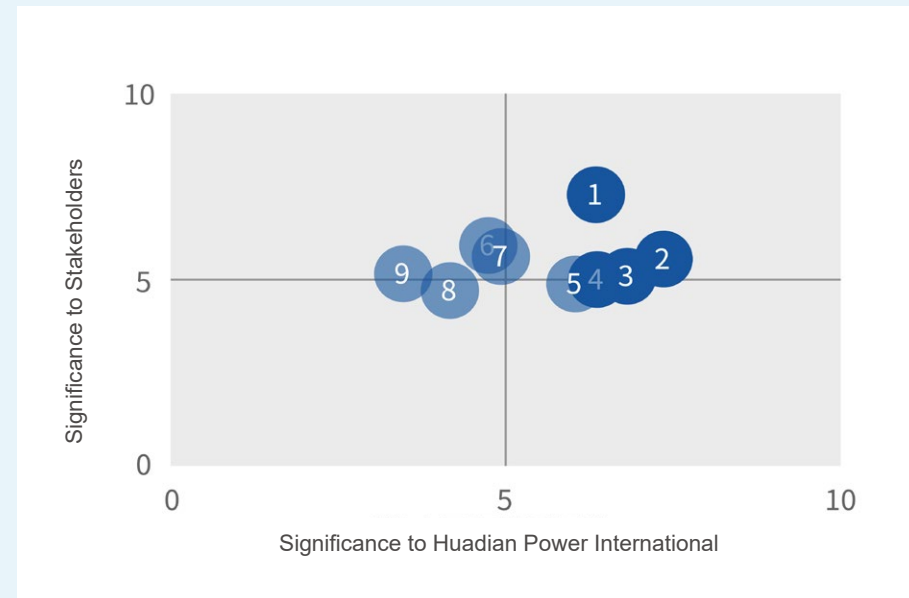
On this basis, the Group collected the expectations of stakeholders from two perspectives of “significance to Huadian Power International” and “significance to stakeholders” through online questionnaire survey. During the Reporting Period, the directors, supervisors and senior management of the Company actively participated in the materiality assessment, and evaluated and prioritized potential material issues from the perspective of significance to Huadian Power International. By combining the views with those of stakeholders such as the government and regulatory authorities, shareholders, employees, customers, suppliers and other partners, 12 issues (including 5 environmental issues, 4 social issues and 3 economic issues) were finally determined as material issues. These issues have been approved by the Board together with the Report and will be the focus of the Group’s ESG work in the future.

### Process of Materiality Assessment



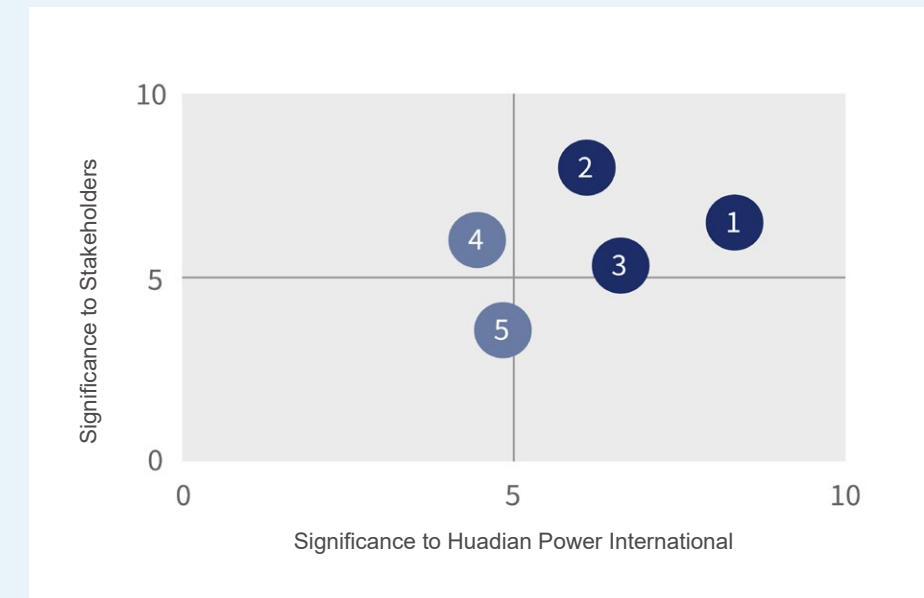
No.	Environmental Issues		
1	Ecological Protection	5	Emissions Management
2	Energy Use and Management	6	Tackling Climate Change
3	Clean Energy Development	7	Water Use and Management
4	Greenhouse Gas Emissions and Management		





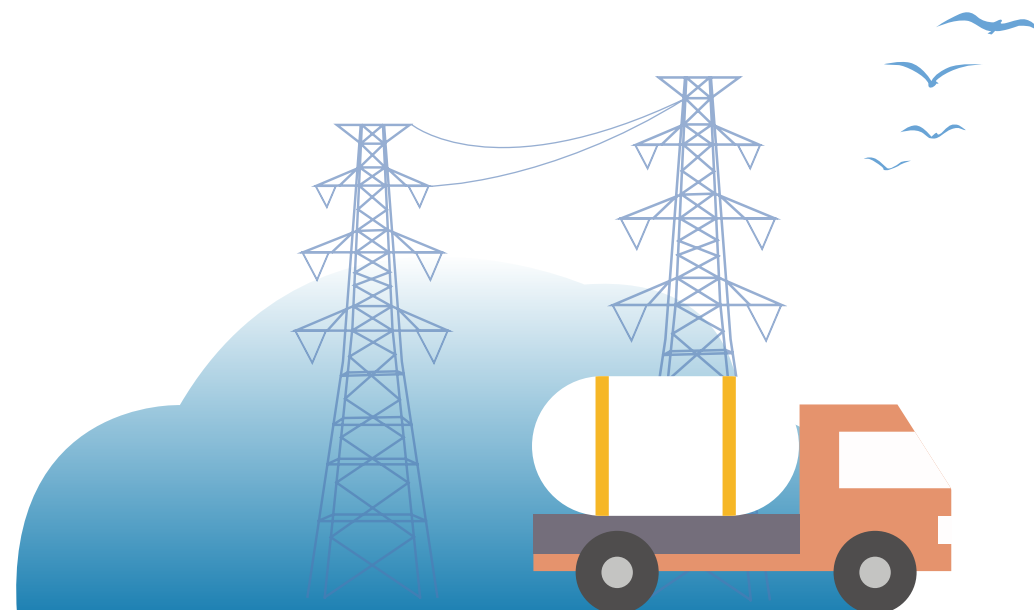
## No. Social Issues

- |                                     |  |
|-------------------------------------|--|
| 1 Occupational Health and Safety    | 6 Supplier Management                        |
| 2 Ensuring Service Quality          | 7 Employee diversity and equal opportunities |
| 3 Employee Rights and Benefits      | 8 Labor Standards                            |
| 4 Employee Development and Training | 9 Community Investment and Engagement        |
| 5 Anti-corruption                   |  |



## No. Economic Issues

- |                          |                                    |
|--------------------------|------------------------------------|
| 1 Development Strategies | 4 Technological Innovation         |
| 2 Business Performance   | 5 Corporate Information Disclosure |
| 3 Compliance Management  |                                    |








The Group adheres to standardize operations and legal corporate governance as a foundation, makes effort to achieve a shift from scale expansion to efficiency improvement, accelerating the high-quality transformation and development. At the same time, the Group actively responds to market changes, continues to run operations well, deepens reform and innovation, optimizes production indicators, works with suppliers to do a good job in supply chain management, and strives to build a comprehensive energy enterprise with strong competitiveness.

## 02

### Well-run Operations, Promote High-Quality Development

-  Standardize Company Operations
-  Actively Explore the Market
-  Promote Lean Management
-  Continuous Innovation
-  Sustainable Supply Chain



## Standardize Company Operations

As an important state-owned enterprise to implement the strategy of comprehensively governing the country according to law, the Group strives to play an exemplary role, strictly abides by and implements national laws and regulations, and makes efforts to become the practitioner, promoter and leader of socialist economy under the rule of law. To this end, the Group keeps abreast of relevant policies and requirements on governing enterprises according to law and simultaneously, continues to strengthen construction of its legal compliance system, strengthens the effectiveness and legitimacy of the system, and eliminates the risks related to system compliance.

The Group strictly abides by applicable laws and regulations on preventing bribery, extortion, fraud, and money laundering, including but not limited to the *Criminal Law of the PRC*, the *Regulations of the PRC for Punishment of Corruption* and the relevant regulations of the State-owned Assets Supervision and Administration Commission of the State Council. Meanwhile, in order to further endeavor to the construction of conduct of the communist party of China ( "CPC" ), uphold integrity and combat corruption, the Group has formulated and constantly improved a number of internal policies, such as the *Measures for the Implementation of the Responsibility System for Building the Conduct of the CPC and Upholding Integrity*, the *Working Rules of the Commission for Discipline Inspection Commission (Trial)*, and the *List of Responsibilities for Building the Conduct of the CPC, Upholding Integrity and Anti-Corruption in Functional Departments and Offices*.

The Group has established a sound risk management and internal control system. The functional departments and affiliated entities of the Company continuously conduct risk assessment and monitoring for their legal risks, anti-corruption matters, and other risks. The Group also has a smooth feedback channel, constantly strengthens the investigation and reporting of cases reported through letters and visits, and promptly investigates and deals with violations of discipline. Meanwhile, the Group has established secure reporting channels, and shall ensure the confidentiality of information after receiving reports from relevant personnel. During the Reporting Period, the Group was not involved in any corruption-related legal cases.

During the Reporting Period,

the Company organized all cadres (including directors) to

conduct **43** sessions of discipline education on CPC rules and regulations

and **14** sessions of honest conversation by organizing the Committee of the CPC and the central group of the Commission for Discipline Inspection to study, holding thematic CPC Day, watching educational warning videos, setting up "discipline lecture", etc.

A total of **1,693** person participated in the above activities.

### Focus

In February 2021, Huadian Power International held the 2021 Work Conference on Building the Conduct of the CPC, Upholding Integrity and Anti-Corruption. The conference comprehensively summarized the work of building the conduct of the CPC, upholding integrity and anti-Corruption of Huadian Power International in 2020, and made comprehensive arrangements for the in-depth implementation of the spirit of the 5<sup>th</sup> Plenary Session of the 19<sup>th</sup> Central Committee of the CPC and the 5<sup>th</sup> Plenary Session of the 19<sup>th</sup> Central Commission for Discipline Inspection of the CPC, deepening efforts to comprehensively and strictly govern the CPC, and strengthening the construction of the conduct of the CPC, upholding integrity and combating corruption. At the conference, the Secretary of the CPC Committee and Chairman of Huadian Power International signed the *Letter of Responsibility for the Construction of the Conduct of the CPC and Upholding Integrity 2021* with each CPC branch and held a collective honest conversation with all cadres.



### Focus

In May 2021, Huadian Power International held a warning education seminar on "cherishing a happy life and staying away from duty crimes". At the seminar, a large number of cases of duty crimes proved the heavy cost of duty crimes, and deeply warned the cadres to cherish a happy life and strictly abide by the rules of discipline. The Secretary of the Discipline Inspection Committee of Huadian Power International also put forward three requirements in his concluding remarks: the first is to strengthen ideological understanding and focus on key tasks, the second is to implement the "two responsibilities" and comprehensively govern the CPC with strict discipline, and the third is to earnestly carry out the activity of warning education month and conscientiously and thoroughly carry out the work of three special measures of governance.



### Focus

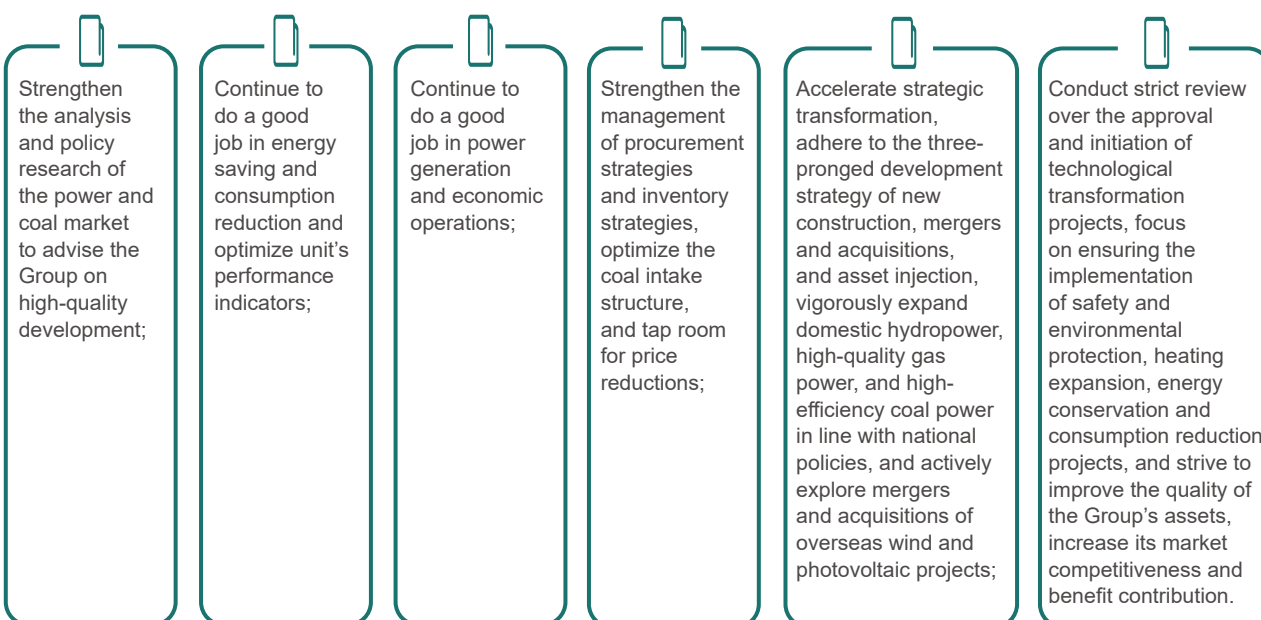
In August 2021, the member of the CPC Committee and the Secretary of the Discipline Inspection Commission of the Zhejiang Branch of Huadian Power International gave a special CPC lecture on *Keeping in Mind the Original Aspiration and Mission, Daring to and Being Good at Supervision, and Striving to Be A Discipline Inspection Cadre with Five Qualities* to improve the comprehensive quality and working ability of discipline inspection cadres, and build a discipline inspection team that is politically competent, professionally competent, loyal, clean and responsible.



## Actively Explore the Market

The energy and power industries are undergoing profound changes. The proposal and implementation of the “3060” carbon peaking and carbon neutrality goals have accelerated the energy structure transformation and spawned new industries, new formats, and new models. In terms of the power market, China has accelerated the construction of a new type of power system with renewable energy as the mainstay. Renewable energy saw rapid growth and the inter-provincial and cross-regionally mutual aid capacities continued to improve. In terms of the coal market, coal demand rebounded with the economic recovery, while supply was restricted by safety, environmental protection and import policies, and market prices remained high, which had a major impact on the profitability of the Group’s coal-fired units. Regarding carbon emissions, China launched a national carbon emissions trading market for online trading, putting forward new requirements for companies’ clean and low carbon power generation, and bringing the risk of an increase in the cost of power generation.

Faced with risks from the power market, the coal market and carbon emissions, the Group has always taken the guiding ideology of “insisting on making the main business stronger and better, insisting on differentiated development, and insisting on improving relative competitiveness”, and actively adopted the following strategies and measures to strive for a leading position in the industry.



## Promote Lean Management

With the goal of building a comprehensive energy enterprise with strong competitiveness, the Group continues to optimize production indicators and promote high-quality development of the enterprise through standardized and lean management. Focusing on the development concept of “innovation, coordination, greenness, openness, and sharing”, the Group has implemented measures of improving quality and efficiency to enhance its ability to create value by improving production management mode and implementing technological transformation.

### Energy Supply Performance:

Number of wholesale customers and large customers over

**1,500**

Number of retail customers served by electricity selling companies over

**2,300**

Total marketized electricity

**139.61** million MWh

## Continuous Innovation

Innovation is the inexhaustible driving force for enterprises to enhance competitiveness and achieve sustainable development. The Group has always adhered to the corporate spirit of “meticulousness, efficiency and excellence”. While pursuing to achieve high benefits through high efficiency, the Group actively creates active atmosphere of innovation, and advocates the spirit of “bold innovation and careful verification” to encourages employees to make innovative attempts.

The Group vigorously promotes technological innovation, invests considerable in scientific research, actively carries out various scientific research and innovation activities, and constantly makes technological progress. Meanwhile, the Group insists on the combination of technological innovation and intellectual property protection. When issuing plans for science and technology projects, the Group requires that “the intellectual property rights generated by the research institute of scientific and technological project of the company shall be owned by the project undertaking unit of the company”, and the maintenance expenses of intellectual property shall be included in the general management fee. During the Reporting Period, the Group was not involved in any disputes or legal proceedings related to intellectual property rights.

During the Reporting Period, the Group:

Obtained

**373** patent authorizations

Completed

**71** scientific and technological projects



### Focus

#### The first self-controlled heavy-duty gas turbine control system (TCS) in China was localized and put into operation

On 25 May 2021, China's first self-controlled heavy-duty gas turbine control system (TCS) was successfully on-grid and put into operation in Huadian Zhejiang Longyou Thermal Company Limited. This marks that China has mastered the key technology in the whole process of independent design, production, commissioning and transformation of the heavy-duty gas turbine control system, accelerating the process of gas turbine localization.







## Focus

### Biomass Power Generation Project of Hubei Huadian Xiangyang Power Generation Company: new idea of turning waste into wealth

The biomass gasification-coupled power generation project of Unit 6 of Hubei Huadian Xiangyang Power Generation Company Limited is the first biomass gasification-coupled power generation project in China. It adopts the first circulating fluidized bed gasification device using biomass-mixed fuel independently developed in China and relies on the coal-fired power units in service for efficient power generation. While maintaining the same power generation, it reduces annual consumption of standard coal by about 18,000 tons, treats about 50,000 tons of agricultural and forestry wastes, and reduces annual carbon dioxide emissions by about 50,000 tons. By consuming straw, rice husks, peanut shells, wood wastes and other agricultural and forestry wastes, it provides more than 100 jobs for surrounding villagers and increases annual income by more than RMB 17 million, thus realizing the "double benefit" of environmental protection and economy.



## Sustainable Supply Chain

Suppliers are one of the important partners of the Group. Establishing and maintaining long-term and close cooperation relationship with suppliers is an important guarantee for the stable and efficient operation of the Group. In view of this, the Group attaches great importance to the management of potential environmental and social risks in its supply chain, while building a sustainable and high-quality supply chain through the establishment of a strict procurement policy system and supplier selection process.

The Group's procurement mainly includes fuel, infrastructure equipment, related materials, and services. The Group strictly complies with laws and regulations such as the *Public Tendering Law of the PRC*, etc., and formulates internal policies such as the *Materials Procurement Management Measures of Huadian Power International Corporation Limited*, the *Infrastructure Construction Procurement Management Measures of Huadian Power International Corporation Limited*, etc. Meanwhile, the Group is committed to ensuring the legal compliance of procurement management and an open, fair, impartial and honest bidding process.

In order to strengthen the Group's material management work and establish a centralized, standardized, and efficient material security system, the Group has formulated the *Material Procurement Management Measures of Huadian Power International Corporation Limited*, which sets out the general objectives of material management, plan management, procurement management, and supplier management, etc. In order to systematically control and strengthen supplier management, ensure the quality of bidding and procurement, and control the environmental and social risks of suppliers, the Group has established a unified supplier network in accordance with the principles of "unified management, dynamic assessment, scientific control, and supporting the superior and eliminating the inferior". The supplier network implements layer-by-layer checks on each step of supplier selection, supplier pre-qualification review, supplier dynamic quantitative evaluation, annual review, inspection and supervision. Suppliers are managed timely and effectively through the e-commerce platform.

In addition, the Group has established a supplier assessment indicator system to optimize the structure of supplier and has created a supplier blacklist to control procurement risks. Criteria for supplier assessment mainly include the suppliers' performance in quality, safety and service, whether they are certified by the ISO 14001 Environmental Management System, whether they have comprehensive policies and objectives regarding quality and environment, or whether they have had adverse social impacts on production, operation or construction, etc.

As a large power generation enterprise, the Group's suppliers are mainly coal supply companies. The quality of coal has a direct impact on the Group's power generation efficiency and environmental protection work. On the one hand, the Group actively adopts measures to deal with coal market risks, and on the other hand, it adopts measures to mitigate coal suppliers' environmental risks, thereby improving the implementation of environmental protection work and reducing pollutant emissions. Therefore, in order to effectively control the environmental risks of coal suppliers and encourage them to use environmentally friendly products, the Group uses coal with high calorific value, low sulfur and ash content. In addition, the Group has established a reference-oriented coal sample system, improved acceptance process tracing mechanisms, built process monitor system and developed standardized labs for incoming coal to control coal source and quality. The incoming coal is required to be tested on whether the quality meets the national requirement and the procurement requirement of the Group before acceptance to ensure that coal quality is under control.

During the Reporting Period,  
The number of suppliers  
applying the Group's  
supplier-related  
management measures was

4,885

accounting for  
100%

#### Number of Suppliers by Region

Regions	Units	Number of Suppliers in 2021 <sup>3</sup>	Number of Suppliers in 2020	Number of Suppliers in 2019
Mainland China	Number	4,882	11,418	9,965
Hong Kong, China	Number	3	5	4

3. During the Reporting Period, the Group invested all of its wind power, solar power and other renewable energy assets in the renewable energy business company of China Huadian.







The Group adheres to placing safe production as the number one priority for its operations, and implements the principle of "safety first, prevention crucial, comprehensive treatment". With a rigorous and efficient corporate attitude, the Group ensures the carrying out of safe production work, continuously improves its safety management and supervisory system, improves safety risk management abilities, implements occupational health and safety management measures, ensures the protection of personnel and assets, and provides communities with stable and reliable energy in a sustainable manner.

# 03



## Safety First, Ensure Safe Operations

- ③ Consolidate Safety in Production
- ③ Ensure Stable Supply
- ③ Ensure Occupational Health



## Consolidate Safety in Production

There is nothing trivial about safe production, which should always be borne in mind. The Group has always regarded production safety as a top priority, strictly complied with the *Work Safety Law of the PRC* and other national laws and regulations related to workplace safety and provision of a safe workplace that has a significant impact on the Group, and established work safety management systems, including the *Safe Production Responsibility System*, the *Administrative Regulations on Hidden Danger Investigation and Management*, the *Safety Management of Major Dangerous Sources*, the *Administrative Regulations on Safety of Contracted Projects*, the *Measure for the Management of Traffic Safety*, and the *Safety Training Management*, so as to continuously enhance the implementation of the safety management system. Meanwhile, the Group has continuously improved the work safety inspection and protection system, and implemented the work safety responsibility system for all employees. The Group's headquarters, branches and subsidiaries have all established work safety committees and a three-level safety supervision network of "factory-workshop-team" to ensure that safety responsibilities are implemented at all levels. As of the end of the Reporting Period, the Group had a total of 668 safety specialists. During the Reporting Period, the Group did not violate the above laws and regulations on production safety and provision of a safe workplace. The overall situation of safe production was stable. No general or serious personal injuries or deaths occurred, and no general or serious equipment and fire accidents occurred.

In order to strengthen the management and control of safety risks at production sites, the Group has carried out the construction of in-depth safety risk hierarchical management control, increased safety risk identification and dynamic hierarchical management control, and adopted the following safety measures:

- 1 Conscientiously implement safety responsibilities of personnel at all levels, increase the investigation and management of hidden dangers in safe production, and work against regulatory violations;
- 2 Strengthen the formulation, improvement, and implementation of safety and technical measures to keep safety risks under control, and consolidate the foundation for safe production;
- 3 Strengthen the configuration management of safety facilities and the environmental management of safety operations, ensuring that the safety facilities at the production site are complete and reliable;
- 4 Strengthen the management of unsafe incidents, investigate and analyze the causes of unsafe incidents in strict accordance with relevant requirements, formulate corresponding preventive measures, and educate relevant responsible personnel;
- 5 Conduct in-depth analysis of safety production situation and existing difficulties and priorities, and highlight the safety management and control of flammable and explosive areas, major hazard sources, high altitude operations, and outsourced projects;
- 6 Continue to improve the monitoring and alarming of flammable and explosive gas concentrations and ventilation facilities to ensure that the safety of flammable and explosive areas, major hazards, and outsourced projects are in a controllable and controlled state;
- 7 Encourage basic-level units to apply new technologies to reduce operational risks.

The implementation of safe production is also reliant on practical safety training to enhance employees' safety skills and safety awareness. To this end, the Group has actively carried out safety training, including:



The Group also fully understands the importance of emergency response to accidents in the implementation of production safety work, and has formulated the *Regulations on Emergency Response to Production Safety Accidents* to strengthen and clarify the responsibilities of relevant parties in emergency response to production safety accidents. The Group's subsidiaries also prepare comprehensive emergency plans and special emergency plans for emergencies, and continuously improves employees' emergency handling ability through emergency drills to ensure personal safety and health as well as smooth production.

During the Reporting Period, a total of

**54,044**  
employees of the Group  
passed safe production  
examinations.

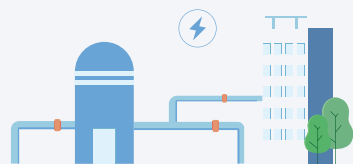
During the Reporting Period, the Group conducted a total of

**1,907** safety  
emergency drills.



## Focus

Sichuan Guang'an Power Generation Company Limited organized an emergency drill for liquid ammonia leakage. Through conducting targeted emergency treatments such as liquid ammonia leakage treatment, personal poisoning and suffocation treatment, liquid ammonia leakage dilution treatment, environmental pollution incident treatment, and excessive discharge of wastewater and nitrogen oxides, employees' ability of emergency response, emergency treatment and self-protection, self-rescue and mutual rescue was further improved. Meanwhile, the drill tested the effectiveness of government-enterprise cooperation. In the event of an accident, the development and spread of the situation can be controlled at the fastest pace, and the personal safety and property safety of the Company's internal and external personnel can be guaranteed as much as possible. More than 100 people from Ecological Environment Bureau of Qianfeng District, Emergency Management Bureau of Qianfeng District, the Second People's Hospital of Qianfeng District and other units participated in the drill.



## Focus

Hangzhou Huadian Banshan Power Generation Company Limited organized personal injury and fire emergency drills. The drill simulated the full-load operation of #1 gas turbine. Due to the high temperature of the environment, there were #1 sudden inter-phase short-circuit failures in the main change. When handling an accident, an operator inadvertently fell away due to the excessive inhalation of oil fume, thereby initiating emergency plans such as the *On-site Handling Plan for Transformer Fire Accidents* and the *Emergency Plan for Personal Injuries and Deaths Accidents*, and timely cooperated with the local fire and health departments to carry out a series of emergency response measures such as equipment accident handling, fire extinguishing in the main realization field, emergency rescue, etc., to carry out rescue scenarios. During the period, the company's command was strong, and various emergency plans were activated in a timely manner. The volunteer firefighters and emergency rescue personnel quickly mobilized and the drill tasks were successfully completed.



## Ensure Stable Supply

It is currently the most important responsibility of the national energy industry to make every effort to ensure power supply, keep warm, and safeguard people's livelihood, development and safety. It is the Group's unshakable responsibility and mission to practice the service concept of "Huadian thermal power, warming tens of thousands of families" with practical actions, and to effectively ensure the supply of electricity and heat to satisfy the public needs.

The Group has set up a leading group for ensuring energy supply, earnestly fulfilling its political and social responsibilities. Centering on the core goals of ensuring power supply and heating, the group has overcome the difficulties of high coal market prices and heavy operating pressure on coal and power enterprises, and has made every effort to ensure safe and reliable energy supply. Meanwhile, combined with the current financing environment, the Group has carefully sorted out the financial situation of all coal and power enterprises under its management, arranged various financial support in an orderly manner according to the financial demand, and ensured the capital demand for energy supply to the greatest extent.

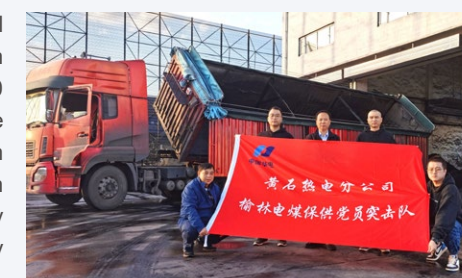
In addition, the Group continues to improve the emergency response mechanism and strengthen emergency response training and drills to ensure stable supply while consolidating safe production. The Group conducts drills on emergency plans for major emergencies every year, and conducts all drills on contingency plans and emergency plans every two years. For important nodes, such as winter and important events (such as the National Day), the Group will also carry out special inspections and work to ensure power and heat supply.

## Focus



During the National Day holiday in 2021, Huadian Hubei Power Generation Company Limited was fully committed to coal purchase. On the one hand, the company actively visited energy bureaus and coal groups in Shaanxi, Shanxi and other provinces with rich coal resources to coordinate thermal coal resources. On the other hand, the company also actively sought the support of Huadian Coal Industry Group Co., Ltd., fuel logistics companies, Hong Kong companies and other units to increase the purchase and transportation of self-produced coal and high-quality overseas coal. Through continuous efforts, the company signed an additional long-term contract amount of 2.6 million tons in October, achieving a good start in securing coal and electricity supplies.

On 29 October 2021, CPC members from Huangshi Thermal Power Branch Company of Huadian Hubei Power Generation Company Limited rushed to Yulin, Shaanxi Province, 1,500 kilometers away, for thermal coal supply protection. At the same time, there were more than 20 CPC members from the regional power plants and Hubei Fuel Logistics Branch Company were working day and night to ensure energy safety and stable supply, and to ensure that the people can stay warm through the winter.







## Focus

In November 2021, the unit 2 machine of Huadian Shuozhou Thermal Power Company Limited carried a load of 351.7 MW at the evening peak, which was the first full-load operation after the completion of the unit overhaul. The company adhered to the loss control and reduction strategy of "generating more power in peak period and less power in trough period", and regarded the full-load operation capacity of generating units as the core of market competition. The company established a technical research team, optimized operation adjustment, effectively improved boiler efficiency, and made every effort to ensure the safety and steady supply of energy, laying a good foundation for people to have a warm winter.



The Group also understands that the quality of customer service is directly related to the production, operation and life quality of the general public in the supplying area. The Group insists on actively carrying out the work of improving customer service level and customer satisfaction as an important work. The Group's customers are mainly power grid companies, electricity users and heat users. Over the years, the Group has continuously improved the management of customer service to ensure smooth communication with customers, actively responded to customers' needs and expectations, and implemented customer feedback to improve customer service satisfaction with considerate services.

In addition, in the era of informatization, personal information security and network information security are particularly important. The Group attaches great importance to the security of information, strictly complies with applicable laws and regulations such as the *Law of the Protection of Consumer Rights and Interests in the PRC*, and properly keeps the information of the Group and customers in accordance with confidentiality arrangements and privacy protection measures to ensure the security of information.

## Ensure Occupational Health

The Group strictly abides by national laws and regulations that have a significant impact on the Group relating to providing a safe working environment and protecting employees from occupational hazards and relevant industrial standards and regulations, including but not limited to the *Law of the PRC on the Prevention and Control of Occupational Diseases* and the *Provision on the Supervision and Administration of Occupational Health at Work Sites*, and has formulated and implemented the corporate standard of occupational health, supervision management system of occupational health and other measures. In order to fully implement the aforementioned laws and regulations, to strengthen the management of the prevention and treatment of occupational diseases, and effectively protect the health and safety of workers during operations, the subsidiaries of the Group have promptly announced and implemented relevant laws, regulations and policies, improved the occupational health management system, and regularly reviewed and updated the system and management measures, thereby implementing the goal of preventing and controlling occupational hazards. During the Reporting Period, the Group did not violate the above laws and regulations on providing a safe working environment and protecting employees from occupational hazards.

During the Reporting Period,  
the number of customer  
complaints received by the  
Group was

0

In terms of production site's safety management, the Group implements the following safety protection work:



As for newly built generating units, the occupational hygiene facilities were designed, constructed, put into production and operated in accordance with the national "three simultaneous" management requirements for occupational health in construction projects. Furthermore, they were assessed and reviewed by nationally qualified institutions;



Strengthen the management of occupational health facilities in operation to ensure that they are complete and standardized;



Formulate the monitoring and assessment of occupational health hazards, and occupational health surveillance and archive management, regularly monitor the potential hazards of occupational disease such as dust, noise, toxic and hazardous substances, and electromagnetic radiation, etc., that may occur on-site;



Set up announcement boards and offer notice cards at the entrances of workplaces, and set warning signs of occupational disease hazards at the striking positions in workplaces;



Configure dust removal facilities in areas such as coal transportation systems where dust hazards may exist, strengthen the containment of toxic materials in locations with ammonia gas and other locations where toxic substances are present, avoid direct operations and open-air layouts, and equip toxic gas concentration monitoring and spraying facilities.

In terms of employee personal health and safety protection, the Group implements the following safety protection work:

- Strengthen the inspection, management and maintenance of occupational health equipment and facility to ensure they are effective;
- Enhance employee protection measures by providing work clothes, insulated shoes, protective glasses, earplugs, dust masks, and anti-toxic protective equipment, etc. to employees as required;
- Uphold the principle of "prevention crucial", organize occupational health knowledge training and enhance promulgation of occupational safety and health knowledge;
- Enhance the diagnosis and treatment of occupational diseases, organize employees to have health examinations of occupational disease and continuously improve medical and health protection measures;
- Under the condition of high summer temperature, provide good logistics support, promptly implement measures to prevent heatstroke, and carry out activities such as promotion of heatstroke first aid knowledge, delivery of heatstroke cooling items to the front line, and distributing "cooling" to effectively ensure the health of personnel and equipment during peak summer periods.

During the Reporting Period,  
The number of work-related  
fatalities of the Group was

0 (0 for the past three years)

Total lost days due to  
work injury was

3,895

The coverage rate of  
occupational disease  
examination was

100%





In the goal related to ecology and energy, lucid waters and lush mountains are invaluable assets. The Group has always adhered to the corporate mission of "providing reliable, clean and economical energy", actively responded to the national environmental protection policies, comprehensively implemented the national dual control of energy consumption and "3060" carbon peaking and carbon neutrality goals, strengthened its ability to respond to climate change risks, continued to promote energy conservation and emission reduction, continued to increase resource investment, and achieved the co-development of high-quality development and ecological and environmental protection.

# 04

## Develop Harmoniously, Protect Lucid Waters and Lush Mountains

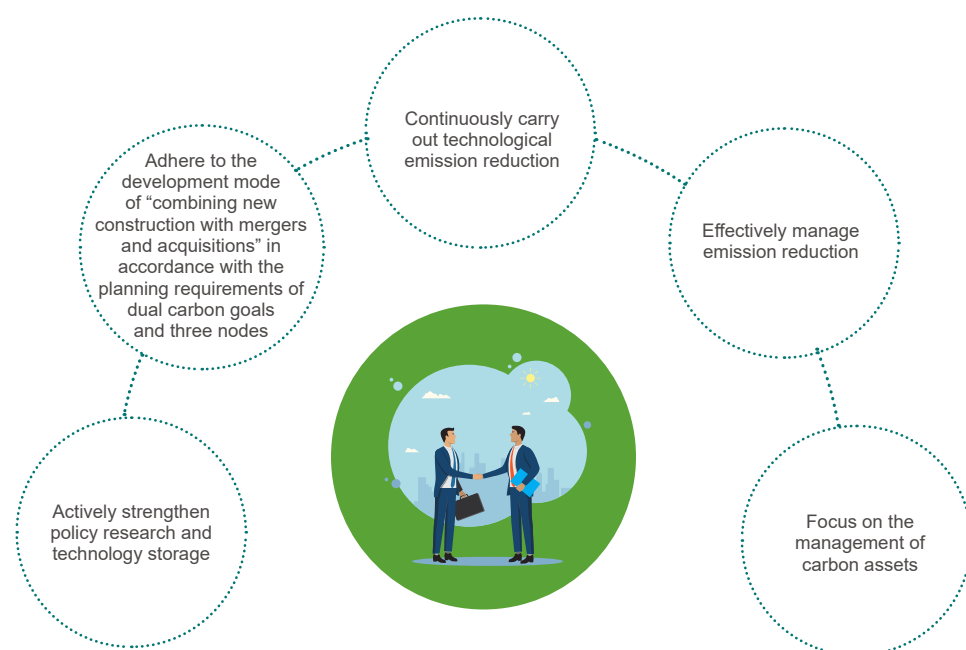
-  Tackle Climate Change
-  Strictly Control Operational Emissions
-  Conservation of Resources
-  Strictly Protect Ecosystem
-  Environmental Key Performance



## Tackle Climate Change

Since China has proposed the “3060” carbon peaking and carbon neutrality goals, it has become a consensus for all industries to actively respond to climate change and achieve carbon peak and carbon neutrality as soon as possible. The power industry is an important field of carbon emissions. The *Outline of the “14<sup>th</sup> Five-Year Plan and the Long-Term Objectives Through the Year 2035* clarified the key tasks, including improving the dual control objectives of total energy consumption and intensity, promoting the clean, low-carbon, safe and efficient use of energy, and further promoting the low-carbon transformation in industrial, construction, transportation and other fields. As a major contributor to the power industry’s carbon reduction and decarbonization, power generation enterprises assume greater responsibility and face the challenges of safe, reliable, clean, low-carbon, and economical and efficient power supply.

Since 2021, China has successively introduced policies related to carbon emission reduction: on 14 May 2021, the Ministry of Ecology and Environment of the PRC issued the *Administrative Rules for the Registration of Carbon Emissions Rights (Trial)*, the *Administrative Rules for the Trading of Carbon Emissions Rights (Trial)* and the *Administrative Rules for the Settlement of Carbon Emissions Rights (Trial)* in accordance with the *Administrative Measures for the Trading of Carbon Emissions Rights (Trial)*. On 22 September 2021, the Central Committee of the CPC and the State Council issued the *Opinions on Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy*. On 24 October 2021, the State Council announced the *Action Plan for Carbon Peak by 2030*. The above policies are mainly reflected in carbon emission management, actions, trading, etc., which have a long and huge impact on the Group. On the basis of careful study and judgment of domestic background and relevant policies, objective assessment of the Group’s basic situation and comprehensive analysis of the situation, the Group proposed basic countermeasures, including:



During the Reporting Period, the Group actively participated into the integration of renewable energy assets with Fuxin Development, a subsidiary of China Huadian. This integration realized a large proportion of equity participation in the development and integration platform of China Huadian’s renewable energy, facilitating the development of the renewable energy industry. On the other hand, the Group continued to pay attention to and actively explored more efficient and environmentally friendly power generation technology, vigorously promoted green transformation, and helped the country to achieve carbon peak and carbon neutrality as soon as possible.

Controlling greenhouse gas (“GHG”) emissions is an essential act of tackling climate change. During the Group’s operation, its GHG emissions are mainly sourced from fossil fuel combustion in thermal power plants. Hence, to manage fossil fuel consumption effectively and decrease coal consumption rate for power supply is a direct way to control GHG emission. To this end, the Group has set a goal of expecting to reduce carbon emissions by 1% by 2025 (compared with 2020), and will continue to take energy conservation and consumption reduction as an important means to improve quality and efficiency, optimize the efficient operation of equipment, and promote technological transformation and consumption reduction.

### Focus

Huadian Power International Fuyuan Thermal Power Company attaches great importance to energy conservation and carbon reduction, and strengthens publicity and training to improve the operation efficiency of units and reduce carbon emissions. On the premise of ensuring the safe production of units, the company carries out double-rotor transformation during the heating period, which greatly reduces carbon emissions. By replacing the steam generator rotor of #1 units in the first 10 months of each heating season and adopting high back pressure operation in winter, the coal consumption can be reduced by 46.5 g/kWh during the heating period, and 11,400 tons standard coal in one heating season will be saved, reducing carbon dioxide emissions by approximately 27,900 tons.



### Focus

On 16 September 2021, Huadian Power International Guangdong Branch Company organized a seminar on “Empowering the Implementation of ‘Dual Carbon’ Targets and Hybrid Hydrogen Combustion of Gas Turbine and Carbon Dioxide Capture and Utilization Technology” in Guangzhou. Shenzhen Company, a subsidiary of Guangdong Branch, takes the low-carbon development of its own enterprise as the starting point, actively explores energy saving and emission reduction measures, and intends to establish a set of carbon dioxide capture technology for the flue gas after combustion of gas-fired units to reduce carbon dioxide emissions in flue gas.



With the increasing adverse effects brought by climate change, such as the increase in the frequency of extreme weather, global warming has been increasing. In this regard, power generation enterprises need to strengthen their ability to cope with risks so as to cope with possible high temperature, windy and rainstorm weather with higher frequency to ensure the safety and stability of production activities. In the face of possible extreme weather, the Group’s subsidiaries have formulated detailed work plans, emergency plans and drills, such as working mechanisms and drills for summer peak, flood control and power protection, and typhoon prevention.

## Strictly Control Operational Emissions

The in-depth battle for pollution prevention and control and the continuous improvement of the quality of the ecological environment are necessary to achieve the coordinated development of high-level protection of the ecological environment and high-quality economic development. On 2 November 2021, the Central Committee of the CPC and the State Council issued the *Opinions on Further Winning the Battle of Pollution Prevention and Control*, which requires to consolidate the achievements of pollution prevention and control and win the battle of defending blue sky, clear water and clean land with higher standards. In response to the increasingly stringent requirements on ecological and environmental protection in China, the Group has timely announced and resolutely implemented relevant national policies and requirements, improved the internal environmental protection management system and measures, actively adopted technological transformation for environmental protection and related environmental protection measures, implemented the normal operation of environmental protection equipment and supervision of environmental protection indicators, and strictly controlled the discharge of pollutants in compliance with standards.

During the operation process, the emissions generated by the Group mainly include air pollutants such as sulfur dioxide, nitrogen oxides, soot, etc., carbon dioxides, wastewater and solid waste. The Group strictly complies with relevant laws and regulations that have a significant impact on the Group relating to air and greenhouse gas emissions, discharges into water and land, and generation and disposal of hazardous and non-hazardous waste, including but not limited to the *Environmental Protection Law of the PRC*, the *Water Pollution Prevention and Control Law of the PRC*, the *Water and Soil Conservation Law of the PRC*, the *Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Waste*, the *Environmental Protection Tax Law of the PRC*, the *Environment Compliance Guidance for Coal-fired Thermal Power Enterprise*, the *Emission Standard of Air Pollutants for Thermal Power Plants* and the *Notice of National Development and Reform Commission on GHG Emissions Reporting by the Major Enterprise and Public Institutions*. In addition, the Group strictly implements and complies with the *Supervision and Management Measures on Ecological Protection of China Huadian Corporation Limited*, the *Administrative Measures of "Three Simultaneities" for Environmental Protection and Water and Soil Conservation at Construction Projects of China Huadian Corporation*, the *Measures for Managing Emission Permits of China Huadian Corporation*, etc.

During the Reporting Period, the Group has paid environmental protection related taxes in full, and there was no incident of non-compliance with environmental protection related laws and regulations. According to the *State Contingency Plans for Environmental Emergencies*, the Group did not have any environmental emergencies of general or above level during the Reporting Period.

### Air Pollutants

The power generation industry is a major industry for energy saving, consumption reduction, and pollution emission reduction. In order to speed up the development of a resource-saving and environmentally-friendly society, China continually shuts down small thermal plants to reduce emissions and energy consumption. Therefore, the Group proactively responds to the shutting down of small thermal plants of "building large thermal plants and shutting down small ones" by adopting the "developing and reducing" method, which includes "reducing" small thermal plants and actively adjusted the energy structure by "developing".

In order to ensure the compliance of air pollutant emissions, the Group pays attention to, advocates, and implements national environmental protection policies and regulations in a timely manner, improves environmental protection management and the supervision system and maintains the implementation of general management and daily supervision. The overall status of environmental protection, input in environmental protection and pending improvements are included in the Groups' annual summary and plan. Meanwhile, the Group monitors emissions and analyzes data.

In addition, the Group spares no effort to reduce pollutants emission by technological renovation and enhancing the operation and maintenance management of environmental protection facilities. During the Reporting Period, the investment in environmental protection which were used mainly for large technological renovation of the Group was RMB 770 million. Since 2020, the Group has completed the ultra-low emission transformation of all coal-fired power generating units. Without further adopting relevant emission reduction measures, the maintenance of environmental protection facilities' removal effect has become one of the key environmental protection tasks of each company due to the continuous aging of environmental protection facilities. Currently, the emissions of sulfur dioxide, nitrogen oxides and soot per unit of electricity generation of the Group are 0.07 g/kWh, 0.13 g/kWh and 0.01 g/kWh respectively.

### Effluent

For sewage generated during the operation process, the Group carries out work in accordance with relevant national and local regulations to ensure that the requirements for sewage treatment and discharge are met. The Group's power generation projects follow the principle of "diversion of clean water and sewage, diversion of rainwater and sewage, and multiple use of water", and treat sewage through an effective sewage treatment system. The treated sewage is partly used for greening and cleaning water in the plant area, and the rest is discharged as required.

The Group will strengthen the management of wastewater discharge and strives to achieve zero wastewater discharge. The thermal power plants under the management of the Group have started to prepare for comprehensive treatment and renovation of wastewater since 2016, and have all met the environmental emission standards since 2020. Going forward, the Group will continue to implement the "Three-year Implementation Plan for Winning the Battle of Pollution Prevention and Control" launched by the Group in 2018, and strive to achieve the goal of near zero discharge of wastewater except once-through cooling water by the end of the "14<sup>th</sup> Five-Year Plan". During the Reporting Period, the Group discharged a total of 7,860,000 tons of wastewater, representing a decrease of 98.91% as compared to 2020, and completed the investment of RMB 383 million. The wastewater treatment of 22 power plants was carried out with remarkable results.

### Waste

As for the generated wastes during operations, the Group has implemented practices pursuant to relevant national and local requirements and ensures the requirements of waste handling and disposal are met. The hazardous waste generated by the Group during its operation mainly includes spent catalysts, spent machine oil, waste bag filters and used batteries. Whilst the general solid waste generated is mainly desulfurization gypsum, coal ash and slag. The generated hazardous wastes were delivered by the Group to qualified third-parties for centralized treatment in accordance with the requirements of relevant environmental protection departments, with a treatment rate of 100%. As for general solid wastes, the Group proactively promoted a circular economy, which desulfurized gypsum, coal ash and slag were reused in various ways or sold, such as in the production of cement, concrete, etc., so as to reuse resources. During the Reporting Period, the comprehensive utilization rates of desulfurization gypsum, coal fly ash and slag of the Group were 100.0%, 97.0% and 98.7% respectively. In the future, the Group will continue to encourage relevant units to strengthen the comprehensive utilization of waste with the goal of maintaining 100% compliance treatment rate of hazardous waste and further improving the comprehensive utilization rate.

### Focus

#### The implementation of standardized management of "two hazards and one waste"

The power plant of Huadian Weifang Power Generation Company Limited is located in the inner city, and the demand and supply of hazardous chemicals and the production of hazardous waste and waste materials are large, which poses huge environmental risks. In 2021, the material department conscientiously implemented the Group's work objectives of improving quality and efficiency, and strengthened the standardized management of "two hazards and one waste". The results of the work included reasonable storage of oxygen, acetylene and other chemicals, which can ensure safe production needs. In addition, the company disposed 169.86 tons of hazardous waste such as waste paint buckets, waste oil sludge, chemical waste liquid and waste batteries in a timely manner. Disposal of waste materials in a timely manner can effectively eliminate safety hazards.





## Conservation of Resources

As a power generation enterprise, the Group strictly abides by the *Law of the PRC on the Promotion of Clean Production*, the *Guidelines for Environmental Compliance of Coal-fired Thermal Power Enterprises* and other laws and industrial regulations on the use of resources. At the same time, the Group firmly implements the energy conservation priority policy in China's "14<sup>th</sup> Five-Year Plan", strengthens energy conservation management, and continuously promotes the transformation of energy structure to be green, low-carbon and efficient.

Regarding the use of resources and raw materials, the primary consumed resources and raw materials of the Group include coal, natural gas, diesel and water resources. With the goal of effectively saving resources and improving utilization efficiency, the Group constructs its projects with scientific management, careful organization and meticulous construction. Energy and water saving technology renovation are implemented to existing coal-fired power units. The Group constantly improves energy consumption indicator management and implements specific energy and water saving plans after collecting, consolidating and analyzing energy consumption data. By doing so, it is able to gradually form a mature energy consumption management system. Furthermore, the Group continues to promote the research of fuel intelligent management and enhances its fuel information management system, which supports full-process tracking, accurately managing fuel. During the Reporting Period, the standard coal consumption of power generation of the Group was 272.7 g/kWh.

Water is an indispensable resource in the production activities of power generation enterprises, especially for the Group's coal-fired power and hydropower business. On the one hand, in order to effectively control the risks related to water resources, the Group fully considers the water intake of the project during the project design period, investigates the distribution of water resources in the region and the precipitation situation, and selects the appropriate construction area. Therefore, the Group does not have any issue in sourcing water that is fit for purpose. On the other hand, with the goal of reducing the water consumption rate of power generation and improving water efficiency, the Group actively adopts water-saving measures and conducts equipment's water-saving technological transformation in the daily operation of projects. Each subsidiary of the Group also carefully formulates water use plans and water management measures, conducts research and analysis on the use of water resources, and eliminates the waste of water resources. In addition, some of the Group's power plants have implemented the whole plant wastewater recycling and treatment transformation, and all wastewater is recycled and reused after treatment in compliance with standards to improve the utilization rate of water resources. During the Reporting Period, the water consumption rate of the Group's coal-fired power plants was 1,218.6 g/kWh, representing a decrease of 5.9% as compared with last year.

### Focus

Huadian Power International Pingshi Company actively expanded its heat supply. In March 2021, it supplied steam to a company with an annual heat supply of 255,319.36 GJ, increasing the heat-to-power ratio of the unit and reducing the coal consumption for power supply. The company also implemented energy-saving technological transformation projects, carried out steam seal transformation of steam turbine to reduce steam leakage and heat consumption of power generation of steam turbine. The medium temperature section of the boiler's air preheater has been transformed to reduce the air leakage rate of the air preheater and save power in the plant.



### Energy-saving publicity activities

From 23 to 29 August 2021, which was the 31<sup>st</sup> National Energy Conservation Publicity Week, Sichuan Guang'an Power Generation Co., Ltd. held the activity of "Optimizing Operation, Saving Energy and Reducing Consumption". During this period, Sichuan Guang'an Power Generation Co., Ltd. organized members of the energy conservation office to participate in the "Cloud Classroom" of the National Energy Conservation Publicity Week. Through various special activities such as theme essays and advocacy presentations, the sense of responsibility and awareness of employees on energy conservation and consumption reduction was further enhanced, forming a good atmosphere for all employees to participate in actions of energy conservation and emission reduction.



## Strictly Protect Ecosystem

Environmental protection policies in China have become increasingly stringent. With the increasingly strong binding force of ecological protection redlines, minimum environmental quality requirements, upper limits on resource utilization and the negative list for environmental access, stricter requirements are imposed on work of the Group including preliminary work, infrastructure construction and production. Therefore, the Group adheres to implement ecological and environmental protection and fight the battle for prevention and control of pollution. The Group strictly complies with relevant policies and management measures relating to minimize the significant impacts on the environment and resources, including but not limited to the *Law of the PRC on Appraising Environment Impacts (2018 Edition)*, the *Comprehensive Evaluation Measures for Ecological Protection of China Huadian Corporation Limited (Trial)*, etc. The Group also ensures that emissions generated from its operations, such as air emissions, wastewater, noise, etc., attain the relevant standards, for example, the *Emission Standard of Air Pollutants for Thermal Power Plants*, the *Integrated Wastewater Discharge Standard*, the *Emission Standard for Industrial Enterprises Noise at Boundary*, etc.

The Group also strictly abides by the *Water and Soil Conservation Law of the PRC* and relevant policy requirements and is committed to implement soil and water conservation. For construction projects, the Group will carry out environmental impact assessment of construction projects, identify important environmental impact factors, formulate and implement various environmental protection measures, and also implement stringent management during construction, mining and project operation.

In addition, the Group continues to carry out the proliferation and release of rare fish, and actively participates in afforestation, devoting the Group to biodiversity protection in various ways, and making efforts to build a harmonious and beautiful homeland for all kinds of species.

### Focus

In 2021, Sichuan Guang'an Power Generation Co., Ltd. actively responded to the national policies on water and soil environmental governance, and implemented the environmental remediation project of the ash field in Shigu Village. The project adopted the temporary closure for anti-seepage treatment. After completion of the construction, it can realize the diversion of rain and sewage and the recycling of leachate inside the ash field, and prevent soil pollution.



On 26 March 2021, Huadian Fuel Logistics Company carried out voluntary tree planting and raising activities, and employees worked together to repair water basins and other support work for trees to help them grow healthily.



Environmental Key Performance<sup>4</sup>

Indicators	Units	2021	2020	2019	Remarks for 2021
Total input in environmental protection	Ten thousand RMB	77,000	18,280	144,700	Capital input
Air Pollutants <sup>5</sup>					
Sulfur dioxide emissions	Tons	12,124	10,108	15,154	Addition of Hunan Company
Sulfur dioxide emissions per unit of electricity generation	g/kWh	0.07	0.08	0.08	/
Nitrogen oxides emissions	Tons	23,929	19,357	26,582	Addition of Hunan Company
Nitrogen oxides emissions per unit of electricity generation	g/kWh	0.13	0.14	0.13	/
Soot emissions	Tons	1,171	942	1,623	Addition of Hunan Company
Soot emissions per unit of electricity generation	g/kWh	0.01	0.01	0.01	/
GHG <sup>6</sup>					
Total direct GHG emissions (Scope 1)	Ten thousand tons CO <sub>2</sub>	17,196.6	15,262.3	16,785.8	/
Total indirect GHG emissions (Scope 2) <sup>7</sup>	Ten thousand tons CO <sub>2</sub>	8.4	8.9	7.3	/
Total GHG emissions (Scope 1 and Scope 2)	Ten thousand tons CO <sub>2</sub>	17,205.0	15,271.2	16,793.1	/
GHG emissions per unit of electricity generation <sup>8</sup>	kg/kWh	0.8	0.7	0.8	/
Use of Resources					
Total electricity consumption of thermal power plant	MWh	13,916,170.8	12,644,174.4	13,568,230.8	/
Total natural gas consumption	Ten thousand cubic meters	386,543.6	316,093.6	278,474.1	/
Total diesel consumption	Ten thousand tons	1.7	1.5	1.5	/
Total coal consumption	Ten thousand tons	9,119.4	8,072.1	8,606.3	/
Total standard coal consumption	MWh	542,296,947	Not available	Not available	A new disclosure indicator in the Reporting Period
Total standard coal consumption per unit of electricity generation	g/kWh	272.7	274.9	278.8	/
Total water consumption of thermal power plants	Ten thousand tons	28,801.5	26,849.0	29,657.7	/
Water consumption rate of thermal-power electricity supply	g/kWh	1,218.6	1,295.1	1,378.5	/

Indicators	Units	2021	2020	2019	Remarks for 2021
Waste					
Spent catalysts generated	Tons	3,601.39	3,606.76	1,030.91	All recycled and reused by catalyst manufacturers
Spent machine oil generated	Tons	1,519.08	663.81	553.67	Entrusting qualified third parties for recycling and disposal; Due to the overhaul cycle of equipment, the usage increased during the Reporting Period
Waste bag filters for dust removal generated	Fields	35,019	20,776	23,879	Recycled by the manufacturer
Used batteries generated	Tons	205.56	155.84	146.71	Entrusting qualified third parties for recycling and disposal; Due to the overhaul cycle of equipment, the usage increased during the Reporting Period
Total coal ashes generated	Ten thousand tons	1,833.21	1,768.05	1,541.88	Comprehensive utilization and standardized storage for export, or used for land reclamation and greening
Comprehensive utilization rate of coal fly ashes	%	97.0	88.9	91.0	
Number of coal fly ash storage fields	Fields	25	23	Not available	The construction of ash storage fields has passed the environmental impact assessment. The safety assessment of all ash storage fields of the Group is carried out in accordance with the <i>Guidelines for Safety Assessment of Ash Storage Fields of Coal-fired Power Plants</i> issued by the National Energy Administration to ensure the safety of all ash storage fields
Total slag produced	Ten thousand tons	385.08	382.54	339.63	Comprehensive utilization and standardized storage for export, or used for land reclamation and greening
Comprehensive utilization rate of slag	Ten thousand tons	98.7	91.7	87.2	
Total desulfurization gypsum generated	%	591.99	597.29	533.57	Data and statistics include inventories of the previous year; comprehensive utilization and standardized storage for export, or reuse as raw materials for building materials
Comprehensive utilization rate of desulfurization gypsum	%	100.0	92.0	85.4	
Total production of pollutants produced	Tons	0	0	Not available	/
Total amount of mercury pollutants produced	Tons	0	0	Not available	/

4. Unless otherwise stated, the data were sourced from a total of 38 thermal power plants put into operation (including electricity and heating supply) belonging to the Group as of the end of the Reporting Period.

5. The emission data of air pollutants in 2021 comes from the annual report of pollutant emissions of thermal power plants. Part of the emission data of air pollutants in 2020 were revised after the Company improved the statistical scope.

6. The calculations of GHG emissions were set out based on the Guideline of the Greenhouse Gas Emissions Accounting and Reporting for the Chinese Power Generation Enterprise (Trial). The data used in the calculation were sourced from the recorded data of the thermal power projects of the Group and best conservative estimates were made based upon historical performance data or benchmarking with similar facilities. The data listed here are only for reference.

7. The calculation of total indirect GHG emissions (Scope 2) refers to the national grid average emission factor of 0.5810 tons CO<sub>2</sub>/MWh in 2021 provided by the Ministry of Ecology and Environment in the Guidance for Accounting and Reporting Corporate GHG Emissions for Power Generation Facilities.

8. The listed data refer to the GHG emissions per electricity generating of electricity supply, not including the heat supply.









Building an excellent and united team requires growing and moving forward together with employees, so as to achieve the Group's target of sustainable development. The Group adheres to the people-oriented principle, attaches great importance to the protection of employees' legitimate rights and interests and employee care, and strives to create a harmonious and inclusive working environment. Moreover, the Group implements the talent development strategy and continuously enhances the talent cultivation mechanism to develop a team equipped with knowledge, technology and innovation to stimulate rapid development.

# 05



## United Team, Develop and Move Forward

-  Protecting Employees' Rights
-  Emphasis on Talent Cultivation
-  Colorful Employee Activities
-  Human Resources Performance Indicators



## Protecting Employees' Rights

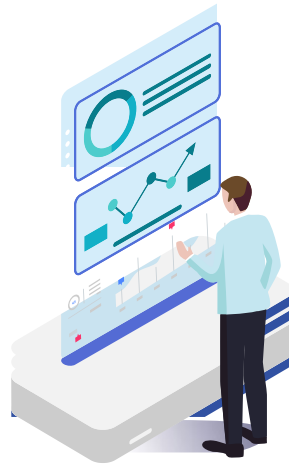
The Group strictly complies with relevant laws and regulations that have a significant impact on the Group relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, other benefits and welfare, and prevention of child labor or forced labor, including but not limited to the *Labor Law of the PRC*, the *Labor Contract Law of the PRC*, the *Trade Union Law of the PRC*, the *Civil Code of the PRC* and the *Law of the PRC on the Protection of Minors*. The Group has formulated and implemented a human resources management system in accordance with the above laws and regulations, covering the management of employee recruitment, labor contract, promotion mechanism, compensation and benefits, working hours, dismissal, etc. During the Reporting Period, the Group did not violate the above labor and employment-related laws and regulations.

In the recruitment stage, the Group adheres to an open, fair and just talent competition and selection mechanism, and strictly reviews the information of candidates during the recruitment process, and resolutely objecting to hire child labor under 16 years old. If child labor is found, the Group will immediately deal with it in accordance with relevant laws and regulations, investigate and take remedial measures to prevent the incident from happening again. At the employment stage, employees have legally entered into labor contracts with the Group, specifying matters such as employees' remuneration and benefits, position and grounds for termination of employment. In addition, the Group advocates equal and diversified employment policies and does not discriminate against employees due to race, nationality, skin color, gender and other factors.

In terms of remuneration and other benefits, the Group follows the principle of fair distribution according to work and equal pay for equal work. Under the premise of efficiency and fairness, the Group implements systems such as salary points and annual salary system for leaders, and establishes an objective, fair, scientific and effective performance appraisal system for all employees. Based on the performance principle, the Group insists on giving priority to quality and efficiency and giving consideration to efficiency and fairness, so that employees have the opportunity to obtain salary or position adjustment; In accordance with the relevant national laws and regulations approved by the employees conference, the Group participates in social insurance such as pension, unemployment, medical care, work-related injury and maternity insurance, and pays social insurance premiums on time as required to ensure that employees enjoy various social insurance benefits and housing subsidies in accordance with relevant regulations. Regular body check of occupational diseases is also provided to employees.

In terms of working hours and holidays, the Group implements a 40-hour working system per week with an average of no more than 8 hours per day, and takes national statutory holidays, vacation, home leave, marriage and funeral leave, maternity leave and family planning leave. If overtime working hours in weekdays and in rest days are required due to work reasons, the *Labor Contract Law of the PRC* and relevant internal regulations shall apply.

In addition, the Group has established an employee supervisor selection system in accordance with the *Company Law of the PRC* and the Articles of Association to ensure that employees enjoy sufficient rights in corporate governance; It supported the labor union to carry out work in accordance with the law, listened to the opinions of employees through democratic forms such as employees' representatives meetings and labor union meetings on matters involving the vital interests of employees such as wages, benefits, labor safety and health, and social insurance, and cared about and valued the reasonable needs of employees.



As of the end of the Reporting Period,

The labor contract signing rate of the Group reached

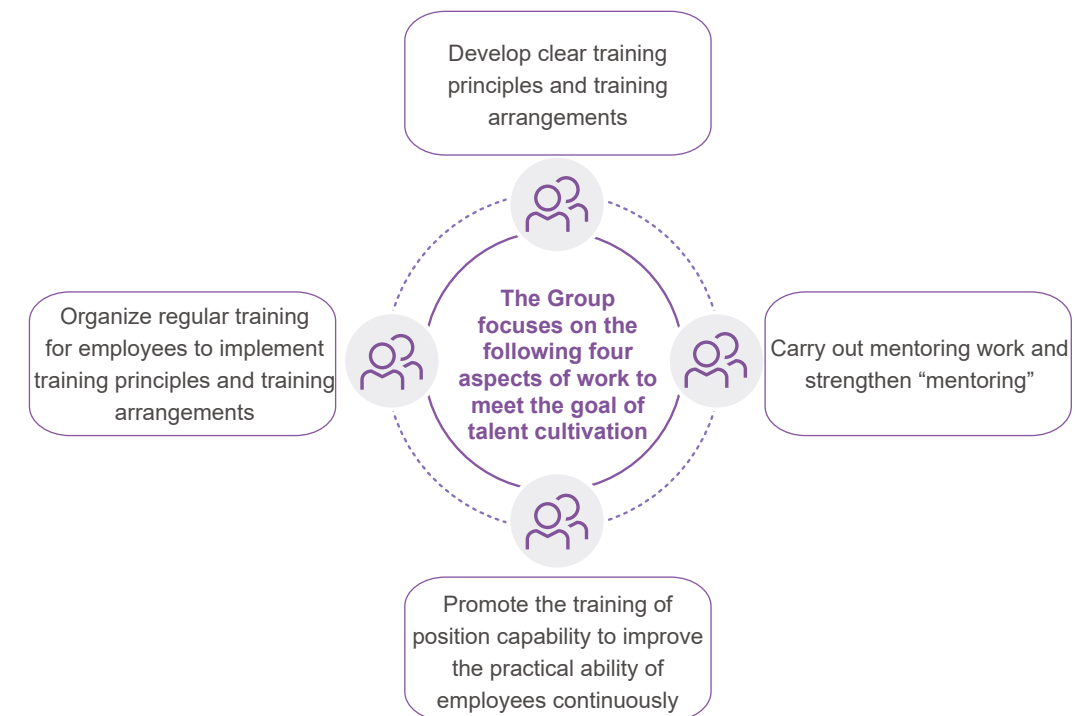
**100%**

The additional commercial medical insurance coverage rate reached

**99.97%**

## Emphasis on Talent Cultivation

The Group vigorously promotes the strategy of "developing a competitive enterprise of quality workforce" and establishes the development strategy of talent cultivation and various plans, while mobilizing the enthusiasm, initiative and creativity of talents to provide strong talent support for the development of the Group. Each subsidiary of the Group has implemented the Group's talent strategy, adheres to people-oriented and lean management, and strives to provide wide-ranging and targeted trainings to employees of different positions by formulating tailored training plans on the basis of the actual needs of specific job requirements, the construction of talent team building and employees' career plan, so as to continuously improve the professional skills and knowledge level of employees.



### Focus

#### Orientation training

In 2021, Huadian Power International continued to implement the training of new employees, and all branches and subsidiaries actively responded. The training covered corporate cognition, cultural integration, professional quality, team building, safety, basic skills, etc., aiming to enhance new employees' sense of identity and belonging to the Company, which has helped them better integrate into the new environment and adapted to new identities.







## Focus

### Skilled talent continuing education

Huadian Power International Shandong Branch continued to educate skilled personnel about their professional knowledge and organized theoretical training on centralized control operation. The training adopted an innovative training model covering all professions and aspects, which combined professional theoretical explanations with practical skills such as electrical maintenance, rotating machinery maintenance and metal supervision, further improved the professional skills and knowledge of front-line personnel, and ensured the safe and stable operation of power generation.



## Focus

### “Apprenticeship” talent training

Huadian Power International Zhejiang Branch piloted the “professional mentoring system” in the training of young employees. The career mentor system adopts the dual feedback mode of regular coaching and regular assessment. Middle-level management personnel and professional workers with good work performance and excellent comprehensive ability are mainly employed as mentors to conduct one-on-one matching with young employees. At the same time, the Human Resources Department carefully prepared the “Professional Mentor Handbook” to clarify employees’ career development channels, job title, skill promotion, etc. As an extension of the traditional “apprenticeship” work, this work further strengthened the induction and guidance of young employees and helped them better integrate into the company, and established their own career development plans.



During the Reporting Period, Huadian Power International formulated and issued the *2021 Talent Development and Training Work Plan*, and carefully organized and carried out various training activities as required. Firstly, focusing on carbon neutrality and carbon peak, overseas mergers and acquisitions, the *Civil Code of the PRC* and other aspects, the Group educated and guided the cadres and employees of the headquarters to accurately grasp the opportunities and challenges, to fully understand the situation, and to further improve the strategic thinking ability, situation judgment ability, overall planning ability, and market control ability; Secondly, based on the annual goals and tasks of Huadian Power International, the Group further improved the comprehensive business level and management capabilities of cadres and employees in respect of the Group’s core business, focusing on the *Work Safety Law of the PRC* (2021 revised edition), financial sharing center, compliance management and other aspects.

## Colorful Employee Activities

The Group proactively creates an energetic, active and united workplace to create a team with more cohesion and to simulate the physical and psychological health of employees. The Group held a variety of cultural and sports activities every year to meet the spiritual and cultural needs of employees. In addition, the Group also held various competitions, such as skills competition, created a platform for employees to show their skills and talent, hoping to continuously improve the professional skills and professional quality of employees through the competition.



## Focus

### Lantern Festival Activities

During the Lantern Festival in 2021, in order to enrich the cultural life of employees and gather the joint efforts of transformation and development, the labor union of Huadian Power International Hubei Branch organized a series of cultural and sports activities such as calligraphy competition, hurdle race with obstacles, and educational and intellectual competition, so that the employees can enjoy the warm and peaceful Lantern Festival and start the new year with good spiritual conditions.



## Focus

### Art flower arranging activities

On 5 March 2021, the labor union of Huadian Power International Shuozhou Thermal Power Branch organized the activity of “celebrating the 100-year founding of the Party and sharing the prosperity of the world” on March 8<sup>th</sup>, 2021, which enabled female employees to learn flower arranging skills and to enhance communication and friendship between them.





## Focus

## Welding technology competition

On 15 April 2021, the maintenance department of Sichuan Guang'an Power Generation Co., Ltd. organized a welding technology competition to encourage welding operators to practise basic skills, improve skills and enhance technical communications.



## Focus

## Table Tennis Competition

From 27 to 28 May 2021, the labor union of Huadian Power International Henan Branch held the table tennis competition of "100-year Red Party Flag, Chasing Dreams in a New Era". The competition not only demonstrated the spirit of employees to strive for improvement, but also enhanced the communication between regional branches.



## Human Resources Performance Indicators

Indicators	2021 (Unit: Persons)	2020 (Unit: Persons)	2019 (Unit: Persons)
Total number of employees	25,266	27,409	27,834
Total employees by gender			
Male	19,404	21,375	21,615
Female	5,862	6,034	6,219
Total employees by position			
Management	5,216	6,497	6,683
Professional technical position	2,851	2,189	2,035
Production position	16,146	17,703	17,860
Service position	892	929	1,148
Other position	161	91	108
Total employees by age group			
24 years old and below	1,430	1,378	1,416
25-29 years old	3,310	3,866	4,213
30-34 years old	3,280	3,733	3,404
35-39 years old	2,233	2,577	2,661
40-44 years old	3,319	3,992	4,539
45-49 years old	5,187	5,554	5,951
50-54 years old	4,250	4,178	3,692
55 years old and above	2,257	2,131	1,958
Total employees by region			
Beijing	120	113	Not available
Shandong	11,355	11,759	Not available
Hubei	2,696	2,685	Not available
Anhui	1,208	1,198	Not available



Indicators	2021 (Unit: Persons)	2020 (Unit: Persons)	2019 (Unit: Persons)
Total employees by region			
Ningxia	71	1,047	Not available
Sichuan	1,504	1,512	Not available
Zhejiang	1,093	1,126	Not available
Hebei	2,438	2,625	Not available
Henan	1,035	1,053	Not available
Guangdong	1,189	1,181	Not available
Tianjin	682	667	Not available
Shanxi	474	1,811	Not available
Inner Mongolia	30	141	Not available
Chongqing	386	Not available	Not available
Hunan	917	Not available	Not available
Others	68	491	Not available
Total employees by education background			
Master's degree and above	1,061	1,016	Not available
Bachelor's degree	12,027	12,274	Not available
College certificate	7,594	8,380	Not available
Technical secondary school certificate	2,567	3,331	Not available
Vocational school certificate	596	668	Not available
High school diploma and below	1,421	1,740	Not available
Total employees by employment type			
Permanent employee	25,139	27,116	27,287
Contractual employee	127	293	547

9. Collect and disclose the data of employee turnover rate since the Reporting Period. The breakdown of the rate (i.e., employee turnover rate by gender, age group and region) is calculated by dividing the number of employees in the relevant category by the total number of employees in the relevant category in the current year.

Indicators <sup>9</sup>	2021 (Unit: Persons (%))	2020 (Unit: Persons)	2019 (Unit: Persons)
Employee turnover by gender (rate)			
Male	117 (0.6)	207	284
Female	30 (0.5)	29	64
Employee turnover by age group (rate)			
24 years old and below	23 (1.6)	41	36
25-29 years old	57 (1.7)	89	156
30-34 years old	38 (1.2)	60	84
35-39 years old	10 (0.4)	20	24
40-44 years old	7 (0.2)	7	10
45-49 years old	9 (0.2)	11	18
50-54 years old	1 (0.0)	6	10
55 years old and above	2 (0.1)	2	10
Employee turnover by region (rate)			
Beijing	1 (0.8)	0	0
Shandong	18 (0.2)	31	32
Hubei	24 (0.9)	26	27
Anhui	5 (0.4)	10	34
Ningxia	0 (0.0)	5	19
Sichuan	6 (0.4)	17	27
Zhejiang	5 (0.5)	6	18
Hebei	6 (0.2)	20	29
Henan	32 (3.1)	12	16
Guangdong	11 (0.9)	61	60
Tianjin	5 (0.7)	7	13
Shanxi	3 (0.6)	20	37
Inner Mongolia	0 (0.0)	2	11
Chongqing	24 (6.2)	Not available	Not available
Hunan	7 (0.8)	Not available	Not available
Others	0 (0.0)	19	25

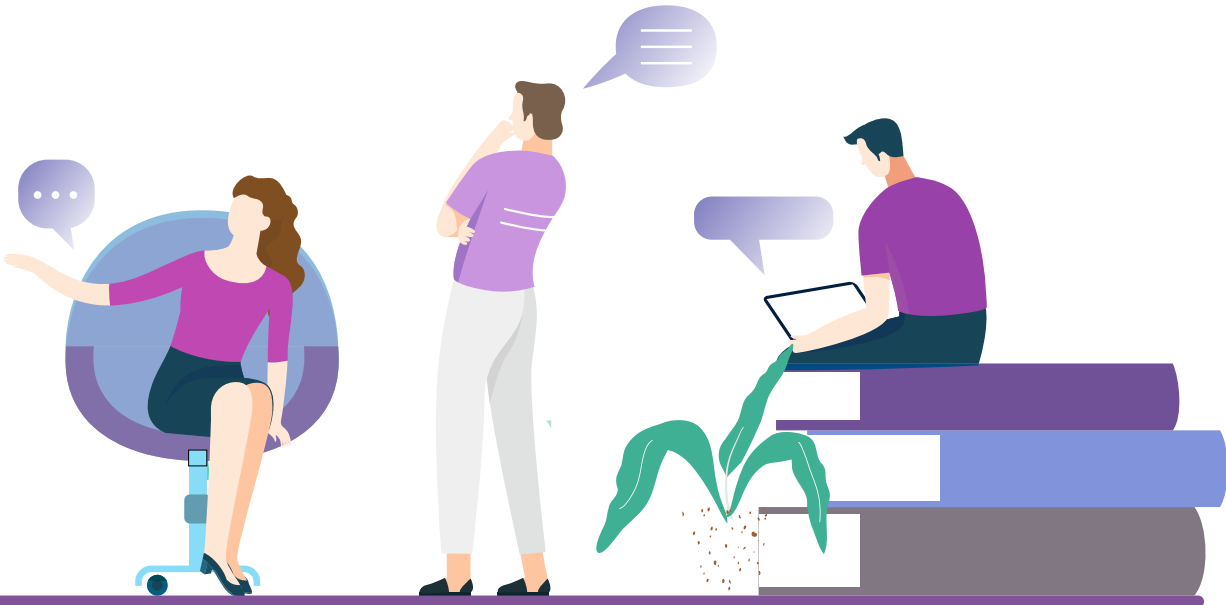


Indicators	2021 (Unit: Persons)	2020 (Unit: Persons)	2019 (Unit: Persons)
Total employees trained by training type			
Training provided by China Huadian or superior organizations	10,015	16,184	10,131
Qualification training	12,662	9,531	12,960
Adaptability training	83,368	70,664	85,454
Technical level training	10,744	27,894	3,885
Continuous training	573	2,172	3,200
Other training	52,947	67,984	131,471

Indicators <sup>10</sup>	2021 (Unit: Number of employees (%))
Total employees trained by gender (percentage)	
Male	18,304 (75.9)
Female	5,812 (24.1)
Total employees trained by employee type (percentage)	
Company leader (including director and supervisor)	485 (2.0)
Professional manager	4,641 (19.2)
Professional technician	2,682 (11.1)
Skilled personnel	16,308 (67.6)

10. Collect and disclose the number and percentage of employees trained since the Reporting Period. The breakdown of the percentage (i.e. percentage of employees trained by gender and employee category) is calculated by dividing the number of employees trained in the relevant category by the total number of employees trained in the current year.

Indicators	2021 (Unit: Hours)	2020 (Unit: Hours)	2019 (Unit: Hours)
Average training hours per employee by gender			
Male	78	76	86
Female	74	74	51
Average training hours per employee by employee category			
Company leader (including director and supervisor)	119	134	112
Professional manager	77	74	78
Professional technician	74	74	80
Skilled personnel	77	74	78









The Group keeps in mind the responsibility as a state-owned enterprise, promotes the spirit of "caring everywhere", actively understands the needs of the community and considers the interests of the community, and serving to the society with sincere altitude and sincere services. During 2021, the Group consciously devoted itself to the cause of rural revitalization, while solidly promoting various community volunteer services, contributing love and serving the public with practical actions, and striving to convey the "Huadian warmth" to all over the country.

## 06

### Support Prosperous Community, Implement the Spirit of Caring Everywhere

-  Support Rural Revitalization
-  Care about the Community



## Support Rural Revitalization

2021 marks the first year of the “14<sup>th</sup> Five-Year” plan, and also a crucial year for consolidating and expanding the achievements of poverty alleviation and effectively connecting with rural revitalization. In this regard, the Group responded to the national strategy, focused on consolidating and expanding the results of poverty alleviation, consciously devoted itself to the course of rural revitalization, and practiced social responsibility and corporate responsibility with practical actions.

### Focus

#### Charity donation activities

From 1 to 4 November 2021, Huadian Power International organized a charity donation activity of “Supporting Rural Revitalization with Happiness Action”. With the strong support of cadres and employees, a total of 170 donated items were raised, including 25 stationeries, 125 clothes for adults, 12 sports equipment and 8 electronics. These donated items were sent to the “Huadian Love Points Supermarket” by mail, and distributed to the people in the western region through the Love Supermarket, contributing to the consolidation of poverty alleviation achievements, the realization of rural revitalization and the promotion of common prosperity.



### Focus

#### Poverty alleviation and consumption activities

In 2021, Huadian Power International carried out poverty alleviation and consumption activities, and consumed a total of RMB 51,750 for purchasing agricultural products in Wujia County, Xinjiang, continuously improving the effectiveness of consumption assistance. In addition, Huadian Power International actively responded to the call of the Labor Union of China Energy Chemical and Geology, and organized all employees to participate in the activities of “Dedication of Love, Transmission of Hope, Mutual Assistance and Mutual Assistance”, and joined hands with peers to “One Yuan Donation, Ten Yuan Donation” to convey big energy with little love.

#### Pairing-up assistance activities

In 2021, Huadian Power International Zhejiang Branch paired up with Hunan Village, Hunan Town, Qujiang District, Quzhou City in Zhejiang Province, and donated RMB 100,000 to designated banks as assistance funds, which were mainly used for income generation and poverty alleviation subsidies for low-income farmers in pair-up villages.



## Care about the Community

The Group actively supports employees to participate in public welfare undertakings, and brings care to the community by carrying out various employee volunteer activities.

### Focus

#### Safety consulting activities

In June 2021, Sichuan Guang'an Power Generation Co., Ltd. and Guang'an City Qianfeng District Emergency Management Bureau adopted the “government-enterprise linkage” method for the first time to carry out a wonderful and practical safety consulting activity at the railway station of Qianfeng District. During the period, the staff patiently explained to the public about how to avoid danger when earthquake happening, how to prevent fires and how to use electricity safely, and taught the citizens about the first aid methods for cardiopulmonary resuscitation, creating a strong atmosphere where the public in the community care for safety and participate in safety related activities.



### Focus

#### Voluntary services for epidemic prevention

In 2021, the vaccination of COVID-19 was carried out in an orderly manner in all provinces across the country. In order to ensure the smooth implementation of vaccination work and alleviate the pressure of medical staff to continue to fight against COVID-19, Hangzhou Huadian Banshan Power Generation Company Ltd. organized party members to set up a volunteer service team for epidemic prevention and control, and rushed to the centralized vaccination point of Hangzhou Gongshu District Traditional Chinese Medicine Hospital to help the hospital orderly guide the public to complete vaccination.





Look Forward to the Future

2022 is a crucial year for the implementation of the “14<sup>th</sup> Five-Year” plan, as well as a year for the Group to accelerate high-quality development, and it is essential to do a good job in all aspects. The Central Economic Work Conference made a major judgment that China’s economic development is facing “three pressures” including shrinking demand, supply shock and weakened expectation. The power industry is facing accelerating internal reform, industrial upgrading and competition intensify. Opportunities and challenges coexist, and favorable factors and unfavorable factors are intertwined. The Group needs to analyze and grasp the major contradictions in a scientific, accurate and comprehensive manner, grasp the right direction, and further enhance the foresight and initiative of work.

Social Responsibility Management

The Group insists on taking legal compliance as the bottom line of production and operation development, promoting the modernization of corporate governance system and governance capacity, and further implementing the integrated construction of internal control and compliance risk management. The Group will explore the establishment of a new model of internal control and compliance supervision combining offline and online channels and on-site and remote integration, so as to achieve full-process, multi-angle and all-round real-time inspection, and comprehensively coordinated risk prevention.

Environmental Protection

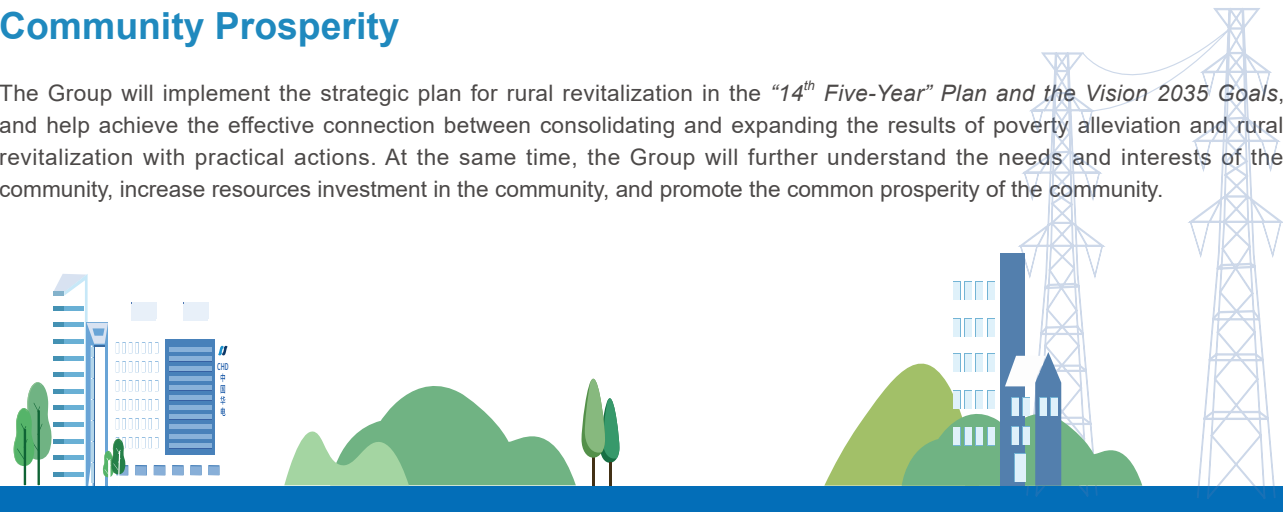
The Group adheres to the three-pronged development strategy of new construction, mergers and acquisitions and asset injection, accelerating the optimization of asset structure, and increasing the proportion of clean energy installed capacity. At the same time, the Group will deepen ecological and environmental protection governance, earnestly implement the Central Government’s *Opinions on In-depth Prevention and Control of Pollution*, fully fulfill the environmental protection management responsibilities of investors, and ensure that pollutants are discharged in accordance with the law and meet the discharge standards. The Group will closely follow the national environmental protection policies, urge relevant units to strengthen the in-depth optimization of water use and water pollution prevention and transformation and unorganized discharge treatment, and accelerate the comprehensive treatment of wastewater to ensure timely completion and compliance with environmental protection requirements.

Safety Production

The Group adheres to the primary responsibility of ensuring the safe and reliable supply of energy, carefully studies and analyzes the characteristics of power safety production and the lessons of safety accidents in recent years, and keep carrying out in-depth investigation and management of hidden dangers in safety production and “Production Safety Month” activities to further consolidate the foundation of safety production. At the same time, the Group pays close attention to the major safety hazards in the internal system to effectively prevent safety accidents.

Community Prosperity

The Group will implement the strategic plan for rural revitalization in the “14<sup>th</sup> Five-Year” Plan and the Vision 2035 Goals, and help achieve the effective connection between consolidating and expanding the results of poverty alleviation and rural revitalization with practical actions. At the same time, the Group will further understand the needs and interests of the community, increase resources investment in the community, and promote the common prosperity of the community.



SEHK’s Guide Index

Mandatory Disclosure Requirements	Description	Relevant Chapter in the Report or Explanation
Governance Structure	A statement from the board containing the following elements:  (i) a disclosure of the board’s oversight of ESG issues;  (ii) the board’s ESG management approach and strategy, including the process used to evaluate, prioritise and manage material ESG-related issues (including risks to the issuer’s businesses); and  (iii) how the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer’s businesses.	Take Responsibility to Heart, Prudent Corporate Management
Reporting Principles	A description of, or an explanation on, the application of the following Reporting Principles in the preparation of the ESG report:  <b>Materiality:</b> the ESG report should disclose: (i) the process to identify and the criteria for the selection of material ESG factors; (ii) if a stakeholder engagement is conducted, a description of significant stakeholders identified, and the process and results of the issuer’s stakeholder engagement.  <b>Quantitative:</b> information on the standards, methodologies, assumptions and/or calculation tools used, and source of conversion factors used, for the reporting of emissions/energy consumption (where applicable) should be disclosed.  <b>Consistency:</b> the issuer should disclose in the ESG report any changes to the methods or KPIs used, or any other relevant factors affecting a meaningful comparison.	About the Report
Reporting Boundary	A narrative explaining the reporting boundaries of the ESG report and describing the process used to identify which entities or operations are included in the ESG report. If there is a change in the scope, the issuer should explain the difference and reason for the change.	About the Report
General Disclosures and KPIs	Description	Relevant Chapter in the Report or Explanation
A.Environmental		
Aspect A1: Emissions		
General Disclosure	Information on:  (a) the policies; and  (b) compliance with relevant laws and regulations that have a significant impact on the issuer  relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Develop Harmoniously, Protect Lucid Waters and Lush Mountains



General Disclosures and KPIs	Description	Relevant Chapter in the Report or Explanation
KPI A1.1	The types of emissions and respective emissions data.	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
KPI A1.5	Description of emission target(s) set and steps taken to achieve them.	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
Aspect A2: Use of Resources		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Due to the business nature of the Group, this is not applicable to the Group
Aspect A3: The Environment and Natural Resources		
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
Aspect A4: Climate Change		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	Develop Harmoniously, Protect Lucid Waters and Lush Mountains
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	Develop Harmoniously, Protect Lucid Waters and Lush Mountains

General Disclosures and KPIs	Description	Relevant Chapter in the Report or Explanation
B.Social		
Aspect B1: Employment		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	United team, develop and move forward
KPI B1.1	Total workforce by gender, employment type (for example, full-or part-time), age group and geographical region.	United team, develop and move forward
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	United team, develop and move forward
Aspect B2: Health and Safety		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	Safety First, Ensure Safe Operations
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Safety First, Ensure Safe Operations
KPI B2.2	Lost days due to work injury.	Safety First, Ensure Safe Operations
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Safety First, Ensure Safe Operations
Aspect B3: Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	United team, develop and move forward
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	United team, develop and move forward
KPI B3.2	The average training hours completed per employee by gender and employee category.	United team, develop and move forward
Aspect B4: Labor Standards		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labor.	United team, develop and move forward
KPI B4.1	Description of measures to review employment practices to avoid child and forced labor.	United team, develop and move forward
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	United team, develop and move forward
Aspect B5: Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Well-run Operations, Promote High-Quality Development
KPI B5.1	Number of suppliers by geographical region.	Well-run Operations, Promote High-Quality Development



General Disclosures and KPIs	Description	Relevant Chapter in the Report or Explanation
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	Well-run Operations, Promote High-Quality Development
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Well-run Operations, Promote High-Quality Development
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Well-run Operations, Promote High-Quality Development
Aspect B6: Product Responsibility		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Safety First, Ensure Safe Operations; due to the business nature of the Group's, health, advertising and labelling matters relating to the electricity supplied are not applicable to the Group
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Due to the business nature of the Group, this is not applicable to the Group
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	Safety First, Ensure Safe Operations
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Well-run Operations, Promote High-Quality Development
KPI B6.4	Description of quality assurance process and recall procedures.	Due to the business nature of the Group, this is not applicable to the Group
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Safety First, Ensure Safe Operations
Aspect B7: Anti-corruption		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Well-run Operations, Promote High-Quality Development
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Well-run Operations, Promote High-Quality Development
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Well-run Operations, Promote High-Quality Development
KPI B7.3	Description of anti-corruption training provided to directors and staff.	Well-run Operations, Promote High-Quality Development
Aspect B8: Community Investment		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Support Prosperous Community, Implement the Spirit of Caring Everywhere
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	Support Prosperous Community, Implement the Spirit of Caring Everywhere
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Support Prosperous Community, Implement the Spirit of Caring Everywhere


**HUADIAN POWER INTERNATIONAL CORPORATION LIMITED**

 Address: No. 2 Xuanwumennei Street, Xicheng District, Beijing  
 Zip code: 100031