華能國際電力股份有限公司
Huaneng Power International, Inc.

環境、社會及管治報告
Environmental, Social and Governance Report
2025





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CHAIRMAN'S STATEMENT



The 14th Five-Year Plan period was a turning point for Huaneng Power International. At Huaneng International, we advanced our transformation, enhanced performance, and delivered on key goals. Under the leadership of the CPC Central Committee with Comrade Xi Jinping at its core, we aligned with national priorities, pursued innovation with determination, and made steady progress across all key initiatives. We completed our 14th Five-Year objectives and our progress in building a world-class enterprise has accelerated.

Over the past five years, we have remained committed to national strategic imperatives. We supported the growth of state-owned capital and implemented China's new energy security strategy. Our overall strength has also improved: operational results reached record levels, equipment reliability led the sector, and our asset size and quality witnessed steady growth. Besides, we fulfilled our responsibility for secure energy supply by delivering reliable energy services during major events and critical periods, thereby providing robust energy support for economic and social stability.

Over the past five years, we pursued green development. We accelerated the development of strategic emerging industries, with new energy as the priority. We drove deep transformation in thermal power. These efforts led to a significant improvement in our market competitiveness. New energy capacity increased by 20% compared to five years ago. Offshore wind power projects now operate across six provincial coastal areas and our energy storage capacity keeps expanding. We advanced the coordinated "three reforms" initiative of coal units for efficiency, heating, and flexibility. Our energy efficiency and environmental metrics remain top-tier. Besides, we built a series of high-quality engineering projects. These earned the National Quality Engineering Gold Award, the China High-Quality Electric Power Engineering Award, among other honors.

Over the past five years, we advanced self-reliance in science and technology and we broke through in key core technologies. Cumulative R&D investment exceeded RMB40 billion, with R&D intensity maintained above 3%. The Company has high-quality completed national scientific and technological research tasks. The Power Network Cybersecurity Range has been awarded a national-level range. The "New Model for Engineering Construction and Management of New-Generation Smart Coal-Fired Power Plants" has received the CEC Innovation Award. Digital and intelligent transformation has empowered the upgrading of traditional industries, and the Company's core competitiveness has been further enhanced.

Over the past five years, we followed an international development strategy. We expanded into the overseas power market and lifted business performance. Through these efforts, we supported deeper and more substantial progress on the Belt and Road Initiative. We improved governance models for overseas subsidiaries, coordinated resource allocation across domestic and overseas operations, and deeply rooted ourselves in the power markets of Singapore and Pakistan, achieving steady growth in operating efficiency. Tuas Power's Singapore has become a successful practice for central power generation enterprises going global. It was recognized as an outstanding example in the State-owned Assets Supervision and Administration Commission of the State Council (SASAC)'s Value Creation Initiative and also as a Singapore's Best Employer.

Over the past five years, we advanced comprehensive reform. We raised our overall quality as a listed company. Modern corporate governance matured with our more standardized operations. We established the "14345" corporate governance framework. We fully implemented the action plan for deepening and enhancing State-owned Enterprise reform and achieved all objectives of the three-year action plan for improving the quality of listed companies. Legal, compliance, risk, and internal control management performed effectively. We passed external internal control audits for the 20th consecutive year. ESG principles are now integrated into our strategies and operations. Our influence and reputation in state-owned enterprise systems and capital markets continue to grow.

Over the past five years, we implemented the general requirements for Party building in the new era. We strengthened self-awareness and resolve in self-reform. High-quality Party building guided and safeguarded our high-quality development. We deepened understanding and implementation of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. We consistently upheld the spirit of the Eight-Point Decision on Improving Party and Government Conduct. We supported rural revitalization and regional coordinated development with investment over RMB70 million. We facilitated over RMB250 million in consumption-based assistance. We responded actively to stakeholder expectations and aligned corporate development with social value creation.

At the start of the 15th Five-Year Plan, Huaneng International will follow Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. We will fully, accurately, and comprehensively apply the new development philosophy. We will support the building of a new development pattern and advance high-quality development. We will strengthen safety and risk prevention and promote green and low-carbon development. We will improve quality and efficiency and advance reforms to build a "three-strong, three-excellent"[1] flagship listed power company. We will make greater contributions to national prosperity and national rejuvenation.

Wang Kui

Chairman

Huaneng Power International, Inc.

[1] "Three-strong" refers to strong innovation drive, strong competitive advantage, and strong Party leadership. "Three-excellent" refers to excellent governance effectiveness, excellent development quality, and excellent operating performance.


02
中国华能
CHINA HUANENG



About Us

ABOUT US



2.1 Company Profile

Huaneng Power International, Inc. ("Huaneng International", "Huaneng" "the Company" or "We") was incorporated on June 30, 1994. The Company's core business, through leveraging modern technology and equipment and the financial resources available domestically and internationally, is to develop, construct and operate power plants. The Company is one of the China's largest listed power generation companies, and is the first power generation company in China to list in New York, Hong Kong and Shanghai simultaneously.

As a power generation enterprise, the Company has persistently emphasized innovations in technologies, structure, and management since its incorporation. In terms of the advancements in power technologies, power plant construction and management of power plants, the Company has pioneered and created various milestones within the domestic power industry, making great strides in developing the power business and technological advancement of the power station equipment manufacturing industry in China, thereby contributed significantly to the improvement of technical and management standards of the domestic power generation enterprises.

Throughout the years, and with great dedication, the Company has expanded steadily by growing its competitive strengths. The success of the Company rests on its strengths in scale and equipment, its transition to low carbon clean energy sources, advantages in scientific and technological innovation and environmental protection, optimal geographic power plant layout, robust corporate governance structure, sound market reputation, extensive experience in the capital markets, advantages in overseas development, its high calibre staff and professional management, as well as the steady support from our major shareholders.

As at 31 December 2025, the Company has controlled installed capacity of 155,869 MW and low carbon clean energy installed capacity accounted for 41.01%. The Company's domestic power plants are located in 26 provinces, autonomous regions and municipalities. The Company wholly owns a power company in Singapore and invests in a power company in Pakistan.

155,869 MW

As at 31 December 2025, Controlled Installed Capacity

41.01%

Installed Capacity of Low-carbon Clean Energy Installation Reached

In 2025, the Company won the "15th China Securities Golden Bauhinia Award – Outstanding Listed Company" (卓越上市公司), the "19th China Listed Company Value Forum – Top 100 Value Main Board Listed Companies"(主板上市公司價值百強) by Securities Times, the "Beijing-Tianjin-Hebei Top 100 Enterprises" (京津冀百強企業) by the Beijing Enterprise Confederation, the "2025 Listed Company Board Best Practice Case" (2025上市公司董事會最佳實踐案例) by the China Association for Public Companies, the "Special Contribution Award for Corporate Governance" (第二十屆中國上市公司董事會"金圓桌獎"之"公司治理特別貢獻獎") of the 20th "Golden Round Table Award" of Chinese Listed Company Boards, and the "Excellent Sponsor of Asset Securitization Business in 2024(資產證券化業務優秀發起人)" by the Shanghai Stock Exchange. The Company's ESG practices were selected for inclusion in the "Blue Book on Environmental, Social and Corporate Governance (ESG) of Listed Companies of Central Enterprises"《中央企業上市公司環境、社會和公司治理(ESG)藍皮書》) issued by the State-owned Assets Supervision and Administration Commission of the State Council. The Company was also honoured with a number of awards by mainstream media including China Media Group and Banyue Tan Magazine, such as the "Top 100 Pioneer List of Central State-owned Enterprise ESG Listed Companies in China"(中國ESG上市公司央企先鋒100榜單), the "Top 100 Pioneer List of ESG Listed Companies in China"(中國ESG上市公司先鋒100榜單), and the "Outstanding ESG Achievements of Enterprises"(企業ESG優秀成果). In addition, the Company received recognitions from industry associations including the China Association for Public Companies and the China Hydropower Quality Management Association, such as the "Best Practice Case for Sustainable Development"(可持續發展最佳實踐案例) and the "First-class Typical ESG Case"(ESG一等典型案例), fully demonstrating the Company's leading role in ESG practices. The external auditor has issued unqualified audit report on internal controls for 20 consecutive years.

2.2 Corporate Governance

In 2025, the Company earnestly implemented the Company Law of the People's Republic of China and other laws and regulations, as well as the regulatory requirements of its listing venues. In full consideration of its own development needs, the Company efficiently and steadily carried out the reform of the Supervisory Committee of listed companies, with the Audit Committee assuming the supervisory functions of the Supervisory Committee. A new corporate governance structure of "Two Meetings and One Tier" consisting of the Shareholders' General Meeting, the Board of Directors and the management team was established, which elevated the Company's corporate governance to a new level and provided solid guarantee for the Company's high-quality development and accelerating the creation of a world-class listed power generation company.

The Company has established a comprehensive and efficient corporate governance system, formulating more than 20 management systems including the Rules of Procedure for the Shareholders' General Meeting (《股東會議事規則》), Rules of Procedure for the Board of Directors (《董事會議事規則》), Working Rules for the General Manager (《總經理工作細則》) and working rules for special committees (專門委員會工作細則). In 2025, taking the reform of the Supervisory Committee as an opportunity, the Company carried out a comprehensive revision of the Articles of Association for compliance with laws, strengthening the fundamental role of the Articles of Association in corporate governance. It also improved the Rules of Procedure for the Shareholders' General Meeting and the Rules of Procedure for the Board of Directors, as well as the working rules for special committees; in accordance with the requirements of the Hong Kong Stock Exchange, it further implemented the statutory functions of governance bodies such as the Audit, Nomination, and Remuneration and Assessment Committees. A "1+N" decision-making system was formed, with the Articles of Association as the foundation, the Regulations for the Administration of Decision-Making on "Three Importance and One Greatness" (三重一大) as the general outline, the rules of procedure as the framework, and business management systems as the support, providing important guarantee for further improving the institutional system and continuously consolidating the standardized operation of the Company.

In 2025, the Company held three Shareholders' General Meetings, seven Board meetings, three former Supervisory Committee meetings, fourteen meetings of special committees and three special meetings of Independent Directors. It completed the review of more than 100 important proposals, including amendments to the Articles of Association, co-optation of Directors, appointment of senior management, profit distribution plans, investment and financing, daily connected transactions and appointment of auditors. All Directors and senior management conscientiously abided by relevant national laws and regulations and the regulatory requirements of the listing venues, fulfilled their duties diligently and conscientiously, attended meetings on time, carefully reviewed relevant matters, and made scientific and prudent decisions on various proposals, effectively promoting the high-quality development of the Company.

2.3 Company Development Strategy

The Company will adhere to major national strategies including building an energy superpower, the new energy security strategy, and carbon peaking and carbon neutrality. Building on improving the quality and efficiency of its development, the Company will further deepen its green and low-carbon transformation, with a focus on developing large-scale wind and solar power bases and deep-sea offshore wind power projects, thereby promoting the high-quality development of new energy. The Company will also accelerate the optimisation and upgrading of its coal-fired power structure in accordance with the approach of increasing capacity, controlling electricity output and facilitating transformation. In addition, the Company will develop strategic emerging industry projects such as new energy storage and clean heating, aiming to building a modern energy supply system that is clean, low-carbon, safe and efficient. The Company will promote the development of technological innovation by adhering to the principle of serving national strategies, responding to market demand and industry development trends, focusing on key research topics and the commercialization of scientific and technological achievements, fostering new quality productive forces, and enhancing new drivers for the Company's innovative development. The Company will also advance its international development strategy, better coordinate the utilisation of both domestic and international markets and resources, strengthen the efficient operation of overseas assets, and enhance the core competitiveness and development resilience of its international business. The Company will consolidate its operational and management foundations, enhance management efficiency, further improve corporate governance, enhance corporate value and actively fulfil its social responsibilities. It will also strengthen the core functions and core competitiveness of the listed company, and strive to build a flagship listed power generation company characterised by the "three strengths and three excellences", namely strong innovation drive, strong competitive advantages and strong Party leadership, together with excellence in governance efficiency, development quality and operating performance.

2.4 Company Philosophy

Corporate Mission	■ To uphold the "Three-color Concept" and serve the building of China into a great power in energy. A "red" company that serves the Party and the people, safeguards energy security, and contributes to the Chinese path to modernization. A "green" company that prioritizes ecology, facilitates energy revolution, and empowers people for a better life. A "blue" company that focuses on technological innovation, promotes energy cooperation, and contributes to building a community with a shared future for mankind.
Corporate Core Values	■ Upholding integrity, focusing on cooperation ■ Innovating continuously, progressing actively ■ Creating achievements, serving the Country
Corporate Target	■ Developing into an international leading listed power generation Company
Corporate Responsibilities	■ Provision of sufficient, reliable and environment-friendly electricity to the society ■ Strive for delivery of long-term, stable and increasing returns to shareholders ■ Support the comprehensive development of employees to establish self-achievements
Corporate Spirit	■ Reform and innovation, striving to be pioneers
Corporate Manner	■ Be brave in pioneering, courageous in shouldering responsibilities, adept at taking action, and willing to contribute

2.5 Situations Faced with the Company's ESG

The year 2026 marks the first year of the "15th Five-Year Plan", and the Central Economic Work Conference has emphasized the need to maintain steady progress while seeking advancements, improving quality and efficiency, and promoting stable economic growth. It calls for the implementation of a more proactive fiscal policy and moderately accommodative monetary policy. The conference also outlined key priorities, including strengthening domestic demand, building a strong domestic market, accelerating the cultivation and expansion of new growth drivers through technological innovation, deepening reforms to strengthen the momentum and vitality of high-quality development, and promoting a comprehensive green transition guided by the 'dual carbon' goals.

In terms of power supply and demand, according to the China Electricity Council's annual analysis and forecast of power supply and demand, taking into account China's current economic growth potential, the recommendations of the 15th Five-Year Plan for national economic and social development, and national macroeconomic regulatory policies, China's macroeconomy is expected to maintain stable growth in 2026. Total electricity consumption nationwide is expected to increase by 5%-6% year-on-year in 2026; the peak unified dispatch load is projected at 1.57-1.63 billion kilowatts; newly commissioned power generation capacity is expected to exceed 400 million kilowatts; and by the end of 2026, the proportion of coal-fired power in total installed capacity is expected to decline to approximately 31%.

In terms of the electricity market, in 2025, the central government issued key documents including the Basic Rules for Electricity Ancillary Services Market, the Basic Rules for Electricity Market Measurement and Settlement, and the revised Basic Rules for the Medium- and Long-Term Electricity Market, and approved the proposals submitted by the National Grid and Southern Grid on normalized cross-grid electricity trading mechanisms, marking further improvement in the electricity market system and more mature market mechanisms, and accelerating the construction of a nationwide unified electricity market. Currently, except for Tibet and the Beijing-Tianjin-Tangshan area, all provinces and regions nationwide have achieved full coverage of the spot market, significantly enhancing the timeliness and flexibility of electricity trading. In 2026, competition among market participants is expected to be more intensive, price fluctuations will be more frequent, the spread between medium- and long-term markets and spot markets, as well as between wholesale and retail sides, will further narrow, and overall market coordination and linkage will be significantly enhanced.

In terms of the carbon market, the General Office of the CPC Central Committee and the General Office of the State Council issued the Opinions on Promoting Green and Low-Carbon Transition and Strengthening National Carbon Market Construction, which specify that by 2027, the carbon market will basically cover the major emitting industries in the industrial sector, and that by 2030, a market mechanism based on total quota control, combining free and paid allocation, will be basically established. Therefore, as the issuance of allowances continues to tighten and paid allocation is implemented, the compliance cost of carbon emissions per unit of coal-fired power is likely to increase.

In terms of the coal market, the national supply guarantee policy has shifted from "increasing production to ensure supply" to "stabilizing production to ensure supply", with limited room for additional coal production in major coal-producing regions; imports of coal may decline year-on-year due to the impact of export policies from countries such as Indonesia. With ongoing industrial restructuring and green low-carbon transition, coal consumption for power generation is expected to remain largely stable year on year; in non-electricity industries, coal consumption in steel, building materials, and other sectors continues to be weak, while coal chemical industry consumption continues to grow. In 2026, the coal market is expected to exhibit characteristics of "generally balanced supply and demand and intensified price fluctuations", due to factors such as new energy and weather, the coal market may experience temporary mismatches, with more frequent and larger fluctuations in coal prices.

In terms of the financial market, in line with the spirit of the Central Economic Work Conference and the quarterly meeting of the Monetary Policy Committee of the People's Bank of China, in 2026 it is necessary to adhere to the principle of seeking progress while maintaining stability and improving quality and efficiency, leverage the integrated effects of existing and new policies, strengthen counter-cyclical and cross-cyclical adjustments, and enhance macroeconomic governance effectiveness. Efforts should continue to implement a more proactive fiscal policy and a moderately accommodative monetary policy, strengthen coordination between monetary and fiscal policies, and promote stable economic growth.

2.6 Company's ESG Responsibility Management

Huaneng International integrates the new development concept of "innovation, coordination, green, openness, and sharing" with ESG management, builds a more standardized and distinctive ESG governance system, and promotes the Company's high-quality and sustainable development. To better implement strategic ESG management, the Company has established an ESG governance structure featuring decision-making by the Board of Directors, leadership by the management layer, and full participation from all departments and units in horizontal coordination and vertical linkage. This ensures the comprehensiveness, effectiveness, and sustainability of the Company's ESG management.

The Company's Board of Directors ensures the design of an appropriate and effective ESG risk management and internal control system. In accordance with the requirements of national policies and regulatory requirements of the listing jurisdictions, combined with industry characteristics and management practices, the Company has established a comprehensive institutional framework covering environmental, social and governance (ESG) aspects in accordance with the principle of "comprehensive design and dynamic improvement". The Company has formally incorporated the ESG report preparation and disclosure process into the Internal Control Manual (《内部控制手册》), which effectively supports and promotes the sustainable and healthy development of various business processes including ESG work, and fully realizes the institutionalization and systematization of ESG management. The Company evaluates the effectiveness of the management system and the Internal Control Manual (《内部控制手册》) on an annual basis and revises them regularly, thereby achieving the dynamic maintenance and continuous improvement of the institutional system.

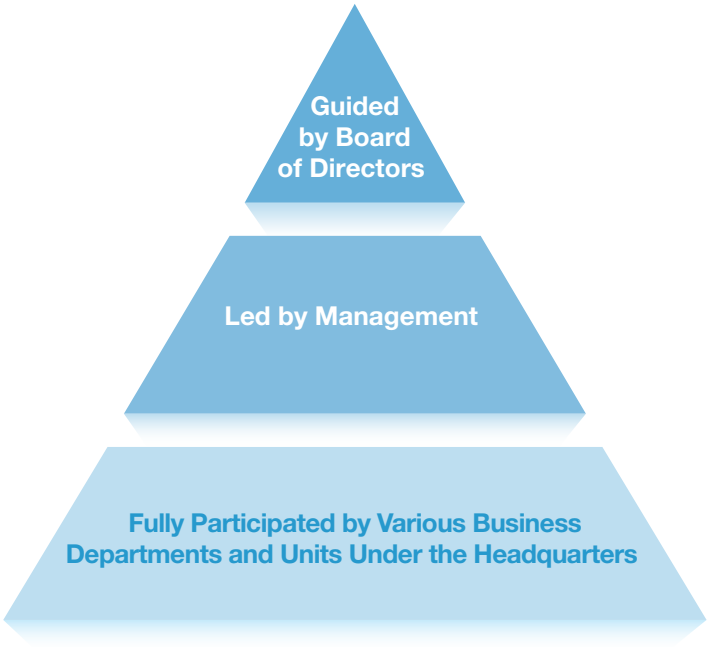
The Board of Directors assumes full responsibility for the Company's ESG management and disclosure, assesses and identifies significant ESG risks, and ensures the establishment of appropriate and effective ESG risk management and internal control systems. The Board of Directors holds regular meetings every year to receive reports from the management on significant ESG matters and provides supervision and guidance.

There are four committees under the Board, namely the Strategy Committee, the Audit Committee, the Nomination Committee, and the Remuneration and Evaluation Committee. According to the division of responsibilities, the Strategy Committee under the Board of Directors is responsible for the decision-making of the Company's overall risk management and regularly listens to the relevant reports. The Strategy Committee's responsibilities include but are not limited to reviewing the annual comprehensive risk management report and assessing the risk management and its effectiveness. The Audit Committee under the Board is responsible for identifying and evaluating the risk of fraud of the senior management and the Board of Directors and forming an independent fraud risk assessment report. It also regularly reviews reports on the Company's internal controls, evaluates the effectiveness of the internal control system, and communicates with the Human Resources Department on issues concerning recruitment and code of conduct. The Strategy Committee is composed of seven directors, including two independent directors. The Audit Committee is composed of five directors, all of whom are independent directors. The independent directors inspect the Company's subsidiaries every year to monitor and provide suggestions on production safety, operation and management, internal controls, and corporate culture. Both the Board of Directors and various specialized committees have incorporated aspects of ESG such as production safety, employee health, energy conservation, environmental protection, and corporate culture into daily work. They closely monitor trending issues such as climate change and ESG information disclosure, aiming to promote balanced development in terms of economic benefits, social benefits, and ecological benefits.

The Company's directors possess extensive theoretical knowledge, solid professional skills, rich management experience, and good professional ethics in fields such as energy and power, production and environmental protection, legal compliance, and financial management. They have a comprehensive understanding of ESG practices, environmental protection, energy transition, and energy conservation and carbon reduction, and have achieved substantial research outputs. Since taking office, the directors have fulfilled their duties with dedication and self-discipline, contributing to enhancing corporate governance and driving the Company's high-quality development. During the reporting period, the Company's independent directors conducted 2 on-site research activities, gaining in-depth insights into the Company's frontline production. They provided constructive suggestions on the Company's 15th Five-Year Development Plan and ESG work, assisting the Company's affiliated enterprises in green development, quality improvement and efficiency enhancement.

The directors and senior management of the Company attached great importance to strengthening their awareness of compliance and enhancing their ability to perform duties, actively participated in various special trainings held by regulatory bodies and industry associations and kept abreast of the updates on laws and regulations and relevant policies in the listing jurisdictions. In 2025, the Company's Directors, Supervisors, and senior management participated in training sessions 39 times. These trainings covered topics including corporate governance, listing regulation practices, the Amendment to the Company Law of the People's Republic of China (《中華人民共和國公司法》), market value management, ESG practices, and new sustainable development regulations. The Board's Secretary attended 2 sessions of enhancement training and seminars for continuing professional development organized by the Hong Kong Chartered Governance Institute. The training sessions focused on the latest regulatory developments of the listing jurisdictions, new standard requirements, compliant operations of listed companies, illegal and non-compliant cases, as well as anti-corruption and anti-fraud cases. All directors, supervisors and senior management personnel of the Company consciously abide by the laws, regulations and provisions of the Articles of Association (《公司章程》), develop a strong work ethic, and take the lead in "knowing the fear and keeping the bottom line". In doing so, they have laid a solid foundation for the Board of Directors to play the role of "formulating strategies, making decisions, and preventing risks", which can take the Company's governance to a new level.

The Company's management coordinates and advances major ESG-related matters in accordance with the decisions and requirements of the Board of Directors. All business departments of the Company's headquarters and its affiliated units are responsible for implementing the specific work of ESG management in accordance with their division of responsibilities and management authority. Going forward, the Company will closely follow the relevant ESG policies and development trends both at home and abroad, and continue to improve its ESG information disclosure.



2.7 Table of Key Performance Indicators in 2025

In accordance with the requirements of the Stock Exchange of Hong Kong Limited's (SEHK) Environmental, Social and Governance Reporting Code (《環境、社會及管治報告守則》), the Shanghai Stock Exchange's (SSE) Guidelines No.14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies–Sustainability Report (Trial) (《上市公司自律監管指引第14號—可持續發展報告(試行)》), and the Global Reporting Initiative's (GRI) Sustainability Reporting Standards (《可持續發展報告標準》), Huaneng International has prepared and analyzed the Company's 2025 ESG key performance indicators, benchmarking against regulatory requirements and its peer companies, as set out below.

Performance Categories	Performance Indicators	2025	2024
Economy	Operating revenue (RMB100 million)[2]	2,292.88	2,455.51
	– Power and heat (RMB100 million)[2]	2,209.61	2,375.54
	– Coal ash, fuels and materials (RMB100 million)[2]	5.62	13.95
	– Port (RMB100 million)[2]	2.18	2.17
	– Transportation (RMB100 million)[2]	1.05	0.72
	– Others (RMB100 million)[2]	74.41	63.13
	Operating expenses (RMB100 million)[2]	1,869.91	2,083.63
	Net profit (RMB100 million)[2]	195.05	141.10
	Controlled installed capacity (MW)[2]	155,869	145,125
	Domestic power generation (100 million kWh)	4,631.14	4,798.64
	Average annual unplanned outage (times/unit • annum)	0.14	0.23
Environment	Coal consumption rate for thermal power unit (g/kWh)	292.05	293.90
	Year-on-year change of coal consumption rate for thermal power unit (%)	-0.63	0.69
	Consumption of standard coal (ten thousand tonnes of standard coal)[3]	12,336.61	13,245.62
	Oil consumption in production (tonnes)	37,938.98	42,920.19
	Natural gas consumption (ten thousand of standard cubic meters)	632,139.30	596,625.26
	House consumption of thermal power unit (MWh)	17,169,233.99	18,775,782.80

2 The scope of statistics of operating revenue (including revenue from power and heat, revenue from coal ash, fuels and materials, revenue from port, revenue from transportation, and other revenue), operating expenses, net profit, and total number of full-time contractual employees, covers Singapore Tuas Power Ltd., the wholly owned subsidiary of Huaneng International, and Huaneng Shandong Ruyi (Pakistan) Energy (Private) Limited. The operating revenue (including revenue from power and heat, revenue from coal ash, fuels and materials, revenue from port, revenue from transportation, and other revenue), operating expenses, and net profit are disclosed in accordance with the Accounting Standards for Business Enterprises of China. Others include lease income. The statistical range of controlled installed capacity includes Singapore Tuas Power Ltd., the wholly owned subsidiary of Huaneng International.

3 The Consumption of standard coal is the sum of various types of energy consumption, calculated according to the General Principles for the Calculation of Comprehensive Energy Consumption (《綜合能耗計算通則》) (GB/T 2589-2020).

Performance Categories	Performance Indicators	2025	2024
Environment	House consumption rate of thermal power unit (%)	4.36	4.44
	Overall water consumption (million tonnes)	20,888.41	21,490.41
	– Fresh water consumption in power generation (million tonnes)	396.77	428.95
	– Water consumption in open cooling circulation (million tonnes)	20,491.64	21,061.46
	Performance value of consumption of fresh water in power generation (kg/kWh)	0.86	0.89
	Performance value of emission of sulphur dioxide (g/kWh)[4]	0.06	0.06
	Performance value of emission of nitrogen oxide (g/kWh)[4]	0.13	0.13
	Performance value of soot emissions (g/kWh)[4]	0.01	0.01
	Sulphur dioxide emissions (tonnes)[4]	24,864.48	27,203.63
	Nitrogen oxides emissions (tonnes)[4]	51,843.63	56,412.55
	Soot emissions (tonnes)[4]	3,782.79	3,780.93
	Certified sulfur dioxide emissions (tonnes)	93,884.95	102,382.73
	Certified nitrogen oxides emissions (tonnes)	129,187.97	136,664.41
	Certified soot emissions (tonnes)	22,386.09	24,124.47
	Total Greenhouse Gas Emissions (Scope 1, Scope 2, Scope 3) (ten thousand tonnes of carbon dioxide equivalent)[5]	39,302.32	42,039.20
	Total Scope 1 Greenhouse gas emissions (ten thousand tonnes of carbon dioxide equivalent)[5]	34,250.10	36,650.81
	– Greenhouse gas emissions generated by coal consumption (ten thousand tonnes of carbon dioxide equivalent)[5]	33,073.22	35,520.55
	– Greenhouse gas emissions generated by natural gas consumption (ten thousand tonnes of carbon dioxide equivalent)[5]	1,165.05	1,117.52
	– Greenhouse gas emissions generated by fuel consumption (ten thousand tonnes of carbon dioxide equivalent)[5]	11.83	12.74
	Scope 1 GHG emission intensity (grams of carbon dioxide equivalent/kWh)[5]	703.31	708.39

4 The Company's exhaust gas emissions are counted and calculated according to the actual concentration of pollutants.

5 The Company conducts Scope 1 and Scope 2 GHG emissions accounting in accordance with the General Guideline of the Greenhouse Gas Emissions Accounting and Reporting for Industrial Enterprises (GB/T 32150–2015). Activity data—including energy consumption and key process parameters—are automatically collected from production systems and statistically compiled based on standardized measurement protocols and reporting cycles, ensuring data traceability and accuracy. Emission factors are primarily drawn from national or industry default values. Where specific processes or localized conditions apply, customized data are obtained through field monitoring and laboratory analysis conducted by qualified third-party agencies. These data are incorporated into calculations only after expert review and validation.

Performance Categories	Performance Indicators	2025	2024
Environment	Total Scope 2 GHG emissions (ten thousand tonnes of carbon dioxide equivalent)[5]	22.97	16.14
	Scope 2 GHG emission intensity (grams of carbon dioxide equivalent/kWh)[5]	0.47	0.31
	Total Scope 3 GHG emissions (ten thousand tonnes of carbon dioxide equivalent)	5,029.25	5,372.26
	– Category 3: Fuel- and energy-related activities not included in Scope 1 or Scope 2 (ten thousand tonnes of carbon dioxide equivalent)	5,027.66	5,370.65
	– Category 7: Employee commuting (ten thousand tonnes of carbon dioxide equivalent)	1.59	1.61
	Scope 1 GHG emission reductions (tonnes of carbon dioxide equivalent)	221,330	118,980
	Total water discharge (million tonnes)	20,511.14	20,509.94
	– Total discharge of sewage (million tonnes)	30.67	27.09
	– Total discharge of open cooling circulation water (million tonnes)	20,480.47	20,482.85
	Certified chemical oxygen demand (COD) emissions (tonnes)	268.39	219.18
	Certified ammonia-nitrogen emissions (tonnes)	32.46	42.36
	Hazardous liquid waste production (tonnes)	1,310.57	968.55
	Production of denitration catalysts (tonnes)	14,802.36	12,851.03
	Production of other hazardous solid waste (tonnes)	636.33	514.32
	Intensity of hazardous waste (g/kWh)	0.04	0.03
	Production of general solid waste (ten thousand tonnes)	4,415.13	4,940.26
	– Production of fly ash and cinder (ten thousand tonnes)	3,470.36	3,933.71
	– Production of desulphurized gypsum (ten thousand tonnes)	944.77	1,006.55
	Intensity of general solid waste (kg/kWh)	0.10	0.10
	Comprehensive utilization rate of fly ash and cinder (%)	84.96	83.09
	Desulphurization gypsum disposal utilization rate (%)	78.33	73.05
	Amount of grievous (and above) environmental accidents (times)	0	0
Social	Total number of full-time contractual employees (persons)[2]	56,104	56,263
	– Total number of male employees (persons)	44,683	44,568
	– Total number of female employees (persons)	11,421	11,695

Performance Categories	Performance Indicators	2025	2024
Social	– Total number of employees aged 30 and below (persons)	11,501	11,071
	– Total number of employees aged between 31 and 50 (persons)	27,609	28,152
	– Total number of employees aged above 50 (persons)	16,994	17,040
	– Total number of employees in the China (persons)	55,603	55,729
	– Total number of employees in overseas regions (including Hong Kong, Macao and Taiwan) (persons)	501	534
	– Total number of full-time employees (persons)	56,104	56,263
	– Total number of part-time employees (persons)	0	0
	Employee turnover rate (%)	0.27	0.30
	– Turnover rate of male employees (%)	0.32	0.33
	– Turnover rate of female employees (%)	0.16	0.19
	– Turnover rate of employees aged 30 and below (%)	0.44	0.70
	– Turnover rate of employees aged between 31 and 50 (%)	0.39	0.23
	– Turnover rate of employees aged above 50 (%)	0.04	0.09
	– Turnover rate of employees in China (%)	0.23	0.25
	– Turnover rate of employees in overseas regions (including Hong Kong, Macao and Taiwan) (%)	3.99	5.24
	Number of employees received training courses (persons)	51,907	51,205
	Proportion of employees received training courses (%)	92.52	91.01
	– Proportion of male employees received training courses (%)	93.26	92.01
	– Proportion of female employees received training courses (%)	89.62	87.22
	– Proportion of management personnel received training courses (%)	93.04	85.71
	– Proportion of non-management personnel received training courses (%)	92.45	91.56
	Training hours per employee (hours)	137	124
	– Training hours per male employee (hours)	136	123

Performance Categories	Performance Indicators	2025	2024
Social	– Training hours per female employee (hours)	139	127
	– Training hours per management personnel (hours)	141	134
	– Training hours per non-management personnel (hours)	136	135
	Number of employee deaths due to duty (persons)[6]	1	0
	Number of contractor and subcontractor employee deaths due to duty (persons)[7]	2	1
	Grievous employee injury and death accidents (employees) (times)	0	0
	Personal injury and deaths accidents during power generation (times)	3	1
	Amount invested in employees' work-related injury insurance (RMB ten thousand)	7,854.33	7,389.36
	Amount invested in employees' work safety liability insurance (RMB ten thousand)	1,145.02	1,380.41
	Accidents that endangered safe operation of power grid (times)	0	0
	Days lost due to work injury (days)	0	0
	Rate of work-related deaths (%)	0.002	0
	Total suppliers (number)	114,159	109,558
	– Domestic suppliers from Chinese mainland (number)	113,077	108,187
	– Overseas suppliers including Hong Kong, Macao and Taiwan (number)	1,082	1,371
	Customer complaints (number)	0	0
	Concluded lawsuits on corruption against the Company or its employees (number)	0	0
	Average equivalent availability of thermal power units (%)	93.68	93.67
	Number of invention patent applications filed (items)	5,351	4,586
	Number of invention patents granted (items)	1,572	1,021
	Number of valid patents (items)	3,881	2,083
	Amount of charitable donations (RMB ten thousand)	441.80	418.60
	Amount invested in rural vitalization (RMB ten thousand)	1,617.10	1,775.60

6 Refer to the number of employees' decease as a result of production safety incidents. In 2023, the number of employee decease due to duty and rate of work-related deaths were 0.

7 Refer to the number of decreases of contractors and subcontractors during production for which the Company is responsible.

2.8 Communication with Stakeholders and Identification of Material Issues

Communication with stakeholders and assessment of material issues serve as the foundation for the Company's ESG management and disclosure. Huaneng International has always been adhering to the corporate responsibilities of "providing sufficient, reliable and environment-friendly electricity to the society, creating a long-term, stable and increasing return to our shareholders, and providing our staff with an environment which encourages contribution and facilitates career development and integrated development". The Company has integrated ESG philosophy into its daily operations and decision-making processes.

The Company fully considers and effectively responds to stakeholders' demands, and works together with all stakeholders to promote economic and social development and share corporate development achievements. The Company's material issue assessment procedures are as follows:

01	02	03	04
Step 1: Understand the Company's Operations and Business Relationships Background	**Step 2: Establish a List of Issues**	**Step 3: Assess and Validate Material Issues**	**Step 4: Disclose Information of Material Issues**
• Understand the Company's operations and business relationships • Understand the internal and external context • Understand key affected stakeholders	• Conduct policy analysis • Benchmark against regulations and standards • Conduct peer analysis	• Assess impact materiality • Assess financial materiality	• Develop targeted disclosure and practice improvements based on analysis results

Step 1: Understand the Company's Operations and Business Relationships Background

The Company's value chain spans the full process from fuel procurement to power sales and is divided into internal and external segments. The internal value chain includes power generation, equipment maintenance, electricity sales and marketing, workforce management, and carbon emissions management–activities that directly affect operational efficiency and cost performance. The external value chain encompasses interactions with key stakeholders such as investors, suppliers, customers, regulators, local communities, industry peers, as well as the interaction with the natural environment, affecting the market competitiveness and image of the Company.

During the materiality assessment process, the Company first conducts in-depth analysis of its operations and business relationships by interviewing directors, management, and personnel from all business units and subsidiaries to understand key information, such as types of business activities, geographical locations, employee conditions, products and services, market conditions, and perspectives and suggestions on ESG strategies. In addition, the Company analyses internal and external policies, risk assessment reports, and ESG standards to map current ESG management practices and challenges. Communication with stakeholders is facilitated through multiple channels, including but not limited to shareholders' meetings, information disclosure, the Company's website and regular meetings, to listen to their concerns and suggestions, and to ensure their participation in the Company's ESG development process.

Stakeholders	Expectations of Stakeholders	Main Mechanisms of Communication and Participation	Responses from the Company
Investors	Increase of the Company's market value and profitability; continuing improvement of the Company's environmental and social responsibility performance	Shareholders' meeting; information disclosure; Company's website	Truthful and thorough disclosure of information; investment of efforts in improving business performance and generating profits; absorption of market opinions for rectification of operating behaviors; investment of efforts in the improvement of environmental and social responsibility management
Clients	Assurance of high-quality products; guarantee of good service	Signing contracts and agreements	Supply of sufficient, reliable and eco-friendly energy and services; guarantee of safe and stable delivery of power and heating
Employees	Guarantee of welfare, health and security; improvement of communication mechanisms; equal chances of promotion and development	Employment contracts; employees' assembly; executive open day	Strict observance of provisions within employment contracts; improvement of the institution of the employee's assembly; improvement of administration of salary and welfare; provision of a healthy and safe work environment; provision of avenues for vocational advancement and training
Suppliers	Honest, fair and just cooperation; mutual benefits and win-win scenarios	Signing contracts and agreements; regular communication through mutual visits; correspondence through files, letters and telegraphs	Adherence to open and transparent business principles and processes; active fulfillment of contracts and agreements; promotion of mutual visits
Community	Joint cultivation of communal civility; support for public welfare; focus on social development	Promotion and organization of public welfare activities; participation in volunteer activities; guarantee of employment	Organization of and participation in public welfare undertakings; building harmonious and civilized communities; attempts at growth of local employments
Regulatory Authority	Compliant operation under disciplines and laws; green energy; energy conservation and emission reduction	Participation in relevant energy meetings, work reports, policy consultations and information submissions	Strict observance of relevant laws and stipulations; vigorous advocacy and promotion of energy conservation and emission reduction
Peers	Fair competition; honest cooperation; joint efforts in production safety	Participation in industry associations[8], policy studies, daily meetings and business exchanges	Competition and cooperation with peers; joint creation of a healthy and orderly competitive environment; mutual benefits and joint progress

[8] China Electricity Council, Chinese Society for Electrical Engineering, Global Energy Interconnection Development and Cooperation Organization, etc.

Step 2: Establish a List of Issues

Based on relevant laws, regulations, and standards, the Company has integrated the SEHK's Environmental, Social and Governance Reporting Code (《環境、社會及管治報告守則》), the SSE's Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies–Sustainability Report (Trial) (《上市公司自律監管指引第14號—可持續發展報告(試行)》), and the GRI's Sustainability Reporting Standards (《可持續發展報告標準》) (GRI Standards) to establish a list of material issues in conjunction with industry best practices. In 2025, the Company reviewed and updated the list of issues to ensure that all identified issues comply with regulatory requirements and better align with leading domestic and international ESG practices.

Step 3: Assess and Validate Material Issues

The materiality assessment covers both the impact materiality and financial materiality of the issues. Impact materiality refers to whether the Company's performance on a specific issue will have a material impact on the economy, society, and environment. Financial materiality refers to whether each issue is expected to have a major effect on the Company's business model, operations, development strategy, financial positions, operating results, cash flows, financing methods and costs over the short, medium, and long term[9]. Based on regulatory requirements and industry conditions, and the results of questionnaires and expert interviews, the Company identifies the impacts, risks and opportunities associated with each issue. The Company also sets thresholds, and assesses the impact and likelihood to derive the materiality assessment results, supporting the Company's strategic decision-making, risk and opportunity management, and resource allocation.

	Thresholds for Impact Materiality	Thresholds for Financial Materiality
Highly Material	Significant impact with a broad scope that cannot be remedied	Financial losses or gains that have a significant impact on the Company's business operations
Moderately Material	Moderate impact with a moderate scope that can be remedied but at a high cost	Financial losses or gains that have a moderate impact on the Company's business operations
Not Material	Minor impact with a limited scope that can be easily remedied	Financial losses or gains that have a minor impact on the Company's business operations

9 The time horizons are defined as follows: within one year for short-term, one to five years for medium-term, and over five years for long-term, which are in line with the Company's development strategy and resource allocation plans.

The Company has established and improved a comprehensive risk management system, incorporating ESG issues such as safety, environmental protection, and climate change into the comprehensive risk management process. We continue to carry out risk investigation and dynamic assessment, review major risks and their changes in key areas, evaluate the effectiveness of risk control measures, and refine specific risk response measures, regularly compiles risk assessment reports, thereby achieving closed-loop risk management. The Company adjusts risk monitoring indicators in line with actual conditions, set reasonable early warning thresholds, and monitor risks in key businesses and areas in real time. By doing so, we have managed to conduct routine risk investigations, precise risk early warning, and long-term risk control. In 2025, we identified major ESG risks as follows:

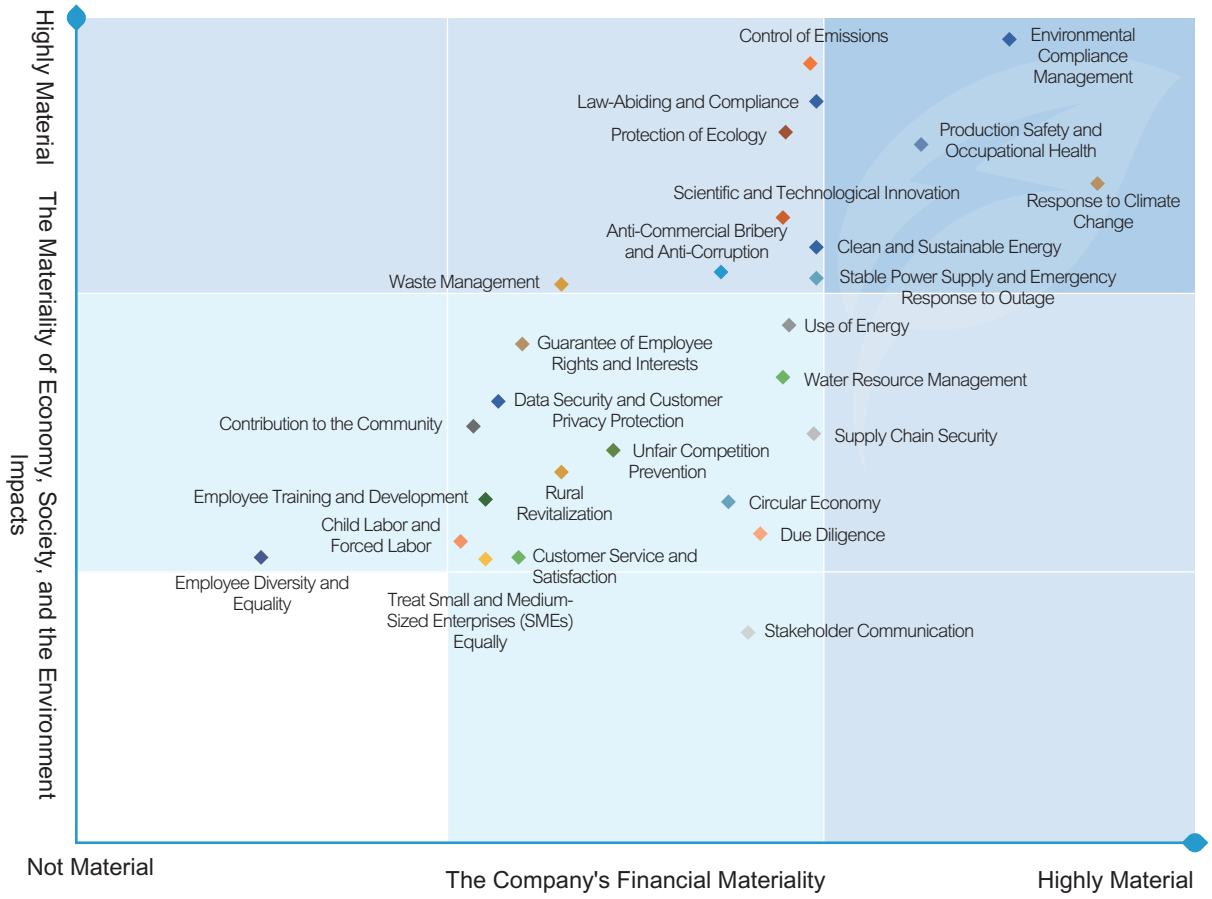
Major ESG Risks	Responses and Main Financial Impacts
Production Safety Risks	**Responses:** Strengthen the intrinsic safety system, enhance safety risk control and emergency response capabilities, deepen safety supervision, and reinforce the safety management of outsourced personnel. **Financial impact:** At the end of 2025, the Company's balance of safety production funds was RMB1.412 billion[10].
Ecological and Environmental Protection Risks	**Responses:** Promote energy conservation and emission reduction for coal-fired power units, carry out energy conservation and environmental protection retrofits, refine systems for energy conservation and consumption reduction, and conduct timely publicity, training, and supervision and inspection. **Financial impact:** In 2025, the Company invested a total of approximately RMB0.412 billion in environmental protection technical renovation projects with a single investment of more than RMB5 million each.
Climate-related Risks	**Responses:** Vigorously develop clean energy, enhance meteorological monitoring, explore advanced technologies, and refine carbon trading strategies. **Financial impact:** Please refer to 5.3.6 Responses to Climate Change for details.



[10] Attributable to the shareholders of the parent company.

Step 4: Disclose Information of Material Issues

The Company employs a two-dimensional matrix of "financial materiality – impact materiality" to present the assessment results of material issues.



DISTRIBUTION OF POWER PLANTS OF THE COMPANY

CHINA NETWORK

Heilongjiang
4,452

Jilin
4,930

The controlled installed capacity of the Company as at 31 December 2025 was

155,869MW,

distributed in areas as depicted in the chart (Unit: MW)

LEGENDS

Wind-power | PV Power | Coal-fired | Combined Cycle | Hydro-power | Biomass power

Liaoning
7,871

Inner Mongolia
303

Hebei
7,179

Gansu
3,902

Ningxia
20

Beijing
2,766

Tianjin
1,846

Shanxi
5,118

Shandong
23,865

Henan
9,895

Jiangsu
14,493

Shanghai
5,720

Chongqing
5,448

Zhejiang
7,764

Hubei
5,773

Hunan
3,755

Jiangxi
8,585

Anhui
3,816

Fujian
4,473

Guangdong
8,436

Guangxi
1,041

Yunnan
5,177

Guizhou
1,826

Hainan
5,409

OVERSEAS NETWORK

Singapore
2,009

Total 155,869


03



Advancing Market Reform Integration to Drive Growth Momentum

ADVANCING MARKET REFORM INTEGRATION TO DRIVE GROWTH MOMENTUM







The power system reform has been under way for 10 years since 2015. This market-oriented reform focuses on the logic of "controlling the transmission and distribution links, and opening up the power generation and consumption side", which means establishing markets in competitive sectors and strengthening regulation in naturally monopolized sectors. In 2025, the National Development and Reform Commission (NDRC) and the National Energy Administration (NEA) jointly issued the Notice on Deepening the Market-oriented Reform of New Energy On-Grid Electricity Prices and Promoting High-quality Development of New Energy (《關於深化新能源上網電價市場化改革促進新能源高質量發展的通知》) (Fa Gai Jiage [2025] No. 136). This marks a key breakthrough in advancing market-oriented reform within the renewable energy sector. The Notice underscores China's firm commitment and tangible progress in driving forward comprehensive power system reform.

As one of the most influential enterprises in the national electric power industry, Huaneng International will lend its full support to national power system reform policies and work conscientiously for arrangements concluded at the Central Economic Work Conference and in various government work reports by participating in the establishment of electricity markets and transactions. By playing the role of market mechanisms, the Company enhances security of power supply and supply capacity of clean electricity. The new power system reform policies have a profound impact on the Company's profitability and sustainable development. In response, the Company has conducted in-depth policy analysis and evaluation based on the actual situation. We have comprehensively considered the impact of related policies on mid- to long-term trading, spot trading, green power and green certificate trading, Chinese Certified Emission Reduction (CCER), and carbon trading markets. By doing so, we aim to enhance market awareness, accelerate the innovation of the management system and mechanism, and strengthen the business synergy of marketing, fuel business and production. Ultimately, we can make wiser business decisions, and maximize the overall economic benefits.

At Huaneng International, developing the retail market is high on the agenda. We are leveraging our competitive advantage of integrating generation and sales to strive for a greater share of the electricity volume. Energy sales companies from all regions maintain close communication with terminal electricity customers, meticulously analyze electricity consumer behaviors, and offer professional and customized services. With technological advantages such as virtual power plants, we provide users with value-added services such as demand-side response. We encourage users to shift their electricity consumption to off-peak hours. Such load shifting management can help users reduce costs and gain benefits, creating a win-win situation. Leveraging social platforms, we have expanded the visibility of our electricity sales business while providing customized pricing packages for small and medium-sized online subscribers. This has enhanced the reputation of Huaneng International's brand for customer service and increased market recognition. Together with electricity users, we are jointly advancing the revolution in energy production and consumption, building a clean, low-carbon, safe and efficient energy system.

Our Targets

As the power system reform advances, Huaneng International has established a marketing philosophy that "focuses on profitability and aims to lead the market". The Company emphasizes the unification of quantity and price, stabilizes the market transaction prices, and competes for market share in electricity consumption. Efforts are also being made to optimize the trading strategies of generating units, to enhance digital capabilities, and to improve the overall operational efficiency of the Company. All these efforts are aimed at generating higher revenues with greater efficiency, and helping the Company stay competitive as a global leader among the listed power generation companies.

The wholesale market trading serves as a "ballast stone" in maintaining stable quantity and price. Pursuant to the national requirements for the signing of mid- to long-term electricity contracts, and taking into account the situation of the local power market, the Company has formulated appropriate trading strategies and ensured the signing of mid- to long-term contracts.

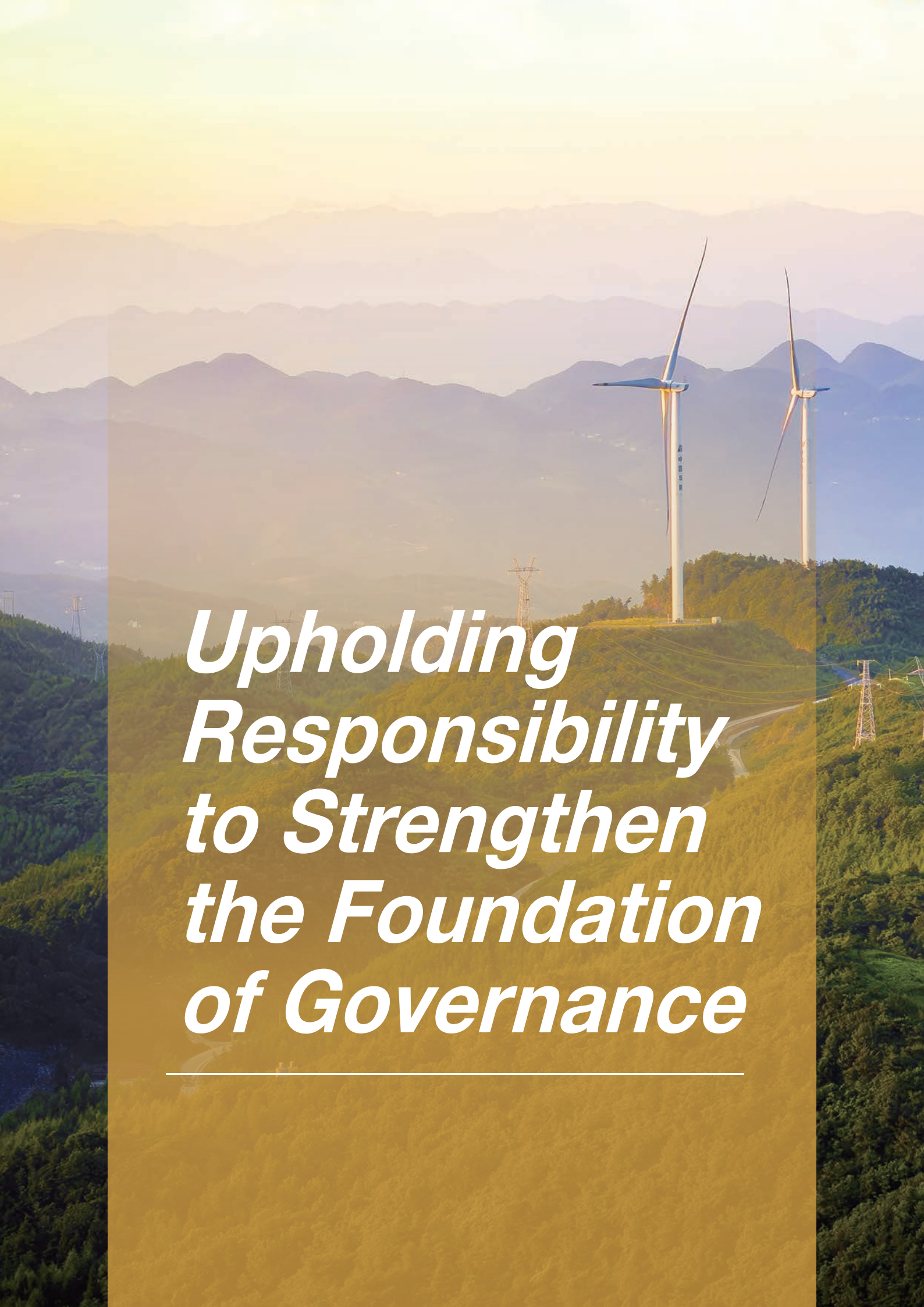
The retail market trading aims to rationally increase the scale of electricity sales with consideration of the wholesale purchase prices, expanding the market share of electricity sales, and striving to cover the direct transaction electricity demand from the generation side. As many regions have strengthened load management, the Company provides value-added services such as ancillary services and demand-side response. By doing so, we can create new profit growth points, enhance user engagement through win-win cooperation, and elevate our brand image in electricity sales.

Management Mechanism

In 2025, confronted by the challenges such as the establishment of a new power system and a unified national power market, and the "carbon peaking and carbon neutrality" goals, Huaneng International worked hard to promote relevant institutional mechanisms and market-oriented talent training, responded to the challenges arising from the spot market, and coordinated the work of regional companies, thus combining forces to address market changes and maximizing operating benefits.

Major Actions

1. The Company pursued coordinated optimization of generation volume and electricity prices, increasing output during high-price spot periods and peak demand seasons (summer and winter peaks), to maximize revenue generation and maintain industry-leading performance in equivalent utilization hours.
2. We strengthened power market trading operations, closely monitored key regional markets, and refined trading strategies for both thermal and renewable power to help stabilize electricity prices at reasonable levels.
3. We expanded our retail power business by deepening strategic partnerships with large industrial and commercial customers and actively expanding into the small- and micro-user segment to enhance sales revenue.
4. We closely tracked policy developments in the national carbon market and continuously optimized our carbon trading strategy to effectively manage compliance costs for thermal power units.
5. We actively developed high-quality district heating markets and advocated for timely adjustments to heat tariffs.



Upholding Responsibility to Strengthen the Foundation of Governance


04

UPHOLDING RESPONSIBILITY TO STRENGTHEN THE FOUNDATION OF GOVERNANCE





Adhering to accelerating the construction of a world-class listed power generation company, Huaneng International pursues new development philosophy, coordinates production safety and green development, actively fulfill the responsibilities of a China's state-owned enterprise, devotes every effort to serving national development and secures a stable energy supply. The Company optimizes the power supply system, adjusts corporate governance structure, steadily strengthens internal management and improves compliance management capabilities, drives the Company towards high-quality and sustainable development.

4.1 Ensuring Stable Energy Supply

Huaneng International is committed to developing itself into an international leading listed power generation company and providing sufficient, reliable and environmental-friendly power, as well as high-quality energy services for the customers. Each of the Company's power plants has put in place contingency plans and response measures to ensure a safe and stable power supply. During the reporting period, The Company's thermal power construction quality management system obtained ISO 9001:2015 (Quality Management Systems) certification. No major safety or quality liability incidents related to products or services occurred.

Establishing a Policy Guarantee Mechanism

In accordance with the Company's emergency management measures for major incidents and accidents and the contingency plans for major production accidents and large-scale blackouts, in case of accidents such as power units tripping, alternating current and direct current power outages, busbar outages, system break-downs or other accidents that may cause large-scale power grid outages, all subsidiaries of the Company have formulated preparatory measures. They have also established corresponding emergency handling organizations in order to minimize negative impacts on society with unified leadership, clear division of labor, quick response and smooth communication. Besides, in case of an emergency, the Company will also manage accident reports to power dispatch department and relevant offices of local governments, handle examination and approval of information disclosed to the public, start emergency plans and be attentive to public concern to reduce the negative impact on society. We implement inspection and start-up preparation after the units' outage, to ensure that the units can be started in time to restore supply after troubleshooting.

Strengthening Daily Equipment Management

In 2025, the Company focused on its equipment and technology transformation management to ensure the safety, reliability and advancement of equipment. As a result, the annual average unplanned outage rate was 0.14 times per unit per year, which witnessed a decrease of 0.09 times per unit per year compared to the previous year. The Company has been pushing ahead with the work of "reducing deficiencies and controlling unplanned power outages". We strengthened generator units' unplanned power outage control and issued analytical reports on unplanned outage events. The power plants carried out special investigations of equipment management and hazards, strengthened technical supervision and management and took measures in technology transformation projects to constantly improve equipment health and ensure the safety of equipment and our staff.

Strengthening the Guarantee of Heating Safety

With earnest implementation of the requirements of China and industry authorities on heat supply, the Company has arranged a supply guarantee plan, with assiduous efforts made to ensure funding security for supply assurance. The Company is committed to implementing and refining all measures to safeguard stable heating services. All the subsidiaries resolutely shoulder their political and social responsibilities, secure coal sources through various channels, strengthen equipment maintenance, and strictly implement instructions of power grid dispatching. Coal-fired power units operated at full availability–started when needed and generating at full capacity. Heating units prioritized thermal supply to ensure stable heating services. These efforts fully demonstrated the Company's sense of responsibility and commitment to public service. In addition, the Company has also taken the following measures to strengthen the guarantee of heating safety.

1. **Ensuring safe operation of running units.** We strictly adhere to the "Two Tickets and Three Systems" mechanism, strengthen management of operational procedures, conduct regular inspections, and prioritize defect resolution. Besides, we apply closed-loop management to equipment defects to ensure safe and stable unit operation during the winter peak supply period.

2. **Fulfilling the production safety responsibilities.** We draw lessons from internal and external production safety incidents. We develop specific measures in accordance with the work plan and work guidelines to achieve a stable supply of electricity and heat.

3. **Placing high importance on fuel supply security.** Fuel operations prioritize securing thermal power for people's livelihoods and ensuring reliable supply, while also managing costs. Based on production characteristics, the Company has implemented targeted measures for fuel procurement, storage, and transportation. We have optimized coal blending strategies, enhanced low-load stable combustion techniques, and strengthened dispatch coordination to ensure safe and resilient fuel supply.

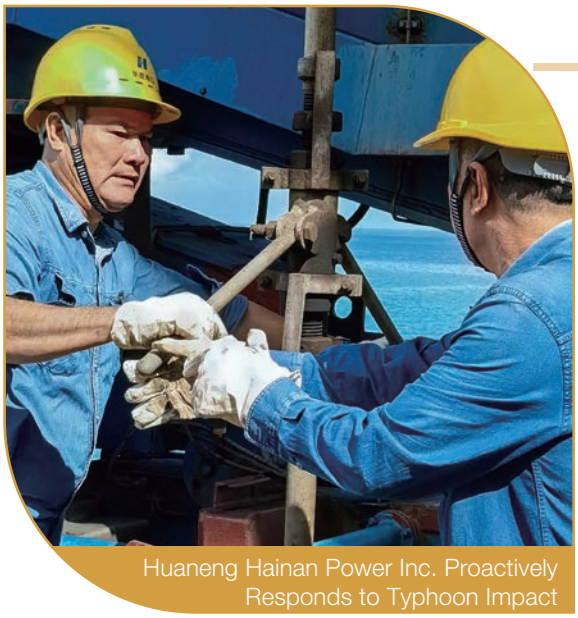
4. **Attaching great importance to the management of direct heating network.** We maintain the normal operation of the heating network by conducting routine management of heating network equipment, ensuring sufficient reserve of materials and human resources, eliminating the defects of heating network equipment and pipes in a timely manner, and focusing on the operation of water replenishing for heating network.

5. **Being well prepared for heating emergencies.** We improve our capabilities of dealing with disastrous events by preparing emergency heating measures in advance, formulating emergency plans in case of outage of heating equipment, quickly identifying, treating and recovering failure equipment, establishing emergency plans for personal injury and death accidents, and enhancing the communication between local government and heating companies.

6. **Strengthening the on-duty work of heating.** We strictly implement the duty policy on holidays and the policy of major operations with the attendance of leaders. We report on the operation of heating units on a regular basis and report the heating emergencies in a timely manner.

Successfully Coping with Natural Disasters and Extreme Weather

Natural disasters and extreme weather are the main climate risks to which the Company is exposed. In 2025, the Company took stable electricity and heat supply as a political task and fulfilled its primary responsibility for ensuring energy supply for people's livelihood. Subsidiaries of the Company worked together to respond to natural disasters and extreme weather events. We strengthened risk identification, inspection, and protective reinforcement of critical facilities in key regions. Overall safety performance across the system remained stable.



Huaneng Hainan Power Inc. Proactively Responds to Typhoon Impact

Huaneng Hainan Power Inc. Successfully Responds to Typhoon Impact

In response to Typhoon Ragasa, Huaneng Hainan Power Inc. activated Level I emergency preparedness and response for typhoon and flood prevention. It implemented a standardized typhoon preparedness system based on checklists, tiered response protocols, and precise on-site actions. It also established a three-dimensional coordination mechanism integrating meteorological monitoring, field reporting, and remote dispatching. This enabled real-time tracking of the typhoon's path, wind intensity, and rainfall changes. As a result, Huaneng Hainan Power Inc. achieved its "zero equipment anomalies, zero supply interruptions" objective and successfully fulfilled its energy supply assurance mission. During the event, our Nanshan Power Plant effectively managed extreme operating conditions, ensuring stable operation of the regional power grid and demonstrating strong technical capability.

Successfully Guaranteeing Energy Supply for Important Periods

In 2025, to enhance power production safety and ensure stable and reliable operations, the Company strictly implemented comprehensive safety assurance measures.

1. **Enhancing the implementation of measures to guarantee the electricity and heat supply in key areas and during critical periods.** We strictly adhere to national requirements on production safety and energy supply security. During the "Two Sessions", summer peak season, and winter peak period, we strengthened production shift management, enhanced on-site oversight of equipment maintenance, unit overhauls, and technical upgrades, and efficiently scheduled maintenance projects–leveraging planned outages and holidays to stagger work across levels. This approach enabled the Company to improve the unit's availability, ensure that the backup units are in optimal condition for immediate dispatch, strive to maximize power generation volume, and fulfill electricity and heat guarantee tasks.

2. **Fully implementing the production safety responsibility during critical periods.** We facilitate the exchange of production management information, promptly report the main production indicators, unplanned outages and equipment failures, and provide guidance to the business units at all levels in implementing precautionary measures.

3. **Enhancing the supervision of unplanned outages and output restriction.** We promptly monitor the repair progress of units affected by unplanned outages and the recovery of restricted power output, and provided guidance to the relevant business units on implementing precautionary measures and post-disaster treatments against typhoons such as "Co-may" and "Ragasa".

4. **Placing high importance on fuel supply security during critical periods.** Fuel operations prioritize ensuring thermal energy for people's livelihoods and reliable supply, while also managing costs. During key periods, the Company strengthens dispatch coordination to ensure safe and uninterrupted fuel availability.



Huaneng Huabei Branch Fully Engaged in Power Supply Stability Operations

Huaneng Huabei Branch Successfully Completed Power Security Mission for the National "Two Sessions"

On March 4, 2025, the annual National "Two Sessions" convened. In accordance with the national power security plan, Huaneng Huabei Branch activated its full power supply assurance protocol. Key facilities in the Beijing-Tianjin region fully engaged in ensuring secure and reliable power supply, with all personnel mobilized to support critical operations. Operational departments dispatched staff to reside on-site at major plants, ensuring close oversight and timely execution of all supply stability measures. Through coordinated efforts and a strong sense of responsibility, the branch delivered reliable and stable energy supply throughout the event, providing solid energy support for the successful convening of the Two Sessions.

4.2 Party Building Leadership in Compliance and Lawfulness

Huaneng International always adheres to the leadership of the Party, pursues legal and compliant operations, and accelerates the construction of a well-governed, operationally compliant, regulated, law-abiding, and honest enterprise. The Company strictly follows the compliance requirements, continuously monitors the trends of regulatory laws and regulations in the listed location, and fully implements the regulatory requirements. Besides, ongoing efforts are made to improve the Company's governance and operations, and to enhance its ability to prevent risks and manage business operations, in an attempt to foster a culture of integrity.

4.2.1 Party Building Leadership

In terms of political construction, the Company thoroughly studies and implements the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, fully implements the spirit of the 20th National Congress of the Communist Party of China (CPC) and the second, third and fourth Plenary Sessions of the 20th Central Committee of the CPC, formulates and issues key tasks, organizes the Party Committee and the Party Committee's Theoretical Study Centre Group expands meetings to focus on studying and discussing the spirit of the Plenary Sessions. All members of the Party Committee publicize the spirit of the Plenary Sessions in their respective branches, and organize training for Party members and cadres in batches to promote the implementation of the spirit of the Plenary Sessions. We strictly implement the "first topic" (第一議題) system, the Party Committee promptly conveys and studies the "first topic", formulates and implements measures, arranges various study contents through monthly work prompts and supervision and inspection mechanisms of the branch, ensuring that the branch keeps pace with the Party Committee's study progress, and promoting the full coverage of the study of the Party's innovative theories. The Party Committee has formulated a theoretical study plan, clarified key topics, organized collective study, and in-depth exchanges and discussions among Party Committee members, and the theoretical study results of the Party Committee have been published in China Huaneng (《中國華能》) and Research & Exchange for the Theoretical Study Center Group (《中心組學習交流》).

In terms of ideological construction, the Company strictly implements the responsibility system for ideological work (including online ideology). The Party Committee conducts special studies on ideological work, carries out special investigations into risks and hidden dangers, focuses on preventing and resolving all types of risks, and ensures stability during critical periods. We guided employees in deepening their understanding of Huaneng International's refreshed "Three-Color" cultural philosophy, and widely mobilized staff to participate in the employee cultural events marking Huaneng's 40th anniversary, earning multiple distinguished honors. The Company also regularly holds "Moral Lectures", and continuously broadcasts "Today in Huaneng International History". Fully utilizing the Company's website, multimedia television, and promotional display boards to disseminate various types of information, the Company has further united the staff and workers in their efforts. The Company continues to maintain its title as a Civilized Unit within the Group Company.

In terms of organizational development, the Company always maintains a clear orientation towards strengthening the primary-level. We have established a "three-level linkage" mechanism where "the Party Committee has a clear position, the Party Branches have clear roles, and the Party members take active actions", thereby reinforcing the chain of responsibility for Party building. As part of the Year of Party-Building Brand Development, the Company launched the "Party Flag Leads the Way, Three-Color Responsibility in Action" special campaign and commended outstanding performance project under the theme of "Party Building Leadership and Collective Effort in Tackling Difficulties". We conducted in-depth education on the CPC Central Committee's Eight-Point Decision on Improving Party and Government Conduct, while advancing integrated learning, self-review, and corrective action. The Company held reading sessions focused on Selected Discourses by Xi Jinping on Improving Party Conduct (《習近平關於加強党的作風建設論述摘編》) and the full texts of the Eight-Point Decision and its implementing rules. Senior leaders delivered keynote lectures, Party Branches engaged in joint learning and co-construction, and online training ensured full coverage for all Party members. The Company organized cautionary education sessions and site visits to educational bases, led by officials in identifying prominent issues. We also convened advancement and summary meetings to institutionalize Party conduct improvement and promote long-term, routine implementation. The Company has optimized and adjusted the settings of "responsibility zones, demonstration posts, task forces, and task groups" and selected and commended recipients of the "outstanding Party members, exemplary Party workers, and advanced community-level Party organizations" honors, as well as outstanding Party member demonstration units under the "responsibility zones, demonstration posts, task forces, and task groups" program.

4.2.2 Governance by Law

In 2025, the Company thoroughly upheld Xi Jinping Thought on the Rule of Law, implemented the strategic deployment of the comprehensive rule of law, and continued to deepen the development of Law-based Huaneng to comprehensively improve the level of law-based and compliant operation. Under the unified leadership of the Party committee and management of the Company, we integrated the concept of governing businesses by law into corporate governance, with the construction of better enterprise governance structure as the base, improving the management of compliant operation as key point, enhancing the capability of the team engaged in the rule of law as a means, and strengthening the construction of corporate rule of law culture as a guarantee. In this way, the Company gains new achievements in developing Huaneng International under the rule of law.

Improving the Corporate Governance Structure

After years of exploration and practice, the Company has insisted on deepening reforms based on the requirements of the modern enterprise system, continuously improving the modernization of corporate governance system and capacity, and continuously refined the corporate governance mechanism with statutory, transparent, coordinated operation, and effective checks and balances.

In 2025, in accordance with the Company Law of the People's Republic of China (《中華人民共和國公司法》) and relevant securities regulatory requirements, the Company successfully completed the Articles of Association revision and Supervisory Committee reform, while simultaneously improving the Rules of Procedure for the Shareholders' Meeting, the Board of Directors, and the working rules for Special Committees. The Audit Committee successfully assumed the supervisory powers of the Supervisory Committee, establishing a new "Two Meetings and One Management Layer" corporate governance structure, providing a solid foundation for sound corporate governance and standardized operations.

Building a Sound Compliance Management System

The Company focuses on "compliance risk management" and continuously strengthens the construction of management systems and operational mechanisms to cultivate a compliance culture. We have strictly implemented a compliance reporting mechanism, prepared the Company's Annual Compliance Management Report. The Company has strengthened the operational mechanism of compliance management with a focus on risk prevention, issuing three key compliance tools: the Compliance Responsibility List for Key Positions, the Departmental Compliance Risk Inventory, and the Compliance and Internal Control Process Management List–collectively known as the "Three Lists". These ensure that compliance requirements are embedded in institutional frameworks, assigned to specific roles, and integrated into business processes. In 2025, the Company issued four specialized compliance guidelines: the Special Compliance Guidelines for Listed Company Operations (《上市公司規範運作專項合規指引》), the Special Compliance Guidelines for Tax and Financial Management (《財稅管理專項合規指引》), the Special Compliance Guidelines for Investment, Mergers, and Acquisitions (《投資並購專項合規指引》), and the Special Compliance Guidelines for Overseas Investment (《境外投資專項合規指引》). These provide clear guidance for employees to fulfill their duties and for the Company's compliant operations.

Strengthening Legal Risk Prevention

To address the risks of copyright infringement for new media accounts, contract legal risks, horizontal monopoly agreement risks, and legal risks of abusing market dominance, the Company issued Legal Risk Warning Letters to establish legal risk prevention awareness and improve the capability to mitigate compliance risks. We strengthened the management of litigation cases to promote rectification and governance through case analysis. The Company cracked down on illegal activities such as the unauthorized use of Huaneng International's name and logo to solicit investment, and issued formal statements on its official website and WeChat account to safeguard the rights of the Company and the public. The Company strictly complies with the Anti-Unfair Competition Law of the People's Republic of China (《中華人民共和國反不正當競爭法》)and relevant policies. The Company has established a sound management system for anti-unfair competition and developed response plans and rectification requirements for potential negative contentious incidents. The Company does not engage in false advertising, implementation of monopolies, or infringement of others' trade secrets. During the reporting period, the Company did not receive any litigation or administrative penalties arising from suspected anti-unfair competition activities.

Enhancing the Review of Legal Issues

Following the strategy of governing the enterprise by law and the idea of solving the difficulties of reform with a thinking and methodology based on the rule of law, the Company has promoted the thorough integration of legal affair management and operation management to ensure mutual cooperation and efficient coordination between the legal affair department and other business departments. The Company has embedded legal and compliance review as a mandatory procedure into its operational management processes, strengthening the review of contracts, articles of association, institutional systems, and major decisions. By continuously improving the standardized, normalized, and refined levels of legal and compliance review, the Company has enhanced its supporting and safeguarding role to effectively prevent legal and compliance risks. Moreover, the Company has continued to improve the systematization and integration of legal affairs management, fully exploited the system-based management efficiency, made legal affairs management more visualized and standardized across all aspects, effectively strengthened risk management and control efforts, and continuously improved management efficiency.

Improving Staff's Awareness of Laws by Various Activities

In 2025, the Company advanced various publicity and education campaigns on laws in an effective manner, and promoted the implementation of relevant requirements. Upon thorough study on and implementation of Xi Jinping Thought on the Rule of Law, the Company Law of the People's Republic of China (《中華人民共和國公司法》) and other legal and regulatory requirements, the Company systematically carried out the work of legal literacy for the need of corporate management.

The Company continued to carry out routine legal literacy publicity campaigns. In alignment with the latest amendments to the Administration Measures for Significant Asset Restructuring of Listed Companies (《上市公司重大資產重組管理辦法》) and the Code of Corporate Governance for Listed Companies (《上市公司治理準則》) released by China Securities Regulatory Commission, we have drafted and issued the New Legislation Briefing (《新法簡報》) taking into account our own business practices, so as to enhance the legal awareness of all employees. The Company launched a series of legal publicity and education themed on "Operation in Compliance with the Law". All employees participated in the training sessions, where our long-standing legal advisers were invited to deliver lectures on "A Company's Life Cycle" and "A Family's Life Cycle". At these sessions, advisers shared business-related legal knowledge throughout a company's life cycle from establishment, incorporation, operation, restructuring and liquidation to termination, as well as family-related legal topics like marriage, family affairs, and inheritance. Additionally, one-on-one legal consulting was provided to employees, offering professional legal advice to safeguard the rights and interests of both the Company and staff. Such activities were enthusiastically received with favorable achievements.



Legal Publicity and Education

4.2.3 Anti-corruption

In 2025, strictly complying with the Oversight Law of the People's Republic of China (《中華人民共和國監察法》), the Regulation on the Implementation of the Oversight Law of the People's Republic of China (《中華人民共和國監察法實施條例》), the Criminal Law of the People's Republic of China (《中華人民共和國刑法》) and other laws and regulations, the Company assiduously carried out conduct improvement and anti-corruption campaigns, urged all employees to uphold ethics as well as Party disciplines and state laws, and created an atmosphere where everyone remains disciplined, abides by the law, discharges duties in a standardized fashion, and practices clean operation, so as to provide reliable support for the Company's high-quality business development. Guided by the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, the Company thoroughly studied and implemented the important thought of General Secretary Xi Jinping on the Party's self-reform, the guiding principles of the Fourth Plenary Sessions of the 20th CPC National Congress, and the deployment of the fourth Plenary Session of the 20th CPC Central Commission for Discipline Inspection. Focusing on the core tasks and serving the overarching interests, we prioritized political supervision, strengthened the oversight on key areas, and persistently addressed the "four malfeasances". With these efforts, we have achieved new results in advancing our Party conduct improvement, clean governance and anti-corruption work. In 2025, the Company maintained a sound momentum in political ecosystem and Party conduct improvement and clean governance, fostering a clean and upright atmosphere with a stronger drive for entrepreneurship and development. There was no commercial bribery and corruption case, and the number of lawsuits on commercial bribery or corruption raised and concluded against the Company or the Board members, management, or its employees was zero.



Implementing the Responsibility System for Conduct Improvement and Clean Governance

1. The Company held the 2025 conference of conduct improvement, clean governance and anti-corruption campaigns.

2. The Company has formulated and issued the Schedule of Priority Tasks for Fulfilling the Main Responsibility for Comprehensive and Strict Party Governance and Implementing Party Conduct Improvement, Clean Governance and Anti-corruption Campaigns in 2025 (《公司2025年落實全面從嚴治黨主體責任開展黨風廉政建設和反腐敗工作重點任務安排表》). By adopting the "checklist + accountability" approach, the Company divided the annual tasks into 19 specific action items in seven aspects, reinforcing responsibilities at each level.

3. The Company convened special meetings on comprehensive and strict party governance every half year, listened to the "dual responsibilities" of the Company's team members, the special supervision of the Company's discipline inspection commission, and the work reports of various departments and offices at the management, supervision, and execution levels. At the meeting, the Company analyzed the prevailing trends and tasks, worked out solutions to solve existing issues, and arranged priorities.

Strengthening Daily Supervision and Targeted Supervision

1. The Company has strengthened the supervision over the "top leaders" and the leadership team, practiced the Measures on Strengthening the Supervision over the "Top Leaders" and the Leadership Team by the Discipline Inspection Commission (《公司紀委加強對"一把手"和領導班子監督工作方案》), and regularly reported on the main work carried out to supervise the "top leaders" and the leadership team.

2. By convening special meetings on comprehensive and strict party governance in 2025, the Company conducted "one-to-one" talks with the heads of departments and offices on key tasks, aiming to align their understanding and awareness, identify current major issues, and figure out effective measures accordingly.

3. The Company has established the integrity archives of middle-level management cadres of the Company's Party Committee and expatriates for dynamic management.

4. The Company strictly assesses the integrity when appointing and promoting cadres to prevent the promotion or appointment of any cadre with improper conduct.

5. The Company conducted supervision and issued supervision opinions on key and difficult areas such as fund management, capital operation, international business, risk prevention and control, and audit rectification. By doing so, we have made harvests in business reform and development.

6. The Company has enhanced oversight of overseas projects. In compliance with the integrity and compliance guidelines for overseas operations of central enterprises and the Group Company's requirements for integrity risk control in overseas projects, the Company supervised and implemented the overseas integrity risk control.



Promoting the "Three Non-corruptions"[11]

The Company strengthens the standardized management of letters, visits and reports, strictly implements the Detailed Rules for the Implementation of the Discipline Inspection Commission of the Company (Trial) (《紀委執紀工作實施細則(試行)》) and the Management Measures for Public Complaints and Proposals《信訪工作管理辦法》), and sets up reception places, recording phones, reporting mailboxes, etc. to receive letters, visits and telephone reports.

1. The management of complaint reporting and problem clues shall adhere to the principles of centralized management, standardized procedures and strict discipline, strictly implement the handling procedures according to the management authority, and establish a management ledger.
2. The personnel of the Company's Discipline Inspection Commission strictly implement the confidentiality system and avoidance system, strictly control the scope of knowledge of the review and investigation work, and are not allowed to privately retain, conceal, read, extract, copy, or carry clues to issues and information related to the case, as well as to disclose the review and investigation work.
3. We have improved the mechanism for assisting in investigation and evidence collection, and strictly implemented the investigation and evidence collection process and review.
4. The Company works to consolidate the institutional foundation. To clarify the red line and bottom line on this front, we have compiled and distributed the Institutional Red Line Handbook (《制度警戒線》) across 44 areas including business reception, compliance management, and welfare fund management. This initiative helps reinforce the Company's anti-corruption system.

Strengthening Integrity Campaigns

1. The Company sends integrity message at important moments. On major holidays such as New Year's Day, Spring Festival, Labor Day, Dragon Boat Festival, Mid-Autumn Festival, and National Day, by sending integrity messages and issuing Job Alert (《工作提示》), we urge cadres at all levels to uphold integrity, frugality, and high moral standards.
2. We concentrate efforts to address malpractices and corruption issues close to the people, carry out self-inspection and self-correction on key rectification areas, and persistently eradicate the conditions that enable misconducts and corruption issues.



[11] No one dares to be corrupt, no one can be corrupt, and no one wants to be corrupt.

Conducting Education on Professional Integrity

1. We have deepened the education of the spirit of the Eight-Point Decision, intensively rectified improper dining and handling of gifts and gratuities, and organized all cadres to sign commitment letters. We hold learning and warning education meetings, guiding Party members and cadres to regulate their behaviors at all times.

2. We prepare and organize all cadres to learn the Guidelines on Integrity Culture (《廉潔文化教育手冊》), and regularly issue the Window of Discipline (《紀律之窗》) bulletin. We also regularly share meeting guidelines and educational materials through the "Discipline and Integrity" column on our internal website to constantly enhance the resistance of Party members and cadres against misconduct, reinforcing integrity reminders during holidays and fostering a healthy, clean, and transparent atmosphere for promoting the integrity culture. In 2025, a total of 25 directors and management personnel at the Company's headquarters received anti-commercial bribery and anti-corruption training. The total number of employees across the Company who received anti-commercial bribery and anti-corruption training was 56,104. The coverage rate in both cases was 100%.

3. We keep a close eye on key issues, priority areas, and focused targets, resolutely combat corruption, and consistently signal a commitment to strict governance. We have reported several typical cases of violations against regulation and discipline by enterprises.

Facilitating the Construction of Discipline Inspection Teams

1. We highly value learning and training, aiming to improve the overall quality of discipline inspection cadres in three areas of political development, ideological guidance, and professional work. We have organized cadres to participate in the Group Company's training courses on discipline inspection and other inspection practices, thereby improving their political quality and competence.

2. The Company launched the "Year of Standardized, Legalized, and Institutionalized Discipline Inspection" campaign on key priorities. In line with actual conditions, the Company listed major tasks and plans for self-inspection and self- correction from six aspects of complaint reporting, safety in case handling, key stages in case handling, conduct in case handling, disciplinary violations by discipline inspection and supervision cadres such as drinking, and on-duty performance. We also organized two on-site training sessions at the warning education base, thus making our discipline inspection more standardized, legalized, and institutionalized.

3. We consistently intensify publicity and guidance. We have uniformly distributed training materials such as the Compilation of Comprehensive Training Courses for Discipline Inspection and Supervision Cadres (《紀檢監察幹部全員培訓系列課程匯編》) and the Important Thought of General Secretary Xi Jinping on the Party's Self-reform (《學習貫徹習近平總書記關於党的自我革命的重要思想教學大綱》). These efforts aim to enhance the capabilities of discipline inspection cadres and cultivate a cohort of business champions.

4. The Company attaches importance to strengthening self-supervision. Through daily work exchanges, and routine interviews, we conduct strict education, management and supervision for discipline inspection personnel to prevent them from "being blind to their own problems".

4.2.4 Protection of Intellectual Property Rights

The Company earnestly implements the decisions and arrangements of the central government on protection of intellectual property rights to further enhance the protection of intellectual property rights, and thoroughly implements the requirements of the Outline for Building a Powerful Country with Intellectual Property Rights (2021–2035) (《知識產權強國建設綱要(2021–2035年)》) and the Plan for Protection and Application of Intellectual Property Rights for the 14th Five-Year Plan Period (《"十四五"國家知識產權保護和運用規劃》), so as to facilitate the high-quality development in patent application and technological innovation of the Company. The Company constantly establishes and improves the intellectual property rights protection systems, and based on patents-related needs, unremittingly refines the requirements and policies for intellectual property rights agency to open and optimize channels for patent application, guarantee the efficiency of patent application, and promote the steady development of quality and quantity of patents.

To effectively strengthen the strategic layout of intellectual property rights, the Company launches special projects for patent enhancement, and cooperates with professional organizations to optimize the cooperation mechanism, integrate resources, and coordinate and carry out patent application and renewal based on the Company's management conditions. Meanwhile, we have registered Huaneng International's "H" trademark at overseas markets, and standardized the management, development and application of intellectual property rights, refining the protection mechanism for technological achievements and facilitating the formation and application of technological innovation and proprietary intellectual property rights. In 2025, the Company's "H" trademark completed international registration in four countries and regions, including the UK, Australia, Singapore and Hong Kong, thereby laying a solid foundation for the protection of Huaneng International's trademark abroad.

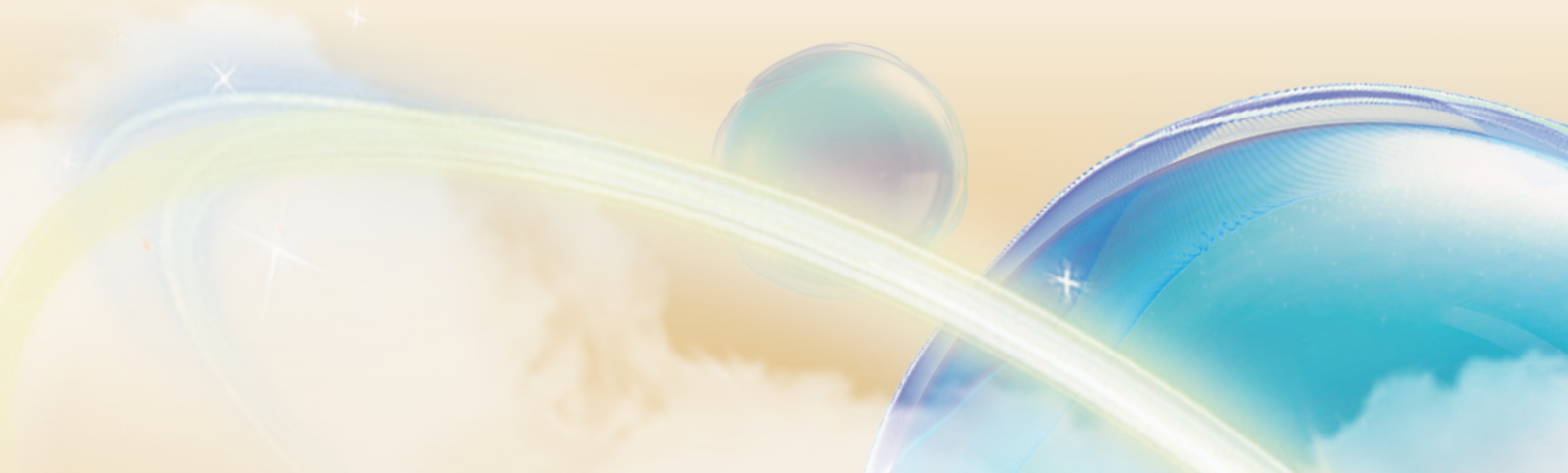
In 2025, the Company strictly followed the Patent Law of the People's Republic of China (《中華人民共和國專利法》), the Copyright Law of the People's Republic of China (《中華人民共和國著作權法》), the Trademark Law of the People's Republic of China (《中華人民共和國商標法》) and their respective implementation rules and regulations. Besides, the Company abided by the international conventions and general standards related to protection of intellectual property rights to ensure that the Company is protected in the ownership and use of intellectual property rights under applicable laws, and receives no punishment or lawsuit from the government for intellectual property infringement.

Formulating Patent Improvement Measures

Patent quality is an important indicator to measure technological innovation. The heads of the Company's secondary unit division and the chief engineers take the lead in establishing a special working group to explore the establishment of a responsibility system for technological innovation headed by the chief engineers, and refine and implement various patent indicators, deeply integrating the patent work with scientific research, planning, infrastructure and technical transformation of production, and formulating patent improvement measures appropriate to the Company.

Strengthening the Training for Intellectual Property Rights

The Company actively conducts research on the compliance management of intellectual property rights. We organize patent work training within the system and complete the patent application and protection as well as the trademark protection and publicity to improve the patent application knowledge of grassroots employees and guide all units to achieve Industry-University-Research-Practice cooperation.



Protecting and Maintaining Intellectual Property Rights

Huaneng International attaches great importance to the protection and maintenance of intellectual property rights, and requires all units to strictly follow relevant laws, regulations and policies. In accordance with the management requirements, the Company constantly improves and optimizes the top-level design. In the light of the Measures for the Management of Trademarks and Fonts of the Company《商標及字號管理辦法》), we continuously strengthen the protection for intellectual properties such as core technologies, trademarks and fonts, and software copyright, improve the mechanism for dealing with impostor enterprises, proactively investigate the unauthorized use of our trademark, fight against infringement, so as to safeguard the legitimate rights and interests of the Company. Meanwhile, the Company further enhances all-round management of core technical secrets and business secrets and reinforces competition restrictions on key talents in possession of the Company's core technology secrets. With respect to intellectual property rights of others, we, adhering to the principle of full respect and proper use, define the scope of use, methods, prohibited acts and liability for breach through a license agreement to use such intellectual property in a legal and compliant manner. In addition, the Company establishes and improves the coordination mechanism between intellectual property rights agencies and Legal Department of the Company, so as to better handle disputes arising from intellectual property rights, enhance risk control, and establish a multi-level intellectual property protection system.

Strengthening the Management of Patent Information

The Company establishes a patent information management system covering the whole process. Starting from the patent application, we dynamically monitor and maintain the patent information using technological means, and link all patents to relevant project, realizing full tracking management throughout the life cycle of patent including its application, authorization, maintenance, achievement transformation and expiration.




05



Empowering with Science and Technology Innovation to Accelerate Green Transformation

EMPOWERING WITH SCIENCE AND TECHNOLOGY INNOVATION TO ACCELERATE GREEN TRANSFORMATION



Huaneng International orients green and low-carbon development as a long-term direction. Driven by technological innovation, we engage in global energy transformation. To accelerate the construction of a new power system centered on renewable energy, we vigorously develop clean energy projects such as wind power and photovoltaics. By systematically implementing energy-saving, consumption-reducing, and efficiency-enhancing measures and optimizing energy allocation and utilization, Huaneng International plays the role as a backbone in advancing low-carbon development in the energy and power sector for green transformation.

5.1 Grasping Opportunities of Energy Revolution

The 15th Five-Year Plan period marks an accelerated phase in building China's new power system. By 2030, a new energy system will take shape. At that time, the share of non-fossil energy consumption will reach approximately 25%, renewable energy sources such as photovoltaic and wind power will constitute a main contributor to installed capacity, and significant progress will be achieved in constructing a new power system. By 2035, the new power system will be fundamentally established, providing robust energy support for the journey towards modern socialism.

The 15th Five-Year Plan period also represents a critical strategic opportunity for the Company to speed up transformation and development. Looking ahead, the Company will follow the new energy security strategy of "Four Revolutions and One Cooperation" and the national goal of "carbon peaking and carbon neutrality", adhere to the strategy of green and low-carbon development, strengthen and improve the integrated energy services, and actively adapt to the transformation of China's energy supply structure. Besides, the Company will continue to develop strategic emerging industries through digitalization, and carry out diversified supply and energy service transformation centered on core industries. We adhere to integrating into the new development pattern of dual domestic and international circulation. In accordance with the principles of prioritizing clean energy, focusing on benefits, and emphasizing stability, we enhance international cooperation, improve the efficient operation of overseas assets, and boost their risk resistance and profitability. In this way, we aim to break new ground and build a "new engine" for the Company's high-quality development.

Developing Clean Energy Vigorously

Amidst the market-oriented development of renewable energy, the Company intensifies efforts to acquire and convert premium strategic resources. We dynamically optimize investment decision-making criteria to ensure competitiveness and reasonable returns of projects on this front. Committed to improving the quality and efficiency of renewable energy development, the Company strives to achieve higher-standard goals in this sector. The Company deeply integrates clean energy into business operation. By constructing large-scale distributed photovoltaic facilities on idle land and rooftop at the plant, we realize self-generation and self-use of green electricity at both office and plant areas. By setting up electrochemical energy storage systems, we refine load management at the plant and maximize the local consumption of green electricity. This practice effectively reduces carbon emissions and grid losses during operations.



Huaneng Lingao Offshore Wind Power Project

Huaneng Lingao Offshore Wind Power Project

Located in Lingao County, Hainan Province, Huaneng Lingao Offshore Wind Power Project is among the first offshore wind power projects to be developed and constructed in Hainan during the 14th Five-Year Plan period. The project also marks Huaneng International's first offshore wind power project in Hainan Province. With a total installed capacity of 600 MW, the project is expected to generate approximately 1.85 billion kWh of clean electricity annually. This is equivalent to saving 560 thousand tonnes of standard coal and reducing carbon dioxide emissions by 1,568 thousand tonnes. As a result, the project will deliver significant economic, ecological, and environmental benefits.

Huaneng Suqian Guanmiao 100 MW Fishery-Photovoltaic Complementary Power Generation Project



Huaneng Suqian Guanmiao 100 MW Fishery-Photovoltaic Complementary Power Generation Project

Located in Suqian City, Jiangsu Province, Huaneng Suqian Guanmiao 100 MW Fishery-Photovoltaic Complementary Power Generation Project combines "power generation" and "fishery aquaculture" to efficiently utilize water resources. By integrating green and renewable energy with traditional fisheries, the project helps achieve benefits from three aspects of "fishery, power generation, and environmental protection". The project generates approximately 146,511.9 thousand kWh of clean electricity annually, reducing the consumption of 44.2 thousand tonnes of standard coal and cutting carbon dioxide emissions by 120.4 thousand tonnes. Therefore, the project plays an important role in optimizing the local energy structure and achieving high-quality green and low-carbon development.

Transformation and Development of Coal Power

The Company pays attention to the reality that the proportion of coal power units in the Company is relatively high, complies with the trend of coal power from the main power source to the basic security and system regulation power source providing reliable capacity, peak shifting and frequency adjustment and other auxiliary services, strictly controls the incremental amount of coal power, and optimizes the stock of coal power. We adopt advanced energy-saving, heat supply and flexibility technologies to realize "three reforms" and continue to improve the profitability of coal power units, so as to optimize and upgrade the structure of the Company's coal power generation.

Optimizing the Development of Gas Power and Other Clean Energy

The Company insists on optimizing the development of gas power, biomass and garbage power generation projects, and actively participates in nuclear power generation, so as to enrich the Company's diversified low-carbon and clean energy technology system. In regions with strong electricity price affordability and substantial peak regulation demand, priority will be given to the deployment of gas-fired power projects. In regions with large installed capacity of gas turbines, the Company will explore the integrated development mode of gas and electricity by comprehensively considering the use of existing pipeline natural gas, liquefied natural gas (LNG) receiving terminals, self-built LNG receiving terminals, or cooperative development with upstream gas suppliers. The Company actively participates in the centralized incineration and harmless treatment of urban sludge and the utilization of sewage resources in water-scarce cities, develops agricultural and forestry biomass power generation in an orderly manner, and accelerates the planning and construction of the Yangtze River Economic Belt, the ecological protection of the Yellow River Basin, and the comprehensive environmental protection management of northern cities. On the basis of a large proportion of shares in Hainan Changjiang nuclear power phase I, Shidao Bay nuclear power, Xiapu nuclear power, the Company has made great efforts in participating in nuclear power investment and broadening the channels of its future profitability.

Coordinated Planning for Strategic Emerging Industries

The Company takes the initiative to adapt to the transformation of the national energy supply structure, and insists on digitalization as a means to actively develop strategic emerging industries. We plan the development of energy storage in a comprehensive manner and explore the innovation of "new energy + energy storage" mode in various forms such as self-consumption, sharing, and leasing, to enhance the stable supply of new energy power. We also explore and research on the change of the energy system brought by the large-scale development of hydrogen energy, and actively participate in the demonstration project of the green hydrogen industry. Relying on the policy environment and market mechanism, the Company develops various forms of energy storage based on new energy development and regional peak demand. We innovate energy storage application scenarios and adopt various business models to develop, utilize and share large-scale energy storage power stations. In regions with high demand for grid frequency regulation and concentration of renewable energy, we invest in energy storage projects with better returns on the power supply side; in regions with large differences in peak and valley electricity prices, we invest in energy storage projects on the load side. On the premise of reasonable returns, we will actively develop other energy storage technologies. In 2025, the Company stepped up the development of new quality productive forces, witnessing strong growth momentum in strategic emerging industries such as virtual power plants, geothermal heating, and new-type energy storage.

Looking ahead, the Company will pay close attention to other strategic emerging industry projects, and actively seek investment opportunities for project development cooperation, reorganization, and merger and acquisition of assets.



5.2 Independent Technological Innovation

Upholding Xi Jinping's Thoughts on Socialism with Chinese Characteristics for a New Era, Huaneng International comprehensively implements the spirit of the 20th National Congress of the Communist Party of China. Based on the new era, new journey, new mission and new positioning of state-owned enterprises, we play "three roles"[12] to serve national strategic needs, promote quality corporate development, and earnestly complete the tasks assigned at the Company's annual work conference. With a focus on "the enhancement of three capabilities", we strive to be the "national team" in scientific and technological innovation. In addition, we deepen the reform of systems and mechanisms and stimulate sci-tech innovation, so as to make breakthroughs in key and core technologies. We pick up the pace to transform sci-tech achievements into practical productivity, providing sci-tech support for the high-quality and sustainable development of the Company.

Innovation Management

The Company implements the new development concept in an all-round way. We earnestly implement the decisions and arrangements of the central government and the SASAC on technological innovation, thoroughly practice the technological innovation strategy, and vigorously embrace the challenges and opportunities in technological innovation arising from the "carbon neutrality" and the new round of revolution in the energy industry. Adhering to the concept of "Four Considerations"[13], we serve national strategies and address major corporate development needs. We concentrate efforts on the establishment of a new energy system and a new power system. By giving full play to the leading role of the Company, we strengthen original innovation, make breakthroughs in core technologies, and actively promote the application and transformation of scientific and technological achievements. We continuously improve the industrialization level of scientific and technological achievements, and support and lead the Company's high-quality development of new quality productive forces.

In 2025, Huaneng International was committed to serving the national strategies and accelerating innovative development. We strengthened efforts to tackle key and core technologies and map out strategic emerging industries in an effort to facilitate the national major strategies. Economically, we drove the collaborative development of upstream and downstream industries such as high-end equipment manufacturing, and reduced the cost of energy generation, operation and maintenance, thus raising China's voice and competitiveness in the global energy sector. Socially, we fostered technical experts, ensured stable energy supply, and established benchmarks in terms of industry technology and safety. Environmentally, we improved the power generation efficiency of thermal power units, increased the proportion of new energy, reduced carbon dioxide and pollutant emissions, and conserved land and resources. In this way, we contributed to the "carbon peaking and carbon neutrality" goals, and injected robust momentum into the high-quality development of the energy industry. The Company achieved remarkable results in several scientific and technological projects. Through material innovation, breakthroughs in energy storage, and digitalization, we propelled the energy industry toward greater efficiency, cleanliness, and intelligence. Meanwhile, the Company focused on enhancing the independent operation and maintenance of gas turbines and building an intelligent safety management and control system. We overcame multiple critical technical bottlenecks to align us with the core requirements for developing new quality productive forces. The Company's "Key Technology and Application for Enhancing Flexibility in Coal-Fired Units Coupled with Molten Salt Thermal Energy Storage" received the First Prize of the Power Science and Technology Progress Award from the Chinese Society for Electrical Engineering (CSEE). The "Key Technology and Application for Full-Process Intelligent and Coordinated Control of NOx During Flexible Operation of Coal-Fired Units" was awarded the Second Prize of the Power Science and Technology Progress Award by CSEE. The "Key Technology and Large-Scale Application for Corrosion and Salt Deposition Monitoring in Power Plants" received the Second Prize of the Fourth Boiler Science and Technology Award. The "An Apparatus and Method for Producing Mineral Wool from Wasted Fly Ash in Waste Incineration Power Plants" project won an award at the International Exhibition of Inventions Geneva. The "A Zero-Liquid-Discharge Treatment Method and System for Desulfurization Wastewater Adaptable to Multiple Operating Conditions" project was recognized with the China Patent Excellence Award.

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12 Technological innovation, industrial control, and security support.

13 Consider the frontier of science and technology in the world, consider the main battlefield of the economy, consider the major national demands, and consider the life and health of the people.

The Company has optimized the R&D investment mechanism, enhanced the efficiency of direct R&D funding, and refined the centralized coordination mechanism for funding of cutting-edge, basic and cross-field science and technology projects. We have also intensified the monitoring and inspection of assembled investment in technological research to make it compliant and effective. In 2025, the Company continuously enhanced patent quality, tapped into high-value patent achievements, and steadily advanced the application of patented technologies. In 2025, the Company filed patent application for a total of 5,351 inventions and was granted 1,572 invention patents. Among these, 1,359 were domestic invention patents and 213 were international ones.



Demonstration Project at the Huaneng Dezhou Power Plant

The Technology for Molten Salt Thermal Energy Storage Coupled With Coal-Fired Units Won The First Prize of the Science and Technology Progress Award From the Chinese Society for Electrical Engineering.

Closely following the national strategic demand, the Company actively promoted molten salt thermal energy storage coupled with coal-fired technology, significantly improving the units' peak shifting, frequency adjustment, and top-peak capabilities, and balancing stable power supply with flexible generation. Since 2022, this technology has been demonstrated and applied in Haimen and Dezhou power plants, with continuous innovation and iteration. The Dezhou Power Plant project adopts a new modular molten salt electric thermal storage technology to achieve collaborative optimization of multi-source heating methods, significantly improving the operating efficiency of the molten salt energy storage system, playing a leading and exemplary role in China's molten salt energy storage R&D and integrated application. The project has a daily thermal storage capacity of 6 hours, can produce 250 tonnes of industrial steam, and has a total energy storage scale of 180 MWh.

Innovation Achievements

1. Construction of the 650℃ high-efficiency ultra-supercritical coal-fired units commenced at the Huaneng Yuhuan Branch.
2. Phase II of the Huaneng Jintan Salt Cavern Compressed Air Energy Storage and Power Generation Project saw switch-on for electricity.
3. The industry's first multi-element, high-precision integrated environmental forecasting platform for wind, waves, currents, ice and tides has been established. It has been piloted at five offshore wind farms in Liaoning, Shandong and other provinces.
4. For the first time in China, domestically-developed TSI system was put into operation for 1,000 MW units at Huaneng Laiwu Power Plant.
5. The successfully completed long-duration in-service testing of the independently developed first-stage moving blade for the 9FA gas turbine at Nanjing Gas Turbine Power Plant.

Development Directions

The Company will closely align with the national strategy of "carbon peaking and carbon neutrality" and serve the needs of building a new power system. Highlighting efficiency, cleanliness, intelligence, and independent R&D in the energy sector, we will deepen technological innovation throughout the value chain. We are dedicated to investing in cross-sector coupling technologies, including long-duration energy storage, digital empowerment of renewable energy, domestication of energy equipment, CCUS and hydrogen production. By strengthening industry-university-research collaboration and promoting talent cultivation, we aim to address "bottleneck" challenges and build a core technological innovation system. These initiatives provide a solid foundation for the high-quality development of the energy sector and the transformation of new productive forces.

5.3 Accelerating the Green and Low-carbon Energy Transformation

The Company implements major national decisions and deployments on ecological and environmental protection, incorporating key objectives and requirements on this front into medium- and long-term corporate strategies and plans. Adhering to targeted, scientific, and law-based pollution control, the Company enforces the "Three Simultaneity"[14] measures for environmental protection and continuously improves energy efficiency, pollution control capabilities, and emission supervision standards. We strive to achieve sustained reductions in carbon emission volume and intensity per unit of power generation, aiming to realize carbon peaking as early as possible and contribute to the building of a Beautiful China. In 2025, the Company did not incur any unexpected environmental accident that was defined as major or above grade. No major administrative punishment or criminal responsibility was imposed by relevant departments such as ecological environment authorities due to environmental incidents.

5.3.1 Overall Planning

Committed to being an industry leader in overall energy consumption indicator and ultra-supercritical unit energy consumption indicator, Huaneng International has successively formulated rules and regulations, such as the Measures for Energy Saving Management (《節能管理辦法》) and the Regulations on Environmental Protection Management (《環境保護管理規定》), and effectively implemented energy saving and consumption reduction responsibilities. We do so to promote energy conservation and enhance energy utilization. Various systems of energy saving are specified by each unit of the Company according to their actual circumstances, and publicity, training, supervision and inspection are carried out in a timely manner as well. The Company actively promotes coal-fired power units' energy saving and emission reduction, and plans to carry out energy saving and environmental protection renovations annually. In this way, we can ensure that the Company's coal-fired units continuously lead in energy conservation and environmental protection and maintain its competitive advantage, thus contributing to the reform of the national energy production and consumption and enhancing the clean and efficient development of coal power generation.

5.3.2 Energy Consumption Management

Huaneng International adheres to Xi Jinping's ecological civilization ideology, implements the spirit of the National Conference on Ecological and Environmental Protection, and the opinions on comprehensively promoting the construction of a beautiful China. The Company will deepen the fight against pollution, focus on safeguarding blue skies, clear waters, and clean lands, and cultivate a green concept for high-quality development. During its development, the Company strictly abides by the Environmental Protection Law of the People's Republic of China (《中華人民共和國環境保護法》), the Energy Conservation Law of the People's Republic of China (《中華人民共和國節約能源法》) and other relevant laws, strictly guard against environmental risks, and resolutely enhance the green image of Huaneng International. The Company mainly consumes coal and natural gas in the power generation process and consumes a certain amount of oil during the start-up ignition and production combustion process. In 2025, the Company's coal consumption for power generation of thermal power units was 292.05 g/kWh. The house consumption rate of thermal power unit was 4.36%.

[14] Facilities for pollution prevention should be designed, constructed, and implemented simultaneously with the construction project.

Management Objective

The Company is taking multiple measures and making concerted efforts to maintain a good level of energy efficiency each year. To this end, during the 14th Five-Year Plan period, the Company adopted systematic and multi-layered measures in energy consumption control, mainly covering management optimization, structural adjustments, technological upgrades, and engineering construction. Main energy consumption indicators continued to maintain a good level. In 2025, the consumption of standard coal was 12,336.61 ten thousand tonnes. Oil consumption in production totaled 37,938.98 tonnes, while natural gas consumption was 632,139.30 ten thousand standard cubic meters.

As the aforementioned targets have been achieved, we have updated next-phase objectives as follows. During the 15th Five-Year Plan period, the Company will focus on intelligence, system integration, and multi-energy complementarity. By driving an energy efficiency revolution through digital technologies, we are committed to marching toward a new phase of green and low-carbon development. Besides, we work to maintain favorable performance across major energy consumption indicators and modify the pass-through section of turbines at Dongfang Power Plant, Shang'an Power Plant, Ruijin Power Plant and other plants.

Management Mechanism

The Company's regional branches are responsible for the energy saving management. In accordance with the Energy Conservation Law of the People's Republic of China (《中華人民共和國節約能源法》), and with the consideration of actual operations, we have formulated regulations and guidance related to energy saving, such as the Measures for Energy Saving Management (《節能管理辦法》).

During the construction period, each project formulates the Overall Planning of Green Construction Project (《綠色建造工程總體規劃》) to specify detailed plans for the quantitative control of construction water and electricity indicators, and establishes the Implementation Plan and Rules of Green Construction Project (《綠色建造工程實施方案與細則》) and the Measures for Green Construction, Energy Saving and Emission Reduction (《綠色施工及節能減排措施》), and other management policies to define specific control measures.

With respect to the energy saving target, the Company maintains a relatively good level within the industry in energy consumption indicators by vigorously developing heat supply renovation, implementing energy-saving projects and practicing effective energy saving management measures. Huaneng International strengthens the budget management of energy consumption indicators and has formulated special assessment regulations to ensure that each unit can achieve optimal consumption of coal, electricity, oil, natural gas, etc. The Company adopts an approach that combines goal management and process management. Firstly, we set the annual energy consumption indicators taking into account specific energy efficiency level of each grassroots power generation unit and carry out assessment on the degree to which the reference target is met. Secondly, regarding those units which have difficulty in meeting the target or unsatisfactory energy consumption outcome, the Company will arrange on-site inspection performed by professionals, who then carry out comprehensive investigations according to specialties and systems, provide recommendations and take remedial measures to ensure the fulfillment of target energy saving and emission reduction assigned by the Company, and ensure that the Company's coal-fired units maintain a sound performance in energy saving.



Management Measures

In 2025, the Company continued to meet stringent key energy consumption performance targets and focused on energy saving and consumption reduction measures in five areas, namely management, structure, technology, institutional development and engineering construction. With the concerted effort of various units, the Company has maintained its industry-leading position in terms of its achieved key energy consumption performance targets by various key energy attributes.

On energy saving through management, we improved the three-level energy saving management system, optimized the three-level energy saving supervision network for grassroots units and introduced energy saving benchmarks into grassroots units' performance management. First, we strengthened the management of energy saving targets by following up with units that were behind the annual energy saving targets and holding dialogue with key units. Second, we enhanced the implementation and management of energy saving responsibilities by urging a breakdown of the responsibilities of all personnel in regional branches and basic-level thermal power plants by job nature for looking after energy saving-related tech-economic indicators to raise energy saving awareness. Third, we enhanced benchmark checking for power units of the same type to identify discrepancies against management, technology, safety, fuel and market benchmarks and improve energy saving management.

On energy saving through structure, first, we organized power plants to explore their heat supply potential and tap into a wider heat supply market according to local conditions. Second, we urged regional branches to optimize their operating capacity through electricity transfers and enabled low energy consumption power units to absorb the additional power generation capacity. Third, we suggested that grassroots units modulate energy saving economics to increase the output coefficient of their power units where policies allow. Fourth, we stepped up fuel procurement work and management of blended coal as fired to ensure that the heating value of coal as fired is consistent across all power plants and that the heating value of coal as fired remained at a high level for ultra-supercritical power units.

On energy saving through technology, we focused on promoting the transformation of existing power units for thermoelectric power cogeneration, facilitating the environmentally friendly and efficient utilization of coal with a further testament to energy utilization enhancement.

On institutional development, to adapt to the construction of new power systems and the spot market, we summarized and refined the operation and maintenance experience of various unit divisions, organized the compilation or revision of relevant rules, regulations and technical guidelines, and continued to tap into the energy-saving potential of existing coal power units.

On engineering construction, the Company formulated reasonable construction energy consumption indicators to improve construction energy utilization. To reduce the energy loss caused by various media, we required all project groups to improve system proposals at the stage of preliminary design and arrange equipment in a reasonable and compact manner while ensuring safe operation and convenient maintenance of the equipment. Compact design was arranged for the main powerhouse and production buildings, so as to shorten the length and span of the main powerhouse and narrow the construction land and plant area. Appropriate structures and light wall materials were also adopted for lower load of the building and less use of steel and cement. Priority was given to locally sourced materials such as sand, stone, lime and brick. The shortfall was sourced from neighboring regions to reduce transportation. The Company gave priority to the use of energy-saving, efficient, and environmentally friendly construction equipment and machinery, preferred energy-saving construction process, optimized work sequences and schedules, promoted shared use of machinery, rationally reduced nighttime operations, and carried out construction and commissioning in a refined manner. By confirming trial operation conditions in advance at each stage, we aimed to achieve success in every trial run and test on the first attempt.



In 2025, the Company made steady progress with positive momentum in its production and environmental protection. In terms of equipment management, reliability was improved year by year and outperformed industry peers. In terms of energy saving and consumption reduction, the equivalent availability coefficient of the unit increased year by year, and the energy efficiency of thermal power units remained industry-leading for many years. The Company paid close attention to optimizing energy consumption and achieving the environmental protection targets. The Company strived for excellence of energy consumption indicators, guided and assisted underperforming power units, and applied advanced energy-saving technologies such as wide-load high-efficiency power generation and generalized regeneration in a targeted manner. The leading advantage of key models was continuously consolidated. In addition, the Company consistently drove the green and low-carbon development, taking new steps in high-efficiency and low-carbon development.

In the future, the Company will continue to promote the transformation of existing power units for thermoelectric power cogeneration technology and optimize energy-saving operation under wide load conditions, facilitating management improvement.



Huaneng Yuhuan Branch

The World's First 650℃ Million-Kilowatt-Class High-Efficiency Ultra-Supercritical Coal-Fired Demonstration Unit (Huaneng Yuhuan Branch) Enters the Full-Scale Construction Phase

Huaneng Yuhuan Branch is constructing a one-million-kilowatt-class 650℃ high-efficiency ultra-supercritical single-reheat coal-fired power generation unit. The unit is designed with a main steam pressure of 35 MPa, and both the main steam and reheat steam temperatures reach the world's highest parameter for coal-fired units at 650℃, which will significantly enhance power generation efficiency. Compared to existing units, the 650℃ high-efficiency ultra-supercritical coal-fired unit can increase power generation efficiency by approximately 4 percentage points, reduce coal consumption per kWh by about 10%, and cut annual carbon dioxide emissions by roughly 450 thousand tonnes.

5.3.3 Water Resources Management

Huaneng International strictly follows the government's requirements for the protection of fresh water. We vigorously promote comprehensive water-saving and wastewater treatment actions for thermal power plants and issued the Guiding Opinions for Thermal Power Plant's Water-saving and Wastewater Treatment (《火電廠全廠節水及廢水綜合治理指導意見》) to provide systematic guidance for thermal power plants in this regard. The main water consumption at Huaneng International's power plants stems from processes such as generating electricity with power units, replenishing water for closed circulating water, and wet desulphurization. Surface water, urban water, a small amount of groundwater and other water sources are used for generating power, and river water or sea water is used for circulating. In 2025, the overall water consumption of the Company was 20,888.41 million tonnes, the freshwater consumption for power generation was 396.77 million tonnes, the open cooling circulation water consumption was 20,491.64 million tonnes, and the performance value of freshwater consumption for power generation was 0.86 kg/kWh.

Management Objective

By 2025, the Company is committed to devoting greater effort in the transformation of water conservation for the purpose of zero discharge of wastewater. To achieve the objective, the Company stepped up efforts in water-saving transformation before 2025, further enhancing its wastewater zero-discharge capabilities. Four power plants, including Liaocheng Power Plant, Yunhe Power Plant, Baiyanghe Power Plant, and Fuzhou Power Plant, have completed the renovation of their terminal wastewater treatment projects. This has enabled the complete on-site disposal of high-salinity wastewater such as desulfurization wastewater and reverse osmosis concentrate, effectively mitigating related environmental risks. In December 2025, Huaneng Anyuan Power Plant was awarded the title of "Advanced Collective of the China Water Conservation Award."

As the aforementioned targets have been achieved, we have updated next-phase objectives as follows. During the 15th Five-Year Plan period, the Company will continue to significantly enhance water resource efficiency through systematic upgrades and refined management and further reduce the total volume of discharged wastewater and pollutant load by deepening wastewater cascade utilization and comprehensive treatment, striving toward higher standards of intensive water resource utilization. The Company will implement terminal wastewater concentration projects at power plants such as Laiwu Power Plant and carry out comprehensive plant-wide water conservation and wastewater management at facilities including Diandong Power Plant.

Management Mechanism

In accordance with the Company's management systems for technical supervision, maintenance, technical transformation and energy conservation, the various thermal power plants have established a set of water consumption management systems and procedures, which include:

1. A water management system has been established with designated professionals responsible for oversight. Rules have been developed for water usage assessment, meter maintenance and management, further clarifying requirements for dual control over total enterprise water consumption and water use quotas to enhance water conservation efforts. This provides an institutional foundation and implementation guarantee for water-saving initiatives. All water-using departments and designated professionals regularly maintain, calibrate, and inspect water metering devices, water quality testing instruments, and water-using equipment to eliminate unreasonable water consumption.

2. A ledger management system has been established, including plant-wide water usage and discharge ledgers, basic information forms for water quality monitoring and water quantity measurement instruments, equipment installation location and parameter tables, instrument verification, calibration, and maintenance record forms, among others. Plant-wide water management indicators are calculated regularly, with water usage ledgers based on actual monitoring data. The smart operation and maintenance management platform has been leveraged to develop an online statistical and automated accounting system capable of tracking key indicators such as water intake, water consumption, and water consumption per unit of electricity generated.

3. According to the principles of shunting sewage and clean water, classification and recovery, and disposal and reuse, the Company comprehensively recycles various wastewater from the plant area, thereby reducing discharge rate.

Management Measures

Huaneng International has comprehensively launched the water-saving and wastewater treatment work plan in its power plants. As at the date of the report, all subordinate power plants enforced the water-saving and wastewater comprehensive treatment. Upon the treatment, the freshwater consumption for power generation has met the criteria set out in the Standards for Energy Saving and Environmentally Friendly Coal-Fired Power Plants of the Company (《節約環保型燃煤發電廠標準》), with wastewater discharge meeting the requirements set out in the pollutant discharge permits and local environmental regulations.

The Company has defined clear management requirements across three critical aspects: water withdrawal, water consumption, and wastewater discharge. In terms of water withdrawal management, the Company makes water conservation a top priority. It strictly implements requirements such as water resource assessment, environmental impact assessment reports and approvals, water withdrawal permits, and annual water withdrawal plans, thereby eliminating unpermitted or over-planned water extraction. Enterprises in the Yellow River Basin adhere to the "Four Waters and Four Determinations" principle, enhance the utilization of unconventional water sources, and ensure that water withdrawals comply with laws and regulations. In water consumption management, the Company adheres to a quota-based approach, strengthens process oversight in water consumption, enhances the cascaded utilization and treatment-reuse of wastewater, improves industrial water efficiency, and ensures that water consumption in processes such as thermal power generation and coal washing meets specified quota requirements. In wastewater discharge management, the Company adheres to the principles of pollution reduction at the source, process control, and end-of-pipe treatment. It strictly complies with requirements such as environmental impact assessment reports and approvals, pollutant discharge permits, and permits for discharge outlets into water bodies. The Company strengthens comprehensive management of the entire process, including wastewater generation, collection, treatment, monitoring, and discharge, to ensure lawful and compliant wastewater discharge and mitigate risks of water pollution and ecological damage.

In 2025, the Company continued to advance the implementation of water-saving and wastewater treatment renovation projects, accelerated the substitution of conventional water sources for production purposes. It also expanded the utilization of unconventional water sources, such as reclaimed water and mine drainage water. In practices, enterprises face challenges of securing a stable supply of reclaimed water, and the water quality from reclaimed water plants frequently exceeds relevant standard limits and fluctuates significantly. Accordingly, the Company has adopted a "One Plant, One Solution" approach. It is actively advancing the implementation of renovation projects, such as advanced desalination treatment for reclaimed water, to ensure that the quality of reclaimed water meets the needs of production processes. Relevant enterprises have been organized to collaborate with local water authorities, striving to secure reclaimed water supply quotas. At the same time, efforts were made to advance the approval of renovation projects and promote the independent construction of reclaimed water distribution networks by enterprises. These initiatives aim to substantially expand the utilization of municipal reclaimed water, reduce the use of freshwater, and contribute regional water conservation results.

The Company stipulates that infrastructure projects must strictly comply with relevant national laws and regulations. In accordance with the "Three Simultaneities" requirement, projects are to be organized and implemented with technical and economic measures that prioritize resource conservation and environmental protection. The Company requires project groups to prepare reports on resource conservation at the stage of preliminary design and take practical and effective measures in the construction of "Sponge City" in accordance with the requirements of regions where projects are implemented. In addition, these groups are required to carry out research of water-saving engineering facilities such as water for multiple uses and wastewater reuse to achieve zero wastewater discharge of new units for water conservation and environment protection. During the construction period, the Company's infrastructure projects respectively determined domestic water and construction water quota indicators based on the characteristics of projects and on-site construction conditions and conducted calculation and assessment management separately. When a service contract was signed with the construction unit, the water conservation quota indicators were included in the contract terms for calculation and assessment. A reusable water collection and treatment system shall be established at the construction site to make water resources available for cascade recycling, rainwater collection tanks shall be set up to recover rainwater, which will be used for road spraying, vehicle washing and greening after treatment, domestic sewage treatment stations shall be designed, constructed and put into use in advance, and all the domestic sewage in the construction area will be treated by the sewage treatment stations, and the treated water shall be reused for secondary recycling applications such as vegetation greening and road spraying. In 2025, the Company's water resource consumption during the construction of various projects was kept within the scope of management objectives. The Company faced no imminent threats in terms of tapping water resources.

In the future, the Company will continue to advance water conservation enhancement efforts, focusing on building water management capabilities in key areas such as green and environmentally friendly water treatment technologies (e.g., EDI, electrochemistry, etc.), research and application of circulating water emission reduction technologies, and the implementation of smart water management technologies. This will further elevate the level of intensive and efficient water resource utilization as well as the effectiveness of water environmental protection.



Huaneng Huangtai Power Plant

Huaneng Huangtai Power Plant Implements a Project to Fully Utilize Reclaimed Water for Production

Huaneng Huangtai Power Plant has successfully implemented a renovation project to fully utilize reclaimed water for production purposes. This project adopts an all-membrane treatment process. The treated reclaimed water is used as boiler makeup water and for plant-wide production. High-salinity wastewater, after nanofiltration salt separation and membrane concentration, is processed through evaporation and crystallization into salt for compliant disposal, achieving zero wastewater discharge for the entire plant. The successful operation of this project has achieved water pollution reduction and intensive water resource utilization, providing a reference technical route for water-saving renovations of thermal power units.

5.3.4 Emissions Management

The Company abides by laws and regulations such as the Environmental Protection Law of the People's Republic of China (《中華人民共和國環境保護法》), the Water Pollution Prevention and Control Law of the People's Republic of China (《中華人民共和國水污染防治法》), the Law of the People's Republic of China on Prevention and Control of Environmental Pollution Caused by Solid Wastes (《中華人民共和國固體廢棄物污染環境防治法》), the Atmospheric Pollution Prevention and Control Law of the People's Republic of China (《中華人民共和國大氣污染防治法》) and the Law of the People's Republic of China on Prevention and Control of Pollution from Environmental Noise (《中華人民共和國環境噪聲污染防治法》). In accordance with the national policies on environmental protection and policy documents regarding ecological environment and energy conservation and emission reduction and the requirements of relevant authorities, the Company has put forward the plan to become a first-class enterprise for environmental protection based on the aim of building a world-class listed power generation company and its actual situation. In addition, actions for ultralow emission transformation, water-saving and wastewater treatment, and comprehensive utilization of solid waste are fully deployed. The Company attaches great importance to the discharge management of pollutants. All thermal power units are required to install desulphurization, denitration and dust removal devices and wastewater treatment and other environmental protection facilities. We strengthen the operation, maintenance and repair of environmental protection facilities, and strictly abide by the requirements of pollutant discharge permits, ensuring that the discharge of pollutants meets national standards and territorial requirements. The Company strictly complies with standards as stipulated in the pollutant discharge permit, ensuring lawful and compliant emissions. Relevant enterprises fully adhere to the requirements outlined in the environmental impact assessment report and its approval documents, organizing regular health examinations for employees. No adverse health impacts have been observed among employees or the surrounding community residents.

During the construction period, the Company attaches great importance to ecological and environmental protection by carrying out green construction and in-depth treatment of dust, noise, garbage and wastewater to minimize the negative impact on the environment. The constructors and all parties engaged in the construction establish a green construction management system, and formulate management systems such as the overall planning of green construction project, the implementation plan and detailed rules of green construction project and the measures for green construction and energy saving and emission reduction, which are independently defined in the general design of the engineering construction organization with detailed regulations on green construction and environmental protection. The quantitative control targets for emissions during the green construction process are clarified with specific pollution control measures. The Company's construction projects strictly implement the requirements of "Three Simultaneities" for environmental protection, in accordance with various environmental protection work and environmental protection measures recommended by the environmental impact assessment approval. In addition, we strengthen the stable operation of environmental protection facilities, ensure that the emission of pollutants meets the standards, and entrust environmental protection supervisors to supervise, inspect and guide the implementation.

In advancing the circular economy, the Company has established clear targets and action plans. First, to enhance resource utilization efficiency, we will optimize energy conversion and power generation efficiency throughout the production process by leveraging technological innovation, equipment upgrade, and energy-saving retrofits. This will minimize energy waste and reduce the consumption of fossil fuels such as coal and natural gas. Second, to enhance the recycling and reuse of waste, we will actively develop related applications in building materials, road construction, and other fields, thereby transforming waste into valuable resources. Third, we will vigorously promote the development of renewable energy by increasing investment in renewable power generation. This initiative aims to reduce dependence on fossil fuels and explore advancements in energy storage technologies, thereby ensuring a stable supply of renewable energy. In 2025, the Company continued to explore pathways for energy saving and consumption reduction. Through equipment retrofits and optimization of production processes, we successfully minimized coal consumption per unit of electricity generated, thereby reducing emissions of carbon dioxide and other pollutants. We also enhanced the treatment and reuse of waste generated during development, production, and power generation, while actively expanding applications in related markets. Furthermore, we advanced the utilization of renewable resources, with some business units pioneering the co-firing of coal with biomass fuels–substituting agricultural and forestry waste for a portion of coal–to reduce carbon emissions. Meanwhile, significant efforts were made to construct wind power and photovoltaic facilities both within and outside plant areas, achieving cleaner and more diversified energy sources.

To enhance capability building in environmental emergency response, enable the effective prevention, timely control and elimination of environmental emergency hazards, and to keep the red line of ecological and environmental protection firmly in place, Huaneng International has established environmental protection management regulations and related provisions. The Company requires grassroots units to implement the policies and requirements of the State and the Company on environmental emergency response, formulate emergency plans for environmental emergencies in accordance with the Measures for the Administration of Contingency Plans for Emergencies (《突發事件應急預案管理辦法》) (Guo Ban Fa [2024] No.5), regularly revise and improve the plans, establish and improve the early warning mechanism for environmental emergencies, and conduct training, filing, drill and revision of the plans. In case of any situation that may lead to environmental emergencies, an early warning should be given in time, with preventive measures taken immediately.

During the reporting period, the Company was not subjected to any significant administrative penalties or criminal liability for pollutant discharge, and there were no significant deficiencies in the Company's environmental monitoring plan and risk management measures.



5.3.4.1 Exhaust Gas Management

The wind, photovoltaic and hydro projects of the Company do not produce air pollutants in the production and operation. Thermal power enterprises produce soot, sulphur dioxide, nitrogen oxides and other air pollutants mainly from the combustion of coal in the boiler. In 2025, the Company's actual total emissions of soot, sulphur dioxide and nitrogen oxides were 3,782.79 tonnes, 24,864.48 tonnes and 51,843.63 tonnes, respectively, far lower than the certified total emissions of 22,386.09 tonnes, 93,884.95 tonnes and 129,187.97 tonnes, respectively, indicating zero excessive emissions.

Management Objective

We completed the coal field enclosure retrofits in key areas such as the Yangtze River Delta and Fen-Wei Plain by the mid-term of the 14th Five-Year Plan and strictly enforced the local authority's requirements of fugitive emissions to ensure that there is no major environmental protection safety accident during the 14th Five-Year Plan period. To support this objective, during the 14th Five-Year Plan period, the Company completed the coal field enclosure retrofits in key areas such as the Yangtze River Delta and Fen-Wei Plain. We strictly enforced the local authority's requirements for fugitive emissions and recorded no major environmental or safety incidents. In 2025, the Company maintained emission performance indicators for sulfur dioxide, nitrogen oxides, and particulate matter at 0.06 g/kWh, 0.13 g/kWh, and 0.01 g/kWh, remaining consistent with the previous year.

As the aforementioned targets have been achieved, we have updated next-phase objectives as follows. During the 15th Five-Year Plan period, for atmospheric pollution prevention and control, we will continue to optimize operations and deepen governance measures, implement comprehensive management of ash fields and complete full enclosure retrofits of the coal field. By integrating efforts in energy saving, consumption reduction, and clean energy substitution, we aim to reduce the generation of atmospheric pollutants and greenhouse gases at the source, ensuring that actual total emissions remain significantly below permitted quotas.

Management Mechanism

The Company has formulated the Regulations on Environmental Protection Management (《環境保護管理規定》), the Management Measures for Capital Expenditure in Electricity Generation (《電力生產資本性支出項目管理辦法》) and others to ensure the progress on the work related to ecological environment protection and air pollution prevention and control projects.

The Company makes full use of its internal information platform to monitor excessive emissions, focusing on the analysis of events with long duration and seriously excessive emissions, and guides all units to learn from these cases and take active measures to improve the Company's overall environmental protection management capability and proficiency. In addition, giving consideration to the promotion of annual key tasks, major projects, air quality assurance tasks, etc., the Company launches environmental protection inspections occasionally to actively prevent and control environmental protection risks.



Management Measures

The Company has taken the following measures to enhance waste gas management:

1. Enhancing the supervision and implementation of work tasks. The Company has enhanced review management of environmental protection renovation projects, optimized review procedures, secured renovation investment, strengthened supervision and management of key processes such as bidding process, and inspected and supervised key work tasks to carry forward the pollution prevention and control tasks.

2. Ensuring effective clean production. The Company has continuously maintained the safe and reliable operation of environmental protection facilities, strengthened real-time monitoring of pollutant discharge, ensured discharge compliance, and controlled pollutant discharge in accordance with requirements set out in the pollutant discharge permit to secure a leading position in terms of pollutant discharge in the industry.

3. Successfully completed the air quality assurance tasks. The Company has ensured good air quality during key hours and weathers with serious pollution, ensured effective pollution prevention and control in key regions such as Beijing-Tianjin-Hebei and neighboring region, Yangtze River Delta and Fen-Wei Plain, and fully adopted measures such as load reduction of diesel trucks, non-peak-hour transportation and control of fugitive emissions to fulfil the Company's social responsibilities.

Work Achievements

The Company has concentrated on implementing ultra-low emission transformation projects for thermal power enterprises. The technologies adopted mainly include electric-bag integrated dust removal and coordinated dust removal for soot treatment, limestone-plaster wet desulphurization for sulphur dioxide treatment, and low-nitrogen combustion and selective catalytic reduction (SCR) for nitrogen oxide treatment. The Company's pollution prevention and control facilities have been constructed and operated under sound conditions. As of the end of 2025, 100% of the Company's thermal power units had completed ultra-low emission transformation. The achievement of "Cold Oxidation Absorption Process (COAP) for Near-Zero Emission of Coal-Fired Flue Gas Pollutants" validated through the demonstration project at Huaneng Linyi Power Plant, has successfully passed the appraisal of international leading technology.



Huaneng Dongguan Gas Turbine Phase II Project

Successful Commissioning of Gas-Steam Combined Cycle Peak-Shaving Unit at Huaneng Dongguan Gas Turbine Phase II Project

As a key project under the 14th Five-Year Plan for Energy Development of Guangdong Province, Huaneng Dongguan Gas Turbine Phase II Project involves the construction of two 498.48 MW gas-steam combined cycle peak-shaving units. The project is guided by the principle of building a high-quality "Genetic Engineering", with all technical, economic, and environmental indicators reaching leading levels among similar units. Compared to ultra-clean coal-fired units of equivalent scale, the project can reduce carbon dioxide emissions by approximately 1.3 million tonnes annually and lower standard coal consumption by about 330 thousand tonnes each year. This contributes significantly to advancing the optimization of the energy structure and building a green, clean energy system in the Guangdong-Hong Kong-Macao Greater Bay Area.

Future Plan

First, the Company will continue to drive its pollution prevention and control efforts, focus on environmental protection transformation projects in key regions, including close-down of coal field, wastewater treatment, and ash field treatment for power plants.

Second, the Company will continuously promote clean production practices, enhance permit-based waste discharge management, ensure effective management and control for air quality in key hours and weather with serious pollution, strengthen the inspection management for environmental protection supervision at different levels and improve the prevention and emergency response for public opinion risk related to environmental protection.

Third, the Company will maintain vigorous environmental protection supervision and management, strengthen supervision and site inspection to ensure effective supervision and management of the implementation of air pollution prevention and control tasks.

Fourth, the Company will optimize environmental protection standard system, promote the research and development and application of technologies such as integrative removal of pollutants and comprehensive energy saving and environmental protection transformation, and summarize experience from demonstrative projects to provide guidance to other projects.

5.3.4.2 Wastewater Management

The Company, with coal-fired power generation as its main business, generates a certain amount of wastewater in the process of electricity production, including those from the concentration of steam turbine circulating cooling water, the wet desulphurization facilities, the auxiliary production facilities of the generator set, the coal field flush as well as sanitary sewage. In strict accordance with the requirements of environmental impact assessments and pollutant discharge permits, most power plants of the Company have achieved zero discharge of wastewater, and recycled domestic sewage, industrial wastewater, desulphurization wastewater and chemical wastewater through the sewage treatment station in the factory. For circulating cooling water from certain water-cooled units–where the primary pollutants are salt discharge strictly comply with the standards set by environmental impact assessments and pollutant discharge permits.

In 2025, the total water discharge of the Company amounted to 20,511.14 million tonnes, the discharge of open cooling circulation water totaled 20,480.47 million tonnes, and the total discharge of sewage (including industrial and desulphurization wastewater) from operation was 30.67 million tonnes. Some of the wastewater was allowed to be discharged when they reached a certain standard after treatment, e.g., wastewater from circulating water; some were reused after treatment and could not be discharged, e.g., those from desulphurization facilities and coal field flush; and zero discharge was required for certain power plants which were not allowed to discharge any wastewater. The Company's certified chemical oxygen demand (COD) emissions are 268.39 tonnes, and the certified ammonia-nitrogen emissions are 32.46 tonnes. The actual discharge volume is significantly lower than the permitted discharge volume, and there have been no instances of exceeding the discharge limits.

Management Measures

The Company adopts the following measures in the management of wastewater treatment and discharge:

1. The Company rigorously implements the applicable water pollution prevention and control policies and sewage discharge licensing requirements. All thermal power plants of the Company have obtained the corresponding pollutant discharge permits as scheduled, thereby providing safeguards for legally compliant wastewater treatment and discharge management.
2. Relevant units conduct inspections and rectifications in accordance with the requirements of pollutant discharge permits. In alignment with environmental protection regulations at all levels, the Company formulated a comprehensive action plan for pollution prevention and control. This includes actively advancing wastewater treatment projects and systematically implementing plant-wide water-saving and wastewater treatment upgrades as mandated by local governments and environmental impact assessments. In particular, wastewater renovation projects were carried out for power plants located in key areas and along the Yangtze River basin to ensure full compliance with environmental requirements.
3. The Company performs on-site checks and inspections of environmental protection facilities, including wastewater treatment units.
4. The Company built a sound standard system for environmental protection and formulated guiding opinions on water conservation and wastewater discharge transformation to ensure compliance with environmental protection requirements through research and optimization.
5. The Company actively adopts the latest wastewater treatment technology and launches wastewater transformation demonstrative projects.



Comprehensive Treatment Project for Desulfurization Wastewater at Huaneng Luoyuan Power Plant

Comprehensive Treatment Projects for Desulfurization Wastewater

In 2025, comprehensive treatment projects for desulfurization wastewater were successfully implemented at enterprises such as Huaneng Luoyuan Power Plant and Huaneng Liaocheng Thermal Power Plant. These projects have become benchmark for the Company in environmental technology innovation and efficient engineering implementation. This project applied independently developed bypass flue gas evaporation and drying technology for high-salinity wastewater, achieving “zero discharge” of desulfurization wastewater across the entire plant. The successful commissioning of such projects not only fulfills the goals of reducing water pollution and intensifying water resource utilization but also exemplifies our commitment to drive green development and advance industrial upgrading through technological innovation. These initiatives provide replicable technical solutions and project management insights for environmental retrofits of similar units.

Future Plan

The Company will continue to strengthen water pollution control and promote enhanced in-depth treatment and comprehensive utilization of industrial wastewater and domestic sewage, as well as launch wastewater zero discharge transformation projects in an orderly manner in compliance with local environmental protection requirements.

With the gradual deepening of wastewater treatment work as well as the increased wastewater treatment technology research efforts by domestic tertiary institute, Xi'an Thermal Power Research Institute Co., Ltd. and Huaneng Clean Energy Research Institute, etc., we will formulate a roadmap for developing practical, reliable and cost-effective wastewater treatment technology. We will gradually carry out thermal power plant water-saving and wastewater comprehensive treatment transformation in key areas in order to eventually enable all the Company's subsidiary thermal power plants to comply with the updated pollutant discharge permit requirements, with some reaching even higher standards.

5.3.4.3 Waste Management

The Company's disposal of wastes strictly complies with laws and regulations such as the Law of the People's Republic of China on Prevention and Control of Environment Pollution Caused by Solid Wastes (《中華人民共和國固體廢棄物污染環境防治法》) as well as the Company's regulations including the Regulations on Environmental Protection Management (《環境保護管理規定》), the Measures for Evaluation and Accountability for Environmental Protection Work (《環境保護工作考核及責任追究辦法》), the Management Standards for Solid Waste (《固體廢棄物管理規範》), the Governance and Management Standards for Desulphurization By-products (《脱硫副產品治理管理規範》), the Governance and Management Standards for Fly Ash (《粉煤灰治理管理規範》), etc. The Company requires that the storage, discharge, and disposal of waste comply with national laws and local policies. We also cooperate with qualified third parties to deal with waste and strengthen waste recycling to minimize waste emissions.

Management Objective

In accordance with the Law of the People's Republic of China on Prevention and Control of Environment Pollution Caused by Solid Wastes (《中華人民共和國固體廢物污染環境防治法》) and the principles of "reduction, recycling, harmlessness" in the prevention and control of solid waste pollution, the Company actively promotes the compliant and comprehensive utilization of solid waste and insists on source management with whole-process responsibility system and traceable information management in place. The hazardous waste management plan is filed in accordance with regulations with such waste stored, transported and disposed of as required. The comprehensive ecological protection treatment and transformation for ash storage field is expected to be completed by 2025. To achieve this objective, on December 29, 2025, the expansion of the dam body and the construction of new roads at the Jiutai Power Plant's ash storage field were completed. With this milestone, the Company has accomplished all planned ecological and environmental comprehensive remediation projects for ash storage field scheduled before 2025.

As the aforementioned targets have been achieved, we have updated next-phase objectives as follows. During the 15th Five-Year Plan period, with a focus on "resource utilization and harmless treatment," we will vigorously promote the comprehensive utilization of solid wastes such as fly ash and desulfurized gypsum, continuously reduce storage and disposal volumes, and further advance the ecological and environmental comprehensive remediation of ash storage field and related facilities.

Non-hazardous Waste

Huaneng International's production activities are mainly concentrated in the area of power production. The solid waste (including fly ash, gypsum and slag) and hazardous waste (denitrification catalyst) generated during the operation of thermal power plants are subject to comprehensive utilization of solid waste and other measures, causing significantly less impact on the environment. The main solid waste generated during the Company's power generation process includes fly ash and cinder produced during the combustion process of the boiler, and gypsum produced during the limestone wet desulphurization in power plants. In 2025, the Company produced 4,415.13 ten thousand tonnes of solid waste, including 3,470.36 ten thousand tonnes of fly ash and cinder, and 944.77 ten thousand tonnes of desulphurized gypsum. The comprehensive utilization rate of fly ash and cinder stood at 84.96%, and the desulphurization gypsum disposal utilization rate was 78.33%. The general solid waste density was 0.10 kg/kWh.

Fly ash and cinder, desulphurization gypsum and other solid waste can be sold as raw materials in related industries, such as cement, concrete, aerated blocks and gypsum board. The Company has established an environmental protection supervision and management system in accordance with the requirements of national and local standards and policies on environmental protection to effectively control the canning, stacking and marketing of fly ash and cinder and desulphurization gypsum.

When loading fly ash and cinder and gypsum, the Company rigorously follows the operational norm for load control, separates the fly ash and cinder from gypsum and controls the load capacity during transportation and conducts thorough check and cleaning before vehicle entry to prevent "escaping, spilling over, dripping and leakage" of solid wastes. Most of the fly ash and cinder and gypsum collected from boilers will be directly transported to the processing plants for secondary use. The Company closely monitors where the by-products of power generation are being transported and how they are going to be used to prevent environmental pollution and public issues that have a negative impact on society.

Some fly ash and cinder in the power plants will be temporarily stored in the ash field, and the Company strengthens supervision and management of the ash field. In accordance with the requirements of local environmental protection authorities, construction and retrofitting of wind-proof and dust control facilities have been carried out to ensure that the storage of ash and gypsum is in line with local environmental protection standards.

The project waste is collected by classification, stored in a centralized way and cleaned up regularly by the Company, and corresponding units are entrusted to clear and transport it regularly. The gravel and earthwork construction waste from the project is used as the on-site roadbed backfill material to realize harmless treatment.



Huaneng Yangliuqing Thermal Power Plant

Huaneng Yangliuqing Thermal Power Plant Successfully Established China's First Demonstration Production Line for Coal-fired Boiler Coupled with Fiberization

The Company actively responds to national policy requirements by adopting a forward-looking strategy of "Clean Energy + Circular Economy," having systematically overcome three major technological bottlenecks: coal adaptability, energy efficiency limits, and material performance breakthroughs. Leveraging the "Coal-Based Solid Waste Fiberization Resource Utilization Technology" project, the Company successfully established China's first demonstration production line for coal-fired boiler coupled with fiberization at Huaneng Yangliuqing Thermal Power Plant. This achievement has led to a significant increase in ash residue resource recovery rates and energy efficiency. This technology significantly reduces energy consumption and carbon emissions in fiber production, expands the application of fiber materials across multiple fields, and sets a benchmark for the green circular transformation of the coal-fired power industry.

Hazardous Waste

The major hazardous waste produced during the process of power generation includes solid waste such as inactivated denitration catalysts and ion exchange resin deactivated in water treatment, as well as liquid waste like waste oil produced during power units' operation. The Company regenerates the denitration catalysts which have reached their life limit and continues to charge them into denitration devices for use. Inactivated ion-exchange resin from chemical water treatment can be restored to its original state for reuse after being rinsed with mineral acids or alkalis of a certain concentration. The Company will, based on relevant requirements, hire qualified agencies to deal with non-renewable denitration catalysts, ion exchange resins that cannot be reused and hazardous liquid waste such as lubricant and other waste oil during operations. Besides, through managing the accounts, we will detail statistics on the amount of waste generated, the amount of disposal, the audit of the qualifications of disposal units, etc., and strictly manage the generation and disposal of waste. In 2025, the Company generated 14,802.36 tonnes of waste denitrification catalysts, 636.33 tonnes of other hazardous solid waste such as ion exchange resins, and 1,310.57 tonnes of hazardous liquid waste such as waste oil during its production and operation processes. The density of hazardous waste was 0.04 g/kWh.

Future Plan

The Company will continue to strengthen waste recycling and strive to minimize waste generation. In addition, the Company will well implement environmental protection transformation projects in key regions, including treatment of ash field for power plants, etc.

5.3.5 Management of Other Environmental Impacts

Huaneng International always handles its operations with great care to minimize their impact on the environment, and performs strict management of noise, dust and the environmental impacts of engineering projects and others in accordance with the Law of the People's Republic of China on Prevention and Control of Pollution from Environmental Noise (《中華人民共和國環境噪聲污染防治法》), etc.

5.3.5.1 Noise Management

During the initial stage of the construction of power plants subordinated to the Company, relevant departments of environmental protection determined the sensitive points of noise along the boundaries of the power plants and their relevant noise control level in accordance with the requirements in the environmental impact assessment approval. Power plants are designed and constructed in accordance with the specifications, and noise emissions meet environmental protection standards, generating no impact on the surrounding areas. For the environmental completion and acceptance of the power units in all power plants, the monitoring authorities will investigate the site based on the requirements in the environmental impact assessment approval, and only when the monitoring results are qualified will the acceptance concerning noise control pass. During the operation of power units, the power plants commissioned relevant monitoring authorities to investigate the noise control regularly in accordance with the requirements of the environmental protection authorities and published the monitoring reports through multiple ways. The power plants installed acoustic enclosures for major noise sources such as fans and other equipment in the plant and built noise walls for key areas such as the cool water tower area. When excessive noise is caused by events like power units' renovation or equipment failures, the Company will implement noise control for equipment that generates excessive noise accordingly. In 2025, the Company developed the Guidelines for Noise Control Design in Gas-Steam Combined Cycle Units (《燃氣－蒸汽聯合循環機組噪聲治理設計導則》) to standardize noise management in its gas-steam combined cycle projects.

In accordance with the Emission Standard of Environment Noise for Boundary of Construction Site (《建築施工場界環境噪聲排放標準》) of the People's Republic of China, each of the Company's construction sites has developed specific noise reduction measures. The sites conduct regular monitoring and recording of boundary noise levels. Noise control during the construction phase focuses primarily on managing noise sources to avoid noise caused by abnormal operation. High-noise equipment is positioned away from residential areas, with mitigation measures such as enclosure and noise-reduction walls in place. Parties concerned are always notified before pipeline steam blowing operations.

5.3.5.2 Dust Impact

Unorganized emissions, such as coal field dust, ash field dust and other emissions from non-road machinery are also environmental impacts caused by power plants. All power plants owned by the Company are required to obtain the environmental impact assessment approval by the relevant environmental protection departments during their initial stage of construction to avoid severe impact on the surrounding environment and natural resources during operations. Our power plants strictly abide by national environmental emission standards during operations and discharge waste according to the standards. When the requirements on the protection of local environment change, the affected power plants will actively take actions to ensure that the surrounding environment and natural resources are protected. To enhance the management of unorganized emissions from coal fields, the Company has carried out segregated coal field retrofits for key areas, and for other areas, the Company introduced wind and dust suppression nets, covers and sprays to effectively control coal dust pollution from coal fields and improve the surrounding environments. In terms of engineering construction, all participating units have carried out construction in strict accordance with the green construction plan and organizational measures and suppressed the generation of dust by taking measures such as regular spraying and construction road pavement hardening.

5.3.5.3 Environmental Impact of Engineering Projects

The environmental impacts of the Company's projects are fully comprehended during feasibility study before the projects enter the approval or filing stage. Following national policies and requirements on environmental protection and the land use planning by the government, the Company avoids choosing location in or near the ecological red lines such as nature reserves or agricultural land to prevent the consequent ecological problems. After the site selection, the Company conducts a systematic survey of the surrounding environment during the feasibility study stage and prepares a detailed environmental management and monitoring plan based on actual condition and relevant regulations. In strict compliance with the environmental protection standards, the Company implements control measures against air pollution, water pollution and noise, actively initiates water and soil conservation design and environmental impact analysis, and accepts assessment on the impact to biodiversity. The Company has no significant impact on the protection and restoration of areas surrounding business premises, key ecological function areas of land and sea, ecological conservation redlines, nature reserves and other areas with key ecological functions or areas of sensitive and fragile ecological environment.

The impact of the Company's production and operation activities on ecosystems and biodiversity mainly occurs during the construction of hydropower stations, where issues such as the disruption of fish communication and other aquatic ecological problems arise. During the construction process, there are impacts on vegetation and animal habitats, which are related to terrestrial ecological issues. We continuously strengthen our efforts to protect ecological environment and biodiversity. In compliance with the requirements of relevant regulatory and management measures, we have established an awareness of ecological conservation red lines and implemented corresponding protection initiatives.

1. Perform production and operation activities strictly outside nature reserves to eliminate their impact on these areas; carry out science education on ecological protection jointly with local government authorities; select the best watershed hydropower development plans, avoid ecologically sensitive targets, and protect and restore areas with key ecological functions or areas of sensitive and fragile ecological environment.
2. Set up rare botanical gardens and rescue stations for rare, wild animals to create a relatively safe and comfortable habitat for wild animals and plants, thereby protecting wild animals and plants and terrestrial biodiversity.
3. Carry out fish habitat protection, planning and restoration; strengthen tributary protection and restore river connectivity; undertake ecological restoration projects such as riverine habitat creation and the near-natural restoration of terrestrial ecosystems, all aimed at protecting watershed biodiversity.
4. Conduct regular scientific research on terrestrial and aquatic ecosystems, and indigenous fishes; build and operate a smart monitoring platform for watershed ecology and the environment to enhance capabilities of inspection, early warning and risk control; monitor genetic diversity and protect fish genetic diversity by breeding and releasing the next-generation indigenous fishes.
5. Implement ecological flow management and develop integrated ecological scheduling model of cascade hydropower stations leveraging advantages of integrated watershed scheduling; conduct ecological compensation programs and researches on the artificial breeding of indigenous fishes as well as their breeding and releasing; prioritize ecological scheduling and create hydrological and hydraulic conditions essential for fish reproduction, aiming to protect the river ecosystem and, especially, fish habitats.



Huaneng Binzhou 850 MW Photovoltaic Project

Huaneng Binzhou 850 MW Photovoltaic Project Contributes to Ecological Conservation and High-Quality Development in the Yellow River Basin

Huaneng Binzhou 850 MW photovoltaic project achieved full-capacity grid connection and power generation in 2025. It is part of the third batch of China's large-scale wind and photovoltaic base construction projects. Upon full-capacity operation, the project is expected to generate 1,286 million kWh of electricity annually. Such output is equivalent to saving 385.8 thousand tonnes of standard coal or reducing carbon dioxide emissions by 917.7 thousand tonnes. This project will deliver significant economic, social, and environmental benefits. The project pioneers a circular economy model featuring photovoltaic power generation on water and aquatic farming beneath the surface. Apart from delivering clean energy, the project also supports marine aquaculture, salt production through seawater evaporation, and bromine extraction. This model enables three-dimensional development and comprehensive utilization of marine space, facilitating ecological conservation and high-quality development in the Yellow River Basin.

5.3.6 Response to Climate Change

5.3.6.1 Governance

To address the global climate challenge, the Company has established a governance structure led by the Board of Directors. By introducing a robust organization, we are committed to advancing the climate strategy to mitigate the impact of climate risks on our business growth and operations, and seizing the opportunities presented by the global energy transition and low-carbon development. For more information on governance, please refer to the About Us section.

5.3.6.2 Strategy

The power generation sector is a significant contributor to global greenhouse gas emissions. Specifically, its decarbonization process is one of the primary factors for the low-carbon transition of society. We refer to climate change scenarios published by major international institutions and complying with the latest international agreements (such as IPCC SSP 1-2.6, IPCC SSP 2-4.5, and IPCC SSP 5-8.5). We assess the alignment of scenario characteristics, assumptions, and parameters with the industry and consider significant uncertainties such as the natural environment, policies, markets, and technology. In the context of our actual business types, operations, and locations, we analyze the potential impacts of climate-related physical risks, transition risks, and opportunities on our business model and value chain in the short, medium and long term. Based on this analysis, we evaluate our adaptability of our strategies and business models and adjust our risk management and action plans for different time horizons accordingly.

In the long run, under reasonably anticipated assumptions regarding policies, economic conditions, natural factors, and technological capabilities, physical risks may have some impact on the new energy business, while transition risks mainly affect the thermal power business. Specifically, for the photovoltaic and wind power businesses, physical risks mainly arise from the instable meteorological conditions, such as solar irradiance and wind speed. Significant changes in these factors will affect the business operation. For thermal power business, the impact of physical risks is not significant. However, as society shifts to a low-carbon economy, existing assets of the thermal power business may be subject to early decommissioning or idling, with carbon price affecting operating costs as well.

In response to the above risks, the Company is committed to vigorously developing clean energy, strengthening meteorological monitoring and promoting the flexibility transformation of thermal power units. The Company also explores decarbonization technologies, keeps abreast of policy changes in the national carbon market, and coordinates and optimizes carbon trading strategy to achieve sustainable development. In 2025, the proportion of low-carbon and clean energy installations in the Company's total capacity reached 41.01%. The Company performs on-going risk monitoring and pays close attention to early warning information on meteorological, natural and geological disasters. A professional team has been established for meteorological analysis and early warning. By fully utilizing public macro meteorological data, the team has built a microscale meteorological model that focuses on application scenarios such as hydropower, wind power and photovoltaic, supporting the Company in making decisions for production and operation. The Company tracks policy changes relating to low-carbon transition and carbon trading and analyzes their impact on business operation and development planning. In addition, based on thorough communication with the government and regulatory authorities at all levels, the Company promptly responds to policy requirements by deploying internal resources, formulating strategies and making preparations. The related funding is primarily from existing financial resources and annual budgets.

Aligned with our strategic planning, we update our climate-related scenario analysis every five years. We also assess and analyze the extent of our exposure to climate-related risks as necessary in the cases of significant business changes (such as asset acquisitions and business transformation), or when previous estimates and assumptions are no longer valid, we perform additional analyses as necessary to assess the Company's climate resilience.

Main Climate-related Risks and Opportunities							
Main Climate Risk/ Opportunity Type	Main Climate Risk/ Opportunity Factor	Description	Time Horizon	Impact on Business Model and Value Chain	Impact on Strategies and Decision-making	Current Financial Effect Related to the Risk/Opportunity	Anticipated Financial Effect Related to the Risk/Opportunity
Physical Risks	Extreme weather events such as rainstorms, floods and typhoons	Extreme weather events such as rainstorms, floods and typhoons may damage the Company's power generation facilities and undermine the stability of power generation and supply.	Short term	Heavy rainfall may lead to water accumulation around the power plants and disrupt equipment operation. Typhoons may damage equipment such as transmission lines and wind turbines.	The Company performs on-going risk monitoring and pays close attention to early warning information on meteorological, natural and geological disasters. A professional team has been established for meteorological analysis and early warning. By fully utilizing public macro meteorological data, the team has built a microscale meteorological model that focuses on application scenarios such as hydropower, wind power and photovoltaic, supporting the Company in making decisions for production and operation.	In 2025, the expenditures identified by the Company resulting from extreme weather events had an effect on financial statement items such as non-operating expenses. For instance, Huaneng Haikou Power Plant incurred approximately RMB0.436 million in expenses for repairing equipment damaged by typhoon disasters, and Huaneng Guangxi Clean Energy Company suffered losses of approximately RMB1.295 million due to natural disasters.	Given the significant uncertainty surrounding the likelihood and severity of extreme weather events, it is not possible to quantify their anticipated financial effect or the combined financial effects stemming from their interaction with other climate-related risks and opportunities. However, if extreme weather triggers natural disasters, it may impact specific items on our financial statements, such as non-operating income and expenses.
	Changes in climate models	Climate change may result in changes in a wide range of factors, such as temperature, humidity, irradiance, wind speed, precipitation patterns, thus affecting the Company's overall power generation capacity and economic benefits.	Long term	Climate change may affect our overall power generation capacity and economic benefits.	We are committed to clean energy development and meteorological monitoring. For example, we make a special budget for the clean energy segment on a yearly basis, covering areas such as project development and technological innovation. Through partnerships in green power and policy coordination, we secure resources to develop clean energy and stabilize energy supply.	No significant financial effect was identified in 2025.	Changes in climate models typically occur in a gradual process and are characterized by high uncertainty, thereby requiring sustained observation over longer time scales. This makes it challenging to quantify the risk's anticipated financial effect or the combined financial effects stemming from its interaction with other climate-related risks and opportunities. In the long run, should climate models change, we will analyze the potential impact on our financial statements based on specific business scenarios.
Transition Risks	Early retirement of thermal power units	During the low-carbon transition, existing assets of thermal power companies may be subject to early decommissioning or idling.	Medium and long term	If thermal power units are forced to exit markets before reaching the end of their useful lives, investments may be unrecoverable and company competitiveness may be weakened.	We retrofit our thermal power units to improve their flexibility and advancing decarbonization technologies. Adopting an integrated approach in the development of retrofitting and technologies, we allocate special budgets to implement related projects. We also collaborate with research institutes and technology companies to retrofit our thermal power units, adapting to energy transition and exploring pathways for low-carbon development.	In 2025, the expenditures identified by the Company due to the risk of early market exit of thermal power units primarily involved flexibility retrofits, which impacted financial statement items such as construction in progress and fixed assets. During the year, the Company's cumulative investment in thermal power unit flexibility retrofit projects, each with an individual investment exceeding RMB5 million, reached approximately RMB133 million.	In the context of the low-carbon transition, the risk of premature retirement of thermal power units is highly uncertain, as it depends on relevant policies. This makes it challenging to quantify the risk's anticipated financial effect or the combined financial effects stemming from its interaction with other climate-related risks and opportunities. Should such an event occur, it may impact specific items on our financial statements, including construction in progress, fixed assets, and asset impairment losses.
	Carbon pricing	With its principal place of business within the territory of China, the Company shall follow requirements under the National Carbon Emission Trading System.	Medium term	Fluctuations in carbon prices may have an impact on the Company's operating costs.	The Company actively tracks policy changes relating to low-carbon transition and carbon trading and analyzes their impact on business operation and development planning. In addition, based on thorough communication with the government and regulatory authorities at all levels, the Company promptly responds to policy requirements by deploying internal resources, formulating strategies and making preparations.	In 2025, the cash flows identified by the Company resulting from the risk of carbon pricing fluctuations had an effect on financial statement items such as non-operating expenses and non-operating income. During the year, the net amount from the Company's carbon emission allowance trading was a profit of approximately RMB10 million.	Since the formal launch of the national carbon market, overall operations have been stable. However, future carbon prices are subject to significant influence from changes in policies, markets, and trading activities, leading to the risk's substantial uncertainty. This makes it challenging to quantify the risk's anticipated financial effect or the combined financial effects stemming from its interaction with other climate-related risks and opportunities. Should carbon prices fluctuate, it may impact specific items on our financial statements, such as other current assets and non-operating income and expenses.

Main Climate-related Risks and Opportunities							
Main Climate Risk/ Opportunity Type	Main Climate Risk/ Opportunity Factor	Description	Time Horizon	Impact on Business Model and Value Chain	Impact on Strategies and Decision-making	Current Financial Effect Related to the Risk/Opportunity	Anticipated Financial Effect Related to the Risk/Opportunity
New Energy Development Opportunities	Increased demand for new energy products	As the public cares more about environmental protection, the demand for clean energy and low-carbon products continues to grow.	Long term	Providing products and services that align with market preferences may enhance our competitiveness and increase revenue.	We develop more electricity products and services based on clean energy to meet market demand. We make a special budget for the clean energy segment on a yearly basis, covering areas such as project development and technological innovation. Through partnerships in green power and policy coordination, we secure resources to develop clean energy and stabilize energy supply.	In 2025, the total profit from our domestic wind and solar power segments amounted to RMB8.491 billion.	We will intensify new energy investment and energy structure transformation. We plan to build large-scale clean energy bases that are intensive, digitalized, and standardized in the three northern regions of China (Northeast China, North China, and Northwest China), coastal provinces such as Liaoning, Shandong, Jiangsu, Zhejiang, and Guangdong, and other central areas with wealthy new energy resources. Investments in new energy projects may impact specific items on our financial statements, including construction in progress and fixed assets.
Fuel Market Reform Opportunities	Coal market fluctuations	The coal market has transitioned from a supply-demand imbalance to a more balanced state. However, due to factors such as increasingly stringent safety and environmental inspections in coal mines, extreme weather events, and changes in supply security policies, coal prices experienced market fluctuations, with initial decrease followed by a subsequent rebound.	Short term	We analyze market trends and make every effort to control fuel procurement costs. We also maintain a leading position in benchmarking waterborne coal procurement and ensure a safe and stable supply of fuel.	In response to coal market fluctuations, we have implemented a series of measures to secure fuel supply and control costs. First, we accurately assess market conditions and reserve fuel for peak periods during summer and winter. By reserving during off-peak seasons to prepare for peak seasons and stocking when prices are low to prepare for price increases, we rescue ourselves from the adverse effects of market fluctuations. Second, we reduce costs and improve efficiency in the logistics chain. This includes securing railway freight discounts, reducing demurrage charges, and advancing the lump-sum demurrage fee system for waterborne coal. Third, we promote the centralized procurement and decentralized sales of waterborne coal. Through scientific analysis of market trends and seizing opportunities in imported coal procurement, we ensure that our seaborne coal procurement remains benchmarked at a leading level.	In 2025, the cash flows identified by the Company resulting from the coal market fluctuations had an effect on financial statement items such as operating costs. During the year, the Company's domestic fuel cost per unit was RMB266.88 per MWh, representing a year-on-year decrease of 11.13%.	Future fuel costs may be influenced by factors such as source structure, supply and demand dynamics, and industry policies, resulting in significant uncertainty. This makes it challenging to quantify the opportunity's anticipated financial effect or the combined financial effects stemming from its interaction with other climate-related risks and opportunities. Should the fuel market reforms, it may impact specific items on our financial statements, such as operating costs.

5.3.6.3 Risk Management

Constantly focusing on the business impact and financial impact of climate-related risks, the Company has carried out the identification, analysis and assessment of climate-related risks and opportunities. Based on industry conditions, business operations, and stakeholder engagements, we identify and assess risks and opportunities related to key issues. We also incorporate them into our comprehensive risk management process to analyze their impact magnitude and likelihood. For more information on risk management, please refer to 2.8 Communication with Stakeholders and Identification of Material Issues.

5.3.6.4 Metrics and Targets

We have issued regulations such as the Greenhouse Gas Emission Reduction Management Measures (《溫室氣體減排管理辦法》) and continues to enhance our management capabilities in addressing climate change and reducing greenhouse gas emissions. After identifying and assessing climate-related risks and opportunities, we focus on analyzing their potential impact on our assets and business activities to define priorities for climate management. Overall, wind, photovoltaic, hydropower, and biomass sectors are more susceptible to climate-related physical risks and opportunities, while coal-fired and gas-fired power sectors are more susceptible to climate transition risks. In 2025, the total profit from our domestic wind, photovoltaic, hydropower, and biomass sectors was RMB8.245 billion, representing 36.19% of the total profit from our domestic power generation segment; the operating revenue from these sectors was RMB26.509 billion, representing 13.04% of the segment's total operating revenue. The total profit from our domestic coal-fired and gas-fired sectors was RMB14.54 billion, accounting for 63.81% of the segment's total profit, while their operating revenue was RMB176.75 billion, accounting for 86.96% of the total operating revenue. We also identified capital expenditures related to major climate-related risks and opportunities. In 2025, our capital expenditures for wind, photovoltaic, and hydropower projects amounted to RMB38.537 billion.

Carbon Reduction Targets

Through structural adjustments and energy-saving efforts, the Company aims to achieve carbon peak as early as possible. During the 14th Five-Year Plan period, the Company's full-scope carbon emission intensity has been gradually decreasing. In pursuit of this goal, the Company consistently treats greenhouse gas emission control as a core strategy, closely aligning with the national "dual carbon" objectives. By optimizing the energy structure, deepening energy-saving retrofits, and advancing clean energy substitution, the Company has achieved a sustained reduction in greenhouse gas emission intensity.

Given our success in declining greenhouse gas emission intensity, we have updated our next-stage target. That is, to achieve carbon peaking as early as possible through structural adjustment, energy saving, and consumption reduction, and our full-caliber carbon emission intensity to gradually decline during the 15th Five-Year Plan period.

The target is a total quantity control goal, with a implementation period from 2025 to 2030. Its primary purpose is to mitigate climate change and support the national carbon peak objective. It focuses on Scope 1 greenhouse gas emission intensity related to carbon dioxide as the core metric, using 2025 as the baseline year, and it covers Huaneng Power International, Inc. and all of its domestic and overseas branches, as well as wholly-owned and controlled subsidiaries.

In the target-setting process, we consider our current business structure, development plans, and internal management requirements. Based on national carbon accounting standards, industry low-carbon transition pathways, and our unit structure upgrade plans, we monitor developments in international climate agreements, including the Paris Agreement, and learn from widely recognized decarbonization pathways and methodologies within the power industry.

To ensure the feasibility of our objectives, the Board holds regular meetings every year to receive reports from management on significant sustainability matters related to target setting and review. The Board further provides oversight and guidance, and continuously evaluates the feasibility of introducing independent third-party verification into the target setting and review. The Company incorporates key performance indicators and targets related to ecological protection, energy conservation and emission reduction, and production safety into the scope of performance evaluation for senior management. The evaluation results are linked to performance-based compensation, and the results of performance fulfillment are reported to the Board's Remuneration and Evaluation Committee and the Board of Directors, thereby strengthening the implementation of responsibilities and the supervision of execution. In recent years, through active promotion of energy conservation and emission reduction, and technological upgrades, the Company's key metrics for monitoring target progress (total Scope 1 greenhouse gas emissions/intensity) have shown an overall declining trend.

Should the Company plan to utilize carbon credits to offset emissions, it will strictly limit the use of carbon credits. We will prioritize carbon credits derived from forestry carbon sink and renewable energy projects certified by authoritative domestic third parties. Concurrently, we will establish a mechanism for tracing, disclosing, and verifying carbon credits to ensure their credibility and integrity.

Internal Carbon Pricing

The Company is implementing a shadow carbon price mechanism to systematically incorporate carbon costs into its decision-making processes and establishing and refining the related pricing methodology. Leveraging this mechanism, when evaluating new projects or strategic plans, the Company can fully account for the carbon emission costs of projects, giving priority to low-carbon, high-return projects. This approach is applied in key areas such as infrastructure construction project investments and production process technical upgrades, thereby promoting cost-benefit analysis and investments in low-carbon technologies, which effectively supports the achievement of the Company's climate goals.

Carbon Asset Management

The Company carries out the following work:

1. The Company actively participates in the construction of the national carbon trade market, and delves into key carbon market policies, including trading regulations, quota allocation plans, and accounting methods for carbon emission.
2. The Company issued regulations on the administration of carbon emissions trading, specifying the management institutions and their responsibilities, along with various requirements of transactions and contract fulfillment and risk management. The Company promotes centralized and professional management of carbon trading. Professional institutions are therefore engaged to provide one-on-one professional services for the grassroots units, and carbon trading-based business training is also held, so as to continuously improve management capability on carbon trading, thus aligning its management model with the national carbon market.
3. The Company advocates refined management of carbon trading and dynamic calculation on quota surplus and deficit of grassroots units, makes the annual trading work arrangement, and carries out some transactions in advance to reduce the performance pressure arising from the carbon trading at the end of the performance period.
4. With the successive implementation of domestic policies on green power, green certificates and voluntary emission reduction as well as the gradual establishment of relevant trading market, the Company takes the advantage of large-scale operation and coordinates electricity, carbon and green certificate markets through a combination of electricity retail channels and user base to strive for the environmental benefits of new energy projects.

Participation in National Carbon Emission Trading Market

The Company pays close attention to developments in national policies on carbon emissions and carbon trading and actively participates in the construction of the national carbon market. Drawing on the experience of carbon trading pilots, clear guides are provided relating to the division of responsibilities, management process, data management, trading management, risk management and other aspects of carbon trading, guaranteeing the Company's active participation in market trading and successful obligation fulfillment. In 2025, the Company's subsidiaries actively participated in carbon trading. As of November 19, 2025, the quota payments had all been settled and obligations fulfilled. During 2025, the Company's grassroots units purchased and utilized 14,164 tonnes of carbon credits, comprising 7,089 tonnes of China Certified Emission Reductions and 7,075 tonnes of Beijing Carbon Inclusive emission reductions. All the aforementioned carbon credits have been verified by third-party certification bodies, registered with the relevant regulatory authorities, and traded on a designated unified exchange. They have been used to fulfill compliance obligations in the Beijing pilot carbon market. This process fully ensures the legality, effectiveness, and credibility of the carbon credits. During the year, the Company has not been subject to any requests for rectification or initiated for investigation by relevant authorities. As of the end of the reporting period, the quota allocation plan for 2025 has not yet been released. The Company will closely monitor the issuance of market policies, continuously optimize its carbon trading strategy, strengthen the supervision and management of carbon trading, and steadily enhance market analysis and response capabilities to ensure the completion of carbon trading compliance obligations for 2025.

2025 Carbon Emission Trading Market Participation Details

Category	Registration Status	Voluntary Emission Reduction Trading Mechanism	Country of Carbon Credit Project	Carbon Credit Type
China Certified Emission Reductions (CCER)	Registered with the national designated registry, the National Center for Climate Change Strategy and International Cooperation (NCSC)	National Greenhouse Gas Voluntary Emission Reduction Mechanism	China	Carbon Reduction Project
Beijing Carbon Inclusive Emission Reductions	Registered with the Beijing designated registry, Beijing Climate Change Management Affairs Center	Beijing Carbon Inclusive Management Mechanism	China	Carbon Reduction Project

This report contains forward-looking statements relating to climate. These statements are based on Huaneng International's expectations, estimates and assumptions at the time this report was prepared, and involve many uncertainties. Such expectations, estimates and assumptions may be affected by market dynamics, regulatory and policy changes, technological advances, the general economic environment and limitations in data or methodologies. Therefore, forward-looking statements should not be regarded as guarantees, expectations or predictions of future performance or results.



Strengthening Foundations to Ensure Production Safety


06

STRENGTHENING FOUNDATIONS TO ENSURE PRODUCTION SAFETY



Production safety is a vital foundation for ensuring public well-being and the stable development of the economy and society, as well as a core commitment of a company in fulfilling its social responsibilities. Safety responsibility is of the utmost importance. Huaneng International always adheres to bottom-line thinking and red-line awareness, and solidly implements its three-year rectification action to improve the system and capability of safe production management, thus fundamentally eliminating potential dangers and preventing and resolving major safety risks to ensure the safety of our people and facilitate high-quality development of the Company.

In accordance with the Law of the People's Republic of China (《中華人民共和國安全生產法》) and other production safety laws and regulations, Huaneng International regards safety as its top priority and builds a solid foundation for production safety. Adhering to the production safety principles of "people-oriented, safety first, prevention first, comprehensive management" and upholding the safety conception of "safety is credibility, safety is efficiency, safety is competitiveness, and safety responsibility is of the utmost importance", the Company pays attention to the inspection and remedy of safety hazards and insists on zero-tolerance policy for safety incidents. In addition, the Company aims to prevent fatal production accident, mishandling of operations with malicious intent, major equipment damage, serious and extraordinary equipment incidents, fire outbreaks, traffic accidents induced by human factors, environmental pollution disasters and other incidents that may adversely affect the Company's reputation. The Company places safety in the first place and attaches great importance to the personal safety and occupational health of our employees. We strengthen the red-line awareness to ensure that production safety is properly conducted.

In recent years, extreme weather events and natural disasters such as typhoons and floods have occurred frequently, and they threaten the life safety and production safety of local enterprises and their employees. The Company has identified five key safety management priorities for this year: (1) Continuous oversight of the safety responsibility system: We have been conducting regular inspections and evaluations of the production safety responsibility system. This includes finalizing responsibility checklists for all positions, establishing clear performance standards and accountability mechanisms, identifying common issues for summary and notification, and driving coordinated rectification across the Company. (2) Advancement of the dual prevention mechanism: We are comprehensively implementing the dual prevention mechanism, ensuring the effective execution of the Guidelines for Classified Production Safety Risk Control (《安全生產風險分級管控導則》). Efforts are focused on enhancing the accuracy of risk classification and rigorously enforcing specialized measures such as daily task planning, assessment-driven training, the campaign against the "Three Violations"[15], hazard remediation, and safety supervision. (3) Thorough equipment hazard management: We have been diligently identifying and managing equipment hazards. A comprehensive, dynamically updated list of criteria for defining major and significant hazards has been established. A checklist-based management approach, a "listed-for-supervision" mechanism, and a closed-loop management system have been fully deployed for hazard remediation. Throughout the year, the Company's system maintained 239 thermal power units under inspection, with all major hazards dynamically cleared. (4) Targeted improvement in key areas: Profound lessons have been drawn from past incidents to drive vigorous improvement in key areas, including new energy infrastructure, outsourced projects, high-risk and major engineering, fire safety, and aging facilities. Special inspection and rectification campaigns, such as the "100-Day Campaign", typhoon and flood prevention efforts, and seasonal safety inspections, were organized to implement various safety assurance measures. (5) Enhancement of the emergency management system: We are continuously improving our emergency management system. By incorporating lessons from both internal and external disaster response experiences, we dynamically optimize our emergency plans. Stringent measures are implemented during the main flood season to ensure effective preparedness against typhoons and floods. New technologies, including drones and intelligent monitoring systems, are utilized to provide innovative support for emergency response.

In 2025, there was no significant violation identified in the Company related to providing a safe working environment and protecting the employees from occupational hazards, and no major or above-level accidents occurred. The number of work-related fatalities was 1, with a work-related fatality rate of 0.002%. In 2024 and 2023, the number and ratio of work-related fatalities were 0.

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15 Refer to opposing unsafe command, unsafe operations, and violations of labor discipline.

6.1 Enhancing the Intrinsic Safety System

According to the national laws and regulations on production safety, the Company, taking actualities of its subsidiaries into consideration, has established its own fourfold Intrinsic Safety System, which comprises intrinsic safety of personnel, process and equipment, environment and management, including:

Ensuring Intrinsic Safety of Personnel

Intrinsic safety of personnel includes management staff and all employees' safety awareness, safety conception and safety management knowledge and skills. Management staff are required to have safety management knowledge and skills and lead by example, while employees are required to ensure safe operation by carrying out adequate controls. The safety behaviors of employees should gradually change from passive to active, and we urge employees to act in accordance with rules and regulations and show good safety behavior everywhere.

Ensuring Intrinsic Safety of Equipment

Intrinsic safety of equipment means that equipment, facilities, or process technologies possess inherent mechanisms for accident prevention. We adhere to high design and manufacturing standards and conduct systematic safety risk analysis for all stages, including the construction stages such as process adoption and equipment design, as well as the routine inspection and maintenance during operation. We also propose and implement risk control measures and install proper protection mechanisms for our processes and equipment to ensure the safe, stable and normal operation of equipment and systems within the prescribed operating period and maintain effective control throughout the time.

Ensuring Intrinsic Safety of Environment

Environment includes spatial environment, physical and chemical environment, and natural environment. The environment should comply with various standards. For the intrinsic safety of the spatial environment, we make sure that the production space, layout, various safety and sanitation facilities and passages comply with the relevant national regulations and standards. For the intrinsic safety of the physical and chemical environment, effective measures are taken to manage and control lighting, ventilation, temperature and humidity, noise, dust and toxic and harmful substances in compliance with national standards to ensure workers' health and safety. As for the intrinsic safety of the natural environment, we enhance the disaster resistance and prevention capabilities of process and equipment and implement emergency response and precautionary measures.



Ensuring Intrinsic Safety of Management

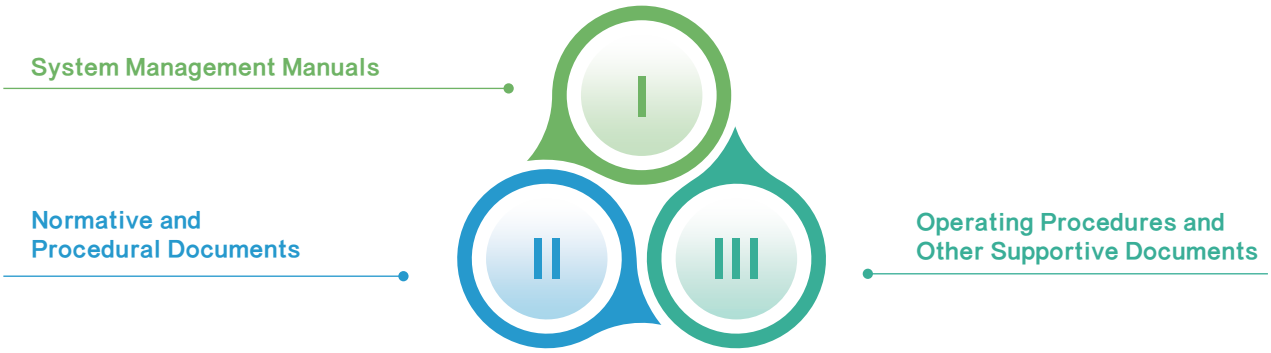
Intrinsic safety of management requires, under the condition of abiding by the national laws and regulations, companies' formulation and implementation of higher standards on safety, norms, and regulations, as well as their development of a comprehensive management system. In respect of safety management, we are transitioning from a reactive to a proactive model, and we are emphasizing more on process controls rather than remedial efforts when responding to safety incidents. We also seek to apply safety system engineering principles and conduct scientific analysis in formulating pre-emptive measures.

The PDCA Management Model of Intrinsic Safety System

The Company's Intrinsic Safety System follows the PDCA management model, e.g., PLAN, DO, CHECK and ACTION, and this closed-loop system can enable continuous improvement. The management model consists of six key elements: leaders' commitments, policies concerning safety, health and environment, planning, implementation and operation, inspection and corrective measures, and management review.



The Company's documents concerning Intrinsic Safety System consist of system management manuals, normative and procedural documents, as well as operating procedures and other supportive documents. Some major documents include the Administrative Measures for Production Safety Supervision (《安全生產監督工作管理辦法》), the Regulations on Production Safety (《安全生產工作規定》), the Implementation Rules for Safety Performance Assessment (《安全績效考核實施細則》), and the Emergency Management Measures for Major Incidents (Accidents) (《重大突發事件(事故)應急管理辦法》).



In 2025, the Company continued to develop its intrinsic safety system:

1. Deepen the implementation of the Three-Year Action Plan for Tackling Root Causes in Production Safety (安全生產治本攻堅三年行動). Solidly advance the "Thunder Action" initiative for production safety, which is guided by the core principles of "zero tolerance, rigorous rectification, and tangible results", dynamically refine the classification and layered management of hazards, and improve the quality of hazard identification and remediation.

2. Continuously conduct assessments and inspections on the implementation of the production safety responsibility system, adopting a four-tier collaborative inspection model that includes self-inspections by grassroots units, spot checks by secondary units, mutual inspections among regions, and supervisory inspections by the company. Efforts will be made to establish a normalized and long-term mechanism. For identified issues and hidden dangers, the root causes will be analyzed, rectification suggestions will be put forward, and assessment reports will be issued. A holistic approach will be applied to address common problems effectively.

3. Implement a complete production safety governance chain that encompasses risk identification through the "Six Emphases"[16], on-site inspections through the "Ten Strict Checks"[17], and accountability and rectification through the "Five Mandatory Rules"[18]. We continue to deepen the fight against the "Three Violations" and the remediation of hazards, strengthen on-site safety management, and create safe work environments.

4. Focus on the contract performance management, responsibility management, and supervision of outsourcing units, strictly control the "entry, process, and evaluation" stages for external teams, and promote the optimization of external teams and the enhancement of management effectiveness.

5. Enhance emergency response capabilities. Clarify responsibilities and optimize early warning and response procedures. Guangdong Branch establishes a standardized typhoon defense model featuring "one center, one map, and one system", successfully withstanding 7 severe typhoons including "Ragasa". Guangxi Branch issues accurate early warnings and effectively responds to 14 severe convective weather events.

16 Refer to emphasizing accountability reinforcement, risk identification, on-site control, system operation, technical support, and work-style assurance.

17 Refer to strictly checking safety responsibility implementation, subcontractor safety management, high-risk operations control, major accident hazards, equipment and facility management, emergency management systems, disaster prevention and mitigation measures, safety education and training, hazardous chemical management, and fire safety management.

18 Units that neglect special campaigns are uniformly reported, major accident hazards are uniformly suspended for rectification, concealment or false reporting of accidents is uniformly dealt with strictly, and accidents resulting from failure to fulfill responsibilities are uniformly investigated and held accountable.

6.2 Improving Quality and Efficiency and Ensuring Rigorous Implementation

Huaneng International thoroughly implements the proposition of Xi Jinping on production safety, addresses the importance of production safety, orientates with comprehensively improving the level of intrinsic safety, continues to deepen the reform and development of production safety, promotes to assign production responsibility at all aspects, and strives for the goal of "zero accidents" and "zero deaths". The Company has taken comprehensive and effective. By using the responsibility system as a key lever, we have solidly carried out special rectification actions for production safety, contributing to the continuous enhancement of production safety.

Establishing Safety Supervision System

Huaneng International always adheres to the policy of "safety first, prevention first, comprehensive management" and implements the national, industrial, and Group Company's guidance and arrangements on production safety. The Company has established a rigorous safety supervision system to ensure intrinsic safety is implemented for every stage of production and operation. The Company and all its affiliated units have established a robust safety management structure and a complete set of safety supervision mechanisms to fulfill safety supervision responsibility. The Company takes charge of system design, business strategy, on-site supervision assessment and evaluation and other work. Regional branches are responsible for implementing the Company's various safety management requirements, work plans and deployment decisions, and fulfilling the duty of organization and coordination as well as specifying the major responsibilities of their affiliated grassroots units. Grassroots units are tasked with implementing the Standard on the Fulfillment of Production Safety Responsibilities (《各級人員安全生產責任到位標準》) and the safety responsibility of all levels and positions, establishing the responsibility consciousness of "the one who is responsible is the one who works, the one who inspects, the one who is in charge and the one who approves". The management, construction and operation maintenance team and other business functions incorporate the production safety principle with their business line to better form a production safety protection system. The interaction of safety supervision and protection ensures the accomplishment of production safety targets.



Comprehensively Strengthening Safety Management Accountability and Enhancing Hazard Investigation and Violation Remediation

1. Strengthening safety accountability. We strictly implement the "three musts" principle[19], refine the all-employee production safety responsibility system, improve production safety responsibility lists and task lists to achieve full coverage of positions and organizational units, with "one list per post", and promote accountability implementation level by level.

2. Standardizing outsourcing management. In accordance with the "Four Controls"[20] and "Four Equalities"[21] principles, we implement safety management responsibilities for external teams and personnel, strictly control the entry of outsourced units, rigorously inspect illegal subcontracting, resubcontracting, and improper qualification affiliation, streamline and integrate external teams, and promptly remove teams and individuals that fail to meet requirements.

3. Deepening source control. We continuously strengthen the dual prevention mechanism, diligently carry out risk identification and hazard remediation for high-risk operations, critical equipment, and key areas, and promptly address defects and issues. An internal reporting and reward system for accident hazards is established and refined, sustaining the motivation of all employees in hazard identification.

4. Strengthening violation remediation. We implement the requirements of the "Twenty-Five Anti-Accident Measures", thoroughly conduct self-inspection and self-correction of habitual violations, and enhance safety control over high-risk operations such as confined spaces, work at height, lifting, crossing operations, electrical work, and hot work. We strictly enforce the principles of "no work without supervision" and "no video surveillance, no operation" for major and above-risk operations, and continuously foster an environment of compliance, making "no production without safety, no construction without safety, and no commencement of work without safety" an iron rule.

19 Industry regulators, enterprise managers and persons responsible for production and operations must all oversee production safety.

20 Refer to controlling plans, controlling operations, controlling teams, and controlling sites.

21 Contractors are held to the same standards as internal departments; they are managed in the same manner as internal departments; their employees are subject to the same requirements as our own employees; and their employees are managed in the same way as our own employees.

Strengthening Safety Risk Control Measures and Enhancing Comprehensive Control Capabilities

1

We strictly implement the "three musts" principle to ensure the effectiveness of the production safety responsibility system, and mainly conduct "penetrating" supervision and inspection on units liable for accidents. Secondary units are subject to safety management evaluation, and grassroots units shall make rectification in safety management. We continuously inspect and evaluate the implementation of the production safety responsibility system. In 2025, we organized experts within the system to carry out inspection and evaluation of the responsibility system, as well as safety re-evaluation for grassroots units. These experts analyzed the root causes of hazards, and provided suggestions. Internal accident notifications and warning education activities were carried out to promote joint rectification of common issues, thereby enhancing the overall production safety management of the Company.

2

We earnestly carry out the Three-Year Action Plan for Tackling Root Causes in Production Safety (安全生產治本攻堅三年行動). The action plan is implemented, hazard identification is deepened. We implement hazard classification and hierarchical management to improve the quality of hazard detection and control, achieve a "dynamic zero" of significant hazards, and properly control safety risks on site.

3

We make targeted efforts on the in-depth analysis of risks in key areas to shift the focus of safety management to prevention, thus preventing and resolving major risks at the source. For infrastructure construction, we focus on key aspects such as lifting and major risks such as fall accidents to strengthen on-site risk prediction and control. More targeted safety measures have been formulated and implemented for different operations in new energy infrastructure projects. For power generation, we thoroughly adopt "personnel defense, technology defense, engineering defense, management defense" measures and provide more guarantee for production safety fund to eliminate the hazards of generation unit operation in a timely manner. For thermal power entities, we have fully implemented the urea substitution transformation project to eliminate all major hazards related to liquid ammonia. For outsourced projects, our management of the outsourcing units focuses on contract performance, responsibility, and supervision, optimizing the units to a reduced size. For new businesses and other areas, we further improve our professional management capabilities, and supervise key areas such as power network, energy storage and hydrogen energy, and coal chemical industry to ensure that risks are managed to a controllable extent.



Enhancing Safety Risk Awareness, and Improving Staff's Emergency Response

Huaneng International strengthens safety risk control and enhances emergency management and response capabilities for natural disasters such as extreme weather, reinforces the safety management in key areas and weak links, and further fulfills safety responsibilities. We promote the implementation of the "dual prevention" mechanism integrating classified risk control and potential risk inspection and clearance in all respects, effectively containing production safety accidents and facilitating high-quality development of the Company. We enhance early warnings for extreme weather and natural disasters, strengthen the tracking and analysis of meteorological information, dynamically improve disaster emergency response plans, and continuously promote scenario-based emergency drills expanding from traditional on-site accident simulations to comprehensive "accident + natural disaster" emergency scenarios. We reinforce enterprise-local government cooperation in disaster relief, crisis response, and aftermath recovery. From the comprehensive scenario-based drills, the Company identifies issues, refines its emergency response processes, strengthens the construction of emergency management team and enhanced its emergency response capacity and efficiency.



Comprehensive Emergency Drill for Typhoon and Flood Prevention by Huaneng Fujian Company

Comprehensive Emergency Drill for Typhoon and Flood Prevention by Huaneng Fujian Company

In June 2025, Huaneng Fujian Company organized a comprehensive emergency drill for typhoon and flood prevention, which deeply simulated the entire process of a super typhoon making landfall and evolving. Scenarios such as waterlogging rescue, emergency power response, firefighting, and lightning-strike rescue were set up, covering risk points including the main plant area, new energy stations, and infrastructure projects. The drill also innovatively applied an emergency management system, strengthening conventional emergency capabilities while honing multi-line coordination under extreme conditions.

6.3 Strengthening Employee Safety and Security

The occupational health of our employees has always remained Huaneng International's top concern. In compliance with the Labor Law of the People's Republic of China (《中華人民共和國勞動法》), the Production Safety Law of the People's Republic of China (《中華人民共和國安全生產法》), the Law of the People's Republic of China on Prevention and Control of Occupational Diseases (《中華人民共和國職業病防治法》) and other laws and regulations, the affiliated units of the Company have formulated the Occupational Disease and Hazard Management Standards (《職業病危害管理標準》), the Employee Health Supervision and Management Standards (《職工健康監護管理標準》), the Management Standards for Health Protection of Female Employees (《女職工健康保護管理標準》) and the Occupational Health Management Rules (《職業健康管理規範》) in accordance with the requirements of the Company's intrinsic safety management system. We always put our employees' health and safety first by raising awareness of work safety and preventing accidents.

The Company strictly implements regular safety hazard inspection, hazard notification, prevention and control, and offers regular health checks for positions with exposure to occupational hazards. A health monitoring file inventory has been established for positions at different levels to ensure that occupational health and safety is under control. All grassroots units set up occupational health management organizations to implement occupational disease prevention responsibilities as well as identify workplaces with occupational hazards against relevant standards to determine the hazard level and form a list of positions with occupational hazards and notifications of occupational disease hazards. Employees are trained in occupational disease prevention, while clear warnings are put up in workplaces with potential occupational hazards where regular inspection is carried out. We provide employees with sufficient personal protective equipment that meets the national occupational health standards, as well as instructions on correct wearing and operating methods. Regular occupational health examinations, e.g., chest X-ray and hearing test, are conducted for employees in relevant production positions such as fuel supply, boiler operation and overhaul, and an established occupational health management database is in place. To safeguard employees' health, the Company has installed climbers or elevators for all new projects to reduce the possibility of typical occupational diseases, such as lumbar disc herniation in the wind power industry. Projects that had already been put into production are also required to install the equipment to reduce the employees' climbing exercise intensity and reduce the inducing factor for diseases.

Raising employees' safety awareness is the key to the Company's safety management. Huaneng International incorporates safety education and training into the Company's annual and medium-term and long-term plan. We have established double-level and triple-level educational and training mechanisms and ensured the supply of required coaches, funds and logistics. The Company is responsible for preparing training plans according to the safety education outline, organizing safety education and training, and maintaining training records and archives. All business units of the Company ensure that employees receive adequate training, customize safety education plans and organize training for power plants, departments, and teams based on their production characteristics.



6.4 Solidifying Infrastructure Security Safeguards

The Company is devoted to infrastructure safety management and promotes the execution of the intrinsic safety management system in this regard. The Company monitors the gaps in outsourcing safety management and the system implementation to improve outsourcing safety management. The Company strictly controls the entry of outsourcing personnel and enhances rectification measures for violations to ensure construction safety. The Company has formulated the Regulations for the Safety Management of Power Engineering Construction (《電力工程建設安全管理規定》), specifying rules on how contractors should fulfill safety management when contracting power engineering construction and regulating the accomplishment of the safety management target.

Strictly Managing Contractors' Qualifications

The Company ensures that only qualified contractors can participate in the construction of the Company's projects. The contractors' qualifications, performance records and bidding documents are carefully evaluated. Bidding is only open to contractors with appropriate qualifications, proven performance records and adequate capabilities for the project. Those with a history of major safety accidents are strictly prohibited from bidding for the Company's projects.

Strictly Managing Subcontracting

Any form of illegal subcontracting is strictly prohibited by the Company. The contractor must obtain the construction unit's consent for subcontracting and the subcontractor must have corresponding qualifications and production safety licenses. Contractors assume overall responsibilities for on-site construction safety. They shall strengthen on-site management and control by incorporating their subcontractors into their safety management system and implementing safety measures.

Strictly Managing Safety Training and Education

The Company requires contractors to organize production safety training and education, establish a safety training system, specify the production safety training department and its principal, formulate an education and training plan for production safety, and establish employee safety training filing records. Contractors are also required to regularly identify safety education and training needs, and assess the effectiveness of training to continuously improve employees' awareness of safety and self-protection.

Deepening the Implementation of the Responsibility Subject

The Company has established a sound production safety responsibility system, clearly defining the responsible personnel, scope of responsibility and assessment standards for each production safety position, as well as safety management responsibilities for engineering construction at all levels. By strengthening safety supervision and management, we ensure the effective operation of the safety supervision and assurance system.

Enhancing On-site Safety Control

The Company vigorously improves safety through technology, developing and promoting the function of smart infrastructure security modules to assist on-site safety control. This includes implementing closed management of construction sites by strict access control, tightening management and control of employees' actions and working process, and reducing habitual violations. The Company also prepares and approves a technical scheme for operation safety and fulfills technical disclosure for construction safety and on-site safety supervision to control safety risks of contractors effectively.

Enhancing Potential Risk Inspection and Mitigation

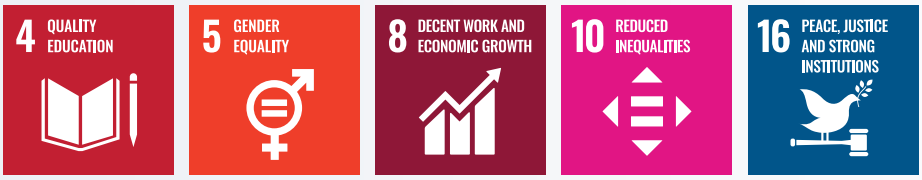
The Company organizes contractors to carry out large-scale on-site safety inspection on a regular basis to assess, record and file the potential safety risks identified. The Company is responsible for supervising contractors to formulate and implement rigorous mitigation plans as well as performing acceptance inspection of the potential hazards mitigation for closed-loop management of potential risk inspection and mitigation to consolidate and improve the infrastructure safety.


07



Practicing a People-Oriented Strategy to Unite Efforts for Progress

PRACTICING A PEOPLE-ORIENTED STRATEGY TO UNITE EFFORTS FOR PROGRESS



People are the core engine that drives innovation and sustainable development, representing an enterprise's most valuable resource. Human resource is key to the success of the Company. Huaneng International regards talent as the cornerstone of the Company's long-term prosperity, and is dedicated to building a top-notch professional talent reservoir. At the Company, we respect employees' rights and interests, acknowledge their value, and improve talent development mechanisms. We also provide a development platform and a favorable working environment for them. We aim to achieve mutual growth for both our employees and the Company, thereby driving the sustained, high-quality development of Huaneng International.

7.1 Safeguarding Employees' Legitimate Rights and Interests

We are devoted to the goal of "maintaining long-term, stable and good relationships with the employees" and the principle of "lawful employment and equal employment opportunity". We create a friendly environment where everyone has a chance to contribute and achieve career development and self-worth. We are dedicated to improving employees' sense of fulfillment and happiness while continuously enhancing unity within the Company.

Lawful Employment Equity

The Company strictly abides by the Labor Law of the People's Republic of China (《中華人民共和國勞動法》), the Labor Contract Law of the People's Republic of China (《中華人民共和國勞動合同法》) and the Provisions on the Prohibition of Use of Child Labor (《禁止使用童工規定》), as well as the Administrative Measures for the Recruitment of College Graduates (Trial) (《高校畢業生招聘管理辦法（試行）》), signs employment contracts with all staff and employs no minors under the age of 16. The Company has consistently and strictly implemented national laws and regulations on the minimum age limit and clarified the rights and obligations of both parties regarding labor and employment to avoid the risks of violation such as child labor and forced employment at the institutional and operational levels. The Company provides equal career opportunity and protection to staff with different nationalities, races, genders, religious beliefs and cultural backgrounds. We offer equal terms to male and female employees, oppose forced labor and job discrimination, and adopt an equal employment policy through the entire employment period of each employee. The Company has diversified recruitment demands and thus can offer employees flexible choices of job positions. In terms of employment relationships termination, the Company strictly follows the established procedures to safeguard the rights and interests of all parties during the employee departure process, and to maintain the standardization and fairness of the Company's human resources management. As the risk of the Company employing child labor and forced labor is rather low, there is no need to establish remedial measures for identified violations.

As of the end of 2025, the Company had a total of 56,104 employees, of whom 87.01% had received college qualifications or above. In 2025, no labor dispute arising from breaches of laws and regulations occurred.

Protection System of Employee Rights and Interests

Upholding our "people-oriented" principle, the Company regards employees as the primary resource and has established a comprehensive and robust system to protect employees' fundamental rights and interests. We take employees' concerns to heart, aim to improve employees' loyalty, and strive to be a caring employer.

Basic Protection: In strict accordance with the requirements of the Labor Law of the People's Republic of China (《中華人民共和國勞動法》) and the Social Insurance Law of the People's Republic of China (《中華人民共和國社會保險法》) concerning employees' rights and obligations, the Company has set up several social insurances including basic pension, basic medical insurance, work-related injury insurance, unemployment insurance and childbirth insurance as well as housing provident funds, annuities and supplementary medical insurances, to ensure that employees' rights are protected in the event of retirement, medical treatment, work-related injuries, unemployment or childbirth. The Company provides employees with work safety liability insurance to better safeguard their rights and interests. In 2025, the Company did not have any social insurance violations or defaults, and achieved full coverage of work-related injury insurance and work safety liability insurance.

Compensation System: The Company, based on the employee's "position, performance, work efficiency and the principle of equality", has established an effective incentive mechanism under which employee's compensation is linked to the Company's operating result and the employee's individual performance. An employee's total compensation includes basic salary, bonus, and allowance, and is paid on time in full amount.

Right for Leave and Vacation: The Company and its subsidiaries have established sound leave systems in accordance with the state regulations and local policies. The leave system specifies that leaves shall include statutory holidays, paid annual leave, home leave, marriage leave, funeral leave, maternity leave, sick leave and personal leave. Either the standard working hour system, the flexible working hour system, or the aggregated working hour system may be adopted based on the Company's production condition and the employee's position to protect the employee's right to take leave.

Democratic Management and Openness of Factory Affairs

The Company continuously deepens democratic management and makes factory affairs more transparent to standardize the operation of employees' assembly and clarify its functions. The Company organized the fourth meeting of the second representative assembly of the labor union. The Company also held the sixth meeting of the second employees' assembly and implemented the Guiding Opinion on Further Strengthening the Construction of the Employees' Assembly System of Central Enterprises (《關於進一步加強中央企業職工代表大會制度建設的指導意見》) issued by the Party Committee of the State-owned Assets Supervision and Administration Commission of the State Council. During the meeting, the work focus of the Company's labor union in 2025 was determined, as part of our efforts to further deepen the standardization of the employees' assembly. The Company strengthened the construction of the democratic management system, implemented the employees' assembly system and the factory affairs openness system, standardized the management and performance of employee directors, so as to expand the participation of employee representatives in the Company governance in an orderly manner and improve the scientific level of democratic management. We also uploaded policies regarding the labor union to the Openness of Factory Affairs tab on our official website, thus protecting employees' rights to know, participate, express and supervise in order to promote joint development of the Company and our employees.

7.2 Expanding Talent Development Pathways

In the spirit of "human resource as the primary resources of the Company", Huaneng International vigorously promotes its talent-driven development strategy. With talent capacity building as the core and optimization of talent structure as the main task, we develop talent resources, optimize talent allocation, improve talent ability and quality, create an enabling environment for talent growth, and inspire talent innovation by seizing the three links of attracting, training and making good use of talents. By doing so, we build a loyal, honest and responsible team of talents with excellent quality and proficiency, which is well structured, professionally equipped, devoted to careers in Huaneng International and in line with the Company's development and strategic needs.

Training and Development

To strengthen the construction of a training organization system and further improve the three-level training system consisting of "headquarters – regional branches – grassroots units". All grassroots units have training centers to actively carry out training related to technology, skills and management.

The Company strictly follows the Regulations on Team Leader Training (《班組長培訓規定》) and the Regulations on Production Worker Training (《生產人員培訓規定》) to facilitate training that meets the needs of the Company and employees at the regional branches and grassroots units based on the actual situation. Focusing on the critical tasks of the year, the Company has developed the 2025 training plan, actively and steadily promoting training related to professions, skills and management. Based on the actual situation, each regional branch has formulated its training plan, comprehensively summarizing the training work of this year, studying and proposing training plans and ideas for the next year, to further improve the training work.

In 2025, the Company, regional branches and grassroots units conscientiously implemented the annual training plans, coordinating and organizing on-board training for new recruits, business management training and production skill training. We carried out various skill contests, technical competitions and on-the-job exercises. The Company also proactively arranged recognition of occupational skills and occupational skill appraisals, and deepened the reform of evaluation on skilled talents, so as to effectively enhance employees' management ability as well as professional and production skills.

In 2025, the Company invested RMB3,129.56 ten thousand in employee training.

Career Development

The Company focuses on employees' career development, continues to optimize the talent allocation and growth environment, constantly refines employee promotion system, provides diversified career development paths of management, professional and technical, and skilled operations to employees, and further stimulates talents' enthusiasm and injects vitality into the Company.

The Company makes further efforts to refine its talent system and mechanism and optimize the recruitment procedure and evaluation mechanism for professional and technical positions. The Company promotes employees with outstanding skill sets and performance or those well-recognized by their peers. Through this approach, the Company has set a stage for talent to stand out and has built an excellent platform for talents to showcase their potential.

The Company continues to strengthen its core management team. Upholding Xi Jinping's Thoughts on Socialism with Chinese Characteristics for a New Era, and implementing CPC's roadmap in the New Era, we adhere to the basic principles of "evaluating candidates by their moral integrity and professional competence with priority given to the former and appointing those with good merits" to select and appoint cadres. Moreover, we persist in the correct orientation for the selection and appointment of people and concentrate on developing both the Company and Huaneng International's business to select the cadres with the right political ideology, a strong sense of responsibility, an aspiration to do great things and great performance. We train the cadres in practice through job rotation and more extensive communication, thereby facilitating talent flow and optimizing human resource structure. We continuously improve management's performance to handle complex situations and build a talented team of high-quality and professional cadres, which meets the standards of qualified cadres in the new era who are loyal, honest and responsible.

The Company continuously strengthens talent development, deepens the cultivation of international talents, actively and steadily carries out training work, proactively carries out title management and talent evaluation work, and optimizes employee recruitment to improve core management and professional teams' comprehensive skills and management capability.

In 2025, the Company formulated and revised systems including the Employee Recruitment Management Measures (《員工錄用管理辦法》) and the All-Employee Performance Management Measures (《全員績效管理辦法》), further strengthened the selection and training of young cadres, continuously improving the age structure and stimulating young employees' working enthusiasm. The Company formulated development plans for young talents and enhanced talent training with the consideration of the Youth League Committee's work, providing a platform for outstanding youth to practice and strengthen their ability to help the Company develop versatile talents.

In the future, the Company will deepen the reform of labor, personnel and distribution system, enhance the effectiveness of these reforms, further improve the talent cultivation mechanism, optimize talent development environment, strengthen talent resource development and encourage staff to continuously improve themselves in their positions to achieve self-realization and joint development with the Company.

7.3 Safeguarding Employees' Physical and Mental Well-being

Employees are fundamental to the development of the Company. The Company can only continuously and steadily supply energy for economic and social development based on the hard work and dedication of all employees. The Company always adheres to the "people-oriented" development concept and vigorously implements the talent-driven development strategy to enable staff and the Company to grow together, sharing the fruits of reform and development, thus filling employees' work and life with happiness.

In 2025, the Company earnestly implemented the Trade Union Law of the People's Republic of China (《中華人民共和國工會法》), serving employees with sincerity. Through initiatives such as "Production Safety Month", "Anti-Fraud Publicity Month", and "Fire Prevention Month", the Company organized knowledge quizzes, video learning sessions, safety training, and others. These efforts integrated ideological guidance with the enhancement of production safety awareness, embedding them into daily work and life, thereby reinforcing the ideological safeguards for safety development.

The Company earnestly fulfills its fundamental responsibility of serving employees and distributes employee benefits in accordance with laws and regulations. As part of its dedication to caring for female employees, the Company held a clothing and etiquette lecture during International Women's Day, and organized a walking competition for female employees in Beijing. Around Children's Day, greetings and encouragement were extended to the employees' children taking the senior high school and college entrance examinations. During Army Day, the Company conveyed appreciation to its retired and transferred military personnel.

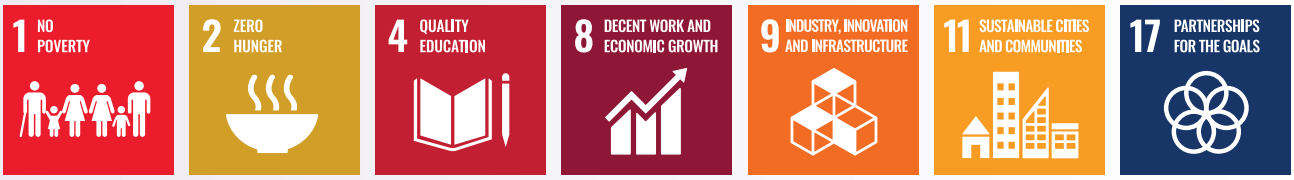
Upholding our "Three-Color" culture, the Company carefully organized an employee culture showcase to celebrate Huaneng's 40th anniversary, with enthusiastic participation from a wide range of employees. Nine entries, including the microfilm "Towards the Sun", the short video "Huaneng International Memories: The Journey to Triple Listing", and the themed essay "The 'Three-Color' Flag Flying High", received internal recognition. The Company regularly carries out diverse recreational and sports activities for employees. This includes organizing New Year's Eve celebration events, holding monthly walking challenges on an ongoing basis, and encouraging employees to actively participate in activities such as the National Day Walk, the Beijing-based units walk, and the fun sports meets for Beijing-based units, all organized by the Group's work committee.


08



Forging Collaboration to Drive Shared Success

FORGING COLLABORATION TO DRIVE SHARED SUCCESS



Huaneng International has always adhered to the harmonious development concept of "serving the nation, benefiting society, pursuing mutual benefit, and fostering shared growth". While pursuing our own development, we place great importance on and respond to the reasonable concerns of stakeholders, and are committed to achieving high-quality development together with all parties. The Company has formulated management policies such as Supplier Management Measures of Huaneng Power International, Inc. (《供應商管理辦法》) and continuously enhances supplier management and collaboration. This ongoing enhancement strengthens supply chain resilience and ensures the delivery of high-quality energy services to downstream customers. In addition, the Company supports the sustainable development of the communities where it operates through diverse public welfare initiatives, with a view to sharing the benefits of enterprise development with these communities.

8.1 Deepening Multi-party Collaborative Cooperation

Building trusted and cooperative relationships with suppliers is crucial to realizing the Company's strategy, and fundamental to improving the stability of supply chains. Our policy is to remain open, fair and just in working with suppliers, and we emphasize effective communication to strive for suppliers' better understanding and recognition of the Company's corporate values and culture. We hope to maintain long-term and mutually beneficial relationships with suppliers and jointly promote the stable and sustainable development of the industry. Based on the supply category, the Company divides our suppliers into three categories: material, service and engineering. The Company's supplier management emphasizes the principle of "Classified management, stringent acceptance control, quantitative assessment and dynamic maintenance".

Supplier Development

The Company's business units at all levels conduct supplier stocktaking and analysis each year to identify more high-quality suppliers for our supplier inventory. Meanwhile, the Company solicits eligible suppliers through various channels, such as procurement guides, mass media, product launches, product showcase (sales) events, industry associations, employee recommendations, public tenders and supplier liaisons.

Supplier Acceptance

The Company's business units at all levels impose stringent controls on supplier acceptance. Only suppliers with a good reputation, advanced technologies, excellent product performance and strong ability to perform are accepted, and accepted suppliers are scrutinized for the legality of their business operations and the authenticity of their qualifications, among other things.

Supplier Selection

We select suppliers in an open, fair and just manner, considering their environmental and social impact. Procurement activities are classified into two categories, namely tendering procurement and non-tendering procurement. Tendering procurement includes open tender and invitation to tender, while non-tendering procurement includes negotiated procurement, competitive bidding procurement, inquiry and comparison procurement, and direct procurement. For tender projects that are required to be conducted openly according to the law, the related work procedures are carried out in strict accordance with national laws and management systems of the Company, and all procurement activities are implemented publicly through the procurement management platform and e-commerce platform to achieve the goal of "all tenders should be recruited, and all activities shall be disclosed publicly".

The Company prohibits suppliers from participating in procurement activities if they are listed as Seriously Dishonest Entities in the National Enterprise Credit Information Publicity System by market supervision authorities, or as Dishonest Persons Subject to Enforcement by the Supreme People's Court on the "Credit China" website or credit information sharing platforms at various levels. If the supplier has already participated in procurement activities, the tendering documents or response documents will be rendered invalid. Suppliers whose related relationships are prohibited by law and agents and suppliers sub-authorized are prohibited from participating in the procurement activities of the same project. The tendering documents or response documents of those who have participated in procurement activities will also be rendered invalid.

Supplier Assessment

Supplier assessment is based on the "user assesses" principle. Based on Huaneng's procurement management platform, each of the Company's various business units conducts comprehensive and annual assessments on the project implementation of suppliers who have contractual relationships with the unit. Suppliers will receive assessment feedback through the e-commerce platform, which serves as an essential reference for future procurement.

Supplier Monitoring

In response to the quality problems occurring in the provision of procurement services by suppliers as well as the problems in suppliers' integrity, delivery, and service during their participation in warehousing applications, procurement activities, and contract performance, the Company will, depending on the severity of the problems, take punitive measures such as downgrading, suspension of the award of contracts, and suspension of cooperation for a limited time.

Supply Chain Risk Management

Huaneng International is committed to ensuring the stability of the supply chain through effective risk management measures. The Company integrates procurement and supply chain risk control into its comprehensive risk management system as a key component, and clearly defines the risk management responsibilities of different levels. The Company has established a supply chain risk analytic model, a collaborative risk early-warning system, and a material reserve system, to collaborate more effectively with suppliers, build up our capabilities in supply chain risk assessment, early-warning, and emergency response, and strengthen our ability to deal with market changes and unexpected events. The improvements help reduce the impact of supply disruptions and provide a solid guarantee for the Company's sustainable development.

Additionally, the Company vigorously promotes in-house R&D and technological innovation. Relying on the strength of internal professional organizations, we have identified products prone to tight supply with equipment and components inventory, and developed supply chain risk response measures accordingly. In the process of procuring infrastructure and production materials under framework agreements, the Company clearly states that it will promote and substitute with domestic products to reduce the supply chain's dependence on overseas sources of goods, thereby further improving the stability of the supply chain.

Coal Procurement

Medium and long-term coal procurement contracts are the "ballast" and "stabilizer" of energy security and supply. By rigorously signing and fulfilling medium- to long-term coal supply contracts, a stable and enduring cooperation mechanism spanning "production, transportation, and demand" has been established. This mechanism plays a vital role in promoting the healthy development of upstream and downstream industries, ensuring the secure and reliable supply of coal, and safeguarding national energy security. As a large power-generating company, Huaneng International places much emphasis on fuel supplier management. The Company strictly implements relevant measures for fuel supplier management, establishing provisions for supplier access, evaluation and grading adjustments, as well as exit mechanisms. It also specifies the classifications of suppliers and their corresponding management measures, and regulates the supply channels and procurement activities for fuel purchase. Regarding the monitoring and management of suppliers, the Company's business units assess suppliers each year in terms of coal supply stability, contract performance, contract fulfillment, production volume, procurement pricing and dispute resolution. At the same time, the Company's business units perform fuel supplier management inspections from time to time, examining whether the relevant supplier management system is sound; whether such system is effectively implemented and whether the acceptance approval is regulated; whether the supplier assessments are objective and accurate; and whether the exit mechanism is put in place.

The Company selects suppliers with great care and carries out the authorized approval procedures for shortlisted suppliers. The Company works with its strategic suppliers in a "plant-mine direct supply" mode. Strategic suppliers typically possess strong performance capabilities, maintain rigorous control over product quality, and demonstrate a heightened awareness of legal compliance, social responsibility, and environmental protection. Strategic suppliers are usually large coal mine operators and are subject to stringent environmental protection requirements imposed by the state concerning their planning, design, infrastructure, exploitation and mining area management. Only those coal mine operators that meet these requirements are allowed to conduct construction and operation. Furthermore, with constantly intensified efforts in releasing quality production capacity in recent years, large coal mines' coal production work has further improved in terms of quality, environmental protection standards, safety and labor protection. There is also a specific set of requirements formulated by the state for the recruitment of miners in large coal mines. By selecting state-owned large mine operators and large coal mine operators, we ensure that suppliers fulfill their social, environmental, and labor protection responsibilities and obligations.

Always taking the green development concept of "energy saving, emission reduction, clean and environmental protection" as the guide, Huaneng International regards environmental protection as a prerequisite for the survival and development of the Company on the basis of national conditions and energy reform trends. In strict compliance with national and governmental environmental policies, the Company implements its fuel procurement practices through the following measures: Firstly, we strengthen the transition of the fuel supply structure, continuously optimizing the shift from road-to-rail transportation and advancing cleaner vehicle transportation. Secondly, in active response to national requirements for the protection of the Yangtze River, the Company persistently promotes water-to-rail initiatives for coastal and riverine power plants, enhancing control over inland transfer processes to ensure alignment with environmental policy standards. Thirdly, based on the specific needs of power plants, the Company reinforces the management of coal quality indicators upon delivery. This ensures that the overall quality, sulfur content, ash content, and coal mix of procured coal meet the plant's requirements for coal blending, peak-load regulation, environmental protection, and emissions control.

8.2 Empowering Development with Sincere Service

Huaneng International is devoted to providing power grid companies and other downstream enterprise consumers with high-quality power products and services in sharing the Company's achievements with clients whilst ensuring a safe and stable power supply. The Company has formulated the Marketing Management Regulations (《市場營銷管理規定》) and other marketing-related policies to regulate customer service processes. Adhering to the customer-oriented service concept, the Company established a customer service mechanism, and conducted promotional meetings, regular communication via telephone and regular return visits to understand customer needs and solve their problems related to electricity. The Company also actively developed value-added services for customers, providing information consultation, quotation agency, electricity consumption monitoring, energy consumption diagnosis, energy saving renovation, operation and maintenance, etc., to continuously improve customer satisfaction and maintain harmonious customer relationships. When receiving customer complaints, the Company immediately transfers the complaints to regional branches and grassroots units and supervises them to handle the complaints in accordance with the management regulations and procedures. In customer acquisition and development, the Company remains firmly market demand-driven and continuously improves its service standards. For users across different scales, industries, and electricity consumption patterns, we make full use of both online and offline channels. This enables us to formulate tailored development strategies adapted to local conditions, provide customized electricity procurement plans and deliver efficient, precise, and convenient integrated energy services. In 2025, the scale of electricity transactions in the provincial and municipal electricity markets expanded. The Company made use of various channels through electricity sales companies to strengthen the development of power users. It had a variety of customer types, a relatively stable number and electricity consumption of large users signed for the whole year, and a rapid increase in the number and electricity consumption of small and medium-sized users.

Huaneng International is strongly committed to both data security and the protection of customer information. The Company strictly complies with national laws and regulations, including the Cybersecurity Law of the People's Republic of China (《中華人民共和國網絡安全法》), the Data Security Law of the People's Republic of China (《中華人民共和國數據安全法》), the Personal Information Protection Law of the People's Republic of China (《中華人民共和國個人信息保護法》), and the Network Data Security Management Regulations (《網絡數據安全管理條例》). Corresponding internal policies–such as the Data Management Measures (《數據管理辦法》), Data Security Management Measures (《數據安全管理辦法》), Data Quality Management Rules (《數據質量管理細則》), and Data Center Construction and Operation Management Rules (《數據中心建設與運維管理細則》)–have been established to govern related activities. A bottom-up data management system has been implemented, guided by the principle that "responsibility follows ownership, custody, and processing". This system ensures full adherence to data security laws and regulations, reinforces accountability for data security, and enforces rigorous technical requirements for data storage and backup. All data usage is conducted lawfully and in compliance with regulations to maintain security and controllability of information. In 2025, the Company recorded no incidents involving data security breaches or customer privacy leakage.



8.3 Sharing Achievements and Co-creating Value

Guided by the philosophy of harmonious development– "serving the nation, benefiting society, pursuing mutual benefit, and fostering shared growth" – Huaneng International actively engages with and contributes to community development and collaborates with stakeholders to jointly promote social prosperity and progress. The Company proactively implements national support and assistance policies, advances rural revitalization and development with dedication, and widely participates in public welfare initiatives to help people realize a better life.

Assisting in Rural Revitalization

For the nation to rejuvenate, rural areas must thrive. Focusing on priorities such as rural development, rural infrastructure improvement, rural education enhancement, and rural governance optimization, Huaneng International leverages its corporate strengths to build upon the achievements of poverty alleviation and advance rural revitalization. The Company actively implements support initiatives in industrial rejuvenation, talent cultivation, ecological conservation, and consumption assistance. Huaneng International mobilizes its grassroots units to carry out assistance tasks assigned by local governments. Through targeted aid, on-site village support, and designated financial contributions, the Company ensures stable income for households lifted out of poverty and solidifies and expands the gains of poverty alleviation. Capitalizing on its core business advantages, the Company invests in and constructs photovoltaic assistance projects tailored to local conditions, enhancing energy access in rural areas and generating stable collective income. Efforts are also made to actively explore the unique resources of assisted regions, support and nurture new industries and business models, and foster high-quality development of rural industries. In addition, the Company funds the construction of public infrastructure, effectively improving production and living conditions in assisted communities and promoting the development of livable, business-friendly, and harmonious villages. Meanwhile, the Company actively engages in initiatives such as the "Pillar Project" for educational assistance, the "In the Same Boat Project" for emergency relief, the "Blessing Project" for agricultural revitalization, and the "Foundation Project" for capacity building. By focusing on talent development, healthcare security, industrial growth, and ecological revitalization, Huaneng International supports assisted regions in realizing modern agricultural development, building ecologically sustainable rural communities, and achieving common prosperity for farmers. In 2025, the Company directly allocated a total of RMB16,171 thousand for rural revitalization efforts and purchased agricultural products worth RMB48,553 thousand from designated assistance areas, energy industry cooperation zones, and key nationally supported regions. Huaneng International was recognized among the 2025 Top 500 Chinese Enterprises in Rural Revitalization, enhancing its brand value while contributing to social harmony and development.



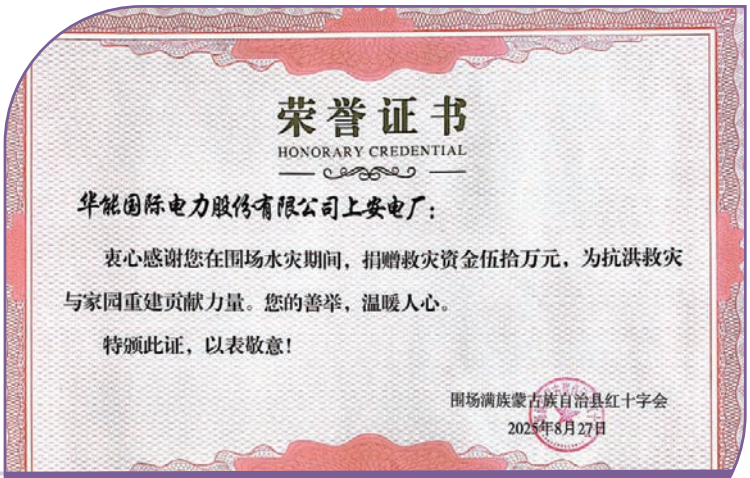
Huaneng Shandong Power Generation Company Supports Rural Planting Industries

Huaneng Shandong Power Generation Company Deployed Village-based Cadres to Support Rural Construction.

In line with the requirements of local governments, power plants under Huaneng Shandong Power Generation Company–including the Huangtai, Laiwu, and Linyi plants–have each selected and assigned first secretaries to provide on-site village assistance. These village-based cadres actively secured project funding and encouraged local talent to return and contribute to development. Their efforts have effectively addressed pressing issues in the supported villages, such as road paving, living environment improvements, and increasing villagers' income. As a result, the appearance and conditions of the villages have been notably enhanced. Furthermore, the cadres have actively revitalized unused land resources to develop rural tourism and specialty cultivation industries, significantly strengthening the village collective economy and boosting both income and overall prosperity for the villagers.

Huaneng Hebei Branch Extended Assistance to Regions Affected by Heavy Rainfall

From June to July 2025, Weichang County in Chengde City experienced multiple rounds of heavy rainfall, leading to flooding in several areas and posing significant risks to local residents' safety and property. To support the community in rebuilding sustainable communities, Huaneng Hebei Branch donated RMB500 thousand to the Weichang County Red Cross for disaster relief. This gesture demonstrated the Company's social responsibility and commitment, while also laying a strong foundation for its ongoing development in the Chengde area.


荣誉证书

HONORARY CREDENTIAL

华能国际电力股份有限公司上安电厂：

衷心感谢您在围场水灾期间，捐赠救灾资金伍拾万元，为抗洪救灾与家园重建贡献力量。您的善举，温暖人心。

特颁此证，以表敬意！

围场满族蒙古族自治县红十字会

2025年8月27日

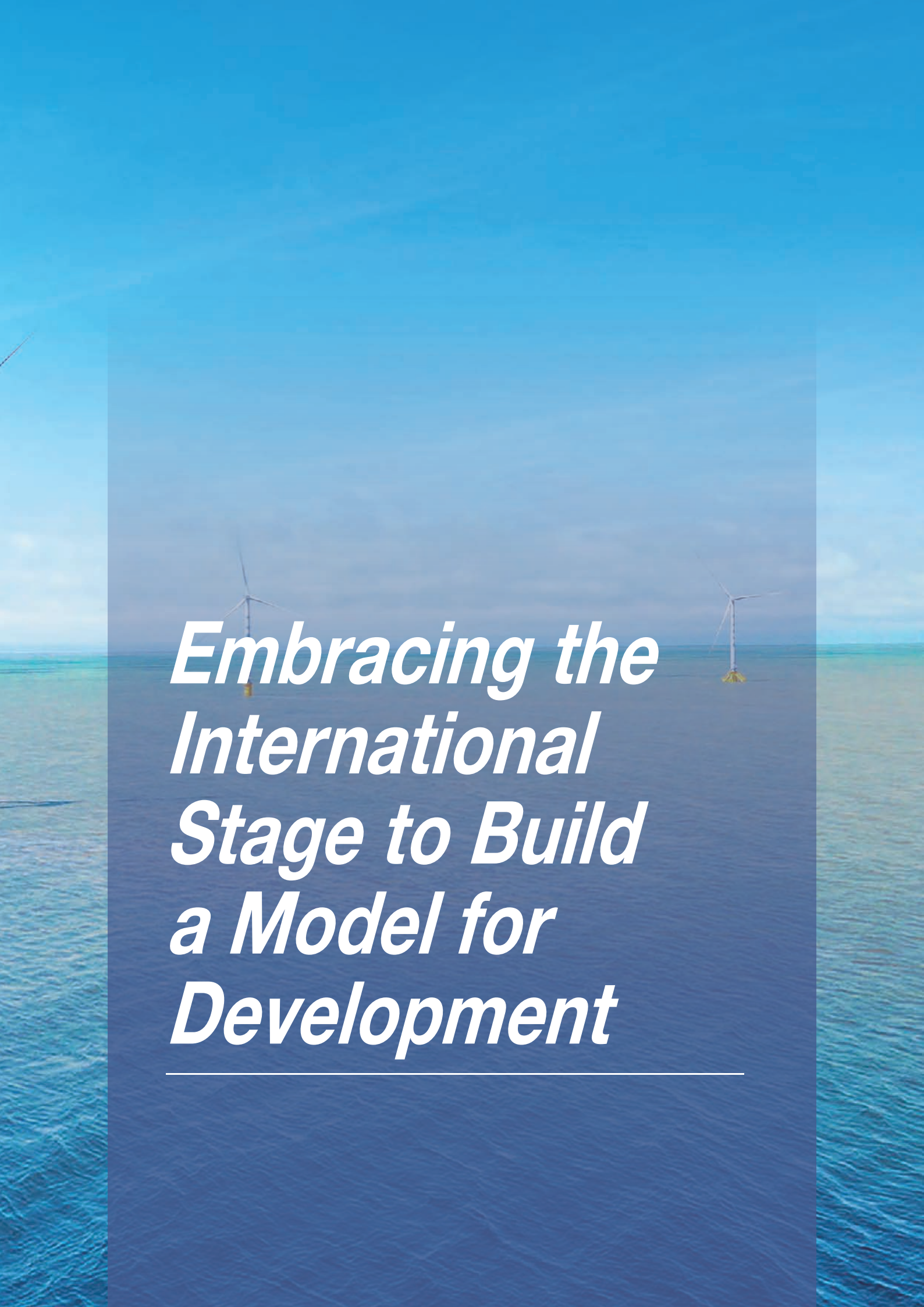
Huaneng Hebei Shang'an Power Plant Donates Funds for Disaster Relief



The Volunteer Activity Organized by Huaneng Chongqing Branch

Huaneng Chongqing Branch Conducted Volunteer Initiatives to Support Rural Revitalization

In October 2025, the “Three-Color Sail” volunteer service team of Huaneng Chongqing Branch carried out volunteer activities in Taohua Village, Zhongxian County. Equipped with telescopic ladders and repair tools, the volunteers inspected and replaced damaged streetlights throughout the village, conducted thorough safety checks of household electrical circuits, walls, doors, and windows, and meticulously documented potential hazards for professional follow-up. The team also engaged in in-depth discussions with villagers on “leveraging new media to advance rural revitalization”, focusing especially on emerging models such as live-streaming sales to help address the challenge of marketing local agricultural products and explore new pathways for rural economic development. In 2025, Huaneng Chongqing Branch organized a total of 178 volunteers, contributing 52 hours of service and actively fostering social harmony through practical actions.



Embracing the International Stage to Build a Model for Development


09

EMBRACING THE INTERNATIONAL STAGE TO BUILD A MODEL FOR DEVELOPMENT



Huaneng International successfully acquired 100% equity in Singapore Tuas Power Ltd. ("Tuas Power") in 2008. Tuas Power is one of the three major power-generating companies in Singapore and one of Singapore's major public utility and environmental service providers.

About Tuas Power

As of December 31, 2025, Tuas Power mainly owns assets such as Tuas Power Station, Tembusu Multi-Utilities Complex (TMUC), desalination plant, electricity retail company, and operates 7 generating units with a total installed capacity of 2.01 million kW. Among them, the Tuas Power Plant has an installed capacity of 1.876 million kW, and the Tembusu Multi-Utilities Complex (TMUC) has an installed capacity of 133.5 thousand kW. Tuas Power's share of Singapore's electricity market in 2025 is approximately 18.3%.

Tuas Power Station has been providing safe, reliable and efficient electricity supply to Singapore since 1999. The Station currently has 5 units of gas-fired Combined Cycle Plants (CCP) in operation that contribute to the country's electricity demand at a highly reliable performance of over 99%.



Tuas Power Station

The Tembusu Multi-Utilities Complex serves the petrochemical industries in the Tembusu area of Jurong Island, Singapore. TMUC comprises a Biomass Clean-Coal (BMCC) cogeneration plant and wastewater treatment plant, which provides different types of utilities – electricity, steam, high-quality industrial water and demineralized water for industrial customers. In respect of steam supply, TMUC provides a variety of pressure grades of steam to meet the differentiated needs of different customers while generating electricity. This process is completed by steam turbine generator sets. This cogeneration process helps to further improve the efficiency of the TMUC.



Tembusu Multi-Utilities Complex

Going beyond providing energy service, Tuas Power has extended its business to combined heat and power, environmental, oil storage and tank leasing services by leveraging cutting-edge technologies and world-class practices, further driving the industry's development. So far, Singapore Jurong Island Desalination Plant project co-developed by a consortium of Tuas Power and ST Marine has been put into operation, with a daily output of up to 30 million gallons (equivalent to about 13.7 ten thousand cubic meters) of drinking water.



Jurong Island Desalination Plant

Tuas Power emphasizes efficient and environmentally responsible energy solutions for modern business and industrial needs. Tuas Power insists on conducting operations in an environmentally responsible manner by maximizing plant efficiency, resource conservation, reducing waste and controlling emissions.

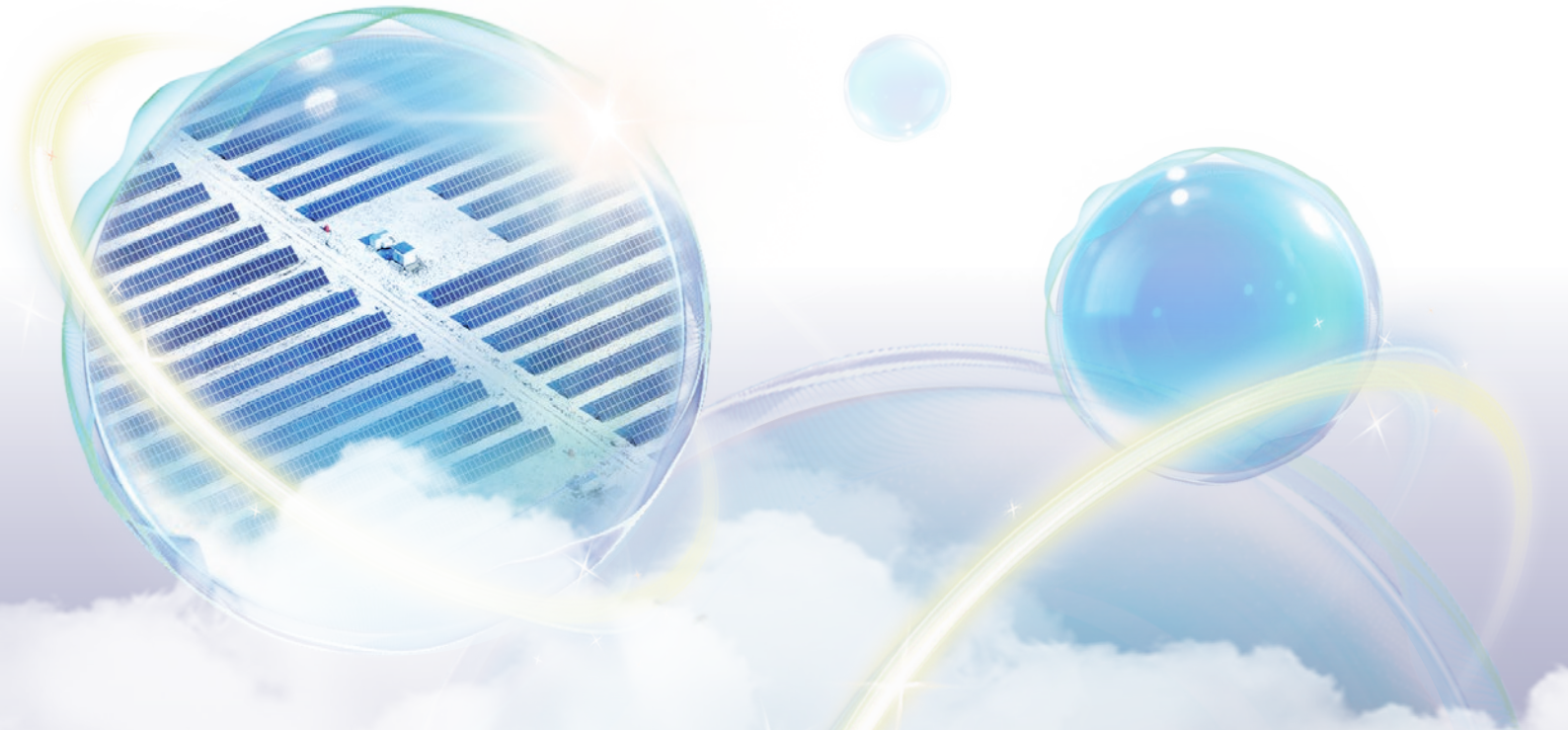
In 2025, Tuas Power had no reportable environment-related incidents. In the future, Tuas Power will continue to enhance environmental protection and safeguard measures.

Energy Conservation

Since 2024, Tuas Power has started to monitor energy performance. Using well-tested and calibrated thermodynamic models to perform off-line heat balance calculations, Tuas Power is able to monitor the efficiency performance of each unit. Tuas Power identifies deviations and quantifies gaps in terms of energy and cost savings by comparing the current performance levels of the entire plant and its major facilities with the "Renewed • Clean" benchmarks under similar process conditions, so as to further follow up and improve the efficiency of the power plant. This system can also provide early warnings and detect abnormalities, enhancing the reliability of the power plant. In 2025, Tuas Power conducted multiple rounds of technical exchanges and experience-sharing sessions with domestic power plants, steadily advancing the preparatory work for benchmarking against domestic units. Benchmarking against similar advanced power plants serves as a crucial initiative for identifying performance issues, quantifying gaps, and implementing targeted improvements, effectively driving enhancements in operational performance. Starting in 2026, Tuas Power Plant will benchmark against leading domestic power plants, with a focus on systematically learning from their best practices in production safety management to drive continuous optimization of various energy consumption indicators.

The environmental, occupational health and safety management and planning systems of both Tuas Power Station and TMUC are certified to ISO 45001:2018 (Occupational Health and Safety Management System), ISO 14001 (Environmental Management System) and ISO 50001 (Energy Management System). While ensuring compliance with laws and regulations, these certifications help to identify key processes for improvement, and demonstrate the Company's tireless efforts to practice energy conservation and compliance.

In 2025, the Jurong Island Desalination Plant sustained its excellent safety record from the previous year, achieving zero casualties, zero major safety incidents, no environmental pollution events, and receiving no warnings or penalties from government agencies. Since obtaining ISO 45001:2018 and ISO 14001:2015 management system certifications in 2024, JIDP has strictly complied with these frameworks, diligently implemented all relevant requirements, and successfully passed both internal and external audits. Throughout the year, the plant maintained an equipment availability rate of no less than 98%. While reliably meeting the dispatch requirements of PUB, Singapore's National Water Agency, JIDP collaborated with external environmental consultants to conduct continuous water quality monitoring in the surrounding sea areas near the project site. Through a combination of online monitoring and third-party sampling, the plant ensured that effluent quality consistently complied with the discharge standards set by the National Environment Agency of Singapore, with no adverse impact on the ecological environment of the receiving waters.



Emissions Management

Management of Greenhouse Gas

In terms of greenhouse gas management, the carbon emission of the five units of CCP of Tuas Power Station is lower than that of the national average of all power plants in Singapore. To further advance carbon reduction efforts, the plant completed upgrades to the CCP4 and CCP3 units in 2023, which collectively reduce carbon emissions by nearly 20 thousand tonnes annually. Additionally, the CCP1 unit was upgraded in July 2025, and the CCP2 unit is scheduled for an upgrade during maintenance in 2026. Beyond unit upgrades, Tuas Power Plant has adopted a multi-dimensional carbon reduction strategy. This includes actively exploring and participating in imported renewable energy projects, providing tailored carbon reduction solutions to customers, advancing the construction of on-site photovoltaic installations, and initiating the registration of international green certificates–all aimed at optimizing the energy supply structure.

The usage of 20% carbon-neutral biomass (Palm Shells & Woodchips) is a mandatory requirement by the Government of Singapore to lower the carbon footprint of TMUC. This approach reduces carbon emissions and consequently lowers the carbon tax burden. To remain competitive, TMUC gradually increased the proportion of biomass in its fuel mix.

In addition, mitigation measures that reduce energy losses from power plants or increase the power generation efficiency of power plants can also help reduce greenhouse gas emissions. In accordance with the measurement and reporting requirements for greenhouse gas emissions from Singapore's National Environment Agency, Tuas Power and TMUC submitted their plans and supporting documents for the measurement of greenhouse gas emissions to the Singapore authorities and received approvals in December 2018. In 2025, Tuas Power and TMUC submitted their annual emission reports based on these approved documents and paid the relevant carbon taxes accordingly.



Other Exhaust Gas Management

In terms of other exhaust gas management, Tuas Power Plant operated five units of natural-gas-fired CCP generators to achieve zero emission of sulphur dioxide. TMUC reduces NOx and SO_2 emissions by using advanced Circulating Fluidized Bed (CFB) boilers and purchasing low-sulphur, low-ash coal. The low combustion temperature of the CFB boilers, combined with the low-sulfur, low-ash coal, ensures minimal emissions of nitrogen oxides and sulfur dioxide. In addition, the highly efficient bag filters installed in the CFB boilers keep particulate emissions well within compliance limits. TMUC is fully capable of meeting the stringent air emission requirements set forth in the Singapore Environmental Protection and Management Act (《環境保護和管理法案》).

Ash Recycling

In ash recycling, TMUC has achieved 100% comprehensive utilization of ash (fly ash and bed ash) by working together with local building materials companies. With the 100% biomass transformation project in the works, TMUC is seeking approval from relevant regulators to continuously recycle the generated ash and slag.

Wastewater Management

In the case of water treatment, the TMUC project has established wastewater treatment facilities to treat the wastewater produced internally and the wastewater generated by the petrochemical industry in compliance with relevant regulations. To fully utilize the well-designed water cycle, customers are incentivized to return clean condensate for TMUC's steam production. High-temperature return condensate is used to pre-heat deaerator feed water to improve efficiency. Boiler blowdown water is recycled back to the Water Treatment Plant as an alternative source of raw water. Partially treated water from the wastewater treatment plant is being reused for plant washing in TMUC Site 2.

Green Plan

Adhering to the development principle of "green, clean, benefit, steady", and focusing on green development, the Company promotes the development of new energy projects at home and abroad, continues to advance the development of new businesses such as transnational power imports and international green certificates, and builds high-quality model projects. Tuas Power has embarked on various initiatives in support of Singapore's carbon emission reduction to address the challenges posed by climate change and meet carbon reduction goals. Our initiatives include exploring and participating in importing renewable energy, providing carbon-reduction solutions for customers, constructing in-plant photovoltaics and registering for international green certificates. In 2025, the in-plant photovoltaic project at TMUC was connected to the grid for power generation. Tuas Power actively promoted the construction of in-plant photovoltaic projects at Tuas Power Station and Jurong Island Desalination Plant, and steadily advanced the full biomass conversion project at TMUC, having completed the project's feasibility study. The Company actively leverages the synergy value of Tuas Power to engage deeply in domestic renewable energy projects. Currently, the installed capacity of the projects in which the Company holds equity participation has reached 318 MW.



Customer Information Protection

In handling customer information, Tuas Power has implemented comprehensive measures to safeguard personal privacy. These include password protection for customer data files and strict access controls, ensuring that only authorized personnel may retrieve relevant information. Furthermore, the company provides annual specialized training on compliance with the Personal Data Protection Act (《個人資料保護法》) to all employees and conducts regular external audits to monitor and ensure the effectiveness of these measures. All employees are required to strictly adhere to the company's governance policies concerning customer information protection. In 2025, Tuas Power did not experience any incidents of data security breaches or customer privacy leaks.

Community Joint Building

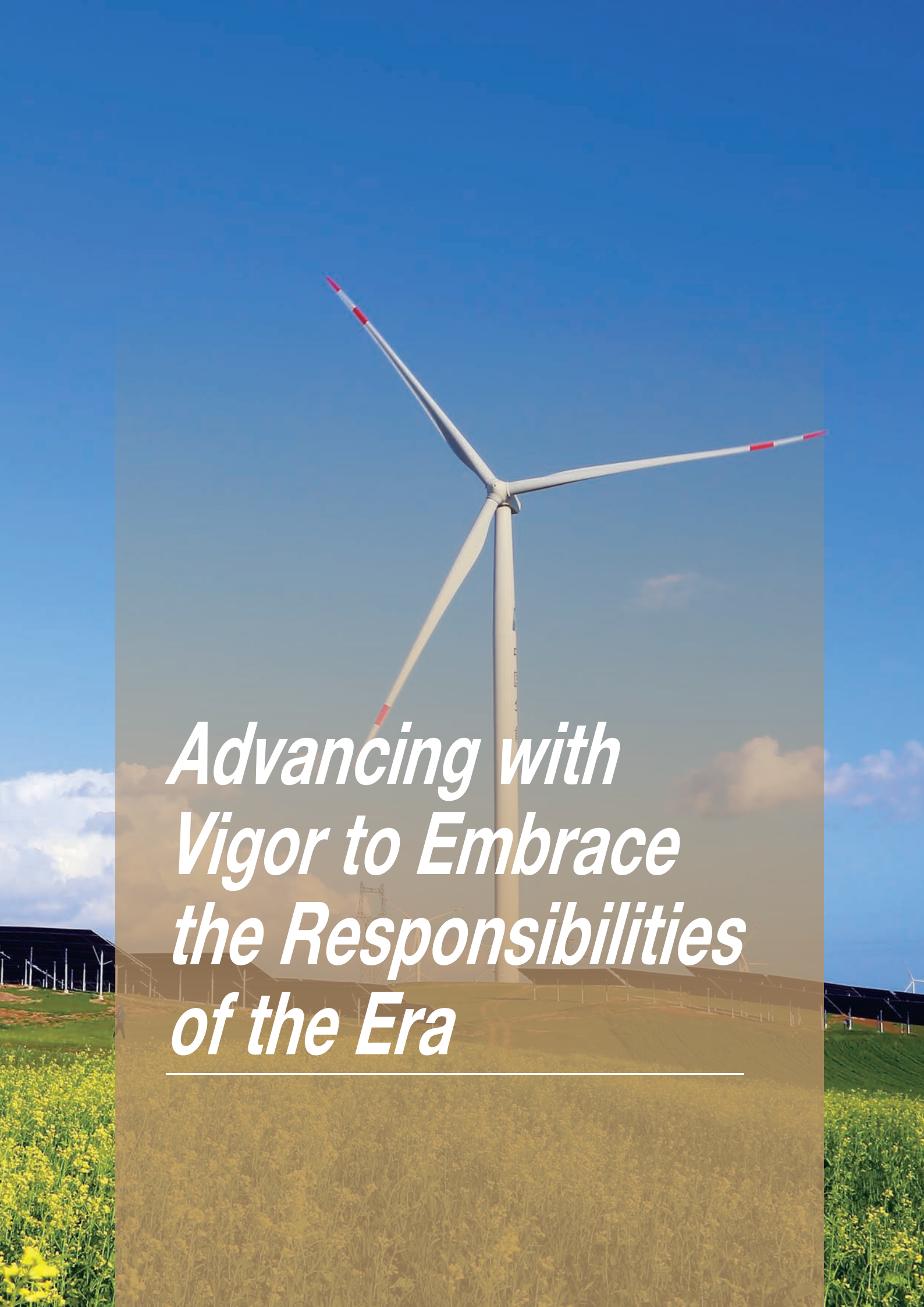
Tuas Power actively cooperated with Statutory Boards of the Singapore Government, charity organizations and non-profit organizations to give back to the society through volunteer activities, funding public welfare and welfare organizations, etc., and has established a good corporate culture and responsible corporate image. In 2025, Tuas Power provided funds SGD 37 thousand to charitable, voluntary and welfare organizations such as Metta Welfare Association, PCS Living Blood Centre, Food From The Heart (FFTH), Garden City Fund, Power and Gas Industry Unions, Singapore Children's Society, Focus on the Family Singapore, Gardens by the Bay, The Straits Times Campus Subsidy Fund to help groups and families in need, and support horticultural research and conservation to protect Singapore's green environment.

Digital Intelligence

Tuas Power is pushing forward with its digital and intelligent transformation by upgrading and integrating existing business systems to form end-to-end solutions. The system is designed to simplify and integrate the processes of all departments, so as to improve the quality of service provided to customers, operational efficiency, and the visibility of business processes, and support strategic planning and decision-making.




10



Advancing with Vigor to Embrace the Responsibilities of the Era

ADVANCING WITH VIGOR TO EMBRACE THE RESPONSIBILITIES OF THE ERA

We have mission and responsibility, and believe only truth is practicable and diligence is sustainable. We forge ahead and make sound development for a far-reaching success. The electric power industry is closely related to national development and people's lives. Although it has existed for over a century, it is still vibrant. As a responsible enterprise, we will continuously explore our potential and improve quality and efficiency. Facing the current co-existing situations of both risks and opportunities, Huaneng International, is orientated with Xi Jinping's thoughts on Socialism with Chinese Characteristics for a New Era, thoroughly implements the guiding principles of the 20th CPC National Congress and the plenary sessions of the 20th CPC Central Committee, implements the Company's development strategy whilst adhering to steady progress, promoting transformation and upgrading, and actively carrying out reforms and innovations, making more contributions to both national development and rejuvenation.

Looking ahead, the Company will continue to intensify its efforts in energy and power supply, brand leadership, technological innovation, corporate governance, value creation, and capital market performance, with a focus on building a flagship listed power generation enterprise distinguished by its "three strengths and three excellences".

We comprehensively take advantages of company's technology and marketing, proactively participate in the construction of new type of power and energy systems that are characterized by clean and low-carbon, safe and sufficient, economically efficient, synergized supply and demand, flexible and intelligent, building a "new engine" for the Company's high-quality development to promote green, low-carbon and circular development, we promote the development of an integration of sources, networks, loads and storage and the multi-energy complementary smart energy system. Targeting "carbon peak" and "carbon neutrality", we promote green and low-carbon energy transformation to effectively reduce carbon emissions. We adopt renewable energy, vigorously develop the new energy sources, increase efforts to plan and build a new energy supply based on large-scale wind and solar power bases and supported by clean, efficient, advanced and energy-saving coal power in the vicinity, transform the development of coal power, optimize the development of gas power and other clean energy power generation, actively lay out pumped storage, and build the integration of source, network, load and storage, as well as the development pattern of multi-energy complementarity.

We strengthen and improve the comprehensive energy services, actively adapt to the transformation of China's energy supply structure and continue to develop strategy-focused emerging industries through digitalization and measures tailored to local conditions. To carry out diversified supply and energy service transformation centered on core industries, we actively develop energy storage, and participate in the demonstration of integrated green hydrogen industry of "production, storage, transportation and utilization".

Bearing the principle of "clean, benefit, steady" in mind, we insist on the integration into the new "dual circulation" development pattern, strengthening the international cooperation. We build Tuas Power into the Company's overseas innovation and development platform, strengthen efficient operation of overseas assets, optimize the asset portfolio, and improve the risk resistance and profitability of the Company's overseas assets.

We support high-quality development and forge new quality productive forces with scientific and technological innovation, adhere to the strategy of serving the country, adapt to the urgent need of the Company's development, stick to the digital intelligent development, strengthen the basic and forward-looking technology research, implement demonstrative project of science and technology, further enhance the independent innovation ability, create new forms of productive forces, and support and lead the Company's high-quality development.

The Company adheres to the orientation of promoting profitability, improving efficiency and creating value, works hard to ensure the safety of production, energy conservation and efficiency improvement, and the protection of the ecological environment, strengthens and optimizes major industries and enhances industrial coordination. With our focus on the "one benefits and five rates"[22](一利五率), we strive to improve quality and efficiency, continuously optimize asset structure, enhance the Company's operational vitality, promoting the improvement operational efficiency and other indicators until reaching the international advanced level.

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22 Refers to total profit, asset liability ratio, revenue cash collection rate, return on equity, R&D investment intensity, and overall labor productivity

APPENDIX

11.1 About this Report

This report is the tenth "Environmental, Social and Governance Report" (《環境、社會及管治報告》) released by Huaneng International. This report focuses on the Company's efforts and contributions to the environment, society and governance, as well as our outlook for the future. We hope that through the publication of this report, we can strengthen communication and liaison with our stakeholders.

The Board of Directors and all the Directors hereby warrant that the contents of this report do not contain any false representations, misleading statements or material omissions and take joint and several liabilities for the authenticity, accuracy and completeness of the contents.

The Scope of the Subject of this Report

Huaneng International and its domestic and overseas affiliated branches and its wholly owned and controlled companies. Unless otherwise stated, the data disclosed in this report are about Huaneng International and its affiliated domestic subsidiaries and its wholly owned and controlled companies.

No major adjustments have been made to the disclosure scope hereof compared with that of the Company's previous ESG reports, and the statistical approaches adopted remain consistent.

Reporting Period

The Company's "Environmental, Social and Governance Report" (《環境、社會及管治報告》) is an annual report for the period from 1 January 2025 to 31 December 2025, and some of the statements and data are traced back to the previous year.

Reference Remarks

In order to facilitate the presentation and be easy to read, "Huaneng Power International, Inc." in this report is referred to as "Huaneng International", "Huaneng", "the Company" or "we". "China Huaneng Group Co., Ltd." in this report is referred to as "Group Company".

Content Compiling

The contents of this report are prepared in the light of the SEHK's "Environmental, Social and Governance Reporting Code" (《環境、社會及管治報告守則》), the Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies – Sustainability Report (Trial) (《上海證券交易所上市公司自律監管指引第14號—可持續發展報告(試行)》) and the Global Reporting Initiative (GRI) Sustainability Reporting Standards (GRI Standards) (《可持續發展報告標準》). The chapters of this report reflect the efforts and contributions made by the Company to achieve the 17 Sustainable Development Goals (SDGs) of the United Nations. Currency used in this report is expressed in RMB unless otherwise specified.

Access to this Report

You can download the Chinese and English version of this report on Huaneng International's website at https://www.hpi.com.cn. This report is published in both Chinese and English. In case of any discrepancies among the different versions, the Chinese version shall prevail. If you have any questions or suggestions, please call 010-63226999.

11.2 Statement of the Board of Directors

The Board of Directors assumes the overall responsibility for the Company's ESG management and disclosure and holds annual board meetings to discuss important ESG-related issues.

The strategy committee is in charge of supervising the Company's comprehensive risk management. The Company has incorporated safe production, environmental protection and other ESG material topics into the comprehensive risk management assessment process. The strategy committee meets regularly every year to discuss assessment over the comprehensive risk management. In 2025, the strategy committee deliberated on and approved the 2025 Comprehensive Risk Management Report (《公司2025年度全面風險管理報告》), which comprehensively summarized safe production, environmental protection, climate change and other ESG-related risks, and formulated detailed responses, with changes in material risks closely tracked and monitored.

At the 2025 annual board meeting, the Board emphasized the review of the assessment of ESG material topics, the establishment of environmental targets, and the targets completion progress. The Company identified 26 ESG reporting topics, including 3 material topics that possess both financial materiality and impact materiality. They are Environmental Compliance Management, Response to Climate Change, and Production Safety and Occupational Health. The Company sets five environmental performance targets in emission reduction, carbon reduction, waste reduction, energy saving and water resources management, covering Emissions Management, Energy Consumption Management, and Water Conservation and Wastewater Management.

2025 ESG Report provides detailed disclosure of the progress and key performance indicators in relation to the above work and ESG topics. The report was reviewed and approved by the Board of Directors on 24 March 2026.



11.3 Contents Index of the Environmental, Social and Governance (ESG) Reporting Code by the Stock Exchange of Hong Kong Limited

Environmental, Social and Governance Reporting Code	Page Number		Report Content
Governance Structure			
• A disclosure of the board's oversight of ESG issues; • A disclosure of 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); • A disclosure of how the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer's businesses.	110	11.2	Statement of the Board of Directors
Reporting Principles			
Materiality: (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.	17-21	2.8	Communication with Stakeholders and Identification of Material Issues
Quantitative: Information on the standards, methodologies, assumptions and/or calculation tools used, and source of conversion factors used, for the reporting of emissions/energy consumption (where applicable) should be disclosed.	12-16 109	2.7 11.1	Table of Key Performance Indicators in 2025 About this Report
Consistency: The issuer should disclose in the ESG report any changes to the methods or KPIs used, or any other relevant factors affecting a meaningful comparison.	109	11.1	About this Report
Reporting Boundary			
A narrative explaining the reporting boundaries of the ESG report and describing the process used to identify which entities or operations are included in the ESG report. If there is a change in the scope, the issuer should explain the difference and reason for the change.	109	11.1	About this Report



Environmental, Social and Governance Reporting Code		Page Number	Report Content	
Subject Area A: Environmental				
Aspect A1: Emissions				
A1	General Disclosure	55-63	5.3.4	Emissions Management
A1.1	The types of emissions and respective emissions data.	12-16 55-63	2.7 5.3.4	Table of Key Performance Indicators in 2025 Emissions Management
A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	12-16 55-63	2.7 5.3.4	Table of Key Performance Indicators in 2025 Emissions Management
A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	12-16 55-63	2.7 5.3.4	Table of Key Performance Indicators in 2025 Emissions Management
A1.5	Description of emissions target(s) set and steps taken to achieve them.	55-63	5.3.4	Emissions Management
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.	55-63	5.3.4	Emissions Management
Aspect A2: Use of Resources				
A2	General Disclosure	49-52 52-55	5.3.2 5.3.3	Energy Consumption Management Water Resources Management
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).	12-16 49-52	2.7 5.3.2	Table of Key Performance Indicators in 2025 Energy Consumption Management
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	12-16 52-55	2.7 5.3.3	Table of Key Performance Indicators in 2025 Water Resources Management
A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	49-52	5.3.2	Energy Consumption Management
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.	52-55	5.3.3	Water Resources Management
A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	–	Not applicable due to product nature	

Environmental, Social and Governance Reporting Code		Page Number	Report Content	
Aspect A3: The Environment and Natural Resources				
A3	General Disclosure	44-71	5	Empowering with Science and Technology Innovation to Accelerate Green Transformation
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	44-71	5	Empowering with Science and Technology Innovation to Accelerate Green Transformation
Subject Area B: Social				
Employment and Labour Practices				
Aspect B1: Employment				
B1	General Disclosure	86-87 87-88	7.1 7.2	Safeguarding Employees' Legitimate Rights and Interests Expanding Talent Development Pathways
B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	12-16	2.7	Table of Key Performance Indicators in 2025
B1.2	Employee turnover rate by gender, age group and geographical region.	12-16	2.7	Table of Key Performance Indicators in 2025
Aspect B2: Health and Safety				
B2	General Disclosure	74-83	6	Strengthening Foundations to Ensure Production Safety
B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	12-16 74-83	2.7 6	Table of Key Performance Indicators in 2025 Strengthening Foundations to Ensure Production Safety
B2.2	Lost days due to work injury.	12-16	2.7	Table of Key Performance Indicators in 2025

Environmental, Social and Governance Reporting Code		Page Number	Report Content	
B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	74-83 89	6 7.3	Strengthening Foundations to Ensure Production Safety Safeguarding Employees' Physical and Mental Well-being
Aspect B3: Development and Training				
B3	General Disclosure	82 87-88	6.3 7.2	Strengthening Employee Safety and Security Expanding Talent Development Pathways
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	12-16	2.7	Table of Key Performance Indicators in 2025
B3.2	The average training hours completed per employee by gender and employee category.	12-16	2.7	Table of Key Performance Indicators in 2025
Aspect B4: Labour Standards				
B4	General Disclosure	86-87	7.1	Safeguarding Employees' Legitimate Rights and Interests
B4.1	Description of measures to review employment practices to avoid child and forced labour.	86-87	7.1	Safeguarding Employees' Legitimate Rights and Interests
B4.2	Description of steps taken to eliminate such practices when discovered.	86-87	7.1	Safeguarding Employees' Legitimate Rights and Interests
Operating Practices				
Aspect B5: Supply Chain Management				
B5	General Disclosure	92-94	8.1	Deepening Multi-party Collaborative Cooperation
B5.1	Number of suppliers by geographical region.	12-16	2.7	Table of Key Performance Indicators in 2025
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.	92-94	8.1	Deepening Multi-party Collaborative Cooperation
B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	92-94	8.1	Deepening Multi-party Collaborative Cooperation
B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	92-94	8.1	Deepening Multi-party Collaborative Cooperation

Environmental, Social and Governance Reporting Code		Page Number	Report Content	
Aspect B6: Product Responsibility				
B6	General Disclosure	30-33	4.1	Ensuring Stable Energy Supply
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	–	Not applicable due to product nature	
B6.2	Number of products and service related complaints received and how they are dealt with.	12-16 95	2.7 8.2	Table of Key Performance Indicators in 2025 Empowering Development with Sincere Service
B6.3	Description of practices relating to observing and protecting intellectual property rights.	40-41	4.2.4	Protection of Intellectual Property Rights
B6.4	Description of quality assurance process and recall procedures.	–	Not applicable due to product nature	
B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	95 100-105	8.2 9	Empowering Development with Sincere Service Embracing the International Stage to Build a Model for Development
Aspect B7: Anticorruption				
B7	General Disclosure	34-36 36-39	4.2.2 4.2.3	Governance by Law Anti-corruption
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.	36-39	4.2.3	Anti-corruption
B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	36-39	4.2.3	Anti-corruption
B7.3	Description of anti-corruption training provided to directors and staff.	10-11 36-39	2.6 4.2.3	Company's ESG Responsibility Management Anti-corruption
Community				
Aspect B8: Community Investment				
B8	General Disclosure	96-97 100-105	8.3 9	Sharing Achievements and Co-creating Value Embracing the International Stage to Build a Model for Development
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	96-97 100-105	8.3 9	Sharing Achievements and Co-creating Value Embracing the International Stage to Build a Model for Development
B8.2	Resources contributed (e.g. money or time) to the focus area.	96-97 100-105	8.3 9	Sharing Achievements and Co-creating Value Embracing the International Stage to Build a Model for Development

Environmental, Social and Governance Reporting Code		Page Number	Report Content	
Aspect D：Climate-related Disclosures				
(I) Governance				
Governance	An issuer shall disclose information about: (a) the governance body(s) (which can include a board, committee or equivalent body charged with governance) or individual(s) responsible for oversight of climate-related risks and opportunities. (i) how the body(s) or individual(s) determines whether appropriate skills and competencies are available or will be developed to oversee strategies designed to respond to climate-related risks and opportunities; (ii) how and how often the body(s) or individual(s) is informed about climate-related risks and opportunities; (iii) how the body(s) or individual(s) takes into account climate-related risks and opportunities when overseeing the issuer's strategy, its decisions on major transactions, and its risk management processes and related policies, including whether the body(s) or individual(s) has considered trade-offs associated with those risks and opportunities; (iv) how the body(s) or individual(s) oversees the setting of, and monitors progress towards, targets related to climate-related risks and opportunities (see paragraphs 37 to 40), including whether and how related performance metrics are included in remuneration policies (see paragraph 35); and (b) management's role in the governance processes, controls and procedures used to monitor, manage and oversee climate-related risks and opportunities, including information about: (i) whether the role is delegated to a specific management-level position or management-level committee and how oversight is exercised over that position or committee; and (ii) whether management uses controls and procedures to support the oversight of climate-related risks and opportunities and, if so, how these controls and procedures are integrated with other internal functions	10-11 65-71	2.6 5.3.6	Company's ESG Responsibility Management Response to Climate Change

Environmental, Social and Governance Reporting Code		Page Number	Report Content	
(II) Strategy				
Climate-related risks and opportunities	An issuer shall disclose information to enable an understanding of climate-related risks and opportunities that could reasonably be expected to affect the issuer's cash flows, its access to finance or cost of capital over the short, medium or long term. Specifically, the issuer shall: (a) describe climate-related risks and opportunities that could reasonably be expected to affect the issuer's cash flows, its access to finance or cost of capital over the short, medium or long term; (b) explain, for each climate-related risk the issuer has identified, whether the issuer considers the risk to be a climate-related physical risk or climate-related transition risk; (c) specify, for each climate-related risk and opportunity the issuer has identified, over which time horizons – short, medium or long term – the effects of each climate-related risk and opportunity could reasonably be expected to occur; and (d) explain how the issuer defines 'short term', 'medium term' and 'long term' and how these definitions are linked to the planning horizons used by the issuer for strategic decision-making.	65-71	5.3.6	Response to Climate Change
Business model and value chain	An issuer shall disclose information that enables an understanding of the current and anticipated effects of climate-related risks and opportunities on the issuer's business model and value chain. Specifically, the issuer shall disclose: (a) a description of the current and anticipated effects of climate-related risks and opportunities on the issuer's business model and value chain; and (b) a description of where in the issuer's business model and value chain climate-related risks and opportunities are concentrated (for example, geographical areas, facilities and types of assets).	65-71	5.3.6	Response to Climate Change

Environmental, Social and Governance Reporting Code		Page Number	Report Content	
Strategy and decision-making	An issuer shall disclose information that enables an understanding of the effects of climate-related risks and opportunities on its strategy and decision-making. Specifically, the issuer shall disclose: (a) information about how the issuer has responded to, and plans to respond to, climate-related risks and opportunities in its strategy and decision-making, including how the issuer plans to achieve any climate-related targets it has set and any targets it is required to meet by law or regulation. (i) current and anticipated changes to the issuer's business model, including its resource allocation, to address climate-related risks and opportunities; (ii) current and anticipated adaptation and mitigation efforts (whether direct or indirect); (iii) any climate-related transition plan the issuer has (including information about key assumptions used in developing its transition plan, and dependencies on which the issuer's transition plan relies), or an appropriate negative statement where the issuer does not have a climate-related transition plan; and (iv) how the issuer plans to achieve any climate-related targets (including any greenhouse gas emissions targets (if any)), described in accordance with paragraphs 37 to 40; and (b) information about how the issuer is resourcing, and plans to resource, the activities disclosed in accordance with paragraph 22(a).	65-71	5.3.6	Response to Climate Change

Environmental, Social and Governance Reporting Code		Page Number	Report Content
	An issuer shall disclose information about the progress of plans disclosed in previous reporting periods in accordance with paragraph 22(a).	65-71	5.3.6 Response to Climate Change
	Current financial effect An issuer shall disclose qualitative and quantitative information about: (a) how climate-related risks and opportunities have affected its financial position, financial performance and cash flows for the reporting period; and (b) the climate-related risks and opportunities identified in paragraph 24(a) for which there is a significant risk of a material adjustment within the next annual reporting period to the carrying amounts of assets and liabilities reported in the related financial statements.	65-71	5.3.6 Response to Climate Change Upon assessment, the Company did not identify any significant risks that would result in material adjustments within the next annual reporting period to the carrying amounts of assets and liabilities reported in the related financial statements.
Financial position, financial performance and cash flows	Anticipated financial effect The issuer shall provide qualitative and quantitative disclosures about: (a) how the issuer expects its financial position to change over the short, medium and long term, given its strategy to manage climate-related risks and opportunities, taking into consideration: (i) its investment and disposal plans; and (ii) its planned sources of funding to implement its strategy; and (b) how the issuer expects its financial performance and cash flows to change over the short, medium and long term, given its strategy to manage climate-related risks and opportunities.	65-71	5.3.6 Response to Climate Change

Environmental, Social and Governance Reporting Code		Page Number	Report Content	
Climate resilience	An issuer shall disclose information that enables an understanding of the resilience of the issuer's strategy and business model to climate-related changes, developments and uncertainties, taking into consideration the issuer's identified climate-related risks and opportunities. An issuer shall use climate-related scenario analysis to assess its climate resilience using an approach that is commensurate with an issuer's circumstances. In providing quantitative information, the issuer may disclose a single amount or a range. Specifically, the issuer shall disclose: (a) the issuer's assessment of its climate resilience as at the reporting date, which shall enable an understanding of: (i) the implications, if any, of the issuer's assessment for its strategy and business model, including how the issuer would need to respond to the effects identified in the climate-related scenario analysis; (ii) the significant areas of uncertainty considered in the issuer's assessment of its climate resilience; and (iii) the issuer's capacity to adjust, or adapt its strategy and business model to climate change over the short, medium or long term; (b) how and when the climate-related scenario analysis was carried out. (i) information about the inputs used, including: (1) which climate-related scenarios the issuer used for the analysis and the sources of such scenarios; (2) whether the analysis included a diverse range of climate-related scenarios; (3) whether the climate-related scenarios used for the analysis are associated with climate-related transition risks or climate-related physical risks; (4) whether the issuer used, among its scenarios, a climate-related scenario aligned with the latest international agreement on climate change; (5) why the issuer decided that its chosen climate-related scenarios are relevant to assessing its resilience to climate-related changes, developments or uncertainties; (6) time horizons the issuer used in the analysis; and (7) what scope of operations the issuer used in the analysis (for example, the operation, locations and business units used in the analysis); (ii) the key assumptions the issuer made in the analysis; and (iii) the reporting period in which the climate-related scenario analysis was carried out.	65-71	5.3.6	Response to Climate Change

Environmental, Social and Governance Reporting Code		Page Number	Report Content	
(III) Risk Management				
Risk Management	An issuer shall disclose information about: (a) the processes and related policies it uses to identify, assess, prioritise and monitor climate-related risks, including information about: (i) the inputs and parameters the issuer uses (for example, information about data sources and the scope of operations covered in the processes); (ii) whether and how the issuer uses climate-related scenario analysis to inform its identification of climate-related risks; (iii) how the issuer assesses the nature, likelihood and magnitude of the effects of those risks (for example, whether the issuer considers qualitative factors, quantitative thresholds or other criteria); (iv) whether and how the issuer prioritises climate-related risks relative to other types of risks; (v) how the issuer monitors climate-related risks; and (vi) whether and how the issuer has changed the processes it uses compared with the previous reporting period; (b) the processes the issuer uses to identify, assess, prioritise and monitor climaterelated opportunities (including information about whether and how the issuer uses climate-related scenario analysis to inform its identification of climate-related opportunities); and (c) the extent to which, and how, the processes for identifying, assessing, prioritising and monitoring climate-related risks and opportunities are integrated into and inform the issuer's overall risk management process.	65-71	5.3.6	Response to Climate Change

Environmental, Social and Governance Reporting Code		Page Number	Report Content	
(IV) Metrics and Targets				
Greenhouse gas emissions	An issuer shall disclose its absolute gross greenhouse gas emissions generated during the reporting period, expressed as metric tons of CO_2 equivalent, classified as: (a) Scope 1 greenhouse gas emissions; (b) Scope 2 greenhouse gas emissions; and (c) Scope 3 greenhouse gas emissions.	12-16	2.7	Table of Key Performance Indicators in 2025
	An issuer shall: (a) measure its greenhouse gas emissions in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004) unless required by a jurisdictional authority or another exchange on which the issuer is listed to use a different method for measuring greenhouse gas emissions; (b) disclose the approach it uses to measure its greenhouse gas emissions； (i) the measurement approach, inputs and assumptions the issuer uses to measure its greenhouse gas emissions; (ii) the reason why the issuer has chosen the measurement approach, inputs and assumptions it uses to measure its greenhouse gas emissions; and (iii) any changes the issuer made to the measurement approach, inputs and assumptions during the reporting period and the reasons for those changes; (c) for Scope 2 greenhouse gas emissions disclosed in accordance with paragraph 28(b), disclose its location-based Scope 2 greenhouse gas emissions, and provide information about any contractual instruments that is necessary to enable an understanding of the issuer's Scope 2 greenhouse gas emissions; and (d) for Scope 3 greenhouse gas emissions disclosed in accordance with paragraph 28(c), disclose the categories included within the issuer's measure of Scope 3 greenhouse gas emissions, in accordance with the Scope 3 categories described in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011).	12-16	2.7	Table of Key Performance Indicators in 2025

Environmental, Social and Governance Reporting Code		Page Number	Report Content	
Climate-related transition risks	An issuer shall disclose the amount and percentage of assets or business activities vulnerable to climate-related transition risks.	65-71	5.3.6	Response to Climate Change
Climate-related physical risks	An issuer shall disclose the amount and percentage of assets or business activities vulnerable to climate-related physical risks.	65-71	5.3.6	Response to Climate Change
Climate-related opportunities	An issuer shall disclose the amount and percentage of assets or business activities aligned with climate-related opportunities.	65-71	5.3.6	Response to Climate Change
Capital deployment	An issuer shall disclose the amount of capital expenditure, financing or investment deployed towards climate-related risks and opportunities.	65-71	5.3.6	Response to Climate Change
Internal carbon prices	An issuer shall disclose: (a) an explanation of whether and how the issuer is applying a carbon price in decision-making (for example, investment decisions, transfer pricing, and scenario analysis); and (b) the price of each metric tonne of greenhouse gas emissions the issuer uses to assess the costs of its greenhouse gas emissions; or an appropriate negative statement that the issuer does not apply a carbon price in decision-making.	65-71	5.3.6	Response to Climate Change
Remuneration	An issuer shall disclose whether and how climate-related considerations are factored into remuneration policy, or an appropriate negative statement.	65-71	5.3.6	Response to Climate Change
Industry-based metrics	An issuer is encouraged to disclose industry-based metrics that are associated with one or more particular business models, activities or other common features that characterise participation in an industry. In determining the industry-based metrics that the issuer discloses, an issuer is encouraged to refer to and consider the applicability of the industry-based metrics associated with disclosure topics described in the IFRS S2 industry-based Guidance on implementing Climate-related Disclosures and other industry-based disclosure requirements prescribed under other international ESG reporting frameworks.	12-16	2.7	Table of Key Performance Indicators in 2025

Environmental, Social and Governance Reporting Code		Page Number	Report Content	
Climate-related targets	An issuer shall disclose (a) the qualitative and quantitative climate-related targets the issuer has set to monitor progress towards achieving its strategic goals; and (b) any targets the issuer is required to meet by law or regulation, including any greenhouse gas emissions targets. For each target, the issuer shall disclose: (a) the metric used to set the target; (b) the objective of the target (for example, mitigation, adaptation or conformance with science-based initiatives); (c) the part of the issuer to which the target applies (for example, whether the target applies to the issuer in its entirety or only a part of the issuer, such as a specific business unit or geographic region); (d) the period over which the target applies; (e) the base period from which progress is measured; (f) milestones or interim targets (if any); (g) if the target is quantitative, whether the target is an absolute target or an intensity target; and (h) how the latest international agreement on climate change, including jurisdictional commitments that arise from that agreement, has informed the target.	65-71	5.3.6	Response to Climate Change
	An issuer shall disclose information about its approach to setting and reviewing each target, and how it monitors progress against each target, including: (a) whether the target and the methodology for setting the target has been validated by a third party; (b) the issuer's processes for reviewing the target; (c) the metrics used to monitor progress towards reaching the target; and (d) any revisions to the target and an explanation for those revisions.	65-71	5.3.6	Response to Climate Change
	An issuer shall disclose information about its performance against each climate-related target and an analysis of trends or changes in the issuer's performance.	65-71	5.3.6	Response to Climate Change

Environmental, Social and Governance Reporting Code		Page Number	Report Content	
	For each greenhouse gas emissions target disclosed in accordance with paragraphs 37 to 39, an issuer shall disclose: (a) which greenhouse gases are covered by the target; (b) whether Scope 1, Scope 2 or Scope 3 greenhouse gas emissions are covered by the target; (c) whether the target is a gross greenhouse gas emissions target or a net greenhouse gas emissions target. If the issuer discloses a net greenhouse gas emissions target, the issuer is also required to separately disclose its associated gross greenhouse gas emissions target; (d) whether the target was derived using a sectoral decarbonisation approach; and (e) the issuer's planned use of carbon credits to offset greenhouse gas emissions to achieve any net greenhouse gas emissions target. (i) the extent to which, and how, achieving any net greenhouse gas emissions target relies on the use of carbon credits; (ii) which third-party scheme(s) will verify or certify the carbon credits; (iii) the type of carbon credit, including whether the underlying offset will be nature-based or based on technological carbon removals, and whether the underlying offset is achieved through carbon reduction or removal; and (iv) any other factors necessary to enable an understanding of the credibility and integrity of the carbon credits the issuer plans to use (for example, assumptions regarding the permanence of the carbon offset).	65-71	5.3.6	Response to Climate Change
Applicability of cross-industry metrics and industry-based metrics	In preparing disclosures to meet the requirements in paragraphs 21 to 26 and 37 to 38, an issuer shall refer to and consider the applicability of cross-industry metrics (see paragraphs 28 to 35) and (ii) industry-based metrics (see paragraph 36).	/	/	

11.4 Contents Index of the Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies – Sustainability Report (Trial) by the Shanghai Stock Exchange

Guidelines No. 14 for Self-Regulation of Listed Companies – Sustainability Report (Trial)[23]	Page Number	Report Content
A disclosing entity shall develop a sound corporate governance structure and sound internal rules; ensure its relevant internal bodies possess the requisite expertise and can effectively carry out such duties as the identification, assessment, management, and oversight of sustainability-related impacts, risks, and opportunities; and disclose the following governance information:		
(1) The internal bodies (such as the board of directors and specialized committees) tasked with managing and overseeing sustainability-related impacts, risks, and opportunities, including their composition, authority, tasks, and objectives;		
(2) The professional expertise and capabilities of the aforementioned internal bodies and personnel in executing and overseeing the strategies and rules and systems for sustainability-related impacts, risks, and opportunities;	10-11	2.6 Company's ESG Responsibility Management
(3) The information reporting mechanisms the company has established to ensure the aforementioned internal bodies and personnel can be promptly informed of the sustainability-related impacts, risks, and opportunities, including but not limited to the method and frequency of such reports;	65-71 110	5.3.6 Response to Climate Change 11.2 Statement of the Board of Directors
(4) Information on the setting of targets, execution of strategies, and achievement of goals by the aforementioned internal bodies and personnel in overseeing and managing the sustainability-related impacts, risks, and opportunities, including but not limited to information on internal controls, oversight procedures, oversight measures, and evaluations; and		
(5) The measures and methodologies employed by the aforementioned internal bodies and personnel to incorporate sustainability-related impacts, risks, and opportunities into the decision-making process as they oversee strategy implementation, major transaction decisions, and risk management activities of the disclosing entity.		

23 The remaining non-disclosure articles and encouraged disclosure articles are not listed in this table.

Guidelines No. 14 for Self-Regulation of Listed Companies – Sustainability Report (Trial)[23]	Page Number	Report Content
A disclosing entity shall identify and thoroughly assess the sustainability-related risks and opportunities that may have a material impact on such aspects as its business model, operations, development strategy, financial positions, operation results, cash flows, financing methods and costs, over the short, medium, or long term, and shall disclose:		
(1) The sustainability-related risks (such as the physical and transition risks associated with climate change) and opportunities that the company has identified, as well as the timeframes within which these risks and opportunities will have a material impact on the company; and	17-21 65-71	2.8 Communication with Stakeholders and Identification of Material Issues 5.3.6 Response to Climate Change
(2) The company's definitions for short-term, medium-term, and long-term periods, and the alignment of these definitions with its strategic development planning and resource allocation.		
A disclosing entity shall disclose the effect of sustainability-related impacts, risks, and opportunities on its strategies and decision-making, including but not limited to:		
(1) Methods employed by the company to develop strategies and make key decisions to address sustainability-related impacts, risks, and opportunities such as strategy decision-making mechanism, management approach etc.;	17-21 65-71	2.8 Communication with Stakeholders and Identification of Material Issues 5.3.6 Response to Climate Change
(2) The plans developed for achieving the relevant strategic goals and the qualitative and quantitative metrics to evaluate the progress on those plans; and		
(3) The assessments and judgments made by the company regarding the sustainability-related impacts, risks, and opportunities.		
A disclosing entity shall analyze and disclose the impacts of sustainability-related risks and opportunities on its current period's financial positions, operating results, and cash flows and whether such risks and opportunities will impact its financial positions, operating results, and cash flows in the following year.	17-21 65-71	2.8 Communication with Stakeholders and Identification of Material Issues 5.3.6 Response to Climate Change Upon assessment, the Company has identified no sustainability-related risks or opportunities that would have a material impact on the Company's financial position, operating results, and cash flows in the next financial year.

Guidelines No. 14 for Self-Regulation of Listed Companies – Sustainability Report (Trial)[23]	Page Number	Report Content	
A disclosing entity shall disclose its procedures for identifying, assessing, and managing the sustainability-related impacts, risks, and opportunities, including but not limited to:			
(1) Its methodology for identifying and assessing sustainability-related impacts, risks, and opportunities and its approach for estimating their likelihood, severity, and impact;	10-11	2.6	Company's ESG Responsibility Management
(2) Its priority ranking and ranking standards for the sustainability-related impacts, risks, and opportunities;	17-21	2.8	Communication with Stakeholders and Identification of Material Issues
(3) How the company monitors the sustainability-related impacts, risks, and opportunities such as management mechanism and detailed procedures; and	65-71	5.3.6	Response to Climate Change
(4) The integration of the processes for managing sustainability-related impacts, risks, and opportunities into the company's internal management procedures, and any adjustments thereto in the reporting period.			
A disclosing entity shall disclose the sustainability targets and related indicators mandated by Laws and Regulations and these Guidelines or based on the entity's needs, as well as the overall achievement of these targets as of the end of the reporting period and the progress made in the reporting period.	49-71	5.3	Accelerating the Green and Low-carbon Energy Transformation
A disclosing entity shall, in the context of the climate risks and opportunities it has identified, assess the extent to which its strategies, business models, and other similar aspects are adapted to climate change, and disclose:			
(1) Its assessment of how climate change impacts its strategies and business models, as well as how it responds to these impacts;	65-71	5.3.6	Response to Climate Change
(2) Significant uncertainties it has considered when assessing its climate adaptation; and			
(3) Its capacity to adjust its strategies and business models over the short, medium, and long term to adapt to climate change.			

Guidelines No. 14 for Self-Regulation of Listed Companies – Sustainability Report (Trial)[23]	Page Number	Report Content	
A disclosing entity shall disclose its transition plans, actions, and progress in responding to climate risks and opportunities, including but not limited to: (1) Adjustments made in the company's current and future strategies, business models, and resource allocation to respond to climate risks and opportunities; (2) Actions taken or planned by the company to update the production processes and equipment to directly or indirectly tackle climate risks and opportunities; (3) The transition plan created by the company to address climate risks and opportunities and the fundamental assumptions underpinning the plan; (4) The resources allocated by the company to execute the transition plan; and (5) The progress in executing the company's transition plan.	44-46 65-71	5.1 5.3.6	Grasping Opportunities of Energy Revolution Response to Climate Change
A disclosing entity shall calculate and disclose its total GHG emissions in the reporting period, and convert different GHG emissions into metric tons of carbon dioxide equivalent. The disclosing entity shall disclose Scope 1 and Scope 2 emissions. Any disclosing entity that uses carbon credits shall disclose the source and amount of the carbon credits it uses. Any disclosing entity that participates in carbon emissions trading shall disclose whether it has completed settlement and whether it has been ordered to take corrective actions or is formally investigated by a government agency within the reporting period.	12-16 65-71	2.7 5.3.6	Table of Key Performance Indicators in 2025 Response to Climate Change
A disclosing entity shall disclose the standards, methods, assumptions, or calculation tools used for GHG emissions accounting and state how emissions data are consolidated (such as by equity share proportion or financial and operating control). If there is a change to the accounting standards, methods, or assumptions in the reporting period, the disclosing entity shall state the reasons and specific impacts of these changes.	12-16	2.7	Table of Key Performance Indicators in 2025
A disclosing entity shall disclose information on GHG emissions reduction practices, including its participation in the various emissions reduction initiatives, emissions reduction targets and measures (e.g., management strategies, funding, development of technologies), and the outcomes. The disclosing entity shall disclose, for each scope[24] level, the amount of GHG emissions directly reduced by such emissions reduction measures as redesigning production procedures, updating equipment, improving manufacturing processes, and switching fuels, and convert the data into metric tons of carbon dioxide equivalent. Emissions reductions may be disclosed by each measure used to achieve the reduction. The disclosing entity shall disclose its registration and trading activities in relation to the national projects for voluntary GHG emissions reduction and the China Certified Emission Reduction (CCER), as well as its registration and trading of any other emissions reduction initiatives and emissions savings.	12-16 65-71	2.7 5.3.6	Table of Key Performance Indicators in 2025 Response to Climate Change

[24] Based on the nature of the industry and our operations, Scope 2 greenhouse gas emissions account for an extremely low proportion of the Company's total greenhouse gas emissions. Consequently, Scope 2 greenhouse gas emission reductions are not material to the Company. Therefore, this report only discloses Scope 1 greenhouse gas emission reductions.

Guidelines No. 14 for Self-Regulation of Listed Companies – Sustainability Report (Trial)[23]	Page Number	Report Content	
Any disclosing entity that discloses new technologies, products, and services that contribute to decarbonization and carbon neutrality and the related R&D progress shall provide an objective and prudent account of the specifics of the technologies or services developed based on the relevant processes and technologies, the R&D investment and progress in the relevant businesses, approvals or certifications it has obtained, its mass production capacity, and its existing orders, among other information.	65-71	5.3.6	Response to Climate Change
If a disclosing entity or one of its significant subsidiaries is listed on the registry of enterprises legally obligated to release environmental information, the disclosing entity shall disclose:			
(1) Information on pollutant discharge, including but not limited to the types, names, total discharge, certified total discharge, over-discharge, and environmental performance grade (if any) of or in relation to the key pollutants, characteristic pollutants, and the controlled substances specified by international environmental conventions. Disclosing entities are encouraged to present details on its pollutant discharge by category in the dimensions of business units or facilities, type of source, and type of activity.			
(2) The technologies and methods employed to treat pollutants, as well as the building, operation, and results achieved by pollution control facilities (e.g., reduction in the concentration/intensity or total amount of discharge);	12-16 55-63	2.7 5.3.4	Table of Key Performance Indicators in 2025 Emissions Management
(3) The targets set for the amount of discharge reduction of the key pollutants and the specific actions taken to achieve these targets; and			
(4) The impact of pollutant discharge on such groups as its employees and local communities; and.			
(5) Any major administrative penalties received by and any criminal liabilities charged against it in the reporting period for pollutant discharge, and whether there exist significant flaws in the company's environmental monitoring schemes and risk management practices.			

Guidelines No. 14 for Self-Regulation of Listed Companies – Sustainability Report (Trial)[23]	Page Number	Report Content	
If the wastes produced by a disclosing entity's production and operational activities have a material impact on the environment, the disclosing entity shall disclose the essential details of the wastes produced in the reporting period, including:			
(1) The total amounts (in metric tons) and density (e.g., per unit of revenue, unit of output, or facility) of hazardous wastes and non-hazardous wastes produced; and	12-16 55-63	2.7 5.3.4	Table of Key Performance Indicators in 2025 Emissions Management
(2) The treatment methods and disposal of hazardous and non-hazardous wastes.			
(3) The targets set for the amount of discharge of the wastes and the specific actions taken to achieve these targets.			
If a disclosing entity's production and operational activities have a material impact on the ecosystem or biodiversity, the disclosing entity shall disclose the below content in the reporting period:			
(1) The discontinuation of any production and operational activities and relevant facilities that were in the ecological red zones;	63-65	5.3.5	Management of Other Environmental Impacts
(2) Efforts and achievements in the protection and restoration of the areas around the production and operational sites, key land and marine ecological functional areas, ecological red zones, nature reserves, and other regions with critical ecological functions or ecologically fragile regions;			
(3) Efforts and achievements in the protection of wild plants and wildlife and protection and restoration of natural habitats;			
(4) Efforts and achievements in the protection, sustainable use, obtainment and benefit-sharing, monitoring and early warning, and risk management of biological genetic resources; and			
(5) Efforts and achievements in reducing its products' ecological footprint and reliance on the ecosystem, biological species and their habitats, and biological genetic resources over their lifecycles.			

Guidelines No. 14 for Self-Regulation of Listed Companies – Sustainability Report (Trial)[23]	Page Number	Report Content	
A disclosing entity shall disclose the following environmental information in accordance with the actual situations in the reporting period:			
(1) Risk assessments for environmental incidents, management protocols to prevent the related risks, and the overview of contingency plans for environmental emergencies;			
(2) The dates, locations, and duration of the major environmental emergencies in the reporting period; the classification of these incidents, the responses, and the outcome of these responses; their impacts on the company and the public; and its corrective actions; and	12-16 49-71	2.7 5.3	Table of Key Performance Indicators in 2025 Accelerating the Green and Low-carbon Energy Transformation
(3) Details on any major administrative penalties or criminal charges received from an ecological and environmental authority or other government agencies in the reporting period for an environmental incident, including but not limited to violations, the reasons for and the amount of the penalties, the impacts on the company's production and operational activities, and its corrective actions.			
A disclosing entity shall disclose the details of its energy use in the reporting period, including but not limited to:			
(1) An overview of energy usage, including but not limited to the total direct and indirect consumption (expressed in metric tons of standard coal) of energy (e.g., coal, electricity, gas, or oil) categorized by type, the energy consumption structure, and the overall energy intensity (e.g., expressed as per unit of output);	6-7 12-16	2.1 2.7	Company Profile Table of Key Performance Indicators in 2025
(2) Details on the use of clean energy, including but not limited to wind, solar, hydro, geothermal, biomass, and marine energy, as well as the types, total amounts, and proportions of clean energy used such as natural gas; and	49-52	5.3.2	Energy Consumption Management
(3) Energy saving goals and the specific actions taken, including but not limited to purchasing energy-efficient production, lighting, and temperature control equipment and implementing residual heat and pressure recovery and tiered energy use, and any specific challenges encountered in the use of energy.			
A disclosing entity shall disclose the specifics of its use of water resources in the reporting period, including but not limited to:			
(1) An overview of the usage of water resources, including but not limited to total water consumption (expressed in metric tons) and usage intensity (e.g., per unit of output); and	12-16 52-55	2.7 5.3.3	Table of Key Performance Indicators in 2025 Water Resources Management
(2) Water conservation goals and the specific actions taken, and any specific challenges encountered in the recycling and the use of water resources.			

Guidelines No. 14 for Self-Regulation of Listed Companies – Sustainability Report (Trial)[23]	Page Number	Report Content
A disclosing entity shall disclose the specifics of the circular economy activities conducted within the reporting period, including but not limited to: (1) The specific goals and plans established to achieve a circular economy; (2) The specific actions taken in the reporting period toward achieving a circular economy, including reducing the use of resources, improving resource efficiency, using renewable resources, and preventing and reducing waste creation and recycling wastes; and (3) The specific progress and achievements in attaining circular economy objectives in the reporting period, such as the recycling and comprehensive utilization of wastes (including the amount of waste recycled), the consumption of renewable resources, and the proportion of renewable resources in the total amount of resources consumed.	12-16 55-63	2.7 Table of Key Performance Indicators in 2025 5.3.4 Emissions Management
A disclosing entity shall disclose its contributions to rural revitalization in the reporting period, including but not limited to: (1) If a high proportion of the disclosing entity's businesses is in the rural and poverty alleviation areas, it shall, in the context of its business activities, disclose in detail how its support for rural revitalization and for current progress on poverty alleviation is integrated into its corporate strategies; (2) The specific actions taken to support the specialty industries and local employment in rural areas in the context of its business activities in the rural and poverty alleviation areas, as well as other specific actions taken to support rural revitalization; (3) The specific achievements, such as the total investment made and the scope and number of beneficiaries in the reporting period, and the impact on the company's brand and businesses.	12-16 96-97	2.7 Table of Key Performance Indicators in 2025 8.3 Sharing Achievements and Co-creating Value
A disclosing entity shall provide an overview of its contributions to the public and society in the reporting period, including but not limited to details on any charitable and volunteer activities organized, the amount of funds invested, number of personnel and time allocated, the outcomes, and the impact on its brand and businesses.	12-16 96-97	2.7 Table of Key Performance Indicators in 2025 8.3 Sharing Achievements and Co-creating Value

Guidelines No. 14 for Self-Regulation of Listed Companies – Sustainability Report (Trial)[23]	Page Number	Report Content
Any disclosing entity engaged in such activities as scientific research and technology development in an ethically sensitive domain such as life sciences and artificial intelligence shall provide an overview of its compliance with the ethics of science and technology in the reporting period, including but not limited to: (1) The fields of the company's scientific and technological activities such as research and development, and the ethical standards in science and technology it adheres to; (2) Rules within the company's internal management systems that concern the ethics of science and technology and the company's observance thereof, the establishment of any ethics (review) committee for science and technology programs and its operations; (3) Any instances of a violation of the ethics of science and technology, including an overview of such violations, the penalties imposed by competent authorities, the internal investigation and accountability processes conducted, and the corrective actions taken; and (4) The internal and external training on ethics in science and technology and efforts to raise public awareness on the related topics (if any).	–	Not applicable due to the nature of the Company's business
Any industrial enterprise that is a disclosing entity may disclose its efforts to enhance supply chain risk management and ensure the security and stability of the supply chain in the reporting period, including but not limited to: (1) An overview of its supply chain risk management program, including but not limited to its objectives and specific plans for supply chain risk management, risk response mechanisms, actions taken, and their outcomes; and (2) Actions, such as mergers, acquisitions, or reorganization and technological innovations, and the positive outcomes related to maintaining supply chain security and increasing the company's competitive edge in supply chain management.	92-94	8.1 Deepening Multi-party Collaborative Cooperation
If the balance of accounts payable (including notes payable) exceeds RMB30,000,000,000 or represents more than 50 percent of the total assets at the end of the reporting period, the disclosing entity shall disclose the amount of overdue accounts payable as of the end of the reporting period and the solutions it plans to implement. If a disclosing entity or one of its subsidiaries publicly indicates through the National Enterprise Credit Information Publicity System that it owes an overdue payment to a small and medium-sized enterprise ("SME"), it shall disclose the amount of the overdue payment, the payment term for SME suppliers, the reasons behind the overdue payment, whether the overdue payment has led to litigation or arbitration, and the solutions.	–	At the end of the reporting period, the balance of accounts payable (including notes payable) did not exceed RMB30 billion and does not represent more than 50% of the total assets. During the reporting period, the amount of overdue payments to SMEs by the Company and its holding subsidiaries was 0.

Guidelines No. 14 for Self-Regulation of Listed Companies – Sustainability Report (Trial)[23]	Page Number		Report Content
A disclosing entity shall provide an overview of the safety and quality management of its products and services in the reporting period, including but not limited to: (1) The establishment, execution, and specific measures of the product and service quality management systems and policies; (2) Quality management-related certifications received by the company and the certification status of its quality management systems for the major products and services; (3) Any significant safety or quality liability incidents in the reporting period relating to its products and services, including the nature of such incidents (e.g., administrative penalties), their impact and the amount of damages, and the actions taken in response and the progress on those actions; and (4) The establishment and implementation of after-sales service and product recall policies, the channels for receiving customer complaints, and the process and outcome of complaint handling.	30-33 95	4.1 8.2	Ensuring Stable Energy Supply Empowering Development with Sincere Service
A disclosing entity shall provide an overview of its data security and customer privacy programs in the reporting period, including but not limited to: (1) The development, functioning, and specific measures of its data security management system and certifications (if any); (2) Details on any data security incident that occurred in the reporting period, including its impact, the monetary amount involved, the actions taken in response and the progress on those actions; (3) The development and functioning of its customer privacy protection system; and (4) Details on any privacy breach incident that occurred in the reporting period, including its impact, the monetary amount involved, and the actions taken in response and the progress on those actions.	95 100-105	8.2 9	Empowering Development with Sincere Service Embracing the International Stage to Build a Model for Development

Guidelines No. 14 for Self-Regulation of Listed Companies – Sustainability Report (Trial)[23]	Page Number	Report Content	
A disclosing entity shall disclose the general information about its employees in the reporting period, including but not limited to:			
(1) Employment and compensation policies and how they are implemented, information including but not limited to job creation and flexible employment in the reporting period, a breakdown of the gender and age distribution of employees at the end of the period, as well as information on payment of salary and social security, labor disputes, employee turnover, protection of the rights of flexible employees and the compliance, fairness, and transparency of the recruitment and hiring procedures;	12-16 74-83	2.7 6	Table of Key Performance Indicators in 2025 Strengthening Foundations to Ensure Production Safety
(2) Basic information on occupational health and safety, including but not limited to the identification and assessment of occupational safety risks and their sources, the establishment and implementation of the occupational health and safety management systems, the obtainment of certain certifications, related training, the investment in and coverage of work-related injury insurance and workplace safety liability insurance, and the details of any safety accidents that occurred in the reporting period; and	86-87 87-88 100-105	7.1 7.2 9	Safeguarding Employees' Legitimate Rights and Interests Expanding Talent Development Pathways Embracing the International Stage to Build a Model for Development
(3) General information on employee career development and training, including but not limited to the disclosing entity's position structure, the mechanisms for employee promotion, selection, and career development, the type, frequency, and implementation of employee training, as well as the annual expenditure on training and the training coverage rate.			
A disclosing entity shall disclose the details about its engagement with investors and other stakeholders during the reporting period, including but not limited to:			
(1) The establishment and execution of its stakeholder engagement rules; and	17-21	2.8	Communication with Stakeholders and Identification of Material Issues
(2) The channels for receiving and responding to stakeholder comments and suggestions and how they are implemented, e.g., the method, frequency, and content of the relevant communications.			

Guidelines No. 14 for Self-Regulation of Listed Companies – Sustainability Report (Trial)[23]	Page Number	Report Content
A disclosing entity shall disclose the specifics of its anti-commercial bribery and anti-corruption efforts in the reporting period, including but not limited to:		
(1) The establishment and operation of the anti-commercial bribery and anti-corruption risk management system, and whether a whistleblower protection policy has been established;		
(2) An assessment of the commercial bribery and corruption risks;		
(3) The total count and percentage of board members, management-level staff and other employees who received anti-commercial bribery and anti-corruption training; and	34-36 36-39	4.2.2 Governance by Law 4.2.3 Anti-corruption
(4) Details about all commercial bribery and corruption incidents that occurred in the reporting period, including the specifics of the resulting dismissals or disciplinary actions against any board members, management-level staff and employees, investigations by competent authorities, termination or non-renewal of contracts with business partners, and any lawsuits against the disclosing entity, its board members, management-level staff or employees.		
A disclosing entity shall disclose the specifics of its efforts to combat unfair competition in the reporting period, including but not limited to:		
(1) The establishment, operation, and specific measures of the management system to prevent unfair competition (e.g., untrue publicity, implementing monopoly behaviors, and infringing on commercial secrets); and	34-36	4.2.2 Governance by Law
(2) If any litigation or significant administrative penalties arise from the disclosing entity's anti-competitive practices in the reporting period, it shall disclose the specifics about the litigation, the amount involved, the administrative penalties imposed, and its corrective actions.		

11.5 Contents Index of GRI Sustainability Reporting Standards (GRI Standards) of Global Reporting Initiative

GRI Standards Indicator	GRI Standards Description	Page Number	Report Content	
GRI 1: Foundation 2021				
GRI 2: General Disclosures 2021				
2-1	Organizational details	6-7	2.1	Company Profile
2-2	Entities included in the organization's sustainability reporting	109	11.1	About this Report
2-3	Reporting period, frequency and contact point	109	11.1	About this Report
2-4	Restatements of information	12-16	2.7	Table of Key Performance Indicators in 2025
2-5	External assurance	–	No external assurance temporarily	
2-6	Activities, value chain and other business relationships	92-94	8.1	Deepening Multi-party Collaborative Cooperation
2-7	Employees	86-87	7.1	Safeguarding Employees' Legitimate Rights and Interests
2-8	Workers who are not employees	86-87	7.1	Safeguarding Employees' Legitimate Rights and Interests
2-9	Governance structure and composition	7	2.2	Corporate Governance
2-22	Statement on sustainable development strategy	2-3	1	Chairman's Statement
2-23	Policy commitments	33-41	4.2	Party Building Leadership in Compliance and Lawfulness
		86-87	7.1	Safeguarding Employees' Legitimate Rights and Interests
		92-94	8.1	Deepening Multi-party Collaborative Cooperation
2-24	Embedding policy commitments	33-41	4.2	Party Building Leadership in Compliance and Lawfulness
		86-87	7.1	Safeguarding Employees' Legitimate Rights and Interests
		92-94	8.1	Deepening Multi-party Collaborative Cooperation
2-25	Processes to remediate negative impacts	10-11	2.6	Company's ESG Responsibility Management
2-26	Mechanisms for seeking advice and raising concerns	17-21	2.8	Communication with Stakeholders and Identification of Material Issues
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2-27	Compliance with laws and regulations	7	2.2	Corporate Governance
2-28	Membership associations	17-21	2.8	Communication with Stakeholders and Identification of Material Issues
2-29	Approach to stakeholder engagement	17-21	2.8	Communication with Stakeholders and Identification of Material Issues
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GRI Standards Indicator	GRI Standards Description	Page Number	Report Content	
GRI 3: Material Topics 2021				
3-1	Process to determine material topics	17-21	2.8	Communication with Stakeholders and Identification of Material Issues
3-2	List of material topics	17-21	2.8	Communication with Stakeholders and Identification of Material Issues
GRI 200 Economic				
Economic Performance				
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3-3	Management of material topics	6-23	2	About Us
GRI 201: Economic Performance 2016				
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201-2	Financial implications and other risks and opportunities due to climate change	65-71	5.3.6	Response to Climate Change
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205-3	Confirmed incidents of corruption and actions taken	36-39	4.2.3	Anti-corruption

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GRI 300 Environmental				
Energy (Material Issues: Energy Use, Clean and Sustainable Energy)				
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GRI 302: Energy 2016				
302-1	Energy consumption within the organization	49-52	5.3.2	Energy Consumption Management
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303-3	Water withdrawal	52-55	5.3.3	Water Resources Management
303-4	Water discharge	52-55	5.3.3	Water Resources Management
303-5	Water consumption	52-55	5.3.3	Water Resources Management
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GRI Standards Indicator	GRI Standards Description	Page Number	Report Content	
GRI 305: Emissions 2016				
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305-2	Energy indirect (Scope 2) GHG emissions	12-16	2.7	Table of Key Performance Indicators in 2025
305-4	GHG emissions intensity	12-16	2.7	Table of Key Performance Indicators in 2025
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	57-59	5.3.4.1	Exhaust Gas Management
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GRI 3: Material Topics 2021				
3-3	Management of material topics	59-61 61-63	5.3.4.2 5.3.4.3	Wastewater Management Waste Management
GRI 306: Effluents and Waste 2016				
306-1	Water discharge by quality and destination	59-61	5.3.4.2	Wastewater Management
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403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	78-81 82 83	6.2 6.3 6.4	Improving Quality and Efficiency and Ensuring Rigorous Implementation Strengthening Employee Safety and Security Solidifying Infrastructure Security Safeguards
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Supplier Social Assessment				
GRI 3: Material Topics 2021				
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GRI 414: Supplier Social Assessment 2016				
414-2	Negative social impacts in the supply chain and actions taken	92-94	8.1	Deepening Multi-party Collaborative Cooperation

11.6 Readers' Feedback

Dear readers:

Thank you for reading this report. We particularly wish to listen to your comments and suggestions, and your comments and suggestions are the driving force behind our continuous improvement of our report.

Please help to complete the relevant questions raised in the feedback form and mail it to the headquarters of the Company (headquarters address: Huaneng Building, Fuxingmennei Street 6, Xicheng District, Beijing).

1. Your overall assessment of the Company's "Environmental, Social and Governance Report" is:

   ○ good ○ fair ○ poor

2. Do you think this report reflects the Company's significant impacts on the environmental, social and governance?

   ○ good ○ fair ○ poor

3. What do you think of the information, and the accuracy and completeness of the indicator data disclosed in this report?

   ○ good ○ fair ○ poor

4. What do you think of the Company in serving its customers and protecting the interests of its stakeholders?

   ○ good ○ fair ○ poor

5. Which part of the report do you concern the most?

   _____

6. Is there any content that you are looking for but not found in this report? If yes, please write down what you are concerned about.

   _____

If you wish, you are welcome to provide personal information to facilitate further communication with you:

Name:	Occupation:
Organisation:	Contact Address:
Postal Code:	Tel:
Fax:	E-mail:


華能國際電力股份有限公司
Huaneng Power International, Inc.