

2022

Environmental, Social and Governance Report

China National Nuclear Power Co., Ltd.



About This Report

Reporting period

The report covers our business activities from January 1, 2022 to December 31, 2022, and also includes additional information beyond the stated reporting period.

Reporting cycle

Since the first report of China National Nuclear Power Co., Ltd released in 2019, we have continuously disclosed environmental, social and governance information to the public. This is the fifth ESG report from our company.

References to China National Nuclear Power Co., Ltd.

In the report, "China National Nuclear Power Co., Ltd." is also referred to as "CNNP", "the Company" or "we".

Reporting scope

The report covers all relevant information of CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP.

Data source

All data in the report are from official documents and statistics reports of CNNP.

Compilation conformance

This report is prepared in accordance with the relevant requirements of ESG for listed companies as set out in the Guideline on Environmental Information Disclosure by Listed Companies of Shanghai Stock Exchange (SSE). During the preparation of this report, reference was made to the GRI Sustainability Reporting Standards (GRI Standards), the United Nations Global Compact, ISO 26000: A Guide to Social Responsibility (2010), and the State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibilities issued by State-owned Assets Supervision and Administration Commission of the State Council (SASAC), and other relevant standards or principles.

Reliability assurance

The Company assures that no fictitious record, misleading statement, or material omission are included in this report, and will joint and several liability for the report's authenticity, accuracy, and completeness.

Report Access

This Report is available in both Chinese and English, including paper and electronic versions.

You can download the electronic version of the Report from CNNP official website (<http://www.cnnp.com.cn>).

For a hard copy of the Report, please contact us at cnnp@cnnp.com.cn or 010-8192 0188.

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A Letter to Shareholders

Dear shareholders,

The year 2022 marked a significant period in the history of the Party and the nation. CNNP adhered to Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, his crucial instructions, and decisions made at the 20th National Congress of the CPC in the Company's development. We faithfully delivered the new development philosophy and served the new development paradigm. With support and guidance from the Board of Directors, we sought for better business operation, effective implementation and stricter management to promote the positive, safe and orderly growth in the nuclear power industry and create greater value and returns for shareholders.

We deepen the reform and innovation with continuously improved governance level. Upholding the mission of developing the nuclear industry, strengthening the country, and bringing welfare to humanity, we are committed to the core values of "responsibility, safety, innovation, and collaboration" with an emphasis on building a modern corporate governance system. We continue to advance law-based corporate governance, follow business ethics, comprehensively improve compliance management, and leverage delicacy management to embed risk control and compliance management into the Company's key fields and processes of production and operation. In 2022, CNNP's corporate governance was further modernized with awards granted such as the High-quality Development Listed Company with the Most Investment Value of the 12th China Securities Golden Bauhinia Award and the Special Contribution Award for Corporate Governance of the 17th Golden Round Table Award for Special Contribution to Board Governance.

We harness our nuclear energy strengths to contribute to China's goal of achieving carbon peak by 2030 and carbon neutrality by 2060 (China's 30•60 Decarbonization Goal). Seizing the strategic opportunity presented by the 30•60 Goal, we pay close attention to global climate change issues and constantly shape a business structure featuring "nuclear energy + non-nuclear clean energy + emerg-

ing agile industry". We exploit the advantage of nuclear power generation in supplying clean baseload electricity, promote renewable energy, and tap into the value of commercial large reactors of conventional nuclear power bases. Several nuclear energy comprehensive utilization projects have been implemented, including nuclear energy for heating, hydrogen production, steam supply, seawater desalination, and isotope production. The Company continues to elevate our ability to identify and control environmental risks and adopt various effective measures to protect the environment. In 2022, CNNP's nuclear and non-nuclear clean energy generated 199.29 TWh of electricity, of which 185.24 TWh was produced by nuclear energy, an increase of 7.00% over 2021 and 14.05 TWh was by non-nuclear clean energy, up by 47.66% from 2021.

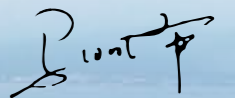
We work together to give people a better life. Our employees' rights and interests are legally protected. We take in their demands and care for their health. The Company also optimizes talent selection and employment, performance management, and salary incentives for different business segments to provide a broader platform for employees to realize their self-worth. Promoting ecological conservation and socio-economic development simultaneously, we share the benefits of nuclear energy with stakeholders by building clean energy industrial parks and zero-carbon demonstration villages.

Required by the new era and new requirements, CNNP will adopt a rational, coordinated and multi-pronged approach to ensuring nuclear safety and accelerate the building of a "clean, low-carbon, safe, and efficient" modern energy system and a power system mainly supported by non-nuclear clean energy to contribute to the Beautiful China initiative and China's 30•60 Decarbonization Goal.

Chairman and Party Secretary



General Manager and Deputy Party Secretary




About Us

Company Profile

China National Nuclear Power Co., Ltd. (Stock Code: 601985.SH, "CNNP" for short) is jointly invested by its controlling shareholder China National Nuclear Corporation (CNNC), China Three Gorges Corporation (CTG), China COSCO SHIPPING Corporation Limited, and China Aerospace Investment Holdings Ltd. The licensed business items within the Company's business scope are: power generation business, transmission business, power supply (distribution) business. Its general items include general equipment repair, intelligent transmission and distribution and control equipment sales, manufacturing of transmission, distribution and control equipment, technical service, technology development, technology consultation, technology exchange, technology transfer, technology promotion, power transmission and distribution project investment, and investment management.

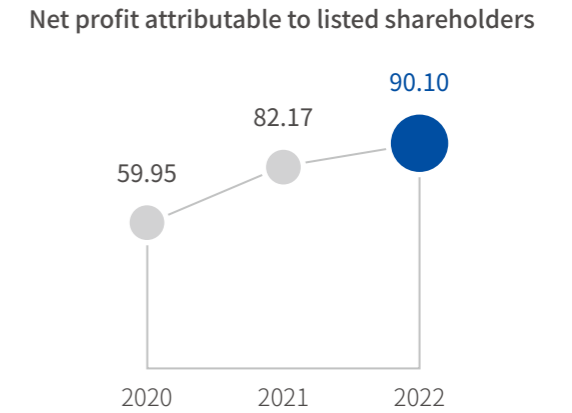
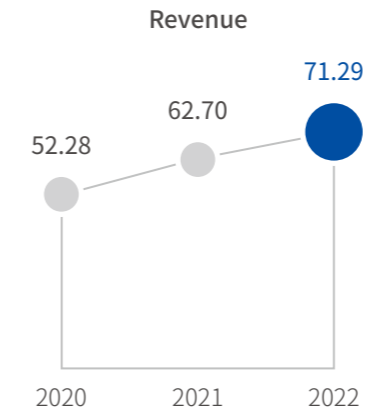
As of March 31, 2023, CNNP had controlled 25 nuclear power units in operation, with an installed capacity of 23.75 GW, 9 units under construction, with an installed capacity of 10.13 GW, and two units to be built after approval, with an installed capacity of 2.42 GW. The Company's non-nuclear clean energy have an installed capacity of 13.06 GW, including 4.26 GW of wind power and 8.80 GW of photovoltaic power. The Company also holds the stake of independent energy storage power plants with an installed capacity of 211 MW. The Company controlled an installed capacity of 7.64 GW under construction, including 1.56 GW of wind power and 6.08 GW of photovoltaic power.

Qinshan Nuclear Power Plant No.1	Type of reactor: PWR CNP 300 Rated power: 1X350MWe	First nuclear power plant ever built in the Chinese mainland, hailed as the "Pride of the nation"
Qinshan Nuclear Power Plant No.2	Type of reactor: PWR CNP 600 Rated power: 4X670MWe	First large commercial nuclear power plant independently designed, built, operated and managed by a Chinese company
Qinshan Nuclear Power Plant No.3	Type of reactor: HWR CANDU700 Rated power: 2X728MWe	China's first commercial HWR nuclear power plant
Fangjiashan Nuclear Power Plant	Type of reactor: PWR CNP1000 Rated power: 2X1089MWe	One of the first 1 GW reactors independently designed, manufactured, constructed, and operated by a Chinese company
Jiangsu Nuclear Power Plant	Type of reactor: PWR VVER1000 Rated power: 2X1060MWe 2X1126MWe Type of reactor: Improved PWR M310 Rated power: 2X1118MWe	A model project of China -Russia nuclear energy cooperation Final nuclear power project that started construction during the 12th Five-Year Plan Period (2011-2015)
Fuqing Nuclear Power Plant	Type of reactor: PWR CNP1000 Rated power: 4X1089MWe Type of reactor: HPR 1000 Rated power: 2X1161MWe	One of the first 1 GW reactors independently designed, manufactured, constructed and operated by a Chinese company The world's first Hualong One nuclear reactor (Hualong One is a third-generation reactor model independently developed by a Chinese company), hailed as a project of "advanced equipment for the country"
Hainan Nuclear Power Plant	Type of reactor: PWR CNP 600 Rated power: 2X650MWe	The southernmost and the first nuclear power plant to be built in the minority-inhabited areas in China
Sanmen Nuclear Power Plant	Type of reactor: PWR AP1000 Rated power: 2X1250MWe	The world's first AP1000 (the world's first proven Generation III+ pressurized water reactor) nuclear power plant
Sanmen Nuclear Power Plant Unit 3 and Unit 4	Type of reactor: PWR CAP1000 Rated power: 2X1251MWe	Domestic advanced third-generation PWR nuclear power
Zhangzhou Nuclear Power Plant Unit 1 and Unit 2	Type of reactor: HPR1000 Rated power: 2X1212MWe	One of the first projects after the bulk production of the "national business card" Hualong One reactor
Tianwan Nuclear Power Plant Unit 7 and Unit 8	Type of reactor: PWR VVER1200 Rated power: 2X1265MWe	The heads of state of China and Russia witnessed the commencement of the project
Xudabao Nuclear Power Plant Unit 3, Liaoning	Type of reactor: PWR VVER1000 Rated power: 2X1274MWe	The heads of state of China and Russia witnessed the commencement of the project
Small modular reactor, Hainan Nuclear Power Plant	Type of reactor: Small Reactor "Linglong One" Rated power: 1X125 MWe	Global first multipurpose modular small reactor technology demonstration project

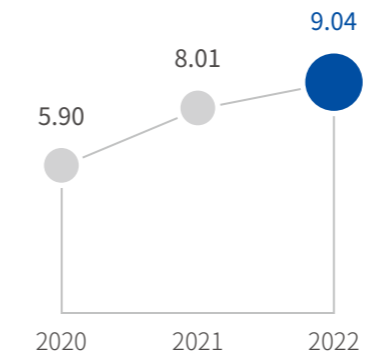
Statistics up to March 31, 2023

● Units in operation ● Units under construction

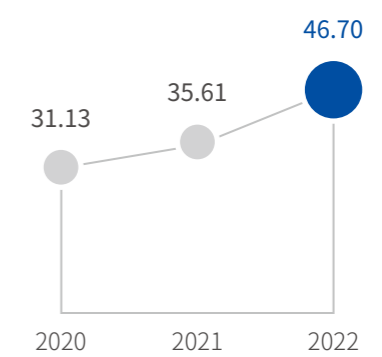
Key Financial Indicators (Unit: billion yuan)



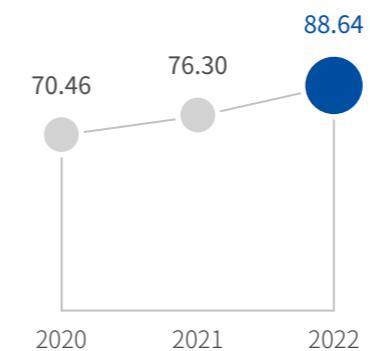
Net profit attributable to shareholders of the listed company after deducting non-recurring gains and losses



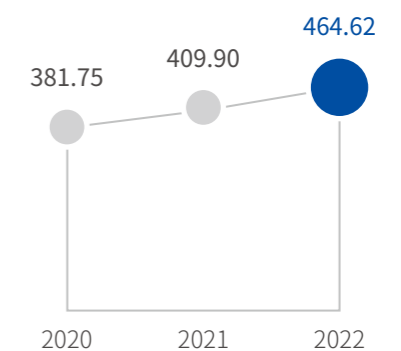
Net cash flow from business activities



Net assets attributable to shareholders of listed companies



Total assets



Development Strategy

As China enters the new development phase, the country plans to implement new development philosophy, build new development paradigm, and promote high-quality development. In response, CNNC has clarified its strategic positioning, strategic goals, and strategic guidelines. We set up a high-quality development index system for three core industries, as in nuclear energy, non-nuclear clean energy, and new agile industries, and proposed six projects and eight

capacity building programs. We also integrate human, financial and material resources into our high-quality development. These actions aim to achieve our long-range goal of becoming a world class competitive clean energy provider

Strategic Positioning

CNNP is the main arm of CNNC to develop its nuclear power business and the main channel to transform the advanced scientific and technological achievements. With the focus on investment, construction and operation of nuclear power projects, CNNP strives to promote the efficient utilization of cutting-edge nuclear technologies and the high-quality supply of clean and low-carbon energy, and is tasked with building a country with strong nuclear power and developing modern energy system.



Strategic Goal

2022 Progress	Now-2025	2025-2035
<ul style="list-style-type: none"> In 2022, we achieved zero serious injuries and zero work-related fatalities safe operation of nuclear power plants exceeded 240 reactor years. 	Ensuring 100% nuclear safety.	<h2>Basically achieve the goal of becoming a world-class clean energy service provider.</h2>
<ul style="list-style-type: none"> The total installed capacity of nuclear power units in operation and under construction has reached 32.63 GW. The installed capacity of non-nuclear clean energy projects in operation and under construction has amounted to 18.26 GW. 	Increasing the installed capacity to over 50 GW and striving to be the first in China in the installed capacity of controlling units in operation and under construction.	
<ul style="list-style-type: none"> Technology service business has achieved revenue growth of 2.57% year on year. 	Searching new possibilities for the multi-purpose use of nuclear energy.	<p>Increase the installed capacity of electric power to over 100 GW.</p>
<ul style="list-style-type: none"> Non-nuclear clean energy has generated 14.05 TWh of electricity. 	Enabling the value of the non-nuclear clean energy industry reach 10 billion yuan.	<p>Become one of the top 500 companies in the world.</p>
<ul style="list-style-type: none"> The perovskite solar cell project of the agile industry has accelerated R&D with orderly advancing hydrogen energy and energy storage projects. 	Achieving breakthroughs in the agile clean technology industry.	<p>The operation indicators of nuclear power will remain top-class in the world, and the operation performance of non-nuclear clean energy will also lead the industry.</p>
<ul style="list-style-type: none"> Three of the 5 domestic R&D projects have completed R&D tasks. A total of 18 operating units achieved full marks in WANO composite index, with an average mark of 98.58, leading the world in safety performance. 	Resolving key technology bottlenecks and leading the world business performance.	<p>Nuclear energy will be commercialized and industrialized in fields like power, heating, seawater desalination, hydrogen production etc.</p>
<ul style="list-style-type: none"> Revenues and total profits have grown steadily as per set targets. 	Achieving the revenue and total profit targets.	<p>The nuclear power industry standards made by CNNP will be widely adopted and CNNP will be able to provide a package of solutions to the world.</p>
		<p>The new agile industry will be effectively expanded, with its business income accounting for more than 10%.</p>

Strategic Guidelines



Scale-up

Coordinating efforts on business development, asset management, marketing, talent development, and value creation, and enhancing the capacity of energy supply to build a bigger, better, stronger company.



Standardization

Advancing standardization of technical and managerial positions and processes in all business and functional areas, and building an efficient, flexible, and standardized management system to increase profitability.



Internationalization

Expanding global presence, fostering global business operations, improving international management capability and gaining a greater say to build a world-class nuclear energy company.



Governance

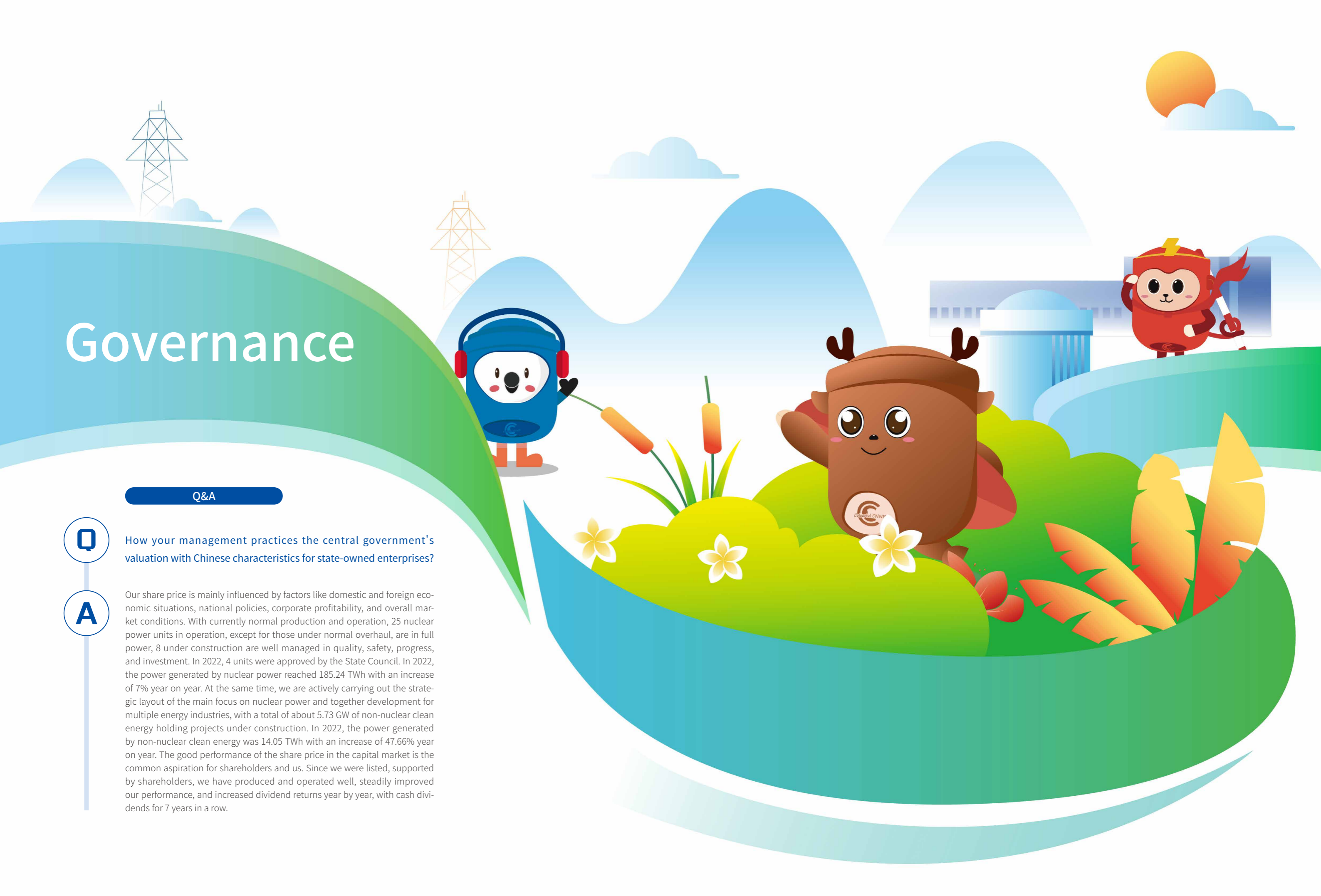
Q&A

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How your management practices the central government's valuation with Chinese characteristics for state-owned enterprises?

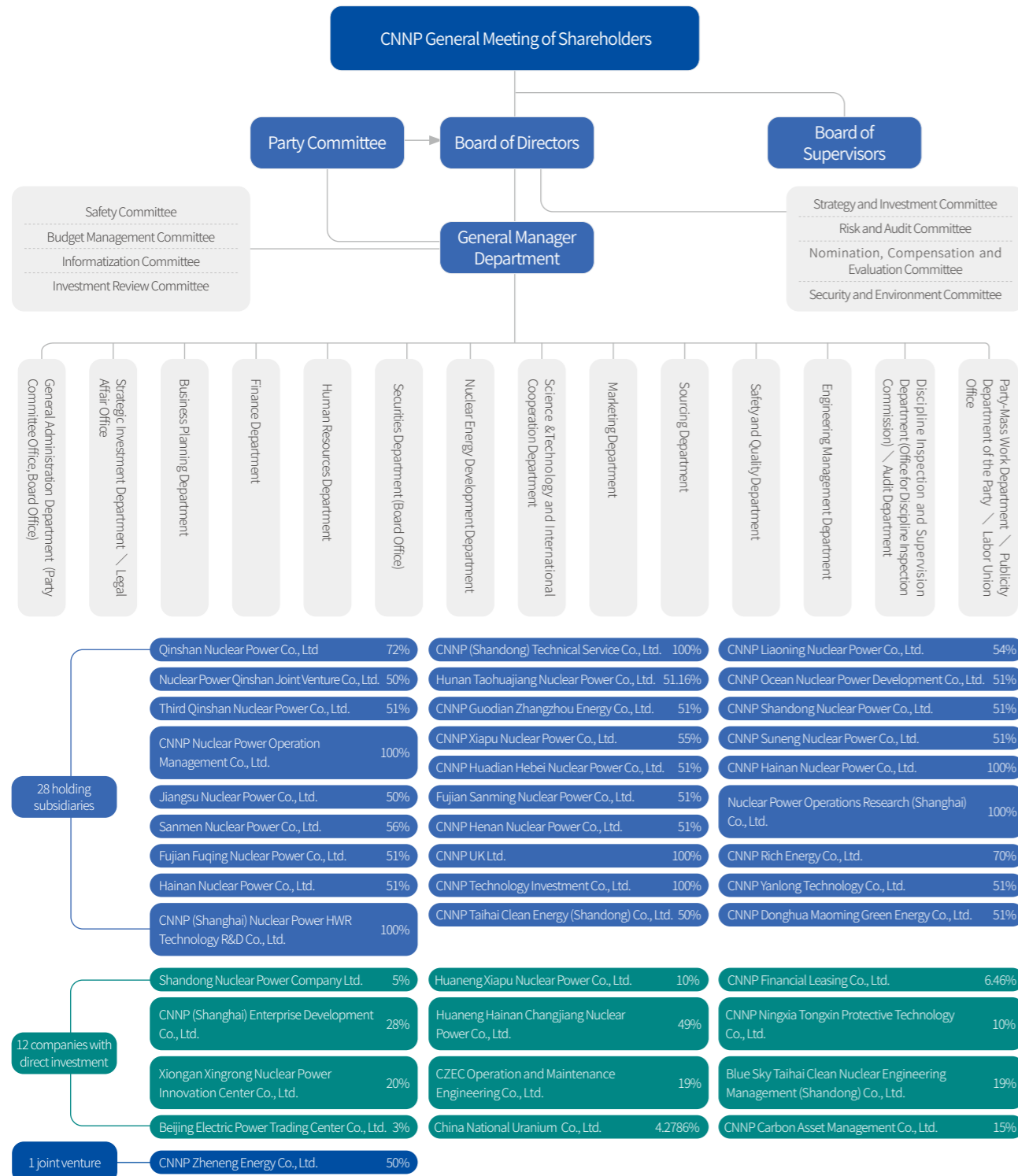
A

Our share price is mainly influenced by factors like domestic and foreign economic situations, national policies, corporate profitability, and overall market conditions. With currently normal production and operation, 25 nuclear power units in operation, except for those under normal overhaul, are in full power, 8 under construction are well managed in quality, safety, progress, and investment. In 2022, 4 units were approved by the State Council. In 2022, the power generated by nuclear power reached 185.24 TWh with an increase of 7% year on year. At the same time, we are actively carrying out the strategic layout of the main focus on nuclear power and together development for multiple energy industries, with a total of about 5.73 GW of non-nuclear clean energy holding projects under construction. In 2022, the power generated by non-nuclear clean energy was 14.05 TWh with an increase of 47.66% year on year. The good performance of the share price in the capital market is the common aspiration for shareholders and us. Since we were listed, supported by shareholders, we have produced and operated well, steadily improved our performance, and increased dividend returns year by year, with cash dividends for 7 years in a row.



Governance Structure

In strict compliance with *Chinese Company Law*, the *Securities Law*, and the *Rules Governing the Listing of Stocks on Shanghai Stock Exchange*, the Company has released its *Articles of Association (Revised Draft)* to carry out standardized operation. Our internal governance structure with reasonable labor division, clarified responsibilities, and effective checks and balances is composed of the General Meeting of Shareholders, the Board of Directors and its specialized committees, the Board of Supervisors and the senior management. Meanwhile, we have hired independent agencies to audit the Company and assist in optimizing internal governance for protecting the rights of shareholders and other stakeholders, creating value for shareholders in the long term, and empowering corporate sustainability.



The board of directors

The Board directors are elected by the General Meeting of Shareholders, with a term of three years, and can stand for re-election, and the candidate list for directors is submitted to the Meeting for discussion and decision through a proposal. There are four committees under the Board, namely Strategy and Investment Committee, Risk and Audit Committee, Nomination, Compensation and Evaluation Committee, and Security and Environment Committee. Highly responsible for shareholders, each specialized committee gives full professional advantages in development strategies, major investments, financial audits, and evaluation of compensation and performance for the senior management to strongly support scientific decision-making for the Board. In 2022, 8 Board meetings were held.

The Company is committed to fostering a diversified Board. The members of the Board include professional and experienced personnel such as senior engineers, senior accountants, and senior political engineers, and diversification is shown from professional skills, industry experience, age, gender, and qualifications. As of December 31, 2022, the Board had a total of 12 directors, including 4 independent directors, accounting for 33.33% of the total, 1 employee director, and 3 female directors, accounting for 25% of the total.

The Company focuses on enhancing the independence of Board decision-making and governance. The nomination and election of independent directors comply with relevant laws, regulations, and the Articles of Association, and have no relationship with the Company that affects their independence. Independent directors conscientiously fulfill their responsibilities and obligations, exploit their professional advantages to the full, and strictly maintain independence. They also actively participate in corporate governance and major decisions and express independent opinions on matters such as the Company's regular reports, profit distribution, director replacement, non-public offerings, and related-party transactions to ensure corporate safe and stable operation. The chairmen of the Risk and Audit Committee and the Nomination, Compensation and Evaluation Committee are independent directors, while the chairmen of the Strategy and Investment Committee and the Security and Environment Committee are non-independent directors.

Board members and their professional functions

Lu Tiezhong	Chairman, Non-independent Director, Chairman of the Strategy and Investment Committee	Researcher-level senior engineer
Ma Mingze	General Manager, Non-independent Director, Chairman of the Security and Environment Committee, Member of the Strategy and Investment Committee	Researcher-level senior engineer
Ma Hengru	Independent Director, Chairman of the Nomination, Compensation and Evaluation Committee, Member of the Risk and Audit Committee, Member of the Security and Environment Committee	Researcher-level senior engineer
Lu Daen	Independent Director, Chairman of the Risk and Audit Committee, Member of the Strategy and Investment Committee	Senior accountant I
Qin Yuxiu	Independent Director, Member of the Risk and Audit Committee, Member of the Nomination, Compensation and Evaluation Committee	Senior economist with lawyer qualification
Huang Xianpei	Independent Director, Member of the Risk and Audit Committee, Member of the Nomination, Compensation and Evaluation Committee	Senior engineer
Liu Xiuhong	Non-independent Director, Member of the Risk and Audit Committee, Member of the Nomination, Compensation and Evaluation Committee	Senior accountant
Wu Han Jing	Non-independent Director, Member of the Strategy and Investment Committee, Member of the Security and Environment Committee	Senior engineer
Yu Guoping	Non-independent Director, Member of the Strategy and Investment Committee, Member of the Security and Environment Committee	Senior engineer
Guan Jielin	Non-independent Director, Member of the Strategy and Investment Committee, Member of the Security and Environment Committee	Researcher-level senior engineer
Wu Yining	Non-independent Director, Member of the Strategy and Investment Committee, Member of the Nomination, Compensation and Evaluation Committee	With accounting professional qualifications
Luo Xiaowei	Employee Director, Board Secretary	Economist, Senior political engineer

The board of supervisors

The Board of Supervisors implements supervision in accordance with laws and regulations to safeguard the lawful rights of the Company, shareholders and creditors, and ensure the Company's healthy development. The 4th Board of Supervisors consists of 5 supervisors, including 2 employee supervisors, accounting for 40% of the total, and 1 female supervisor, accounting for 20% of the total, as an employee supervisor. In 2022, CNNP was honorably listed in the "Outstanding Performance List" of the Board of Supervisors of A-share listed companies.

The general meeting of shareholders

In 2022, the Board of Directors convened two General Meetings of Shareholders, including one annual meeting and one extraordinary meeting. All meetings were convened in compliance with the *Company Law*, the *Securities Law*, the *Rules and Procedures of the General Meeting of Shareholders*, and the *Articles of Association*. The qualifications of the attendees and conveners were legal and valid, so were the procedures, methods and results of voting at the meetings. All proposals were successfully voted through.

Governance Mechanism

The decision-making system composed of "the Articles of Association, Three Regulations and Four Rules"

The Company has passed the decision-making system composed of "the Articles of Association, Three Regulations and Four Rules" which specifies the decision-making subjects and conditions for 35 categories and 230 matters, including decisions on major matters, appointment and removal of key-post holders, major project arrangement and the use of large amount of funds. The system further clarifies the rights and responsibilities of the Board of Directors, Party Committee, and other main bodies, decides major matters by regulations and with efficient processes, and comprehensively meets the decision-making needs of corporate production and operation matters.

Compliance operation

The Company has strengthened compliance management and formulated 53 improvement measures in seven major areas, including organizational foundation institutional development and mechanism operation, to effectively support and ensure the Company's compliance operation and reform and development. In 2022, we participated in compiling training materials for power enterprise compliance practitioners organized by the China Electricity Council (CEC) and published the Legal Compliance Guidelines for Nuclear Power Operation and Management.

 Compliance operation	 Improving the institutional system	 Improving the working mechanism	 Compliance culture cultivation
The Party Secretary fulfills the primary responsibility of promoting the rule of law. The Board of Directors of the Company is the top decision-making body for compliance management, and the Risk and Audit Management Committee is responsible for promoting compliance-related management.	We have organized the development and release of one compliance manual one compliance management system and 11 compliance management guidelines, and completed the sorting of compliance risk database, compliance case database, and compliance obligation list in key areas. A hierarchical and classified compliance management system has been taken shape.	We have sorted out compliance obligations, control nodes, and key performance points, and guided business departments to consolidate the main responsibility in compliance management. We also implement compliance management reporting, rectification, and accountability mechanisms for violations.	We have released the compliant brand of CNNP"601985" and the cartoon image of "He Xiaohe". Various forms of compliance training are carried out in key areas such as the responsible fulfillment of directors and supervisors, and equity mergers and acquisitions. We have set up legal compliance lectures and timely organize the learning and interpretation of laws, regulations and cases to continuously promote the normalization and diversification of legal compliance training.

Comprehensive risk management

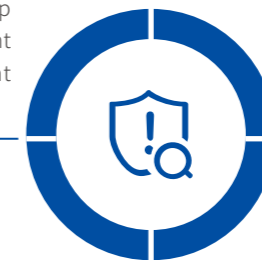
According to the *Guidelines on the Operation of Board of Directors Audit Committees of Companies Listed on Shanghai Stock Exchange*, *Articles of Association*, the *Implementation Rules for the Risk and Audit Committee of Board of Directors*, and other relevant laws and regulations, we improve our risk management system covering all subsidiaries and have formed a comprehensive organizational system for risk management composed of the decision-making and executive levels. The decision-making body, made up by the Board of Directors and the Risk and Audit Committee, is responsible for the effectiveness of corporate comprehensive risk management, decision-making on major risk matters, development and evaluation of the internal control system, and risk analysis and warnings for major projects and important investment matters. The executive body, composed of business divisions, the centralized risk management department, and the discipline inspection, supervision and audit department, builds three lines of defense, integrates comprehensive risk management into all areas and processes of corporate development, promotes full coverage of risk management and effectively controls major risks.

Risk warning and monitoring

The quantitative warning indicator system and monitoring and warning mechanism for major risks are kept improving. We utilize national real-time monitoring and management platforms for big data safety and environmental protection. For instance, digital platforms for dual-prevention mechanisms, and risk monitoring and warning systems for work safety in hazardous chemicals are adopted to identify risks for all employees, processes, time and aspects, well analyze and predict risk development trends, and implement grading control of risks and closed-loop management of hidden hazards. Risk management has realized the transformation from "post-event handling" to "pre-event prevention".

Risk assessment and reporting mechanism

We strengthen special risk assessment and improve our risk management capability of key areas and major projects. The reporting mechanism for major risk events has been improved, comprehensive risk management reports are prepared regularly, and the progress and handling of major risk events are timely reported to higher-level units.



Risk investigation and special rectification

We have released special plans for compliance risk prevention and governance in procurement and bidding, engineering construction, rural vitalization, etc. The problems are identified and rectified problems through comprehensive self-inspection, self-correction, and hierarchical supervision.

Risk management improvement

Managers of the risk internal control system have raised their understanding of risk management, internal control and compliance and promoted their professional level through internal and external training, communication with advanced enterprises, and other means. We collect risk monitoring and warning cases to summarize and promote innovative practices and practical experience.

Remuneration Management

CNNP sustains to improve the remuneration system to protect the lawful rights and interests of employees, fully activate the intrinsic driving force of development, and promote employees to create maximum value with the Company.

Remuneration management system

The Company conducts remuneration management according to laws and regulations and strengthens the linkage between performance and remuneration. An all-encompassing performance appraisal mechanism covering all employees is established and improved based on the *Regulations on Overall Performance Management*, the *Cadre Evaluation System*, etc. The Company develops a management plan for the gross payroll filing system, establishes a more market-oriented method to manage salary distribution, pilots in member units, and sets up a salary system with market competitiveness and incentives.

Executive equity and other compensation



Management body

- The Nomination, Compensation and Evaluation Committee, one of the four committees under the Board, consists of 5 outside directors, of which the chairman and two members are independent directors, ensuring the independence of the committee.
- The committee is responsible for formulating evaluation criteria for directors and executives, evaluating their performance and putting forward suggestions, and developing and verifying remuneration policies.



Management mechanism

- According to the *Implementation Rules for the Nomination, Compensation and Evaluation Committee under the Board of Directors of CNNP*, independent directors receive allowances as decided by the General Meeting of Shareholders, the scores of executives in the annual performance appraisal shall be considered in the compensation scheme, and the annual performance appraisal and compensation scheme be implemented once approved by the General Manager's Office, the Board of Directors, and the General Meeting of Shareholders.
- Some directors and executives are granted equity as an incentive. The second batch of granted options in the Company's first equity incentive plan has been successfully exercised.



Remuneration linked with ESG-related performance

- We have adjusted the accounting rules of annual remuneration for leaders of nuclear power enterprises, market-oriented enterprises, research institutes, etc. to promote a strong linkage between remuneration and business performance in work safety, non-nuclear clean energy market development, and other aspects. The adjustment is according to the *Management Measures for Annual Remuneration of Directors*, combined with the tenure system and contractual-based management requirements of directors, and based on delicacy management and classified assessment.
- Obligatory indicators targeting safety, environmental protection, and energy conservation and emission reduction etc. are set up to assess the management, and the results are linked to their pay. In case of safety or environmental incidents, the accountable management personnel will be punished with a proportional cut of performance-based and annual pay.

Ethical Policies and Practices

CNNP is against any act of corruption and bribery and resolutely implements effective anti-bribery and corruption systems. The Company is committed to holding a professional, just and honest manner in all business dealings and relationships to ensure that businesses are conducted with the highest ethical standards of commercial integrity, transparency, and loyalty by employees, subsidiaries, Board members, contractors, customers, suppliers and other personnel with business dealings with CNNP.

The management body

Abiding by *Chinese Anti-Unfair Competition Law*, the *Anti-Money Laundering Law*, and the *Interim Provisions on Prohibition of Commercial Bribery of the State Administration for Industry and Commerce*, CNNP has set up the Risk and Audit Committee under the Board of Directors for communicating with external auditors, supervising and reviewing their work, and regulating internal auditors. The committee assigns audit, financial and discipline inspection personnel to regularly audit all business operations, including finance, sourcing, and engineering construction. It evaluates the Company's operating performance in terms of risk management, identifies areas for improvement, formulates action plans, and carries out special rectification to eliminate corruption and other illegal activities.

Policies and actions

Improving business ethics policy

- We have developed the *Business Ethics and Compliance Policy* and integrated conduct improvement and discipline enforcement to combine with system improvement and governance systems. 394 systems have been optimized in engineering construction, sourcing, investment, finance, etc. We have organized relevant personnel to sign the responsibility letters for improving Party conduct and upholding integrity, issue the *Construction Manual on Party Building and Good Party Conduct and Clean Governance*, and ensure the Party Committee Secretary and other leaders take their principal responsibilities.
- We have developed the *Supplier Anti-Corruption Policy* and signed integrity agreements and anti-corruption provisions with all suppliers.

Deeply constructing the integrated supervision system

- We optimize relevant systems, and establish and improve standardized supervision manuals for key areas such as sourcing, engineering construction, and mergers and acquisitions. We deeply rectify corruption and discipline problems in engineering, sourcing, finance and remuneration, and further construct the information platform of the integrated supervision system.
- The supervision pattern of horizontal and vertical collaboration and internal and external interaction has been strengthened to further coordinate and plan various supervision. We have coordinated member units to together carry out over 50 times of political supervision, joint inspections, cross inspections, inspections, and audits, and supervised them to carry out 68 times of inspections and "looking back", achieving full coverage.

Continuously promoting the integrity culture

- We have issued the *Guidelines on Strengthening the Construction of Integrity Culture in the New Era* to construct clean CNNP, organized the compilation and learning of typical cases of the Four Malfeasances (favoring form over substance, bureaucratism, hedonism, and extravagance), reminded integrity during important holidays, and specially supervised and inspected key areas.
- We have strengthened warning education and launched a series of campaigns for Anti-corruption and Integrity Month to create a good working atmosphere for integrity.

Whistleblower protection

The Discipline Inspection and Supervision Department (Office for Discipline Inspection Commission) is responsible for managing anti-bribery compliance, and whistleblowing on business ethics, etc. We have issued the *Discipline Inspection and Supervision - Complaint Management Guide*, the *Supplier Anti-Corruption Policy*, and the *Business Ethics and Compliance Policy* to inform our protection policies and multiple safe and smooth channels of whistleblowing for employees, clients, business partners, and other stakeholders. Those who report in good faith and participate in investigations will be protected by the Company to prevent them from retaliation, and actions against this policy will be investigated.

Whistleblowing methods include phone calls, emails, fax and correspondence, in anonymity or real name. Stakeholders can report any misconduct and criminal acts to Discipline Inspection and Supervision Department to prevent risks in accounting, internal auditing, money laundering, bribery, environmental crimes, etc. The department will keep relevant materials and information confidential, and is prohibited to disclose any information of the whistleblowers, anonymous or not. The Board of Directors and senior management regularly receive statistics reports related to misconduct, as well as detailed information on key investigations, to monitor the Company's ethical and compliant operations.

Investor Relations

To effectively safeguard the legitimate rights and interests of investors, CNNP pays close attention to their opinions and feedback, and guarantees accurate and standardized disclosure of relevant information through a comprehensive and multi-channel information disclosure and communication platform. We continuously make corporate operations more transparent through two-way communication to earn investors' attentiveness and trust, thereby promoting a win-win result.



CSR Honors and Awards

- Listed Company with the Most Investment Value During the 14th Five-Year Plan Period of the China Securities Golden Bauhinia Award
- ESG Best Practice Cases Among A-share Listed Companies
- China Securities Journal Golden Bull Award in Social Responsibility
- People's Corporate Social Responsibility Annual Award
- Level A for Information Disclosure by Shanghai Stock Exchange

ESG Management

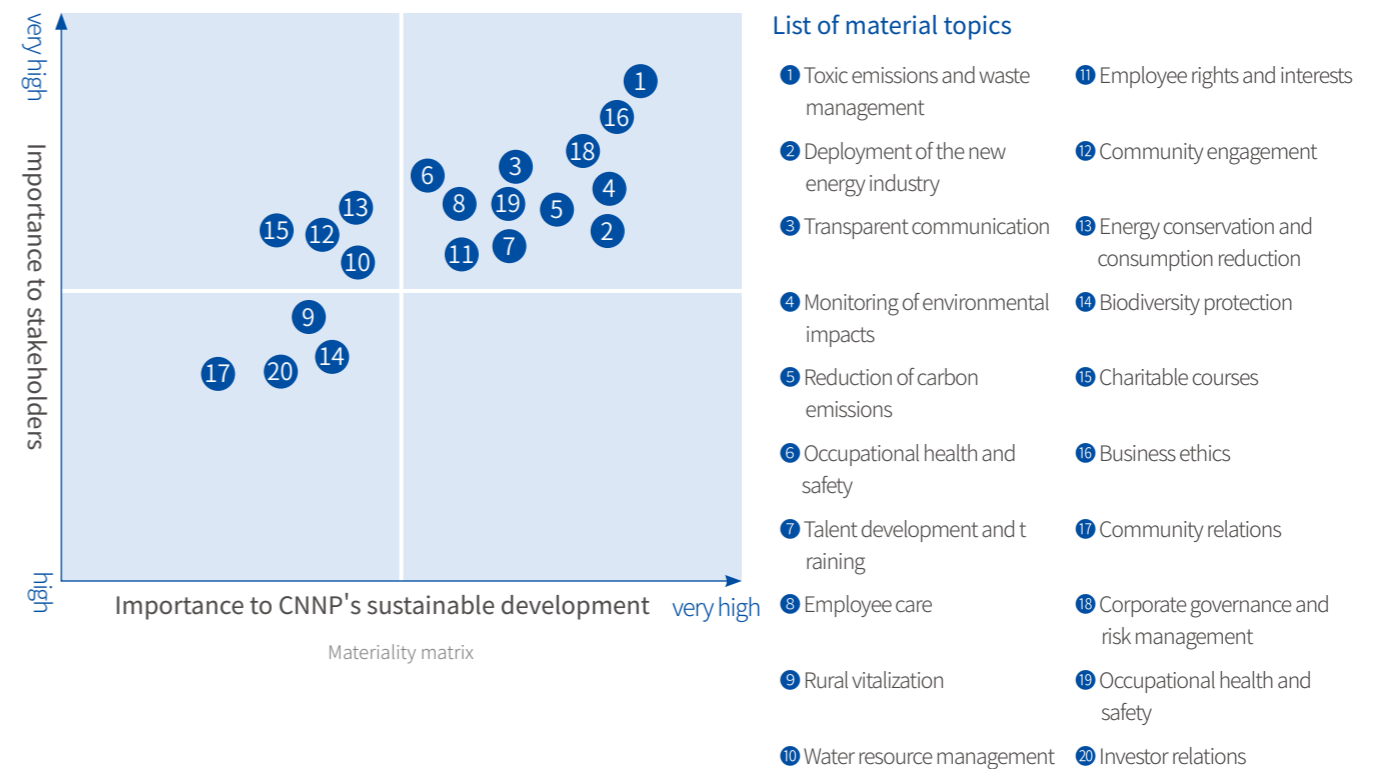
In order to improve ESG management level and performance steadily, CNNP has established an ESG management system headed by the Board of Directors, where through the supervision of Board of Supervisors, namely, the Strategy and Investment Committee, the Risk and Audit Committee, the Nomination, Compensation and Evaluation Committee, Security and Environment Committee, it manages performances such as operation and development, employee rights and interests, work safety and environmental protection.

In 2022, CNNP benchmarked itself against advanced power companies around the world to conduct research and interviews, carry out ESG diagnosis and assessment in environmental, social and governance dimensions, and evaluate the current management situation. Accordingly, we formulated the *Three-Year Action Plan for CNNP Delicacy Management in ESG*, setting goals and routes for ESG management in the coming three years, so as to steadily advance practices to improve ESG management and boost sustainable development.

In order to completely, accurately and objectively convey CNNP's environmental, social and governance efforts to internal and external stakeholders, we have established a sound ESG disclosure system, set up an ESG report management department and designated the contact person, coordinated all functional departments and member units to work on the ESG report, and held a press conference after the ESG report is reviewed and approved by the Board of Directors. Since 2012, CNNP has been publishing social responsibility reports, and since 2019, the ESG reports. In 2022, we released a biodiversity conservation report, set up an ESG column on our website, and issued ESG-related information publicly on ESG report, the Company's external website, as well as the official website of the Shanghai Stock Exchange (SSE), the National Nuclear Safety Administration, the China Nuclear Energy Association, and World Association of Nuclear Operators (WANO) etc. Consequently, we have formed an open and transparent disclosure mechanism for our environmental, social and governance information.

Materiality management

In accordance with the principles of materiality, integrity and stakeholder engagement, CNNP identifies material issues that have a significant impact on itself and are of general concern to stakeholders according to their "importance to CNNP's sustainable development" and "importance to stakeholders," and rank their importance and priority based on the opinions and suggestions from both internal and external parties.



ESG risk identification and management

Against the new opportunities and challenges ensuing from national policies, unbalanced power supply and demand, climate change and other factors on CNNP, we regularly identify and evaluate ESG risks, and carry out targeted managerial improvement actions to promote the Company's stable and sustainable development.



ESG Opportunities and Risks	Governance		Environmental		Social	
	Higher requirements for ESG management of listed companies controlled by central SOEs	Unbalanced power supply and demand	Addressing climate change	Impacts on biodiversity	Impacts of hazardous emissions	Human capital development
Opportunities and Risks on CNNP	<ul style="list-style-type: none"> The SASAC issued the <i>Work Plan for Improving the Quality of Listed Companies Held by Central Enterprises</i>. This document includes the conclusion and deepening of the reform content related to the Three-Year Action of SOE Reform, as well as new reform content that fits the characteristics of listed companies, such as investor relationship management, ESG information disclosure management, ESG information disclosure management, etc. Providing direction to promote our internal reform, improve ESG management level, and achieve management efficiency improvement. 	<ul style="list-style-type: none"> Due to the strict control of coal energy consumption by the country, the need for rapid economic development, and various factors such as cold waves and high temperatures, the contradiction between time and regional electricity supply and demand is particularly prominent. The nuclear power base is close to the area with strong power demand, which has natural convenience in power supply. The electricity price of nuclear power is not affected by fuel fluctuations, and the price is stable. Due to the stable and reliable nature of nuclear power generation and high utilization hours, nuclear power can be used as a base load energy for electricity, providing opportunities for the development of nuclear power. 	<ul style="list-style-type: none"> Climate change brings extreme weather and natural disasters, affecting the progress of project construction and posing a certain threat to the operation of the units. The greenhouse gas emissions of the whole industry chain of nuclear power are comparable to those of hydropower and wind power, only one-fifth of that of solar power generation, and about 2 orders of magnitude lower than coal power. The 30·60 Decarbonization Goal provides new opportunities for the development of the nuclear power industry. 	<ul style="list-style-type: none"> Nuclear power bases are mainly distributed in coastal areas, and the construction and operation of nuclear power plants may cause interference with the habitat and reproduction of marine organisms. It is conducive to promoting the establishment and improvement of the Company's ecological and environmental protection system, paying attention to marine ecology, conducting relevant risk identification, taking positive measures to protect the surrounding environment, and improving the level of biodiversity management. 	<ul style="list-style-type: none"> The radioactive waste, waste liquid and exhaust gas discharged from nuclear power plants must go through strict treatment before discharge to prevent harm to the environment and human body. It is conducive to promoting the Company to improve its hazardous emissions management mechanism and strictly control the generation of radioactive and non radioactive waste. 	<ul style="list-style-type: none"> Human resources loss and turnover cause rising re-employment costs and lack of technical personnel in important positions. The public tends to overestimate the risks of nuclear power, which reflects badly in personnel recruitment.
CNNP's Action	<ul style="list-style-type: none"> CNNP has completed 56 overall tasks and 306 overall measures for the Three-Year Action of SOE Reform in advance, summarized typical experiences and cases of reform, and been recommended by the SASAC multiple times. CNNP has launched and implemented a special improvement project for ESG management, including conducting ESG management diagnosis and evaluation work, forming the <i>CNNP ESG Diagnosis Report</i>, and comprehensively understanding the current status of ESG management. Based on the diagnostic report, CNNP formulate the <i>Three Year Action Plan for CNNP Delicacy Management in ESG</i>, clarifying the work path and three-year goals for improving ESG management. 	<ul style="list-style-type: none"> CNNP has actively promoted the construction of new nuclear power units, improved the reliability of nuclear power equipment in operation, and formulated measures such as strengthening rain and water forecasting, and ensuring power supply during peak winter seasons to ensure stable power supply. CNNP has accelerated the development of non-nuclear clean energy industries such as wind power and photovoltaic, contributing to the green and low-carbon transformation and upgrading of the energy and power industry structure. 	<ul style="list-style-type: none"> CNNP has enhanced cooperation with meteorological departments, improved the organization and planning system for emergency response, upgraded emergency equipment, and prepared emergency materials so as to better respond to meteorological emergencies and natural disasters. CNNP has actively participated in the carbon trading market and discloses carbon emission data and measures. 	<ul style="list-style-type: none"> CNNP has improved the ecological environment quality around nuclear power plants, scientifically monitored indicator organisms, and carried out remote sensing measurement of temperature and drainage. The construction plan avoids protected areas and protects the surrounding marine ecological environment. CNNP has invested special funds and consults experts to carry out proliferation and release, effectively improving the ecological environment of water bodies. CNNP has released a special report on biodiversity conservation, disclosing the impact of biodiversity and key highlight measures, and improving the disclosure mechanism. 	<ul style="list-style-type: none"> In line with nuclear safety laws and regulations, CNNP strictly reviews discharge applications and steps up efforts to minimize the amount of radioactive waste generated. All our nuclear power plants have improved monitoring of automation, standardization and informatization, promoted work toward issuing early warnings against environmental quality problems detected, and strengthened emission monitoring and oversight. 	<ul style="list-style-type: none"> CNNP has organized the construction of the CNNP six-tier team for sci-tech backbone talents, established and improved the talent pool of directors and supervisors, improved the special promotion of Top Talent Development Path, and continuously carried out the "Spark Plan" to select excellent talents. CNNP has provided employees with diversified material and cultural support and services to attract and retain talents.



Environmental

Q&A

Q

What are the development strategies of CNNP in the field of new energy? What are the plans for 2023?

A

When it comes to non-nuclear clean energy, CNNP adopts the strategy of simultaneously developing nuclear power and non-nuclear clean energy, with the former as the focus and the latter as an effective supplement. The Company plans to install 30 GW of wind and solar power at the end of 2025, and by the end of 2022, a total of 12.5 GW had been put in place. In addition, CNNP further studies a new generation of solar cell technology and energy storage technology, gradually transforming itself from an industrial investor to a supplier of non-nuclear clean energy products for upstream and downstream players and for technology integration. This will mark a shift of CNNP toward a company of business diversity.

In 2023, the Company aims to obtain permission to build 10 GW projects with 6 GW of newly installed non-nuclear clean energy capacity. Following specific measures will be taken: First, we will make applications, optimize the decision-making process, and improve work efficiency; Second, we will fully promote large base projects, focus on key areas, and implement two to three large projects; Third, based on existing industrial structures, we will promote development models such as "nuclear industry +"; Fourth, we will secure offshore wind power resources and work for breakthroughs in overseas projects; Fifth, seizing the opportunity presented by distributed power projects, we will accelerate the growth of installed capacity and study the feasibility of new business projects such as hydrogen production and ammonia production, which will then be advanced in a timely and orderly manner.

Climate Actions

Climate change has a significant impact on ecosystems across the globe with rising temperatures and sea levels and frequent extreme weather events posing severe challenges to human survival and development. Deeply aware of the new challenges imposed by climate change on China's nuclear power industry, CNNP identifies both opportunities and risks, leverages the advantages of nuclear energy as a clean, efficient, safe, and stable energy source, mitigates negative climate impacts, and improves ecosystem services.

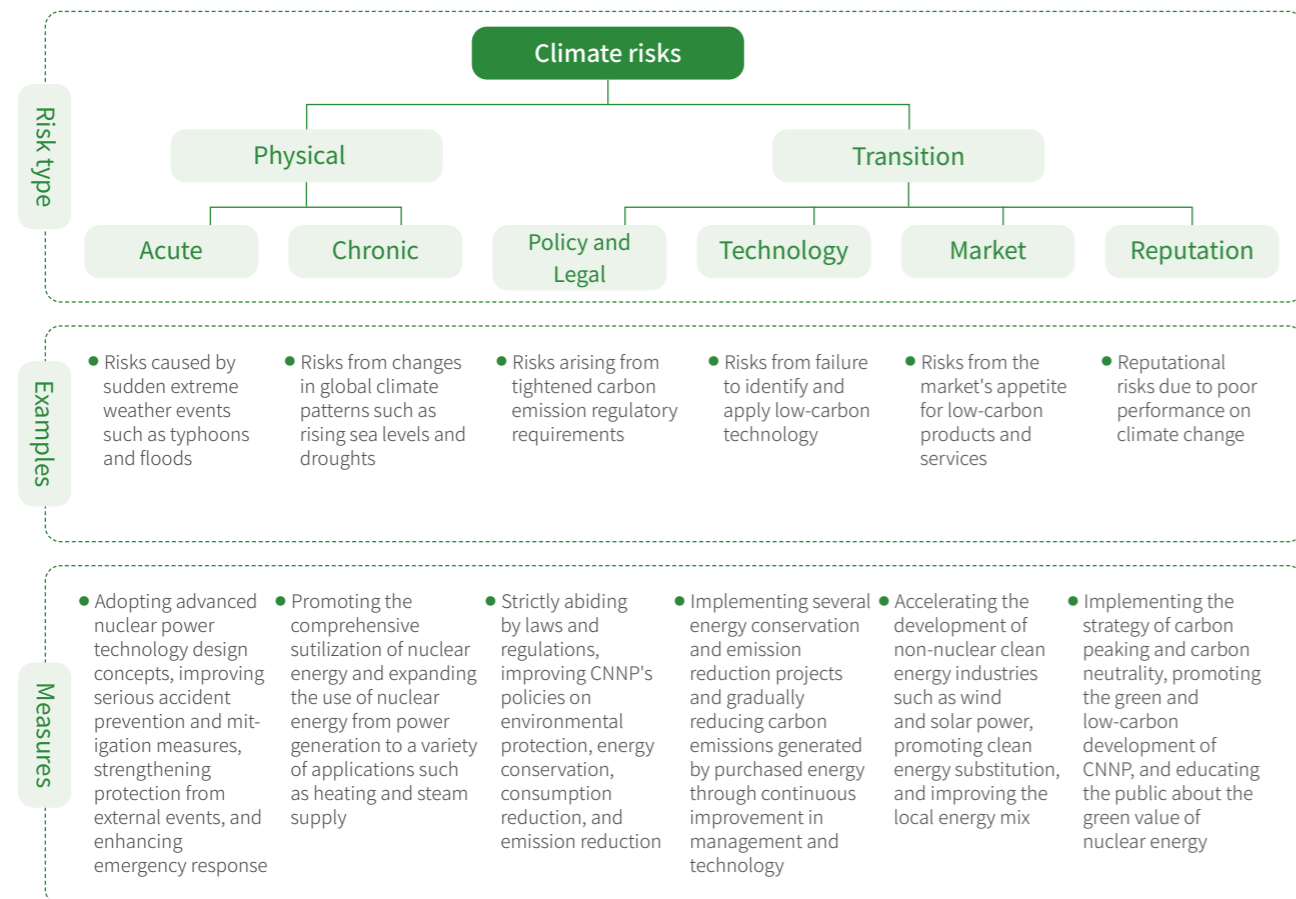
According to the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), the Company discloses information on governance, strategy, risk management, metrics and targets, assesses climate risks and opportunities, and takes actions to address climate change.

Governance

The Board of Directors oversees and reviews climate change risks. The Company's Security and Environment Committee has deliberated and adopted the *Motion on the Company's 2021 Work Safety Work Summary and 2022 Work Plan*. The Chairman heads the Work Safety Committee and makes decisions on important environmental protection matters with necessary resources provided for environmental protection management. The General Manager advances the establishment of the energy conservation, consumption reduction, and emission reduction system, approves relevant annual targets, and incorporates them into the Company's medium and long-term planning.

Strategy

According to the TCFD framework, the Company identifies physical risks, transition risks, and opportunities that may affect the Company's business. In the context of China's 30•60 Decarbonization Goal, the clean energy industry is embracing new opportunities for high-quality development, and in particular, the nuclear power industry looks promising.



Risk management

Climate change risks are incorporated into the comprehensive risk management of the Company, which is regularly reported to the Board of Directors. In 2022, the Company's Risk and Audit Committee held six meetings to deliberate and pass 23 proposals including the *Motion on the Company's 2022 Comprehensive Risk Management Report*. Sticking to the ecological bottom line and environmental quality, all subsidiaries step up efforts to prevent environmental risks and implement the graded management and control of environmental pollution sources, vulnerabilities, and risks. All nuclear power plants have been certified by the ISO 14001 environmental management system, and accordingly, each of them effectively controls the whole production process with targets, indicators, and management plans proposed to tackle important environmental factors such as carbon emissions and waste discharge. The consideration of climate change is also reflected in the construction of the Hualong One project, which is designed with different in-depth defense mechanisms. That means a variety of means to deal with potentially extreme natural disasters and external events.

Metrics / Targets

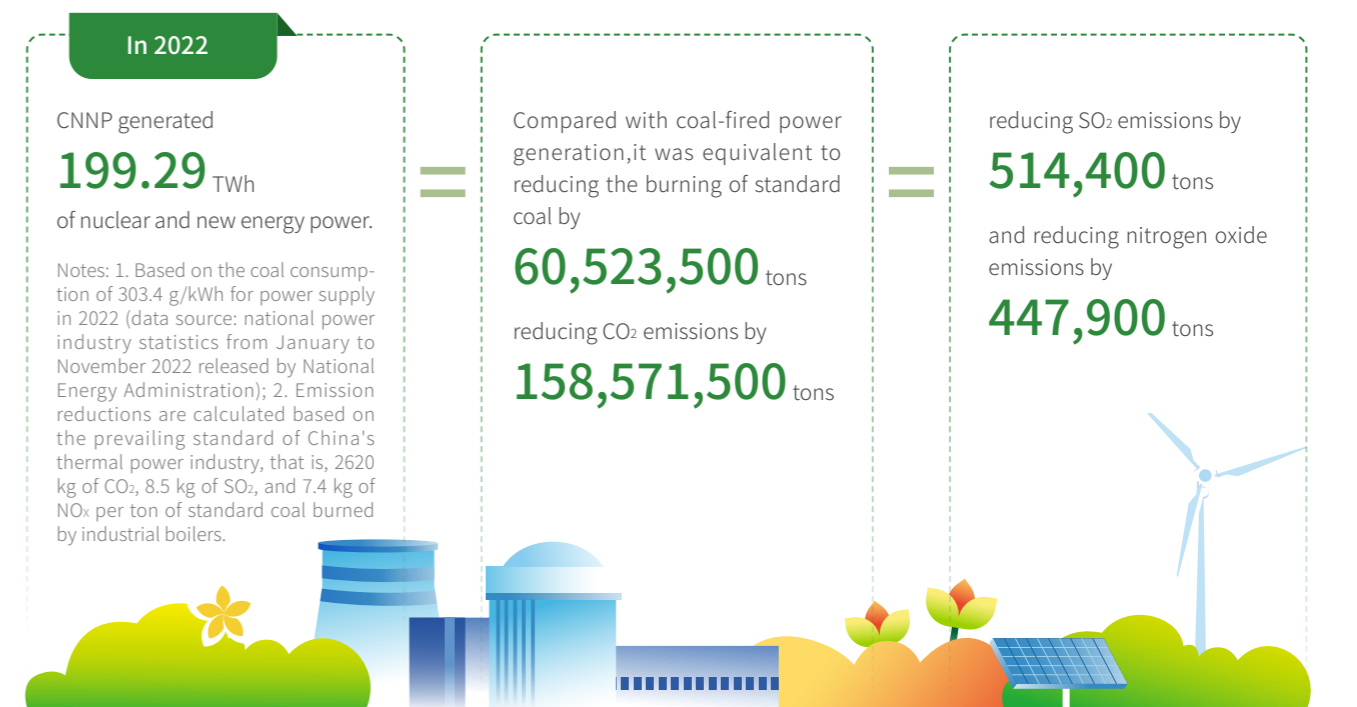
Steadily advancing carbon peaking and carbon neutrality, CNNP has improved the accounting and information disclosure system for CO₂ emissions and taken effective measures to control carbon emissions. In 2022, the actual value of energy consumption per 10,000 yuan of industrial added value, CO₂ emissions per 10,000 yuan of output, the electricity consumption rate of power plants, and other energy conservation and emission indicators dropped from the same period last year.

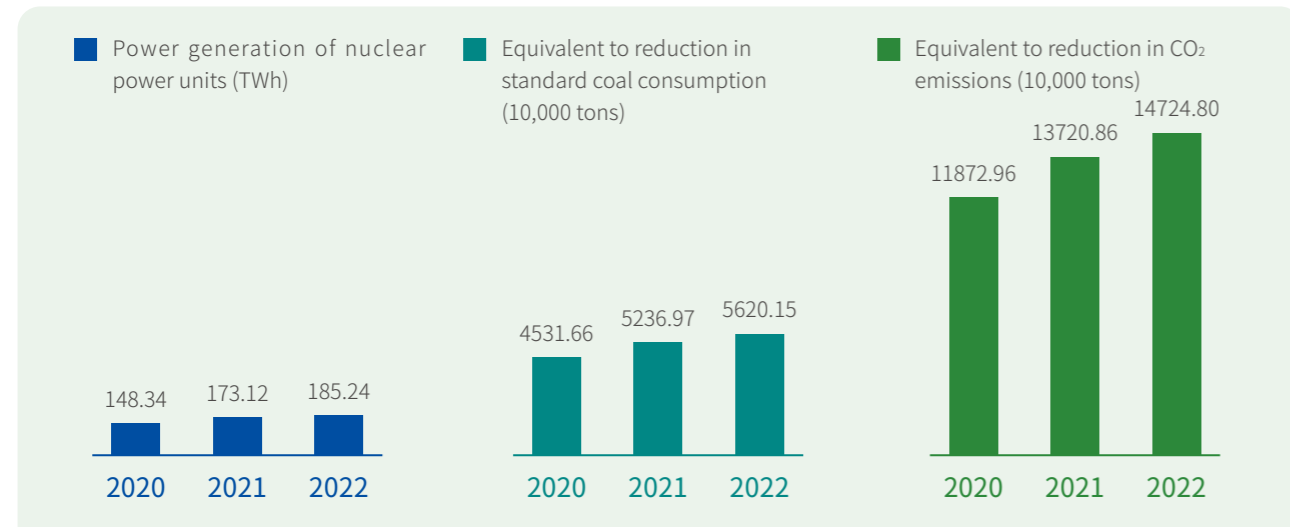
Fewer Carbon Emissions

Leveraging the main business advantages of clean energy, CNNP develops nuclear power in a safe and orderly manner, explores the multiple uses of nuclear energy, and accelerates the development of non-nuclear clean energy industries. Additionally, various measures are adopted to reduce carbon emissions in all aspects of construction and operation for China's 30•60 Decarbonization Goal.

Clean nuclear power development

We focus on our main business, maintain stable performance in safety and environmental protection, and steadily build up nuclear power installed capacity to grow our market share in the nuclear power industry. In 2022, CNNP's 25 operating units maintained safe and stable operation, generating 185.24 TWh of electricity, an increase of 7.00% over 2021. A total of 173.22 TWh of electricity was connected to the grid, an increase of 7.10% over 2021.





In 2022, CNNP's projects progressed safely and efficiently

Projects approved	Projects being constructed
<ul style="list-style-type: none"> On April 20, Units 3 and 4 of the Sanmen Nuclear Power Plant were approved by the state On September 14, Units 3 and 4 of the Zhangzhou Nuclear Power Plant were approved by the state 	<ul style="list-style-type: none"> On February 25, Unit 8 of the Tianwan Nuclear Power Plant started construction On May 19, Unit 4 of the Xudabao Nuclear Power Plant started construction On June 28, Unit 3 of the Sanmen Nuclear Power Plant started construction

Case Hualong One is completed for operation

On March 25, 2022, Unit 6 of Fuqing Nuclear Power Plant, the country's second nuclear power unit using Hualong One, a domestically designed third-generation nuclear reactor, was geared up for commercial operation. As a landmark nuclear power project presented by China to the world, Hualong One, not only has perfect accident prevention and mitigation measures, safe and reliable, but also has outstanding environmental benefits. Each unit of Hualong One generates nearly 10 TWh of electricity annually, which can meet the demand of 1 million people, reduce standard coal consumption by 3.8 million tons, and lower carbon dioxide emissions by 9.47 million tons, equivalent to planting 70 million trees.



Comprehensive utilization of nuclear energy

Clean nuclear energy has unique advantages and potential in reducing coal consumption and greenhouse gas emissions, making it an important zero-carbon energy source to achieve carbon peaking and carbon neutrality. Given market demand, CNNP has promoted the application of high-temperature gas-cooled reactors in urban heating supply, industrial steam supply, and hydrogen production, advanced clean and low-carbon transition, and worked for the balanced comprehensive utilization of nuclear energy in different regions.

Heating

Zhejiang Haiyan Nuclear Heating Demonstration Project (Phase I) was put into operation in Haiyan, Zhejiang on December 3, 2021. Once the project is fully completed and put into operation, it will supply 704,000 GJ of heat each year, equivalent to reducing standard coal by about 24,000 tons and CO₂ emissions by 63,000 tons each year compared with coal-fired power units. In 2022, the case of successfully implementing a nuclear heating project in southern China by Qinshan Nuclear Power Co., Ltd. submitted by CNNP was listed in the *2022 Business Climate Action Cases*.

Industrial nuclear heating

On December 15, 2022, the Company's first industrial nuclear heating project was completed and put into use in Haiyan County, Zhejiang Province, offering green energy heating to nine local corporate users. The heating project, offering 24/7 services, supplies about 288,000 GJ of heat each year, equivalent to saving about 10,000 tons of standard coal and reducing CO₂ emissions by about 24,000 tons.

Steam supply

On May 27, 2022, the energy station of the Jiangsu Nuclear Power steam project poured the first tank of concrete, unveiling the construction of the Company's first industrial nuclear steam supply project at the Tianwan Nuclear Power Plant. The Tianwan Nuclear Power steam supply project can provide 4.8 million tons of industrial steam for the Lianyungang petrochemical base every year, equivalent to reducing the burning of standard coal by 400,000 tons and decreasing CO₂ by 1.07 million tons each year.

Non-nuclear clean energy development

CNNP has clarified the coordinated development of nuclear energy and non-nuclear clean energy as the path toward a clean future. In 2022, the integrated development strategy of nuclear energy and non-nuclear clean energy was effectively implemented in Jiangsu, Fujian, Hainan and other regions, and intensive efforts were paid to simultaneously develop nuclear, wind, solar, hydrogen generation and storage. As a subsidiary of CNNP, CNNP Rich Energy Co., Ltd. serves as the professional platform for the development, construction and operation of non-nuclear clean energy. In 2022, CNNP Rich Energy Co., Ltd. completed 23 reforms, including reforms of mixed ownership, market-oriented operation mechanism, and incentive and constraint mechanism, and attracted strategic investment of 7.5 billion yuan by releasing 30% of equity. At the same time, it expanded overseas markets with on-site surveys in Myanmar, Vietnam, and other places to promote the development of overseas non-nuclear clean energy projects.

In 2022



- The installed capacity of controlled non-nuclear clean energy reached **12.53** GW, including **4.21** GW of wind power, **8.32** GW of photovoltaics (PV) power, and **211,000** kW of independent energy storage power stations.
- The installed capacity of controlled non-nuclear clean energy projects under construction reached **5.73** GW, including **1.555** GW of wind power and **4.171** GW of PV power.
- Non-nuclear clean energy has generated **14.05** TWh of electricity, an increase of **47.66%** over 2021. PV power generation has reached **7.51** TWh, an increase of **51.25%** over 2021, and wind power generation has amounted to **6.54** TWh, an increase of **43.72%** over 2021.



"Nuclear-solar-storage" multi-clean-energy complementary industrial project commences

On September 2, 2022, Sanmen Nuclear Power Plant's new energy project commenced. With an installed capacity of 200 MW, after completion, it will become the first "nuclear-solar-storage" multi-clean-energy complementary industrial project and the first demonstration project for the integrated development of nuclear power and other new energy in China. Once it is put into operation, the average annual electricity connected to the grid will reach 210 GWh, which can reduce 67,100 tons of standard coal, CO₂ emissions by 139,700 tons, as well as discharge of wastewater and thermal water each year, bringing significant environmental benefits.



Fujian Yunxiao Pumped Storage Power Station pioneers "nuclear-pumped storage hydropower" demonstration operation

Since pumped storage hydropower is powerful, efficient, flexible, and responsive, it effectively complements nuclear, wind, and solar power. On November 9, 2022, Fujian Yunxiao Pumped Storage Power Station Project, the first "nuclear-pumped storage hydropower" project in China, commenced in Huotian Town, Yunxiao County. After it is put into operation, it will run in conjunction with Zhangzhou Nuclear Power Plant. While providing peak shaving services for the nuclear power plant to ensure baseload, the station is also tasked with peak shaving, valley filling, frequency regulation, phase modulation, and emergency backup for Fujian Power Grid. These efforts are aimed to ensure the integrity of power grid operation, clean energy consumption, and the security of Fujian's power supply.

Low-carbon operation

CNNP strikes a balance among energy conservation, emission reduction, and development, optimizes business structure, seeks multi-energy complementarity, and prioritizes conservation and efficiency. Coordinated efforts are made in green and low-carbon development. In 2022, CNNP invested a total of 203,238,800 yuan in the renovation of energy-saving and emission-reduction facilities.

Making green buildings

All unit reconstruction and expansion projects comply with the national industrial policy and energy conservation and environmental protection standards. We adopt green construction technology according to the *Assessment Standard for Green Building*, *Evaluation Standard for Green Industrial Building*, *Assessment Standard for Green Retrofitting of Existing Building*, and *General Code for Energy Efficiency and Renewable Energy Application in Buildings*.



Conducting delicacy management of power use

We continue to optimize plant power use and carry out detailed analyses of power consumption. Short, medium, and long-term work plans are implemented by special groups.



Nuclear power plants do not emit pollutants such as SO₂ and NO_x, and CO₂ emissions are mainly converted from the amount of purchased energy. CO₂ emissions are calculated according to the purchased electricity calculation coefficient specified in the *Notice on Subsidiaries Strictly Submitting Statistical Annual Reports and Regular Reporting of Relevant Energy Conservation and Emission Reduction Data*. In 2022, the Company's CO₂ emissions stood at 89,897 tons, down by 2.67% from 2021.

Indicators	2022 targets	2022 results	Compared with the same period in 2021
Actual energy consumption of 10,000 yuan of industrial added value (Tons of standard coal per 10,000 yuan)	0.340	0.300	-9.31%
Actual comprehensive energy consumption of 10,000 yuan of industrial output value (Tons of standard coal per 10,000 yuan)	0.220	0.207	-5.19%
Actual CO ₂ emission of 10,000 yuan of industrial output value (Tons of CO ₂ equivalent per 10,000 yuan)	0.015	0.013	-13.35%

Case CNNP Xiapu Nuclear Power Co., Ltd. optimizes power use during commissioning

To implement the national requirements for energy conservation and emission reduction and meet the requirement of cost control, CNNP Xiapu Nuclear Power Co., Ltd. optimized power use during commissioning in 2022. Following technical specifications, the power plant reduced unnecessary operations to avoid waste and lowered cooling water consumption. When it comes to management, it adopted comprehensive and targeted policies for continuous improvements. The company implemented power-saving measures for lighting systems, ventilation systems, pumps, refrigeration units, and fast reactor equipment. The demand for the lighting of plant buildings was analyzed and delicacy management was implemented for ventilation systems in major plants or areas, saving a total of about 23.06 GWh of electricity for commissioning. Actual electricity consumption only accounted for 68.8% of the planned amount.

Response to Water Stress

Attaching importance to the protection of water resources, CNNP reduces water use, improves water efficiency, and conserves water in project areas by upgrading technology and building wastewater treatment plants.

Less water use

In pursuit of clean production, CNNP minimizes freshwater withdrawal, makes water supply pipelines more intelligent, upgrades the sewage discharge systems of concrete batching plants, and identifies pipeline leaks to lower water consumption. In 2022, CNNP set limits on water consumption per unit of power generated and incentives for comprehensive plant electricity consumption rates. Differentiated management was carried out for different bases. In 2022, the water consumption of China's nuclear power industry decreased by 1.96% from the same period last year.

Key water-saving links

- During the operation period, the cooling water system of the nuclear island equipment and the system of the conventional island recirculate cooling water in closed systems and supply the water for the process, equipment and water re-circulation motors.
- When the system is isolated for maintenance, the staff carefully examine the isolation boundary and minimize the system's water discharge.

Case Qinshan Nuclear Power No.1 Plant upgrades the drainage system

Qinshan Nuclear Power Co., Ltd. has transformed the drainage system of Qinshan Nuclear Power No.1 Plant and classified the collection and transfer of wastewater according to the wastewater quality analysis. Wastewater that meets standards is recycled to flush three rotary filters, which slashes the amount of daily wastewater treatment and saves flushing water. It is expected to reduce wastewater discharge by 250,000 tons. At the same time, the scale of wastewater treatment stations and the capacity of regulating pools drop dramatically with 800 MWh of electricity saved each year.



Better water efficiency

The Company continues to reduce water consumption, upgrade technology, and make rational water use plans. We set up drainage ditches and sedimentation tanks and recycle construction sewage after three-step precipitation to improve water efficiency.



Recycling water

- After reclaimed water in the plant area meets GB/T18920-2020 The *Reuse of Urban Recycling Water—Water Quality Standard for Urban Miscellaneous Use*, all is used for dust control, greening, etc.



Upgrading technology

- The chlorine production station is upgraded in an orderly manner, the supernatant of precipitated wastewater generated from seawater electrolysis is recycled, and the residue is transferred regularly.
- The desalinated water production system is upgraded with the process of "ultrafiltration, reverse osmosis, primary desalting and mixed bed" adopted to improve water efficiency.

Waste Control

CNNP strictly complies with environmental laws and regulations, such as the *Environmental Protection Law*, the *Atmospheric Pollution Prevention and Control Law*, and the *Law on the Prevention and Control of Environmental Pollution Caused by Solid Waste*. We carry out internal audits of waste discharge regularly and try our best to minimize the amount of waste generated.

Radioactive waste

The Company manages radioactive waste in strict accordance with the *Law on the Prevention and Control of Radioactive Pollution*, the *Nuclear Safety Law*, and the *Regulations on the Safety Management of Radioactive Waste* and brings down the amount of radioactive waste generated in nuclear power plants. We continue to optimize the management of three types of waste, lower the amount of waste generated in nuclear power plants, and carry out research and application of radioactive waste treatment technology to improve the treatment capacity and effects. Each nuclear power plant conducts monthly statistics and reports effluent, environmental monitoring data, and radioactive waste treatment and storage. It is shown that the three barriers in operating nuclear power plants are sound and the treatment of the radioactive waste gas, liquid, and solid waste meets the design requirements with the discharge of radioactive effluent effectively controlled.

Progress

Medium and long-term goals

- Conducting a thorough survey of radioactive waste in nuclear power plants to form a waste management list, evaluating radioactive waste amount, storage capacity, and transfer plans, releasing the *CNNP Radioactive Waste Medium and Long-term Treatment and Disposal Plan*, formulating technical guidelines, and promoting the research and application of waste minimization technology
- Getting the effluent and environmental radiation monitoring laboratory accredited by the China National Accreditation Service for Conformity Assessment (CNAS), evaluating ability according to relevant requirements, and engaging in CNAS regular re-assessments
- In 2022, the total amount of radioactive effluent discharged was lower than the limit approved by regulatory authorities, and the absorbed dose rate in air fell within the normal range of the local background radiation
- Continuously improve the environmental protection capacity of nuclear power plants; Put gaseous and liquid effluents from nuclear facilities under stricter control; Maintain good environment quality of surrounding radiation area.
- Further improve effluent and environmental monitoring.
- Strengthen the management of temporary storage of solid waste; Take a special action to minimize waste; Ensure safe storage of solid waste.
- Improve radiation safety management and ensure overall radiation safety of the nuclear power plants.

Non-radioactive waste

CNNP's non-radioactive waste management involves general industrial solid waste, hazardous waste, non-radioactive production wastewater, and domestic sewage. The Company has taken measures to prevent the negative impact on the environment posed by waste gas, water, residue, hazardous waste, dust, malodorous gas, noise, vibration, and electromagnetic radiation generated in production, construction, or other activities.



General industrial solid waste

- Collecting and storing waste in suitable places by category, registering information, and assigning special units to dispose of waste with priority given to recycling



Hazardous waste

- Formulating hazardous waste management plans, registering the information, and reporting timely information to the local competent department of ecology and environment



Production wastewater, domestic sewage

- Disposing of sludge from sewage treatment facilities according to environmental impact assessment requirements and local standards and encouraging the recycling of energy and resources reserved in sludge

Progress

- Publishing the *Measures for the Environmental Protection Management of CNNP*, which clarifies the responsibility for environmental protection, the guidelines, principles, and objectives
- Strengthening the supervision of environmental protection, carrying out environmental protection inspections, "three simultaneities"—an essential environment protection stipulation in China, and environmental incident reporting and verification to ensure all-round monitoring. In 2022, no environmental protection administrative penalties were imposed.

Medium and long-term goals

- Clarify environmental responsibilities at all levels, and improve the environmental protection management system.
- Keep air pollution control and wastewater treatment facilities running safely and steadily, and safety store and dispose of solid waste and hazardous waste.
- Comprehensively enhance our basic environmental protection capabilities.



Environmental Protection

CNNP prioritizes protection and prevention, implements comprehensive management, engages the public, and ensures accountability for damages. National policies and measures for environmental protection and pollution prevention are implemented to strike a balance between environmental protection and business development of CNNP and its subsidiaries.

Environmental management objectives

Further improve the leaders' responsibility system for environmental governance, the action system of all staff, the risk prevention system, the environmental monitoring system, as well as the nuclear and radiation and non-radioactive waste environmental management system at the headquarters and subsidiaries; Comprehensively improve the environmental protection ability and environmental quality; Bring various environmental risks under effectively control; Form an environmental governance system with clear division of responsibilities, specific targets, scientific decision-making, participation of different parties, and strong execution.

With a promise not to operate in protected areas, CNNP avoids nature reserves when planning new projects and nuclear power plants strictly stick to the ecological bottom line. So far, unit operations have not affected protected areas. It is required that for new sites, before the submitted environmental impact report is approved, the selected area should remain intact and no construction in advance such as water, electricity, road access, and site leveling is allowed.

In CNNP's responsibility system for environmental protection, the Engineering Management Department supervises environmental protection targets of construction projects (including nuclear energy and non-nuclear clean energy projects) and supports subsidiaries to evaluate environmental protection upon project completion. The Nuclear Energy Development Department oversees environmental protection in new sites, and the Marketing Department manages environmental protection in the early stage of non-nuclear clean energy and new business development.



The optimal site-selection plan for ecological conservation

There are a number of marine ecological protection red line zones in the Dongshan Bay waters where the Unit 3 and Unit 4 projects of Zhangzhou Nuclear Power Plant located. To minimize the project impact on biodiversity, Zhangzhou Nuclear Power Plant has optimized the drainage plan several times to fully avoid ecological protection red line. To narrow down the 4 ° C temperature rise area, it has optimized the originally planned open drainage channels into hidden culvert drainage. To avoid the 1 ° C temperature rise area reaching the important seaside wetlands red line zones of Dongshan Bay in summer, the drainage outlet located 3.4 km from the periphery of the plant is finally decided after demonstration and comparison among dozens of drainage plans.

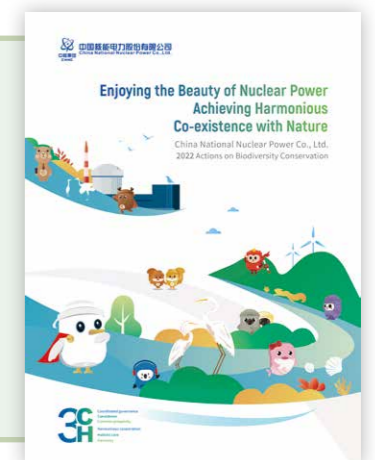
After demonstration, the sea area under this project is far away from the above-mentioned marine ecological red line zone, where the temperature rise area and construction suspended sediment dispersion area etc will not impact. There is no significant impact on the ecological conservation objectives of the marine ecological red line zone in the project-covered sea area. It is in line with the requirements of the control measures of the *Fujian Province Marine Ecological Conservation Red Line Zoning Results*, thus minimizing the impact of the project construction on eco-environment and maximizing the ecological conservation efforts.

Read more

In 2022, CNNP released the biodiversity conservation report, *Enjoying the Beauty of Nuclear Power Achieving Harmonious Co-existence with Nature—CNNP Biodiversity Conservation Practice in 2022*, which demonstrates the Company's efforts in promoting both nuclear energy development and ecological protection, protecting aquatic and terrestrial organisms and their habitats, and sharing the benefits of nuclear energy with stakeholders.



Scan code to read



Q&A

Q

Human capital is the greatest resource for corporate development. What are your talent incentives?

A

To strengthen our talent team building, we attach importance to the cultivation of professional talents, optimize staffing, improve compensation and incentive mechanism, introduce external outstanding talents, and stimulate talents to engage in entrepreneurship. In terms of incentives, we promote the establishment and implementation of equity incentives, agreed remuneration, point system for sci-tech projects, distribution of dividends for sci-tech results, follow-up investment in projects, and the filing system for gross payroll. In 2022, we continued advocating the equity incentive program as we have successfully exercised the second options granted in the initial equity incentive program, thus promoting the common growth of core employees and the Company.



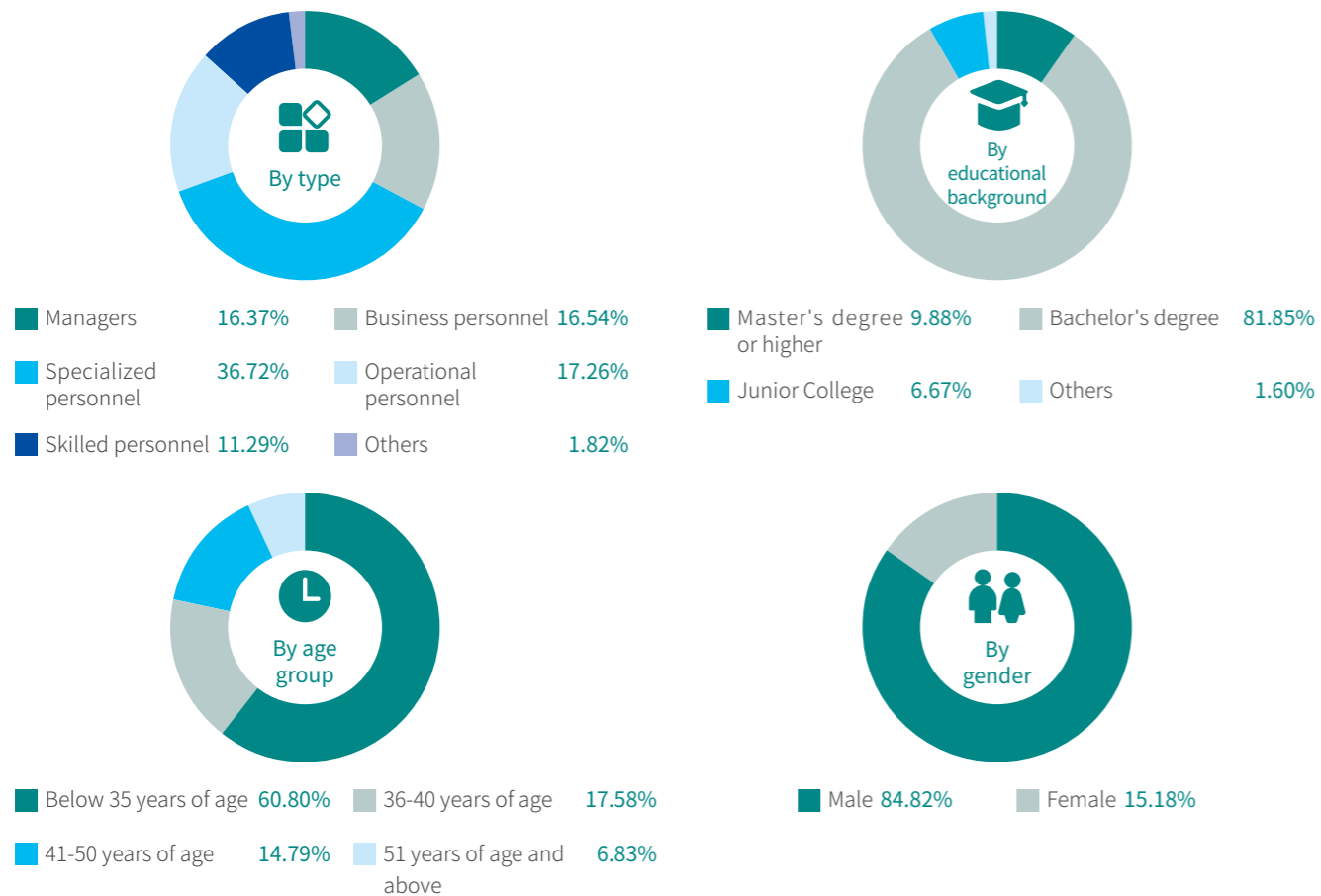
Social

Employee Well-being

CNNP adheres to people-oriented management by protecting employees' legitimate rights and interests and opposing any form of employment discrimination and forced labor. In addition, to develop a harmonious and stable labor relationship, the Company has created a sound occupational health management, unblocked employee training and development channels, and built a robust remuneration and incentive system.

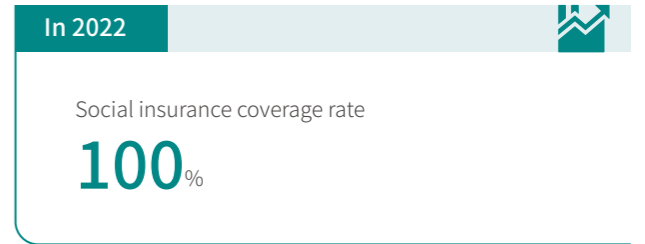
Equal employment

Upholding equal employment and rejecting any form of forced labor, workplace harassment and child labor, CNNP strictly follows Chinese laws and regulations, such as the *Company Law*, the *Labor Law*, the *Labor Contract Law*, the *Law on the Protection of Women's Rights and Interests*, the *Law on the Protection of Minors*, *Regulation on Paid Annual Leave of the Employees*, the *Regulation on Work-Related Injury Insurances* and the *Provisions on Prohibiting the Use of Child Labor* and other applicable laws and regulations. Based on the non-discrimination principle, we create an equal, diversified and inclusive work environment and treat all employees equally regardless of their gender, age, educational background, ethnicity, religion, marital status and other differences. We respect and protect the legitimate rights and interests of all employees and provide fair and reasonable employment and competition opportunities for our employees.



Remuneration and benefits

In an effort to establish a standardized compensation and benefit system, CNNP formulates and implements the *Remuneration Regulations*, the *CNNP Gross Payroll Management Policy*, etc. We ensure that salaries, social insurances, housing provident fund and supplementary medical insurance are paid to employees on time and in full. We continuously building a community of shared interest where the Company and employees share the same values, risks and benefits, and to enhance the sense of gain and happiness of employees.



Upholding democratic management

CNNP unblocks the democratic communication channels to fully mobilize employees. We take employees' opinions in business decision-making, management, supervision and other aspects seriously, and effectively safeguard their right to information, participation, expression and supervision. By virtue of the "voice of employees" Mailbox, we make a list of practical matters and address them with regular follow-up and supervision, so as to fully respond to employees' opinions and suggestions.

In 2022, CNNP conducted questionnaire surveys on corporate culture and employee opinions based on such indicators as the sense of happiness, the sense of gain and the sense of belonging.



Safeguarding occupational health

Abiding by the *Law on Work Safety*, the *Law on Prevention and Control of Occupational Disease* and other applicable laws and regulations in China, CNNP improves the occupational health and safety management system. Aiming at creating a comfortable, healthy and happy working environment for our employees, we carry out activities for the promotion, consultation, prevention and counseling of occupational physical and mental health, and improved the facilities for occupational disease protection. In 2022, the coverage of employee health examinations reached 100%.

Safeguarding occupational health and safety

- Promoting and implementing the *Law on Prevention and Control of Occupational Disease* to strengthen the prevention and control of occupational diseases, and organizing activities for Occupational Disease Awareness Week
- Displaying warning signs and providing protective gear to fully protect employees' occupational safety

Strengthening employee health monitoring

- Further deepening the mechanism of "Serving the People" and organizing regular occupational health checkups
- Inspecting occupational hazards and occupational health of production contractors
- Regularly conducting supervision and inspection for operating units and units under construction on occupational disease protection

Caring for physical and mental health

- Carrying out on-going EAP (Employee Assistance Program), psychological counseling, consultation, lectures and other services to improve employees' mental health
- Organizing training on health knowledge for occupational health personnel and managers

Human Capital Development

Adhering to the strategy of prioritizing talent development and aiming for creating a highland of talents, CNNC develops a training plan that provides all employees with specific career development paths and a variety of career options, and broaden their development channels.

Unblocking career development path

An unimpeded career path not only provides talent with a sustainable career development ladder, but also promotes science-based development of the Company. CNNP has been solidly implementing a special HR plan for the 14th Five-Year Plan period (2021-2025), and optimizing the "CNNP Elite Program", to deepen the echeloned construction of talents, strengthen the team building of cadres in all respects, and reinforce human resource security, thus to achieve "win-win" result of corporate performance and talent development.



Deepening talent pools development

Highlights

- Selecting the first group of chief experts, sci-tech leaders and chief technicians, as well as the person in charge of "open-competition" projects to provide manpower for the construction in key areas, key projects and major projects, and solve the Company's technical bottleneck problems
- Building a CNNP six-tier team for sci-tech backbone talents and a six-tier talent pool in line with the working reality
- Developing the list of talents in CNNP outstanding young talents pool and the international talent pool to accurately identifying high-performing talents in various fields and offering trainings to fully demonstrate their skills

ESG Performance

- Designating 9 high-caliber talents, 32 chief experts, 69 sci-tech leaders and 12 chief technicians
- Selecting two project leaders for "open-competition" projects



Strengthening team building of cadres

Highlights

- Strengthening the team building of the headquarters' cadres through internal selection and external exchange, and gradually increasing the proportion of young talents in the cadre team
- Further standardizing the team building of leaders while improving the Company's team building in a scientific, institutionalized and standardized way
- Establishing and improving the talent pool of directors and supervisors, where professionals with excellent overall quality are preferred, and implementing dynamic management for it

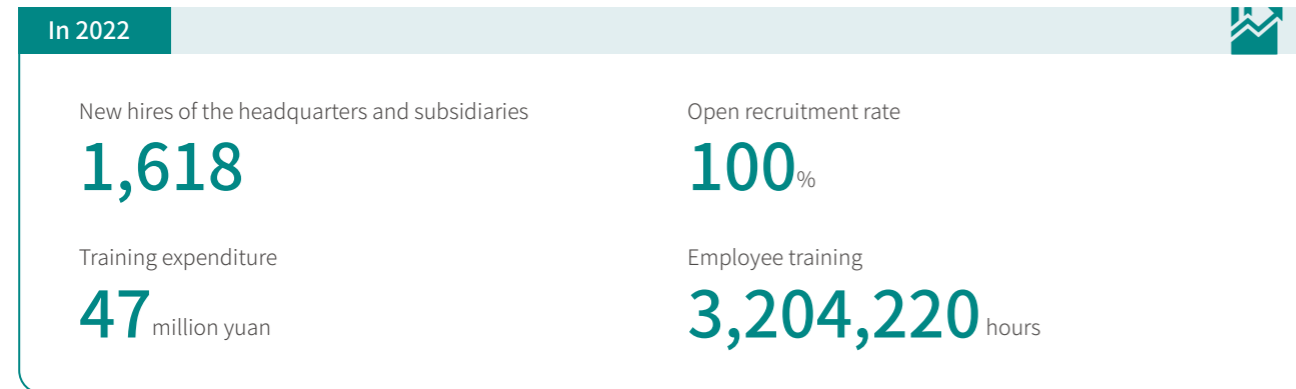
ESG Performance

- In 2022, 15 department heads were selected, of which 9 were promoted internally, 4 were promoted by exchange among member units, 1 was introduced from other industries, and 1 was recruited from outside CNNC
- One third of the newly appointed cadres are 40 years old or younger



Boosting employee growth

CNNP attaches importance to the "selection, cultivation, allocation and retention" of talents, and enhances the capabilities and expertise of all employees. We are committed to building a professional team of skilled personnel and a tiered talent team with sustainable development, so as to promote the co-development of the Company and employees. In 2022, the employee turnover rate was 1.15%.



Sanmen Nuclear Power Co., Ltd. conducts vocational skills competition



Fujian Fuqing Nuclear Power Co., Ltd. hosts a vocational skills competition for valve maintenance in Fujian Province

Selection

- Strengthening efforts to carry out campus recruitment and open recruitment
- Widening recruitment channels by strengthening school-enterprise cooperation

Cultivation

- Improving training system and establishing talent training courses for all employees (including part-time staff and contractors)
- Offering skills certification for employees and building a platform to train skilled personnel, and supporting their degree and specialty certification
- Keeping optimizing the five-channel career development system and establishing talent pools for specialized fields
- Enhancing supervision and mentoring for contractor training and improving their maintenance skills

Allocation

- Optimizing the selection of cadres and strengthening the team building of cadres
- Implementing *Employee Performance Regulations*, and improving and enacting the adjustment system for poor performance and withdrawal system for incompetence

Retention

- Building a long-term incentive mechanism and improving employee treatment by means of equity incentives and specialized incentives
- Widening promotion channels and providing a platform for employee growth to facilitate the co-growth of the Company and employees

Case CNNP holds its first training course for dispatched Board directors

From July 7 to 8, 2022, CNNC held the first round of training for Board directors in accordance with the *Plan for Further Strengthening the Building of the Board of Directors*. The training was closely related to the real situation as we set up courses on the legal and financial issues Board directors encountered while performing their duties. More than 130 people attended the training online and offline, including leaders of CNNP, chairmen, directors and managers of subsidiaries. Through multi-level and multi-faceted training and sharing of experiences, the training enriches the theoretical knowledge of Board directors while actively providing operational guidance for them, thereby effectively solving the sore point and difficulties encountered by the dispatched Board directors, and enhancing their ability to perform their duties.



2022 training course for dispatched Board directors

Community Engagement and Development

CNNP strives to achieve the concurrent development of the Company and society as we widely promote science popularization of nuclear power and strengthen public communication. In addition, caring for people with special needs and disadvantaged groups, we carry out a wide range of volunteer services to contribute to people's well-being.

Transparent communication management

Based on the principles of "coordination by headquarters and integration of resources, project-oriented and emphasis on key points, cooperation between governments and the Company to achieve synergy", CNNP standardizes the public communication process and innovates its public communication practice with the "3C" communication concept of Confidence, Connection and Coordination. Moreover, we establish diversified communication channels, strengthen information disclosure and clear doubts, to boost public trust in us and the nuclear power industry.

Organization

Working alongside the local government of the place where the project located, CNNP formulates public communication schemes, specifying the main contents and range of communication, as well as organizational framework and safeguarding measures of public communication. We also ensure that public communication runs through the whole process from site selection, design, construction, commissioning, to operation and decommissioning.

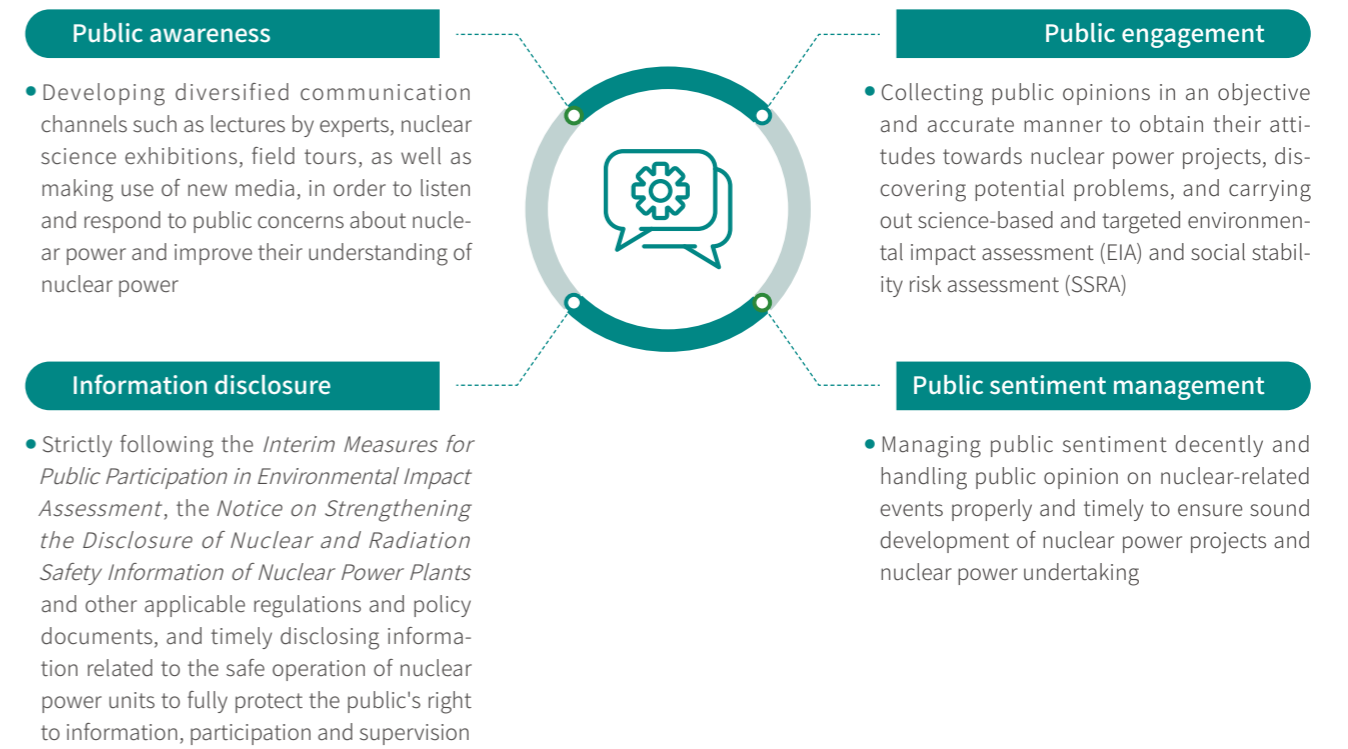
Leader team	Executive team
<ul style="list-style-type: none"> • Providing leadership and guidance for public communication of the nuclear power project • Coordinating cross-city and cross-provincial public communication tasks • Coordinating and issuing information when there is a large-scale public sentiment or a group-related incident 	<ul style="list-style-type: none"> • Organizing and carrying out public communication programs of the nuclear power project • Participating in and proactively coordinating public communication efforts in beyond the place where the project is located • Taking in charge of coping with and monitoring public sentiment and group-related incidents

Guiding principle

 <p>Coordination by headquarters and integration of resources</p> <ul style="list-style-type: none"> • In order to avoid mismatch in information and resources, CNNC and CNNP headquarters coordinate relevant resources to establish a unified talent pool and product pool and promote exchange and sharing of information and experience. By doing so, we strengthen our cooperation and communication, avoid miscommunication due to mismatched resources, and pass on our experience to younger talents. 	 <p>Project-led communication and emphasis on key points</p> <ul style="list-style-type: none"> • Oriented by major projects, our public communication efforts are planned and deployed in line with the projects. We analyze the different needs of stakeholders to develop flexible and differentiated communication strategies, and answer main concerns of the public such as safety, money-related issues, demolition compensation and environmental interests in a targeted manner. 	 <p>Cooperation between governments and coordinated exchange</p> <ul style="list-style-type: none"> • We establish information communication channels and coordination mechanisms to strengthen our cooperation with relevant state departments and local governments at all levels where the projects are located. Based on the general principle of "supervised by the central government, led by the local government, cooperated by enterprises and participated by the public", we encourage the local government to take public communication more seriously and strengthen the pre-project public communication, which aims to meet the needs of the public and communicate with the people in surrounding areas.
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Overall program

Joining forces with local government of the place where the project located, CNNP formulates public communication schemes, specifying the main contents and range of communication, as well as organizational framework and safeguarding measures of public communication. We also ensure public communication through the whole process from site selection, design, construction, commissioning, to operation and decommissioning.



Case: Holding 10th "Appealing Nuclear Power" Cup science popularization presentation contest and 10th anniversary series of activities

The "Appealing Nuclear Power" Cup activities, jointly organized by the Chinese Nuclear Society and CNNP, has been held for 10 years, and has reached 34 provinces (autonomous regions and municipalities directly under the Central Government) with over 100 million online exposure. The "Appealing Nuclear Power" is aimed at popularizing nuclear science knowledge, attracting more people to nuclear science, and displaying the charm of nuclear power to the public. On September 19, 2022, during the National Science Popularization Day activities, China Nuclear Society and CNNP held the 10th anniversary of "Appealing Nuclear Power" science popularization activities and the launching ceremony of the first Nuclear Industry Nuclear Science Popularization Creativity Competition, reviewing the ten-year history and achievements of the nuclear science popularization brand. We also solicited nuclear science popularization works online, invited academicians and experts to conduct special seminars, and released the *Joint Initiative in Beijing on Nuclear Science Popularization for 2030*.



"Appealing Nuclear Power" brings high school students into nuclear power plant

Community relations management

CNNP strictly observes Chinese *Company Law, the Labor Law, the National Human Rights Action Plan* and other relevant state laws and regulations and international labor standards. Upholding the principle of openness and transparency, we ensure integrity management and reject conducts seriously violating human rights. We respect the opinions of the people around the construction sites and protect the rights and interests of the people.

CNNP follows the Free, Prior and Informed Consent (FPIC), protects human rights in accordance with the UN Guiding Principles on Business and Human Rights, while protecting the legitimate rights and interests of the people in and around the project construction site. We ensure that indigenous people and communities enjoy full autonomy and avoid excessive interference before building or relocating nuclear power plants. Furthermore, we conduct due diligence to guarantee that indigenous peoples and communities are informed. We respect the decisions of indigenous peoples and communities and avoid any projects that have a direct impact on them without their permission. In 2022, no indigenous peoples were relocated due to our new projects.

Driving local development

CNNP fully capitalizes on its industrial, resource and platform to proactively serve the local economy and promote local development. In order to improve concurrent development of the Company and local communities, we have stepped up efforts to boost the employment of residents, promote the high-quality development of rural education, improve social governance and public services, and develop clean energy in rural areas.



Boosting local employment

Helping farmers in need to increase their household income by signing general affairs and labor dispatching contracts with locals, coordinating contractors to give preference to locals nearby in recruitment, and setting up low-income support funds and public service jobs

- Jiangsu Nuclear Power Co., Ltd. provided jobs to more than 18,000 people by driving the development of surrounding industries



Promoting education development

Valuing basic education, increasing investment in education funds, helping students in difficulty, thereby promoting the overall improvement of rural education

- Sanmen Nuclear Power Co., Ltd. established a scholarship fund of 50,000 yuan for students in Sanhe Village, rewarding students with good academic performance and subsidizing students in underprivileged families. It also implemented the "Youth Program" for 13 students from families with financial needs, and organized young volunteers to provide academic counseling, with more than 100 student participants



Enhancing public services

Building cultural plazas, libraries, village bookstores, activity centers, fitness trails, village signage, cultural mini parks for science popularization, etc. to enhance local public services

- Liaoning Nuclear Power Co., Ltd. donated nearly 300,000 yuan to Sunbotun Village, of which 150,000 yuan was used to install solar-powered street lights, enable level road conditions, set up garbage containers, and renovate public toilets, and the remaining money was used to build the "Nuclear Cultural Square"



Creating a zero-carbon model village

Practicing integrated development by virtue of following efforts: leveraging the advantages of nuclear power as a baseload energy source and site selection for nuclear power plants to promote the development of non-nuclear clean energy industries; improving energy structure, ensuring energy security, and bettering the way farmers use energy for production and daily life so as to promote rural green development

- Sanmen Nuclear Power Co., Ltd. and CNNP Rich Energy Co., Ltd. brought in investment for Sanhe Village of more than 80 million yuan to develop and build a 200-acre complementary lotus pond-fishery project, promoted the construction of rooftop distributed photovoltaic project, and built 4 sets of public charging piles, all of which is expected to create more than 150,000 yuan income per year to the village

Giving back to local community

CNNP gives back to the community with practical actions, which range from improving the donation system, integrating charitable resources such as corporate donations and volunteer activities, to engaging in environmental protection activities, charitable donations and caring for special groups. In 2022, our volunteer activities attracted 5,674 participants, with a total of 3,000 service hours and 32 volunteer projects.



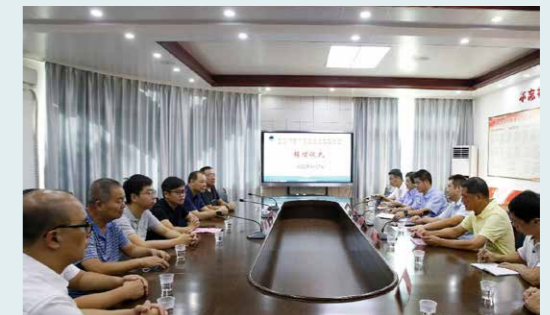
Environmental protection volunteering

- CNNP Xiapu Nuclear Power Co., Ltd. carries out volunteering activities such as tree planting



Organizing charitable donations

- CNNP Guodian Zhangzhou Energy Co., Ltd. donates to Yunxiao No.1 Middle School and Huangtian Village in Pinghe County



Caring for special groups

- Employees of Liaoning Nuclear Power Co., Ltd. visit autistic children, senior Red Army members and CPC members, and present them with condolence offerings and money



Blood donation

- Employees of Sanmen Nuclear Power Co., Ltd. participate in "Health, Blood Donation, Pride" blood donation activity



Outlook for 2023

2023 witnesses the opening year for comprehensively implementing the spirit of the 20th National Congress of the CPC, the key year for the implementation of the 14th Five-Year Plan to inherit the past and usher in the future, as well as an important year to lay the groundwork for building a modern socialist country in all respects. Upholding the general principle of seeking progress while keeping performance stable, CNNP will fully, accurately and comprehensively implement the new development philosophy, harmonize development and safety, maintain self-confidence and self-improvement, maintain integrity and innovation, and grasp the opportunities under China's 30·60 Decarbonization Goal to develop clean energy with practical actions, thus contributing to the Beautiful China Initiative and the target of building a strong nuclear power country.

Laying a solid foundation for high-quality development with governance as focus.

Adhering to party building, we will promote the construction of a high-quality party building system. We will further ensure safe development while enhancing the safety literacy of all employees in nuclear. In addition, we will redouble our efforts to explore the market, develop innovation and optimization capabilities, and promote centralized reform. We will improve our operation and management and strengthen market value management to secure both quality improvement and quantity growth, yielding new achievements in high-quality development with a new look and new actions.

Promoting green and low-carbon development through clean manufacturing.

Following national 30·60 Decarbonization strategies, we take the initiative to accelerate the achievement of carbon peak and carbon neutral goals prudently. Specifically, we regard climate change response as a leverage to promote ecological civilization construction and achieve high-quality development, and steadily build "nuclear energy + non-nuclear clean energy + agile industries", so as to provide more economical and green energy for society.

Accelerating the creation of a better living environment in harmonious coexistence.

With the goal of building CNNP's own volunteer service brand, we will keep integrating corporate charitable donations, volunteer activities and other public welfare resources to form a standardized public welfare charity project management platform and standard process, demonstrating a central SOE's demeanor. We will continue to proactively respond to the national rural vitalization strategies with subsidiaries carrying out brand projects such as village assistance and co-construction of enterprises and local communities. Our ultimate goal is to promote common prosperity and make greater contribution to the building of a modern socialist country in all respects and the great rejuvenation of the Chinese nation!



Honors and Awards

Awardees	Honor/Award	Awarded by
CNNP	A-level in Evaluation of Information Disclosure by Shanghai Stock Exchange (the highest level)	Shanghai Stock Exchange
	GoldenBee Excellent CSR Report – Evergreen Award	China Sustainability Tribune under the Ministry of Commerce
	Special Contribution Award to Corporate Governance	Directors & Boards
	The Most Leading CEO	Directors & Boards
	Wins 2021 Top 5 in the Public Utilities Industry in China's Listed Companies Market Value Ranking	Wind Information Co., Ltd.
	2022 Top Graduate Employers	yingjiesheng.com
	The first prize of the Central SOEs QC Group Achievement Publication Competition	China Association for Quality
Qinshan Nuclear Power Co., Ltd.	Annual Case Award of "The 17th People's CSR Award"	People's Daily people.cn
	China Standards Innovation and Contribution Award	State Administration for Market Regulation
Sanmen Nuclear Power Co., Ltd.	People's Craft Award-Technology	people.cn
	Model Enterprise for Harmonious Labor Relations in China	Ministry of Human Resources and Social Security of the People's Republic of China All-China Federation of Trade Unions China Enterprise Confederation/China Enterprise Directors Association All-China Federation of Industry and Commerce
Fujian Fuqing Nuclear Power Co., Ltd.	National Popular Science Education Base	China Association for Science and Technology
	China Grand Awards for Industry (Nomination Award)	China Federation of Industrial Economics
Jiangsu Nuclear Power Co., Ltd.	2022 National Quality Benchmarking Enterprise	China Association for Quality
	The first batch of "Jiangsu Green Development Leading Enterprises"	Department of Ecology and Environment of Jiangsu Province Jiangsu Federation of Industry and Commerce
CNNP Liaoning Nuclear Power Co., Ltd.	National Excellent Quality Management Team Award	China Association for Quality All-China Federation of Trade Unions All-China Women's Federation China Association for Science and Technology
	2022 National Quality Benchmarking Enterprise	China Association for Quality
	China Quality Installation Engineering (China Installation Star)	China Installation Association
CNNP Xiapu Nuclear Power Co., Ltd.	Advanced Unit of "Urban-rural Integration Development" for Rural Vitalization	Xiapu Government
	May 1st Labor Award	Fujian Provincial Trade Union
China Nuclear Power Operation Technology Corporation Ltd., Wuhan	Excellent Science Reform Demonstration Enterprise	State-Owned Assets Supervision and Administration Commission of the State Council
	2021 Hubei Top 100 High-tech Enterprises	Department of Science and Technology of Hubei Province & Hubei Academy of Scientific and Technical Information

ESG Index

	ESG Indicator	Data/Page
Governance	Total assets (billion yuan)	464.62
	Total installed capacity of nuclear power units in operation (GW)	23.75
	Net assets attributable to shareholders of listed companies (billion yuan)	88.64
	Revenue (billion yuan)	71.29
	Net profit attributable to listed shareholders (billion yuan)	9.01
	Net profit attributable to shareholders of the listed company after deducting non recurring gains and losses (billion yuan)	9.04
	Net cash flow from business activities (billion yuan)	46.70
	Number of general meetings of shareholders held	2
	Number of board of directors meetings held	8
	Number of independent directors	4
	Number of the board of directors	12
	Proportion of independent directors (%)	33.33
	Employee representative director	1
	Female directors	3
	Proportion of female directors (%)	25
Environmental	Ethics policy and practices	P14
	Investor relations	P16
	Risk identification and management	P18
	Power generation of nuclear power units (TWh)	185.24
	Equivalent to CO ₂ in standard coal consumption (10,000 tons)	5,620.15
	Equivalent to reduction in CO ₂ emissions (10,000 tons)	14,724.80
	CO ₂ emissions (10,000 tons)	8.99
Social	Photovoltaic power generation (TWh)	7.51
	Wind power generation (TWh)	6.54
	Electricity generated from non-nuclear energy (TWh)	14.05
	Employees in total	17,090
	Labor contract signing rate (%)	100
	Social insurance coverage rate (%)	100
	Proportion of employees in labor union (%)	100
	Employee training coverage rate (%)	98.90
	Employee health examination coverage rate (%)	100
	New hires of the headquarters and subsidiaries	1,618
	Open recruitment rate of the headquarters and subsidiaries (%)	100
	Training investment (million yuan)	47
	Employee training hours	3,204,220
Female employees	2,595	
Senior executives	96	
Proportion of female senior executives (%)	4.20	
Employee turnover rate (%)	1.15	
Ethnic minority employees	726	
Employee structure	P34	

Appendix

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