



中国核能电力股份有限公司
China National Nuclear Power Co., Ltd.



2018

China National Nuclear Power Co., Ltd.
Social Responsibility Report

About this Report

Reporting period

The report covers our business activities from January 1, 2018 to December 31, 2018, and also includes additional information beyond the stated reporting period.

Reporting cycle

The first report of China National Nuclear Power Co., Ltd was released in 2012. This is the seventh CSR 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 *Guidelines to 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), *Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises* (CASS-CSR 4.0) issued by the Chinese Academy of Social Sciences, the *GRI Sustainability Reporting Standards (GRI Standards)*, and the *Guideline on Environmental Information Disclosure by Listed Companies of Shanghai Stock Exchange*(SSE).

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 010-8357 6866.

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Message from the Chairman

2018 marked the 40th anniversary of China's reform and opening up and the start to implement the guiding principles of the 19th CPC National Congress. It also was the tenth anniversary of the founding of CNNP and we celebrated the third anniversary since IPO. In 2018, despite complex situations and rapidly changing markets with massive challenges, we continued to undertake the mission to "develop the nuclear industry to strengthen the country and serve society", and act in accordance with our four core corporate values of responsibility, safety, innovation, and cohesion. Overall, the Company made progress while ensuring stability and continued to grow in the past year, with our achievements well recognized by many stakeholders. We were on the list of 2018 Top 500 Most Credible Chinese Public Companies and won the award of Outstanding Contributor for China's Reform and Opening Up of Golden Bauhinia Awards as well as many other awards and honors.

We unite under the Party leadership. As a proud supporter of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and the guiding principles of the 19th CPC National Congress, we kept firmly in mind the need to maintain political integrity, think in big-picture terms, follow the leadership core, and keep in alignment; strengthened our confidence in the path, theory, system and culture of socialism with Chinese characteristics; and resolutely upheld General Secretary Xi Jinping's core position on the CPC Central Committee and in the Party as a whole, and resolutely upheld the CPC Central Committee's authority and its centralized, unified leadership. We stayed in line with the "3655" management system and sought to foster eight core competencies and further integrate Party building into corporate governance. We consistently observed the rule of law in every aspect of our activities, promoted clean corporate governance and a positive corporate culture, and made sure that the Party plays a key role in leading the Company on the ideological front and creating cohesion across the Company.

We remain committed to safety and quality. CNNP strictly complied with the *Nuclear Safety Law*, integrated the excellent culture of nuclear safety into corporate management, and strived to improve the organizational structure for nuclear safety management and stepped up safety standardization to guarantee safe construction and operation of nuclear power units. We emphasized accountability of project construction and operation management, attached great importance to the prevention of human error, equipment reliability assurance, and emergency management during the operation of nuclear power projects, and worked to enhance feedback effectiveness. By the end of 2018, we had achieved 150 reactor-years of safe operation. In 2018, our four nuclear power units scored 100 for WANO composite index, ranking first among all rated reactors.

We protect the environment for a harmonious coexistence. We continued to improve our environmental management system, and assessed environmental impacts across the full life cycle of our nuclear power projects, including site selection, design, construction, and operation, and strictly controlled radioactive waste in accordance with national environmental management requirements, seeking to minimize the environmental impact of our construction and operation and promote harmonious coexistence between man and nature. In 2018, we produced 117.847 TWh of electricity safely, equivalent to reducing standard coal consumption by 37.124 million tons, CO₂ emissions by 97.266 million tons, SO₂ emissions by 315,500 tons, and NO_x emissions by 274,700 tons.

We lead with innovation and technology. We continued to increase investment in technological innovation, promote geothermal development and nuclear technology applications, introduce new industry platforms, and build technical service brands. We also pushed ahead the establishment of standardized working system, improved our IT-based management platform, promoted innovative talent cultivation with management innovation, and actively prepared for the establishment of a nuclear power operation research institute. In 2018, we won 53 science and technology awards at and above the provincial and ministerial level, and obtained 235 national patents, and enriched its eight product lines by adding 63 new products.

We seek development through win-win cooperation. While taking the lead in technology development and independent research, CNNP deepened communication and cooperation with domestic and foreign peers, actively explored win-win cooperation models with stakeholders so as to create a sustainable nuclear power supply chain by sharing advantageous resources with each other. As of the


CNNP is committed to providing safe and efficient energy for a clean and low-carbon life style, and creating business values, generating profits for shareholders, increasing employee happiness, and creating social wealth.

end of 2018, we had established stable partnerships with more than 40 countries, organizations and associations.

We care for the well-being and development of our employees. CNNP is committed to protecting the rights and interests of employees. We continued to step up team building efforts along the three pipelines of technical talents, skilled workers, and management personnel., strived to build a comprehensive and multi-level talent training system and create channels for employees to freely show their values, and introduced a variety of programs to help employees in need, seeing they have a strong sense of belonging and happiness. In 2018, we were on the list of *Forbes'* Global 2000 World's Best Employers 2018 and won the China Talent Management Example Enterprise 2018.

In 2019, we will continue to follow the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, carry forward the spirit embodied by the "Two Bombs, One Satellite" project, and implement the cause-oriented, responsibility-oriented, strictness/carefulness-integrated, and striving-based spirit of the nuclear industry. We will tamp the foundation of development, build our core competence, set a model for the safe operation of nuclear power industry, and strive to become a global leader of safe nuclear power/nuclear energy operation. We aim to create a well-recognized nuclear power brand, and demonstrate our strength in providing safe, efficient, clean and green nuclear power driven by innovation and social responsibility fulfillment.

We boost local economy for shared growth. We have launched the "Appealing Light" and other nuclear power public education programs to better help the public know more about CNNP and enhance interaction. Following the principle of helping people increase confidence in their own ability to lift themselves out of poverty and seeing that they can access the education they need to do so, we introduced various poverty alleviation programs, including developing photovoltaic power, farming, and supporting local education as well as aiding Tibet with industrial development. In 2018, we invested 6.52 million yuan in targeted poverty alleviation and donated another 3.262 million to other public-interest programs, thus improving our image as a responsible corporate citizen and the livelihoods of local communities.



Chen Hua
Chairman & Party Secretary, CNNP

About CNNP

Company Profile

Headquartered in Beijing, China National Nuclear Power Co., Ltd. (SSE: 601985) is jointly invested by its controlling shareholder China National Nuclear Corporation (CNNC), China Three Gorges Corporation, China Ocean Shipping (Group) Company (COSCO), and China Aerospace Investment Holdings Ltd. Its business scope covers development, investment, construction, operation and management of nuclear power projects. It is also engaged in investment and development of clean energy projects, investment and investment management of power transmission and distribution projects, research of safe technologies for nuclear power operation, related technical and consulting services, and electric power sales.

On June 10, 2015, CNNP went public and became the first nuclear power company to issue A-shares. As of the end of 2018, CNNP had 26 holding subsidiaries and five companies with direct investment from CNNP and one joint venture. There were 21 controlling nuclear power units in operation, with a combined installed capacity of 19.092 GW; four nuclear power units with a combined installed capacity of 4.558 GW were under construction. Total assets reached 323.481 billion yuan.



1	Qinshan Nuclear Power Plant	Type of reactor: PWR CNP 300 Rated power: 1X310MWe	First nuclear power plant ever built in the Chinese mainland, hailed as "national glory"
2	Qinshan Nuclear Power Plant No. 2	Type of reactor: PWR CNP 600 Rated power: 2X650MWe 2X660MWe	First large commercial nuclear power plant independently designed, built, operated and managed by a Chinese company
3	Qinshan Nuclear Power Plant No. 3	Type of reactor: HWR CANDU700 Rated power: 2X728MWe	China's only commercial HWR nuclear power plant
4	Qinshan Nuclear Power Expansion Project (Fangjiashan Nuclear Power Plant)	Type of reactor: PWR CNP1000 Rated power: 2X1089MWe	One of the first group of 1 GW reactors independently designed, manufactured, constructed, and operated by a Chinese company
5	Tianwan Nuclear Power Plant	Type of reactor: PWR VVER1000 Rated power: 2X1060MWe 2X1126MWe	A model of China-Russia cooperation
6	Fuqing Nuclear Power Plant	Type of reactor: PWR CNP 1000 Rated power: 4X1089MWe	One of the first group of 1 GW reactors independently designed, manufactured, constructed, and operated by a Chinese company
7	Changjiang Nuclear Power Plant	Type of reactor: PWR CNP 600 Rated power: 2X650MWe	Southernmost nuclear power plant as well as the first nuclear power plant to be built in the minority-inhabited areas in China
8	Sanmen Nuclear Power Plant	Type of reactor: PWR AP1000 Rated power: 2X1250MWe	The world's first AP1000 three generation nuclear power unit
9	Tianwan Nuclear Power Expansion Project	Type of reactor: Improved PWR M310 Rated power: 2X1118MWe	Final nuclear power project in China that started construction during 2011-2015
10	Fuqing Nuclear Power Plant Units 5 and 6	Type of reactor: HPR1000 Rated power: 2X1161MWe	The world's first Hualong One nuclear reactor (Hualong One is a third-generation reactor model independently developed by a Chinese company)

Corporate Culture

Mission

Develop the nuclear industry to strengthen the country and serve society

Vision

A global leader in nuclear technology

Core values

Responsibility, safety, innovation, and collaboration

Enterprise spirit

The spirit embodied by the "Two Bombs, One Satellite" project

Patriotic, Dedicative,
Self-reliant, Hardworking,
Collaborative, Enterprising

The nuclear industry spirit

Cause of nuclear power prevails over everything; Responsibility for nuclear power outweighs everything;
Strict management permeates everything;
Self-motivation achieves everything

Goals

Provide safe and efficient energy
Create a clean and low-carbon life style
To be a globally recognized, influential nuclear power company
Pursue excellence and keep self-transcendence
Create business values, generate profits for shareholders, increase employee happiness, and create social wealth

Party Building

Guided by the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and the guiding principles of the 19th CPC National Congress and General Secretary Xi Jinping's major policy addresses, CNNP stays in line with the three strategies of large-scale, standardized and internationalized development, the "3655" management system and the eight core competencies, and take enhancing the Party's political building as the overarching principle to improve political stance and faithfully perform its political responsibilities, continuing to enhance its capacity of sustainable development.

Studying the guiding principles of the 19th CPC National Congress

- We provided education activity to ensure that our Party members keep in mind the need to maintain political integrity, think in big-picture terms, follow the leadership core, and keep in alignment, strengthen their confidence in the path, theory, system and culture of socialism with Chinese characteristics and make sure they resolutely uphold General Secretary Xi Jinping's core position on the CPC Central Committee and in the Party as a whole, and resolutely uphold the CPC Central Committee's authority and its centralized, unified leadership; we also established supervision and inspection mechanisms and strictly followed them.
- We integrated Party leadership and the guiding principles of the 19th CPC National Congress into our work guidelines, medium- and long-term plans, and annual agenda, improved our 13th Five-Year Plan and implemented development strategy for two fifteen-year periods to ensure a sustainable CNNP.
- We conducted learning and training on the guiding principles of the 19th CPC National Congress, which involved approximately 13,000 participants.

Integrating Party building into corporate management

- We embedded Party building performance in the JYK evaluation system, and improved evaluation methodology and indicator design.
- We prioritized Party building/cultural branding as one of five major dimensions of CNNP, and integrated Party building into corporate management.
- We promoted full-scale implementation of the "one articles of association", "three systems" and "four rules", and pushed for the institutionalization and regularization of Party building as part of our corporate governance.

Exercising rigorous governance over the Party

- We oversaw and facilitated the implementation of the rectification advice provided by the central inspection team, issued the *CNNP Rectification Accountability Program for Improvement Aspects Identified by the Central Inspection Team*, and urged relevant departments and member units to make improvement in accordance with the *Opinions of Supervision and Inspection*. In 2018, we improved over 50 mechanisms, all within the specified time limit.
- We tightened up accountability for overseeing discipline compliance, and built a stronger discipline inspection and supervision team.
- We strengthened the leadership of the "Party committee and Discipline Inspection Commission", to ensure that the Party organization plays an important role in "setting development direction, always seeing the bigger picture and overseeing the implementation of plans", stepped up standardized system building, supervision, and evaluation of the primary-level Party branches.

Anti-corruption

With a thorough understanding of the new normal, new tasks, and new requirements of clean Party governance and anti-corruption work, we take enhancing the Party's political building as the overarching principle, consistently follow the eight-point decision on improving Party and government conduct, and keep up our efforts to fight against the practice of formalities for formalities' sake, bureaucratism, hedonism, and extravagance. We also implement the accountability system for clean Party governance and anti-corruption work, tighten up accountability for overseeing discipline compliance, and strive to build a stronger discipline inspection and supervision team for continuous engagement. Besides, we have launched the Anti-Corruption Education Month campaign to enhance employees' awareness of ethics and compliance at workplace, and also strengthened the supplier management. Suppliers who violate our anti-corruption rules will be subject to warning, or disqualification. In 2018, there were 3,713 participants of study and trainings on anti-corruption, and 1,249 participants of the anti-corruption knowledge contest.

3,713

participants of study and trainings on anti-corruption

1,249

participants of the anti-corruption knowledge contest

Dare not be corrupt

- Members of the CNNP Party committee took the lead to sign a letter of responsibility regarding building a clean Party, aiming to set a good example for all staff and make officials take responsibility for anti-corruption in performing their duties.
- We tightened up Party governance, conducted integrity-focused awareness raising activities among discipline inspection officers to ensure timely notification of any non-performance of duties, and avoid overlooking what is right under our nose.

Cannot be corrupt

- We formulated regulations such as *Guidelines for Discipline Inspection and Supervision* and *Guidelines for Internal Supervision* in a bid to tighten up accountability for overseeing discipline compliance and build a strong discipline inspection and supervision team.
- In 2018, we formulated 20 guidelines for discipline inspection and supervision, 12 guidelines for auditing, the Procurement Accountability Measures for Overseeing Discipline Compliance, and other regulations.

Do not want to be corrupt

- We launched the Anti-Corruption Education Month campaign. In 2018, there were 3,713 participants of study and trainings on anti-corruption, and 1,249 participants of the anti-corruption knowledge contest; 239 articles were collected to the integrity-themed writing contest; 71 integrity-building principles were established.

Case

Sanmen Nuclear Power Co., Ltd. launches a youth book club on Party building

To encourage the engagement of young Party members in Party building activities and help shape the values and beliefs of young employees, Sanmen Nuclear Power Co., Ltd. started a youth book club for employees in November 2016 in response to their special needs and characteristics. The club holds monthly reading party to learn good books such as *The Age of Deng Xiaoping* and *Xi Jinping's Seven Years as an Educated Youth*, or practice and discuss the art of Chinese calligraphy and traditional Chinese tea ceremony. The club serves as a good platform for young employees to set up their values, beliefs and life goals.



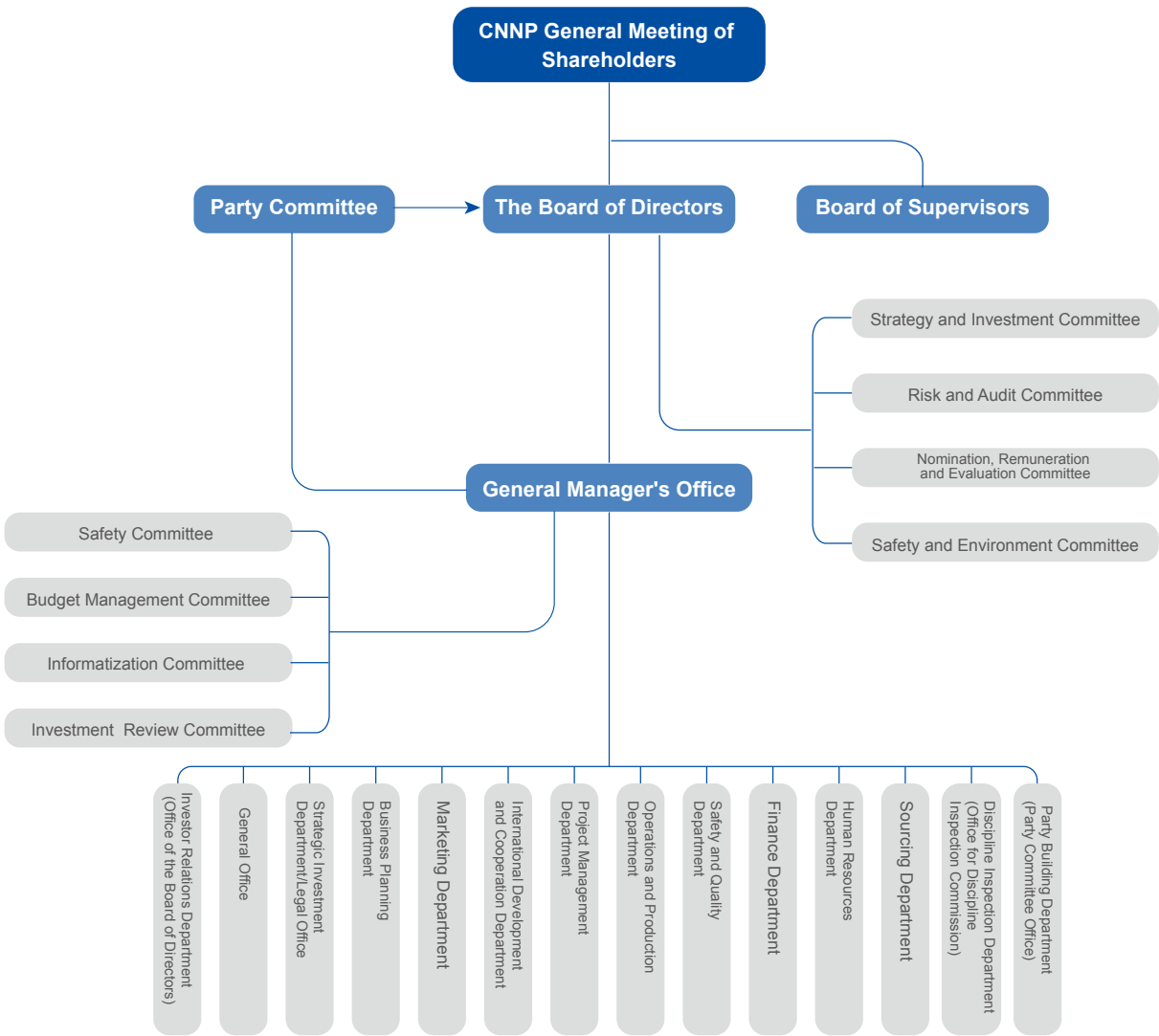
Youth book club of Sanmen Nuclear Power Co., Ltd.



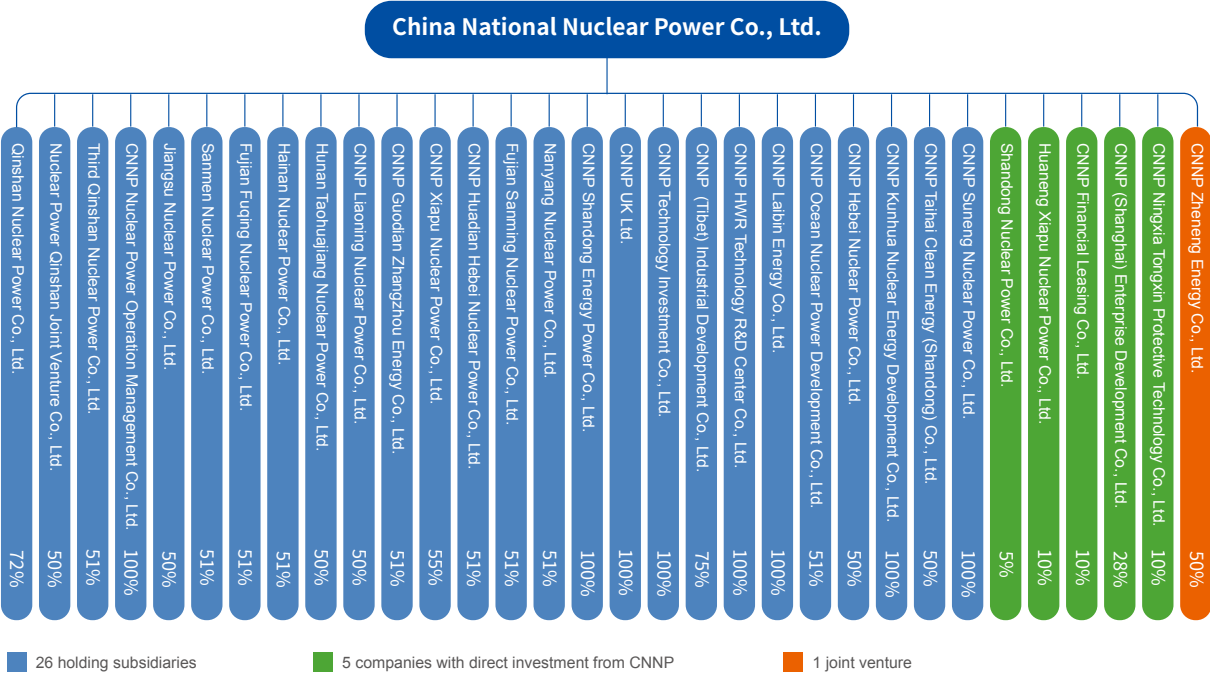
Strategy and Governance

Governance Structure

The Company has taken steps to improve the decision-making process and improve the modern corporate governance system under which "the Party committee plays a leading role, the Board of Directors makes strategic decisions, and the management is responsible for day-to-day operations." Measures have been taken to improve Articles of Association, *Rules of the General Meeting of Shareholders*, *Rules of the Board of Directors*, and other corporate systems to ensure the General Meeting of Shareholders, the Board of Directors, and the Board of Supervisors perform their duties and obligations faithfully. The Board of Directors fulfills its corporate governance functions through four committees: the Strategy and Investment Committee, the Risk and Audit Committee, the Nomination, Remuneration and Evaluation Committee, and the Safety and Environment Committee. The Board of Directors and its committees are responsible for the sound operation of the Company.



Governance Structure



CNNP Investment Map

Development Strategy

The vision of CNNP is to become a global leader in nuclear technology. Upholding the tenet of "develop the nuclear industry to strengthen the country and serve society", we implement strategies for large-scale, standardized and internationalized development and pursue safe development and innovation-driven development. With a strong sense of responsibility and a commitment to excellence, we firmly move towards our goal of becoming a leading nuclear energy company in the new era.

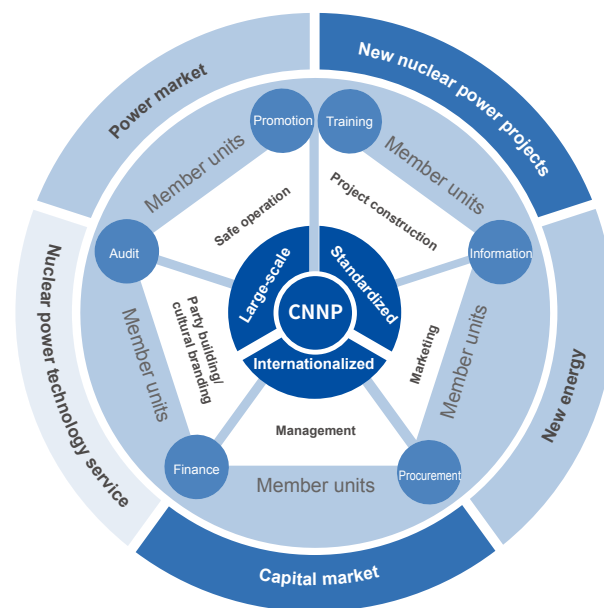


Development Strategy

Governance Mechanisms

"3655" management system

CNNP continues to promote the "3655" management system and has established 6 centers for promotion, training, information, procurement, finance and audit according to the three strategies of large-scale, standardized and internationalized development, and focused on five major dimensions and five markets of strategic operation to improve its overall business structure, coordinate tasks on all fronts, and build its business capacities for high-quality development.



"3655" Management System

JYK management system

The Company has been continuously improving its JYK management system for planning, budgeting, and assessment in a bid to strengthen the role of JYK management in the development of core businesses and core competencies. In 2018, the Company began to implement both top-down and bottom-up budgeting approaches. Accounts were required to be settled on a monthly basis, and quarterly adjustments were made to the budget. Four profit targets were set in 2018 and the total amount of employee remuneration was determined based on the target. Performance was evaluated monthly and quarterly. Review meetings were held on a regularly basis. The red, yellow, and green status rating system was put into place to track project performance with informatization of project performance management. We also identified the top 10 risks affecting the annual business targets, stepped up process control, risk response, and dynamic monitoring, and linked departmental performance to the performance of the entire company.

Risk management

The Company has continued to improve the risk and internal control system to strengthen risk management. We implement a strict risk management system in accordance with the requirements of the State Council, the SASAC and CNNC, and strengthen risk management accountabilities at all levels. We improve the risk management organizational structure and organize risk assessments, inspections, and training on a regular basis, aiming to foster a risk management culture, effectively remove and prevent hazards, and ensure the sustainable development of the Company.



Major risk control initiatives in 2018

Investor Relations

We attach great importance to investors' opinions and feedback, provide information to our investors by means of performance briefings, roadshows, conference calls, Investor Reception Day, etc. to create and maintain smooth and open communication channels for investors, and effectively protect their interests. In 2018, we were rated A for information disclosure practices by the Shanghai Stock Exchange for the third consecutive year.

Case

CNNP organizes investors to visit the world's first AP1000 three generation nuclear power unit

After Unit 1 of Sanmen Nuclear Power Plant was put into commercial operation, CNNP organized more than 30 industry analysts and representatives of well-known institutional investors from over 10 companies such as Zhejiang Zheneng Electric Power CO.,LTD, Guotai Junan Securities, and JPMorgan Chase & Co. to visit Sanmen Nuclear Power Plant and the world's first AP1000 three generation nuclear power unit. At the site, they discussed issues related to the safety, economical efficiency, and prospects of nuclear power.

By inviting professional analysts from major domestic investment institutions and institutional investors to visit the nuclear power plant and participate in face-to-face talk with the CNNP's management and technical experts, we have established closer relationships with investors. The event has effectively promoted positive interaction between the Company and investors and facilitated a better understanding of CNNP and its values by investors, with win-win results for both the Company and investors.

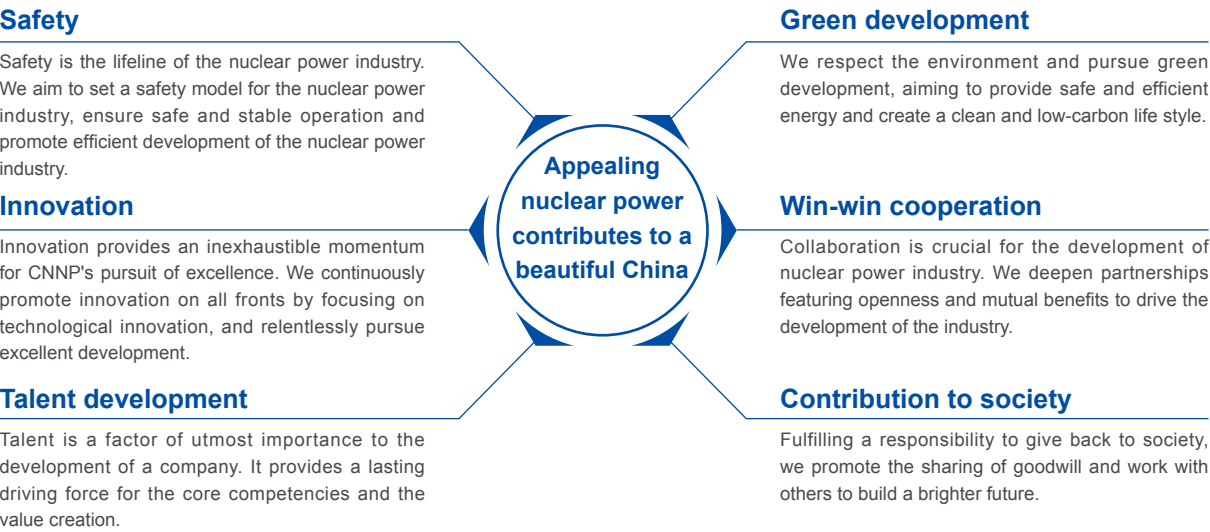


Investors who visit the world's first AP1000 three generation nuclear power unit

Social Responsibility Management

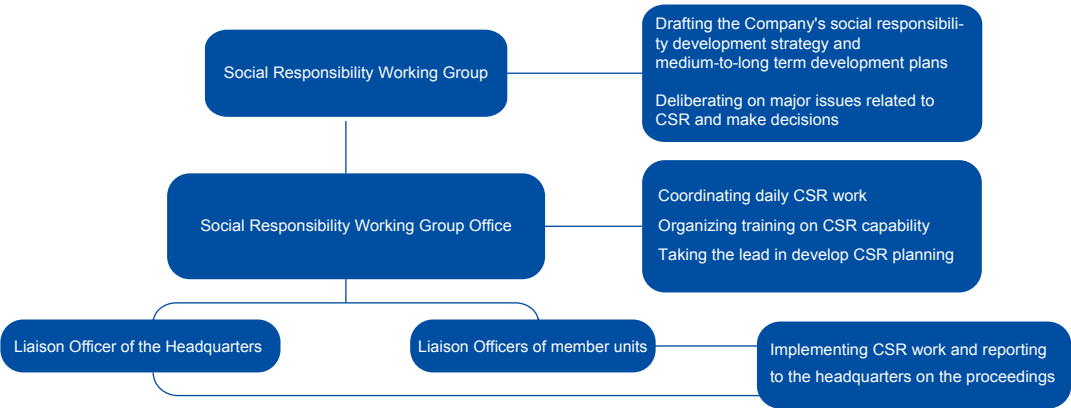
Social Responsibility

A strong sense of responsibility is the foundation of the survival and development of a nuclear power company. CNNP strives to become a globally recognized, influential nuclear power company and is committed to creating business values, generating profits for shareholders, increasing employee happiness, and creating social wealth.



Social Responsibility Management System

We are working to align our social responsibility management system with our development strategy and business model, continuously improve its organizational structure, integrate social responsibility management into our corporate philosophy, functional departments, production and operation processes, and actively respond to the expectations and demands of the government, shareholders, the public, and other stakeholders. We have put in place an efficient social responsibility management system characterized by a clear division of responsibilities to facilitate our work in the area of corporate social responsibility.



CNNP Social Responsibility Management System

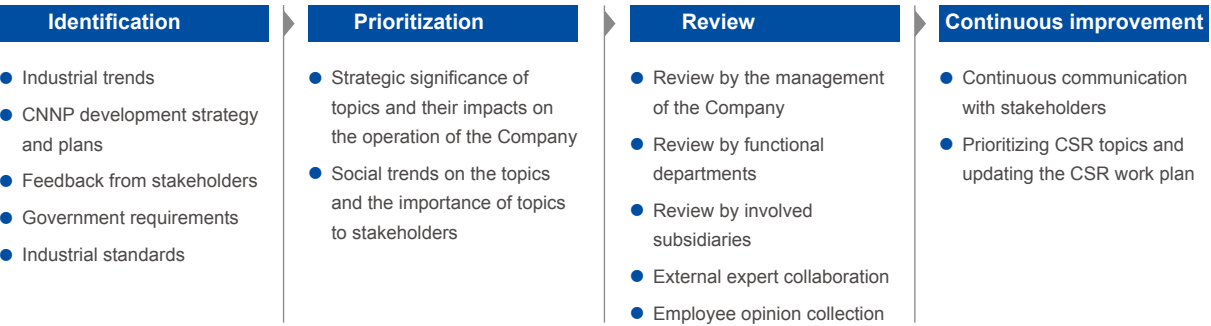
CSR Work Promotion

Based on the three-in-one approach of corporate culture, social responsibility, and branding efforts, we incorporate social responsibility work into day-to-day operations, improve social responsibility management, and continue to take CSR actions in a bid to become a leading global nuclear power company.



Materiality Management

Based on study of the related national policies and our development strategy and plans, we identified major CSR topics from the two perspectives of "importance to the sustainable development of the Company" and "importance to stakeholders" in 2018, prioritized these topics and chose to disclose material topics in this report.



Material topic identification

CNNP Material Topics	Corresponding Indicators of GRI Standards	Boundaries (Internal)	Boundaries (External)	Page No.
Safety				
Nuclear safety culture	Occupational health and safety	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	—	20
Nuclear safety management	Occupational health and safety	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	—	22
Project construction safety	Occupational health and safety	CNNP nuclear power units under construction	Government, the public, and the regulatory authorities	23
Safe operation	Customer health and safety	CNNP nuclear power units in operation	Government, the public, and the regulatory authorities	25
Environment				
Environmental impact identification	Environmental impact of products and services	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	Government, the public, and the regulatory authorities	38
Radioactive materials management	Emissions	CNNP nuclear power units in operation	Government, the public, and the regulatory authorities	37
Biodiversity protection	Biodiversity	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	Government, the public, and the regulatory authorities	39
Water resource management	Water resources	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	Government, the public, and the regulatory authorities	35
Clean energy	Energy	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	—	32
Innovation				
Technological innovation	Indirect economic impact	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	—	44
Innovation management platform	Indirect economic impact	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	—	47
Collaboration				
Domestic production of equipment	Indirect economic impact	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	Suppliers	52
Supplier management	Supplier social assessment	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	Suppliers	51
Strategic cooperation	Indirect economic impact	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	Peers, and industry associations	50
International exchanges and cooperation	Indirect economic impact	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	International organizations and industry associations	53
Employees				
Employees' rights and interests	Employment	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	—	58
Occupational health and safety	Occupational health and safety	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	—	59
Employees development	Training and education	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	—	60
Society				
Targeted poverty alleviation	Local communities	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	Government and residents of local communities	70
Community engagement	Local communities	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	Government and residents of local communities	74
Charitable donations	Public policy	CNNP and its holding subsidiaries, joint ventures, and companies with direct investment from CNNP	Government and residents of local communities	75

Stakeholder Communication and Engagement

We actively identify stakeholders, learn and respond to stakeholders' expectations and demands, communicate and interact with stakeholders in an innovative way, and respond to stakeholders' concerns.

Major stakeholders	Expectations and demands	Communication and response
Shareholders and investors	<ul style="list-style-type: none"> • Performance return • Protection of rights and interests • Compliance management 	<ul style="list-style-type: none"> • General meeting of shareholders and annual reports • Organizing visit • Continuously improving profitability • Timely disclosing related information
Government	<ul style="list-style-type: none"> • Abiding by the law • Paying tax in accordance with law • Driving local development 	<ul style="list-style-type: none"> • Compliance management according to the law • Paying taxes • Driving local economic growth and providing employment opportunities • Accepting supervision and guidance
Customers	<ul style="list-style-type: none"> • Providing safe, stable electricity • High-quality services 	<ul style="list-style-type: none"> • Improving the quality of services • Stepping up technological innovation • Improving service platforms
Partners	<ul style="list-style-type: none"> • Faithfully performing duties under partnership contracts • Responsible procurement • Win-win cooperation 	<ul style="list-style-type: none"> • Disclose procurement information • Strictly complying with terms and conditions of partnership contracts • Deepening communication and collaboration
Employees	<ul style="list-style-type: none"> • Compensation and benefits • Occupational health and safety • Career development • Humanistic care 	<ul style="list-style-type: none"> • Paying agreed amounts of salary and providing social insurance in a timely manner • Organizing periodic physical examinations and establishing an occupational health management system • Improving the talent management system • Caring for the well-being of employees
Environment	<ul style="list-style-type: none"> • Energy conservation and emission reduction • Protecting the environment • Responding to climate change 	<ul style="list-style-type: none"> • Developing clean energy • Green and low-carbon production and operation • Participating in biodiversity protection
Society	<ul style="list-style-type: none"> • Promoting community development • Supporting philanthropy • Providing volunteer services 	<ul style="list-style-type: none"> • Contributing to community development • Improving community livelihoods • Supporting poverty alleviation • Driving local development

Feature

CNNP Forges Ahead Towards a Leading Global Nuclear Energy Enterprise

The year 2018 marked the 40th anniversary of the reform and opening-up of China and the first year of fully implementing the guiding principle of the 19th CPC National Congress. It also marked the tenth anniversary of the founding of CNNP and the third anniversary of our listing. Despite massive challenges posed by the rapidly changing external environment, CNNP continues to forge ahead, actively assume social responsibility, spur innovation, and contribute to the development of our country.

CNNP —a Name Card of China

CNNP has gradually grown to be strong after years of reform and development, making great achievements and opening a new chapter of "CNNP — a Name Card of China".

21 controlling nuclear power units in operation
19.092 GW installed nuclear power capacity
4 controlling nuclear power units under construction
4.558 GW installed nuclear power capacity
323.481 billion yuan of total assets

High-quality, Safe and Reliable Development

Adhering to the policy of "safety and quality first", we focus on the development of core competencies for operation and maintenance. Our total power output in 2018 exceeded our target and hit a record high.

13 overhauls completed
45.06 days period optimization
1.145 TWh power generation increased

WANO composite index of our four units ranking **No.1**
CNNP's Tianwan Unit 2 210 once again broke the world record for shortest time of an overhaul of VVER-1000 units with **25.2 days.**

Building the "Pillars of a Great Power" and Promoting CNNP "Going Global"

We continue to drive the development of the industry with innovation and build our capacity to move closer to the forefront in the world. We actively respond to the implementation of the Belt and Road Initiative and vigorously promote CNNP "Going Global".

We have in-depth exchanges with **Pakistan, Saudi Arabia, Bulgaria, Belarus, Bangladesh**, and other countries.

We establish stable cooperation with **Canada, the Czech Republic, South Korea, Argentina**, and other countries.

Pursuing Green Development and Contributing to a Beautiful China

We persist in the philosophy of green development and promote a diversification strategic layout that involves multiple new energy sources with nuclear power as our core business. We attach great importance to low carbon development and green operations, and actively build green factories to lead green development.

All radioactive effluents discharged from our nuclear power plants in operation are lower than the national annual limits and the levels specified by national standards.

Fuqing Nuclear Power Phase I project was awarded the "National Soil Conservation Ecological Civilization Project"

Fulfilling Social Responsibility and Winning the Battle Against Poverty

Bearing in mind our political responsibility as an SOE, we strive to play a key role in poverty alleviation in China by conducting various poverty alleviation programs, including photovoltaic poverty alleviation, poverty alleviation through agriculture and animal husbandry, poverty alleviation through supporting education, aid for Tibet by industrial development, etc. to drive social development.

11 officials dispatched for poverty alleviation
10 villages benefited from our poverty alleviation projects
6.52 million yuan invested in targeted poverty alleviation

Case

CNNP participates in "Great Reform: An Exhibition Commemorating the 40th Anniversary of China's Reform and Opening-up"

On November 13, 2018, the "Great Reform: An Exhibition Commemorating the 40th Anniversary of China's Reform and Opening-up" was unveiled at the National Museum of China. The world's first Fuqing demonstration nuclear power project – "Hualong One" nuclear power reactor - was on display to showcase one of the outstanding achievements of China in the nuclear power field.



The world's first Fuqing demonstration nuclear power project — "Hualong One" nuclear power reactor



Intrinsic Safety Lays a Foundation for Development

Our Actions

Strengthening awareness raising and standardized management of nuclear safety culture, and organizing related reviews and exchange activities

Putting (ASP) platform into operation

Hosting the 4th Human-error Prevention Skills Contest

Launching an application equipment reliability management system

Conducting the first focus area review (FAR) of the Company by WANO

Improving the class A/B event feedback mechanism

Performance in 2018

150 reactor-years of safe operation for operating units

89.16% of load factor of units in stock

100% of special personnel with certification

Four units scored 100 for WANO composite index, tying for first place among all rated reactors

Corresponding SDGs

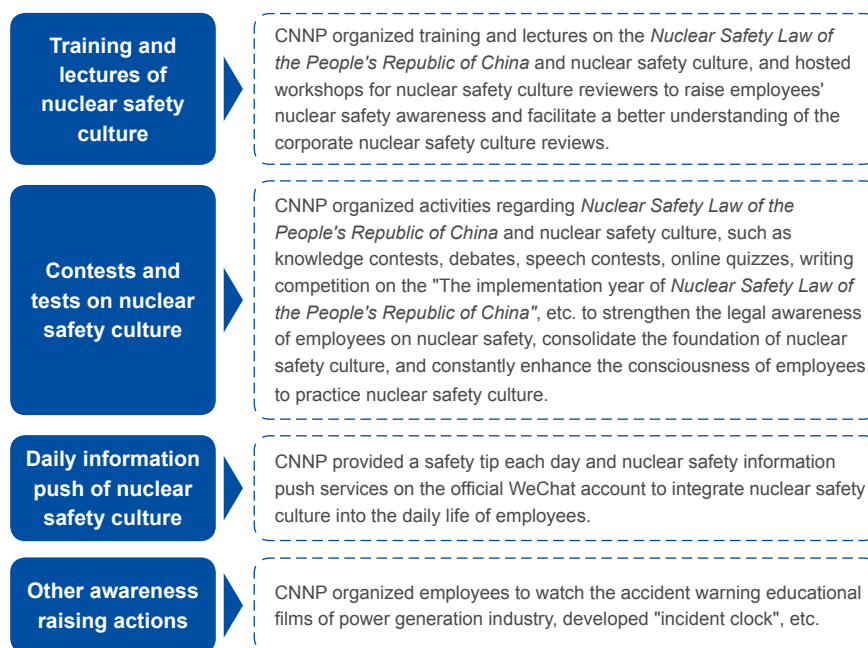


Nuclear Safety Culture

We attach great importance to raising employees' safety awareness, and strive to strengthen awareness raising and standardized management of nuclear safety culture and develop a culture of nuclear safety by organizing related reviews and exchange activities. Our goal is to instill safety awareness in employees and continue to assume a leadership role in developing the excellent culture of nuclear safety.

Nuclear safety awareness raising

We strictly comply with the *Nuclear Safety Law of the People's Republic of China* and strive to engage employees in a culture of nuclear safety, and raise employees' awareness of nuclear safety and promote this kind of awareness to become employees' self-consciousness by organizing activities including speeches, knowledge contests, etc. on nuclear safety.



Case

CNNP organizes the first domestic peer review workshop on nuclear safety culture

In order to enhance the effects of nuclear safety culture review and promote the sharing of review experience, CNNP organized a peer review workshop on August 15-16, 2018 to provide training for employees from CNNP and our member units, State Nuclear Power Technology Corporation (SNPTC), and Institute for Standardisation of Nuclear Industry (ISNI) on CNNP Ten Principles of Excellent Nuclear Safety Culture, overview of nuclear safety culture and review, nuclear safety culture review process and methods, etc. Forty-six participants completed the workshop. During the workshop, CNNP introduced our own nuclear safety culture review tools to peers in the industry for the first time and received well response. This workshop not only helped foster nuclear safety culture reviewers, but also enhance the assessed subsidiaries' understanding of nuclear safety culture, paving the way for smooth implementation of future nuclear safety culture review.

Nuclear safety culture review

CNNP has compiled and published nuclear safety culture promotion plans and analysis reports, and organized nuclear safety culture reviews to standardize nuclear safety culture review and continuously promote the development of nuclear safety culture.

Nuclear safety culture development

We formulated and published the *2018 CNNP Plan to Promote Nuclear Safety Culture Development* to push forward nuclear power culture development from various aspects; we also complied and released the *General Guidelines for Nuclear Safety Culture Review for Nuclear Power On-site Operation Contractors*, and *CNNP Case Studies on Typical Nuclear Power Plant Incidents from Perspective of Nuclear Safety Culture (2018)* to conduct continuously promote standardized management of nuclear safety culture; in accordance with the *CNNP Ten Principles of Excellent Nuclear Safety Culture*, CNNP conducted questionnaire survey of nuclear safety culture and complied *CNNP Analysis Report of Nuclear Safety Culture Questionnaire Survey (2018)*, pointing out the direction for nuclear safety culture development in next step.

Nuclear safety culture review

To help nuclear power plants and contractors promote the development of nuclear safety culture, CNNP, China Nuclear Energy Association (CNEA), and nuclear power plants jointly conduct special review of nuclear safety culture; CNNP also organizes nuclear safety culture seminars to analyze the weaknesses identified during the nuclear safety culture review, make a plan for future review, and set a direction for subsequent improvement.

Case

Jiangsu Nuclear Power Co., Ltd. reviews nuclear safety culture of its contractors

Jiangsu Nuclear Power Co., Ltd.(JNPC) has developed the *Contractor Nuclear Safety Culture Evaluation Standards* according to difficulties in promoting nuclear safety culture in power plant maintenance cooperative units, and taken this as a standard to carry out nuclear safety culture review on China Nuclear Industry Maintenance Co., Ltd. This review was the first domestic nuclear safety culture review conducted for cooperative units, not only promoting the development of nuclear safety culture of JNPC, but also providing a good example of nuclear safety culture review for other subsidiaries.

Case

Sanmen Nuclear Power Co., Ltd. receives the strictest nuclear safety culture review by CNEA

On December 10-14, 2018, CNEA organized four major nuclear energy companies, including CNNC and State Power Investment Corporation Limited (SPIC), etc. to conduct a week-long nuclear safety culture peer review of Sanmen Nuclear Power Co., Ltd. It was the first nuclear safety culture review organized by associations for domestic power plant in commercial operation. It was organized based on CNNP's excellent nuclear safety culture review achievements over the years, marking that the nuclear safety culture review of CNNP has become a model of industry review.

The review team said:

"Since the founding of Sanmen Nuclear Power Co., Ltd., the company has been committed to building a strong nuclear safety culture. It has created a three-level nuclear safety culture management system and formulated nuclear safety culture promotion plan to effectively guide and implement the development of nuclear safety culture."

Nuclear Safety Management

CNNP has continuously improved our safety management system, fulfilled safety management responsibilities, provided effective guarantees for work safety and safety operation, and actively promoted the standardization of safety management, embedding the philosophy of safety in the whole process of work safety to ensure the safety of nuclear power in an all-round way.

Improving safety management system

We continue to improve the organizational system of nuclear safety management. Relying on the Work Safety Committee, CNNP takes efforts to solve safety management problems and provides organizational guarantee for work safety. We strive to improve the "Party committee focuses on working mechanism of work safety", giving full play to the role of Party committee in work safety management, and effectively implementing the system of "one position with two duties".

Improving the management system of the Work Safety Committee. In 2018, the Work Safety Committee published the common and tricky problems in work safety and monitored their rectifications to promote effective problem solving; the business team of Work Safety Committee focused on solving common safety management problem, identified management bias, and provided technological support for improvement of work safety management.

Implementing "Party committee focuses on working mechanism of work safety". We gave full play to the role of Party branches at all levels in work safety, and focused on "Party committee focuses on working mechanism of work safety" to carry out related works, including clearly defining the responsibility of work safety of the main person in charge and key personnel, increasing the special report on safety in the annual report of main person in charge of Party branch, etc.

Standardizing safety management

The Company has actively promoted the standardization of work safety, and published standards and guidelines for each sub-area of work safety management to embed safety into every stage of the lifecycle of a nuclear power project, including planning, site selection, design, engineering, construction, and operation. We have put ASP platform in operation, provided informatization means nuclear power units' monitoring, review, management, and control, realizing the overall improvement in the standardization of work safety management.

Actively pushing ahead with the standardization of work safety management. We have organized the compilation of standards and guidelines for 22 sub-areas of work safety, and issued 373 standards and guidelines to offer guidance for work safety standardization of our nuclear power plants. In 2018, all nuclear power plants of CNNP completed the annual work safety standardization work as planned.

Building ASP platform and pushing forward the standardization of work safety technologies. We officially launched the ASP platform in June 2018. This platform involves two major areas of nuclear power safety and production. It collects and displays data for four sub-areas, including safety & quality, operation & production, equipment reliability, and environmental monitoring, and supports the establishment of a comprehensive indicator system of work safety, improving safety performance.

Quality Project Development

Safety and quality are foundational to nuclear power development, and the nuclear power construction should be absolutely safe. CNNP adopts multiple measures to strengthen the safety management of engineering construction, and strives to build quality projects. Two construction sites of JNPC were named "National Five-Star Sites", which was the first time that CNNP won the highest honor in the field of project site management.

Strengthening construction safety management

In 2018, we adhered to the policy of "safety and quality first", improved management accountability, and strengthened safety management of engineering and construction projects.

Improving management responsibility of construction projects

- Publishing the *Management Measures on Safety, Quality, Environmental Protection Accountability*, and implementing work safety one-vote veto of units happening casualty accident.
- Issuing the *Requirement and Management Guideline on Main Responsibilities of Five Major Positions* and other policies, clarifying the responsibilities in the whole process and of the risk management and control.

Enhancing the development of work safety credit system

- Formulating and issuing "red and yellow lines" standards of safety & quality, establishing "work safety blacklist" system to promote the strict implementation of related regulations and standards.

Advancing process control

- Pushing forward process control of high-risk work and contractors' works, and exploring new management and technological measures to reduce recurrence of hazards.

Commending good performance and promoting best practice

- Commending outstanding contractors and quality projects, and effectively promoting management experience of excellent contractors and construction experience of quality projects.



100%
employment rate of special
personnel with certification

Achievement of quality project construction

In 2018, we focused on JYK reviews, greatly improved the management of engineering and construction projects, and strengthened target management. All units under construction completed milestone nodes as planned or ahead of schedule. We achieved zero occurrence of major equipment-related accident caused by human error, major or more serious explosion accident of high pressure equipment, incident of loss or theft of hazardous materials (explosives), major or more serious fire accident, and major or more serious traffic accidents.



In 2018, the units under construction were advanced in an orderly manner, with safety, quality, and progress well under control.

Units 3 and 4 of Tianwan Nuclear Power were put into commercial operation ahead of schedule; Units 5 and 6 were at the critical stage of transition from civil works to installation, and all previous milestone nodes were completed ahead of schedule.

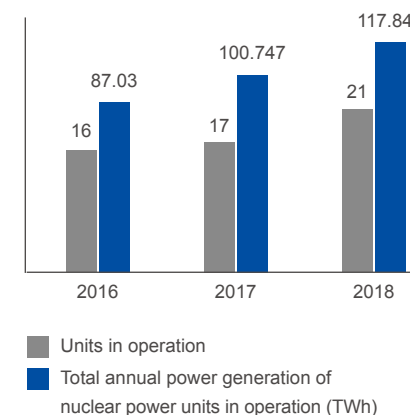
Units 1 and 2 of Sanmen Nuclear Power Plant were put into commercial operation, and there was no unplanned shutdown during the commissioning period. The two units created a record for the shortest time in loading, criticality, commercial operation among domestic nuclear power units.

The world's first Hualong One nuclear reactor – Units 5 and 6 of Fuqing Nuclear Power Plant were proceeding smoothly, and all previous milestone nodes were completed as planned or ahead of schedule.



Safe and Stable Operation

Safe operation depends on the working philosophy of "Never fail". CNNP focuses on preventing human errors, raising operators safety awareness and improving their skills to eliminate safety hazards caused by human errors; CNNP also attaches important to ensuring equipment reliability management, meeting equipment management requirements; in addition, CNNP strengthens emergency management, and effectively responds to natural disasters such as typhoons, etc. to ensure safe and stable operation of power plants.



Prevention of human errors

We have continuously improved the human error prevention system, avoided operational risks by implementing strict operator access system, conducting a wide range of skill trainings, and developing tools to prevent human errors, thus raising safety awareness and improving skills of operators, and enhancing the overall human error prevention capacity of the Company.

Implementing strict operator access system

Setting up and continuously improving the operator recruitment, training, and review system, and implementing a strict operator access review process to guarantee safe and stable operation.

Improving operators' skills

Providing lifelong learning opportunities for operators, including people management knowledge and skill training, human error prevention training and skill contests to constantly raise safety awareness and improve job skills of operators.

Avoiding operational risks

Developing tutorials and tools for avoiding operational risks based on lessons learned, including eleven human error prevention tools, human error prevention videos, and human error prevention labs, etc. to guide operators to effectively prevent human errors.

Case

CNNP hosts the 4th Human Error Prevention Skills Contest

In order to expand employees' knowledge of how to prevent human errors and reduce accidents caused by human errors, CNNP hosted the 4th Human Error Prevention Skills Contest on October 15-19, 2018. The theme of this contest was "Pursuit of safety and excellence". The contest consisted of two sessions including real-world scenario simulation and theoretical knowledge quiz. A total of 126 players of 14 teams from nine subsidiaries of CNNP participated in the contest. The contests helped CNNP comprehensively assess each team's use of human factor management tools and raised industrial safety awareness of the participants. The event invited experts and peers from nuclear energy regulatory authorities, CNEA, and China General Nuclear Power Corporation (CGN) to serve as judges, marking that human error prevention skills contest becomes a platform for exchange of nuclear safety in the industry.

Equipment reliability management

Equipment reliability is the cornerstone of work safety of nuclear power plant and the focus of internal management of power plants. We attach great importance to equipment reliability management. All power plants strictly observe relevant requirements and strive to ensure effective management of key equipment. In 2018, CNNP's 21 units in operation were generally in good working order, with safety

indicators fully under control. Among these 21 units, the average load factor of the units which have completed two fuel cycles was 89.16%, and the average capacity factor of the units was 91.61%. Qinshan Nuclear Power, Jiangsu Nuclear Power Co., Ltd., Fujian Fuqing Nuclear Power Co., Ltd., and Hainan Nuclear Power Co., Ltd. won "The 11th National Equipment Management Best Unit Award".

Improving equipment management system

Establishing mechanisms such as equipment reliability inspection, equipment reliability management technology seminars, and biweekly meetings of unplanned shutdown, optimizing the organizational structure of equipment management of power plants, enhancing power plants' understanding of equipment management, and clarifying the responsibilities in production process.

Unifying equipment management processes and requirements

Issuing 26 equipment management guidelines and procedures and the upgrading version of management procedures of each power plant, unifying CNNP's equipment management procedures and requirement to lay a solid foundation for improving the performance of follow-up equipment management.

Launching equipment reliability database system

Continuing to promote the development of equipment reliability database system and complete the issuing and promotion of product. As of the end of 2018, the average equipment reliability index score of units in operation has reached 88.9, with a significant enhancement of equipment reliability management level.

Case

CNNP launches equipment reliability database (ERDB) system

CNNP launched an equipment reliability database system (ERDB) in November 2018. ERDB is a product independently developed by CNNP on the base of 140 reactor years of safe operation. The ERDB system has 15 functions of equipment reliability management and has independent intellectual property right, which fills the gap of this field in China. By now, CNNP's 21 units in operation have applied the ERDB system, with more than 1.67 million pieces of equipment being involved. It has evaluated 1,097

systems through over 90,000 data measuring points, providing a smart, standardized, effective solution to equipment reliability management of nuclear power plants, effectively facilitating equipment reliability management by using smart data analysis method. It provides strong technological support for CNNP to fully control the nuclear power unit system and equipment and improve the effectiveness of nuclear power unit management.

Enhancement of emergency management

We strictly comply with the *Regulations on Emergency Measures for Nuclear Accidents at Nuclear Power Plants*, continuously improve the emergency management system, optimize emergency documentation process, regularly maintain emergency equipment, strengthen emergency response training and drills, and conduct emergency base review, comprehensively improving emergency response capabilities.

We ensure efficient and timely communication, response, and resource deployment in the aftermath of natural disasters such as typhoons, by improving reporting mechanisms and emergency plans, strengthening government-enterprise cooperation and internal coordination within the Company, and gaining support of the headquarters. In 2018, we successfully dealt with the influence of typhoons such as Typhoon "Lark", "Capricorn", "Winbiya", "Bailijia", etc., successfully protecting our nuclear power units.

Team building for emergency response

Raising emergency preparedness awareness, strengthening team building for emergency response, and constantly improving the emergency response capabilities; equipped with emergency technology experts to provide technological support for nuclear power plants to handle emergencies.

Emergency equipment maintenance

Proactively conducting regular maintenance and inspections of emergency equipment, including the emergency broadcast network, on-site monitoring system, etc. to ensure that the equipment can be readily available.

Emergency response documentation improvement

Revising site emergency plan, upgrading emergency documentation, and making emergency documentation more scientific and feasible according to relevant laws and regulations, such as the *Nuclear Safety Law of the People's Republic of China*, etc. and experience on emergency preparedness.

Emergency response training and drills

Subsidiaries of CNNP analyzed lessons learned in emergency response training and drills, revised the related management procedures, improved the related control process and documentation, increased the effectiveness of emergency response training and drills, and organized special emergency response drills. In 2018, CNNP carried out 405 single emergency response exercise and 9 comprehensive emergency response exercises.

Emergency base management

Urging our plants to carry out self-review of their emergency base and making rectifications of problems identified in accordance with the requirements of the National Nuclear Security Administration.

Case

Qinshan Nuclear Power Co., Ltd holds the first domestic comprehensive on-site emergency response drill of multi-unit serious accident

Qinshan Nuclear Power Co., Ltd held the first domestic comprehensive site emergency response drill stimulating multi-unit serious accident scenario on December 1, 2018. It lasted seven hours and more than 700 people participated in the drill.

The drill simulated a scenario where Unit 1 of Fangjashan Nuclear Power Plant and Unit 1 of Qinshan Nuclear Power Plant broke down at the same time, covering emergency preparedness, implementation of on-site and off-site emergency response plans, and serious accident management. Qinshan Nuclear Power Plant entered corresponding emergency at all levels in accordance with the multi-unit emergency response procedure.

The scenario was played out on a full-scale simulator. Personnel at all levels actively responded, and mainly examined the judgment of emergency status of multiple units, serious accident management, emergency repair, and emergency support requests. The drill also tested the effectiveness of coordination between power plants and off-site emergency management department and higher-level departments. The drill provided a good example for comprehensive on-site emergency response drill of multi-unit serious accident, and effectively improved the emergency response capability of the emergency response team.



Qinshan Nuclear Power Plant holds the first domestic comprehensive on-site emergency response drill of multi-unit serious accident.

Case

Hainan Nuclear Power Co., Ltd fully defends against strong typhoon Mangkhut to win the battle against flood and typhoon

The strongest typhoon of the year, Mangkhut, landed on the coast of Taishan, Jiangmen City, Guangdong Province at around 5pm on September 16, 2018. Located in a neighboring province of Guangdong, Hainan Nuclear Power Co., Ltd took a series of preparatory actions to ensure safety of nuclear power facilities during the typhoon, including closely keeping up with meteorological updates and deploying emergency response personnel in advance to ensure the emergency response plan could be initiated at any time. It reinforced plant buildings so they were able to withstand high winds and prevent leakages. Important preventive measures were put in place and verified in an orderly manner. Steps were taken to strengthen government-enterprise cooperation and internal coordination within the CNNP and gain support from the headquarters to ensure the safety of the nuclear power plant during the typhoon. During the period of the typhoon, the two units were in good working condition.

Continuous Improvement

We actively carry out safety inspections, make rectifications, eliminate safety hazards, learn best practices and benchmark, and organize peer review to continuously improve work safety level, promote experience feedback, and enhance intrinsic safety.

Safety supervision and inspection

We continuously improve our safety supervision, inspection, and improvement system. We have launched the "100-day Accident-free" Campaign, conducted investigations to identify safety hazards, formulated and issued the *CNNP Leadership Safety Supervision Program*, and completed the safety inspection of 10 subsidiaries, including Hainan Nuclear Power Co., Ltd and Sanmen Nuclear Power Co.,

Ltd. These efforts have effectively prevented accidents from occurring. We have established a safety supervision system, and we have done a good job in internal and external tracking and coordination of important work safety issues of units, and promote cross-functional cooperation for effective management and solution delivery.

Case

CNNP conducts safety inspection campaign of our subsidiaries

In 2018, CNNP conducted safety inspections of six subsidiaries, including Qinshan Nuclear Power Co., Ltd., JNPC, Sanmen Nuclear Power Co., Ltd., Fujian Fuqing Nuclear Power Co., Ltd., Hainan Nuclear Power Co., Ltd., and CNNP Xiapu Nuclear Power Co., Ltd. The inspections were jointly carried out by the Safety Supervision Group of Safety Committee of CNNP and experts in related areas. The inspection team focused on the implementation of the work safety accountability system, nuclear safety, emergency preparedness, etc. Sixty-one hazards were identified during the inspection, and nine best practices were recognized and promoted.

CNNP urged the subsidiaries to address identified problems, raise risk awareness, strengthen management accountability, summarize and analyze related issues, and eliminate safety hazards.

Peer review

CNNP regularly invites peers from WANO, CNEA, etc. in the nuclear energy industry to conduct special review of nuclear power plants in various fields, map our review to advanced experience, and improve our weakness to enhance safety level. At the same time, we also organize and participate in review workshops, enhance internal learning and peer exchange to improve employees' understanding of review. In 2018, CNNP organized a WNAO-TC peer review standards training, and conducted 20 peer reviews, covering nuclear safety culture, spare parts, procurement management, code of conduct, change management, etc.; subsidiaries of CNNP completed one external review return visit, five comprehensive reviews, and one special review.

We continuously improve peer review management and technological requirements. We have formulated and published the *CNNP Performance Targets and Review Criteria of Operation Performance Observation, the CNNP Peer Review Data Management Rules*, the Suggestions on *CNNP Special Assessment Data Analysis and Management Actions (2015- 2017)*, etc. and completed the development, installation and commissioning of our on-site peer review software, enabling standardized, smart peer review management and providing reference for smooth development of peer review in the future.

Case

CNNP completes WANO's first focus area review of domestic power enterprises

On August 13-17, 2018, the World Association of Nuclear Operators (WANO) completed the first focus area review (FAR) of CNNP. The review, organized by the WANO Tokyo Center, was the first FAR conducted by WANO for power companies in China, aiming to provide peer advice for improvement of nuclear power management in China.

This review mainly focused on the three aspects of corporate management and control, corporate supervision and corporate support in the GOSP management and control mode of CNNP. Upon completion of the week-long review, the review team believed that the Company has achieved significant improvements in the performance of power plants in operation and under construction. The review team put forward conclusions and advice in line with the reality of CNNP, making contribution to the Company's nuclear power management improvement and pursuit of excellence.

Experience feedback

We adhere to the experience feedback management philosophy of "serving production and promoting safety", and attach great importance to lesson learning from safety accidents, and continuously improve safety management, enhancing the effectiveness of internal and external experience feedback.

Continuous improvement of the of experience feedback organizational system. In 2018, CNNP Experience Feedback Committee organized eight meetings on work safety experience, focusing on issues such as the prevention of human errors and the effectiveness of experience feedback, summing up lessons learned, and identifying typical problems. At the safety experience feedback meetings, the Experience Feedback Committee coordinated the implementation of 50 improvements, effectively ensuring the effectiveness and timeliness of experience feedback.

Effective use of the status reporting system. All status reports are rated and distributed through the experience feedback management platform and the EAM system, and used to support the identification of root causes and the implementation of improvements. The status reporting system has effectively helped CNNP prevent and reduce accidents caused by human factors and recurrence of equipment failures. In 2018, CNNP generated 152,133 status reports.

Establishment of class A/B events experience feedback system. CNNP has organized to upgrade the *CNNP Experience Feedback Management Methods*. On the base of Class A event management and control requirements, the revised methods add Class B event control requirements and include important external events into class B events management process, underlining CNNP's effort to step up external experience feedback management for more comprehensive and objective feedback.

Case

CNNP conducts in-depth power plants' experience feedback work

CNNP organized experience feedback focusing on class A/B events. In 2018, CNNP issued 107 management requirements and initiated 809 corrective actions for 28 Class A events, and 85 management requirements and 640 corrective actions for 33 class B events. The Company set up special report mechanism for leaders to hear class A events, and realized online launch, tracking, and closure of Class A/B events through the experience feedback platform. In 2018, the power plants experience feedback system of CNNP won the third prize of the CNNC Management Innovation Award.

50 improvements implemented by the Experience Feedback Committee at the safety experience feedback meetings

152,133 status reports



Green and Low-Carbon Development for a Beautiful China

Our Actions

- Creating the Safety and Environment Committee which is responsible for overseeing work safety and environmental protection of the Company
- Formulating *Safety, Quality, and Environmental Reporting Regulations*, which builds a environmental reporting mechanism
- Promoting nuclear energy development and building nuclear energy development platforms
- Taking substantive actions to minimize waste and controlling radioactive waste discharge strictly
- Launching "Energy Conservation Promotion Week" and "National Low Carbon Day" campaigns, which create an atmosphere of energy saving and carbon reduction

Performance in 2018

- 117.847 TWh annual power output
- Equivalent to reducing standard coal consumption of 37.1243 million tons
- Equivalent to reducing CO₂ emissions of 97.266 million tons
- Equivalent to reducing SO₂ emissions of 315,500 tons
- Equivalent to reducing NO_x emissions of 274,700 tons

Corresponding SDGs

13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



13 CLIMATE ACTION 14 LIFE BELOW WATER 15 LIFE ON LAND

Environmental Management System

We strictly comply with the *Environmental Protection Law of the People's Republic of China*, the *Nuclear Safety Law of the People's Republic of China*, and other related laws and regulations, and continuously improve our environmental management system. We assess environmental impacts across the full life cycle of our nuclear power projects, including site selection, design, construction, and operation, and generate reports based on the assessment results.

The Board of Directors sets up the Safety and Environment Committee and issues *Rules of Procedures of Safety and Environment Committee under the Board of Directors and Safety, Quality, and Environmental Reporting Regulations* to standardize the procedures and environmental reporting mechanism of the committee and ensure effective management and supervision of daily environmental work and emergency. In 2018, the Safety and Environment Committee assessed environmental performance of three subsidiaries of CNNP and enhanced the capacity of our nuclear power plants' safety and environmental management.

Green Development

As a leader of green development, we attach great importance to the development of nuclear power and other types of clean energy in order to support China's energy transition and pollution prevention, and make contribution to building beautiful China.

Developing clean energy

As a major type of clean energy, nuclear power is of great significance for adjusting and optimizing energy structure and reducing GHG emissions. In 2018, our annual power output was 117.847 TWh, which was equivalent to reducing coal consumption of 37.124 million tons, CO₂ emissions of 97.266 million tons, SO₂ emissions of 315,500 tons, and NO_x emissions of 274,700 tons, compared to coal-fired power plants.

Emission Reduction of Nuclear Power Plants Compared with Coal-fired Power Plants (2018)

Nuclear Power Plant	Power Generation (TWh)	Emissions Reduction of Nuclear Power Plants Relative to Coal-fired Power Plants			
		Standard Coal (thousand tons)	CO ₂ (thousand tons)	SO ₂ (thousand tons)	NO _x (thousand tons)
Qinshan Nuclear Power Plant	52.038	16,027.7	41,992.6	136.2	118.6
Jiangsu Nuclear Power Plant	23.065	7,104.0	18,612.6	60.4	52.6
Fuqing Nuclear Power Plant	30.542	9,406.9	24,646.2	79.9	69.6
Hainan Nuclear Power Plant	7.716	2,376.5	6,226.5	20.2	17.6
Sanmen Nuclear Power Plant	4.427	1,363.5	3,572.4	11.6	10.1

Note:1)Average coal consumption of power supply is 308 g/kWh (Source: Statistics of China Power Industry 2018 released by National Energy Administration)
2)Emissions reduction is calculated in accordance with the method provided by National Bureau of Statistics: based on the assumption that consumption of one ton of standard coal by industrial boilers generates 2,620 kg of CO₂, 8.5 kg of SO₂, and 7.4 kg of NO_x

Developing new energy

We strive to improve the development layout of wind power, solar power and geothermal power. We promote the development of new energy, build a new energy development platform, and actively explore the coordinated development of "nuclear energy, wind power, and solar power".



● CNNP acquired 120 MW of solar power in Xinjiang.
● Qinshan Nuclear Power Plant's 1,760 kW distributed solar power was connected to the grid and began to generate electricity.
● Solar power project of CNNP (Tibet) Industrial Development Co., Ltd. in Chanang County was connected to the grid and began to generate electricity.



● First 7,500 kW distributed wind power project in Xudabao, Liaoning Province was put into commercial operation.



● CNNP's first geothermal power project was started in Xumai Township, Nyêmo County, Tibet.
● CNNP officially acquired Qingdao Relida Co., Ltd., with a heating area of 10.31 million square meters.

Achievements of developing new energy in 2018



Green Construction

We strictly abide by nuclear power construction standards and relevant laws and regulations. Integrating advanced technologies and measures, we launch a number of pollutant emission optimization projects and strengthen pollutant discharge management. CNNP seeks to control the generation of pollutants from the source and reduce the environmental impacts of every link of our construction process.

Noise
reduction

We strengthen noise monitoring and use soundproof walls and fog guns to reduce noise during construction.

Wastewater
reduction

We implement the *Action Plan for Prevention and Control of Water Pollution* and related policies, and upgrad all sewage treatment facilities in nuclear power plants. We implement oversight over the wastewater treatment of sewage stations, fresh water plants, and surrounding environment of nuclear power plants to ensure sewage discharge and seawater quality meet standards.

Waste
reduction

We revise the *Non-Radioactive Solid Waste Management*, optimize solid waste management procedures and formulate rules for solid waste transportation.



Green Operation

CNNP is committed to achieving a win-win result in economic development and environmental improvement, raising energy efficiency and reducing energy consumption in operations. We conduct investigations of environmental pollution sources and risk, and strengthen the management of radioactive waste. Building an effective environmental monitoring system, we timely publish environmental data and accept public supervision.

Saving energy and resources

We attach great importance to the full utilization of energy resources, strengthen the implementation of energy-saving technological transformation projects, conduct energy-saving and low-carbon activities, and encourage employees to integrate energy-saving and low-carbon concepts into daily work and life for continuously improving the level of energy conservation and environmental protection.



Reducing Fuel Consumption

We adopt domestic and foreign advanced technologies to optimize core fuel management measures, which can effectively extend fuel cycles of nuclear power plants and improve fuel utilization efficiency.

We search for more reliable and economical fuel cycle models to improve fuel management level of domestically produced nuclear power units, and enhance the autonomous capacity of nuclear energy.



Reducing Water Consumption

We carry out dily water management and raise employees' awareness of saving water. We use advanced technologies to treat and recycle wastewater and improve water efficiency.

We promote the application of water-saving technologies, renovate water facilities and reduce water waste.



Reducing Electricity Consumption

We strengthen energy management in workplace, control the use time of office equipment, identify "the source of waste" and regularly inspect the maintenance of office environment.

We strengthen the dissemination of energy conservation and carry out targeted publicity activities to raise employees' awareness of saving energy.

Case

Strengthening Nuclear Power Science and Technology Museum's power saving management

To solve the problem of high cost, the Nuclear Power Science and Technology Museum of Qinshan Nuclear Power Plant has adopted a series of measures to effectively save energy, including analyzing power consumption of equipment, identifying the cause of power consumption and the high power consumption equipment to adopt targeted measures; developing equipment use standards to strictly control the power consumption of air conditioners, displays and other devices; coordinating visitor reception to improve equipment utilization efficiency; improving intelligent lighting control system to reduce power waste caused by prolonged periods of lighting. In 2018, the museum completed the upgrade of smart lighting control system, which enabled the museum to save 390 MWh of electricity and 290,000 yuan.

Case

CNNP launches "Energy-saving Awareness Week"

To promote green concepts and public understanding of energy conservation and emission reduction knowledge, CNNP launched the "Energy-saving Awareness Week" on June 11, 2018. We used posters, intranet of member units, and multimedia display systems to promote energy conservation, raising employees' awareness of energy conservation and emission reduction and guiding employees to form good habits.



Jiangsu Nuclear Power Co., Ltd. co-organizes a large environmental protection-themed publicity campaign with the Environmental Protection Bureau of Lianyungang.



Posters made by CNNP Nuclear Power Operation and Management Co., Ltd. at "Energy Conservation Promotion Week" and "Low Carbon Day"

Radioactive Waste Management

We continuously improve the radioactive waste management system, implement strict emissions application review procedures, strengthen monitoring and supervision of emissions, and strive to minimize the generation of radioactive waste. We actively take action to reduce waste, explore radioactive waste minimization measures, and optimize processes and waste management from the perspectives of operation process and emission management. In 2018, all radioactive waste from our nuclear power plants was lower than the national annual limits and the levels specified by national standards. No non-compliance events involving radioactive substances were reported in 2018.



Build a professional monitoring team

We provide our environmental and effluent lab personnel with external training and opportunity to map with the leading peers so that they can improve monitoring and analysis capabilities, which provides a foundation of building a highly-skilled, cross-functional, and well-organized monitoring team.



Clarifying regulations and requirements

We align radioactive waste management measures with the *Regulations on Radioactive Waste Management*, the *Radiation Protection Technology Management and Standards* and other radioactive effluent management regulations, and establish practical and controllable performance indicators.



Ensuring transparency

We timely monitor radioactive waste discharged from nuclear power plants and ensure data transparency to enhance public confidence in nuclear power safety.



Monitoring Environmental Impacts

We have built a mature environmental monitoring system in accordance with *Environmental Radiation Protection Regulations for Nuclear Power Plants*, *Environmental Radiation Monitoring Regulations for Nuclear Power Plants*, and other related laws and regulations to timely track and analyze our environmental impacts on areas around our nuclear power plants, disclose radiation data and accept public supervision. In 2018, the three lines of defense of our nuclear power plants in operation worked effectively. No perceptible impacts on the surrounding environment were reported by our nuclear power plants during normal operation or during refueling outages.

Main environmental monitoring data of CNNP's operating nuclear power plants in 2018

Nuclear Power Plant/Region	Monitoring Project	Monitoring Results	
		Maximum	Medium
Qinshan	Environmental dose rate around the plant by continuous monitoring (μGy/h)	Γ radiation	0.1620.097±0.007
	Radioactivity of aerosols around the plant (mBq/m³)	Total α radiation	0.1760.08±0.03
		Total β radiation	2.871.4±0.6
Tianwan Nuclear Power Plant	Environmental dose rate around the plant by continuous monitoring (μGy/h)	Γ radiation	0.1140.098±0.007
	Radioactivity of aerosols around the plant (mBq/m³)	Total α radiation	0.1270.08±0.03
		Total β radiation	2.181.3±0.6
Fuqing Nuclear Power Plant	Environmental dose rate around the plant by continuous monitoring (μGy/h)	Γ radiation	0.1140.0834
	Radioactivity of aerosols around the plant (mBq/m³)	Total α radiation	0.0540±0.01280.0271±0.0089
		Total β radiation	1.19±0.050.626±0.037
Changjiang Nuclear Power Plant	Environmental dose rate around the plant by continuous monitoring (μGy/h)	Γ radiation	0.260.15±0.015
	Radioactivity of aerosols around the plant (mBq/m³)	Total α radiation	0.3340.076±0.024
		Total β radiation	2.8110.804±0.040
Sanmen Nuclear Power Plant	Environmental dose rate around the plant by continuous monitoring (μGy/h)	Γ radiation	0.1030.101
	Radioactivity of aerosols around the plant (mBq/m³)	Total α radiation	0.110.06
		Total β radiation	2.071.20

Note: The environmental radioactivity monitoring results around CNNP's operating nuclear power plants in 2018 did not change significantly from the local survey results conducted prior to the nuclear power plants were put into operation. In other words, the operations of these nuclear power plants did not adversely affect the surrounding environment.

Biodiversity Protection

CNNP upholds the environmental protection concept of harmonious coexistence between business operation and nature. We are committed to reducing the impact on biodiversity by conducting plant surveys on a regular basis, reporting the environmental conditions of the plants, communicating with the forestry bureau, environmental protection authorities and other government authorities about the plan on ecological protection redline related to our projects, greening the plant areas, and maintaining the original ecology of the plant area through measures such as forest reconstruction and ecological restoration.



Egrets in the wetlands of Hainan Nuclear Power Plant

Case

Hainan Nuclear Power Co., Ltd adopts multiple measures to protect the ecosystem in the surrounding area

Hainan Nuclear Power Co., Ltd takes various effective measures to minimize the impacts of its operation on terrestrial life, aquatic life, and water environment in the surrounding area. The company organizes a number of thematic works to effectively assess the impact of plant operations on marine life, studies biological habits and risk calendar, and takes proper measures to protect them. In order to protect the coral reefs in the coastal waters of the

plant, the company realize the protection in multiple dimensions: from plan design, construction technology, coral reef tracking monitoring, remote sensing monitoring of warm water drainage, etc. It is estimated that there are over 10 species of rare bird such as urchins and over 20 kinds of tropical flowers and plants such as Bougainvillea in the surrounding areas.



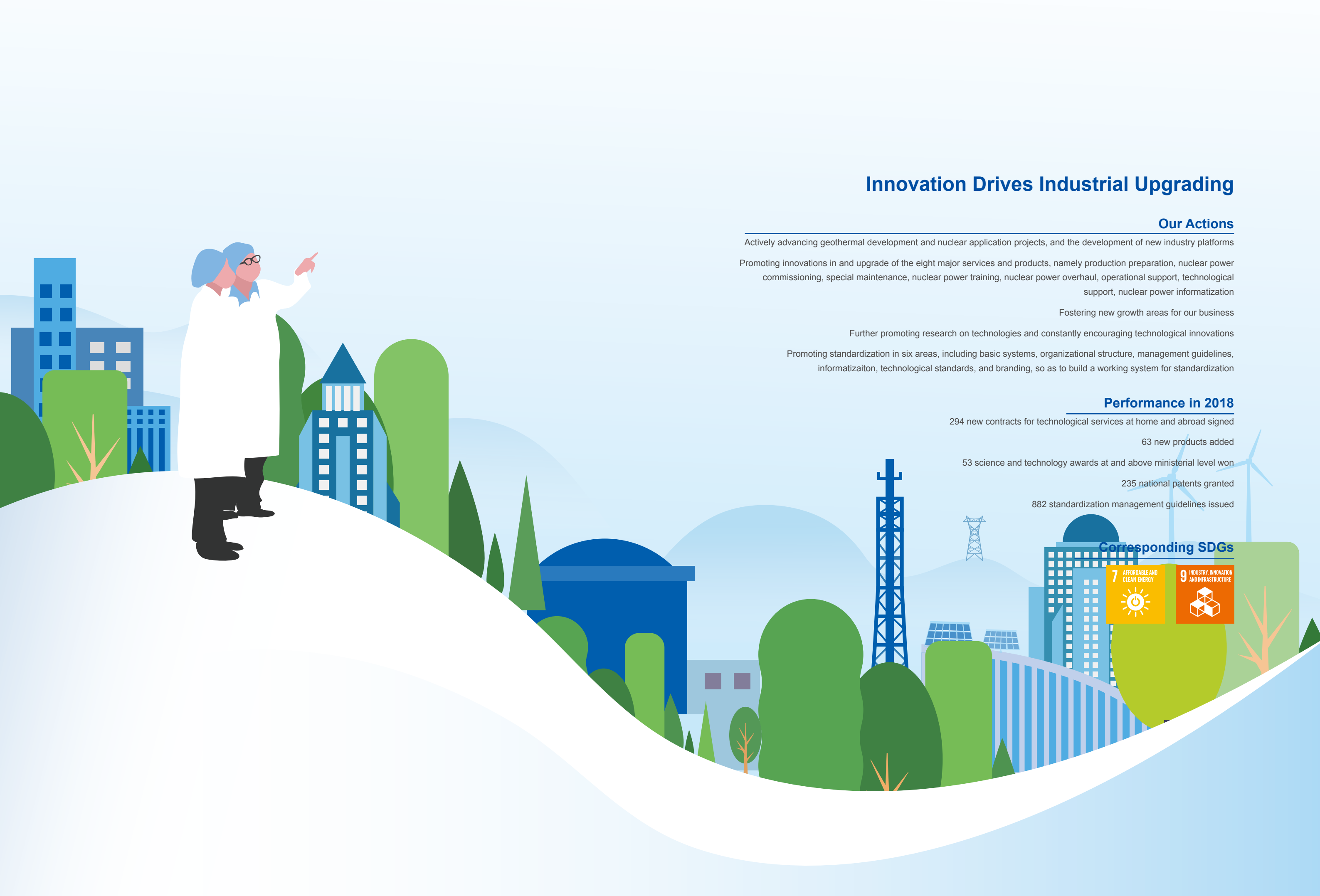
Garden-styled Hainan Nuclear Power Plant

Case

Fuqing Nuclear Power receives honor of "National Soil Conservation Ecological Civilization Project"

Fujian Fuqing Nuclear Power Co., Ltd. always adheres to the development concept of "lucid waters and lush mountains are invaluable assets" and follows the principle of respecting environment and project with precautions and in line with local conditions. The company strictly implements engineering measures such as slag retention, slope protection, flood control and discharge, land remediation and vegetation recovery. Combined with the characteristics of the nuclear power plant and surrounding ecological environment, the company has

implemented vegetation-based slope protection and greening to effectively control soil erosion in the region. Fuqing Nuclear Power Plant protects ecosystems around the plant, increases the environmental capacity of the plant, and realizes the virtuous circle of environmental protection and economic growth. In February 2018, Fuqing Nuclear Power received the honor of "2017 National Soil Conservation Ecological Civilization Project" granted by the Ministry of Water Resources.



Innovation Drives Industrial Upgrading

Our Actions

Actively advancing geothermal development and nuclear application projects, and the development of new industry platforms

Promoting innovations in and upgrade of the eight major services and products, namely production preparation, nuclear power commissioning, special maintenance, nuclear power training, nuclear power overhaul, operational support, technological support, nuclear power informatization

Fostering new growth areas for our business

Further promoting research on technologies and constantly encouraging technological innovations

Promoting standardization in six areas, including basic systems, organizational structure, management guidelines, informatizaiton, technological standards, and branding, so as to build a working system for standardization

Performance in 2018

294 new contracts for technological services at home and abroad signed

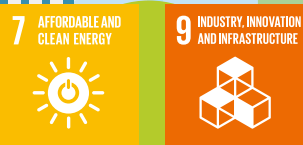
63 new products added

53 science and technology awards at and above ministerial level won

235 national patents granted

882 standardization management guidelines issued

Corresponding SDGs



Innovation-Driven Development

In the pursuit of innovation-driven development, CNNP has actively promoted the deployment of new industries, advanced the development of new projects and new industrial platforms, innovated and upgraded our technological services, and fostered new growth areas to support corporate innovation-driven development.

Promoting the deployment of new industries

CNNP devotes to promoting the deployment of new industries, and actively advances geothermal development and nuclear application projects and the development of new industry platforms to inject impetus into corporate development. In 2018, based on the accurate judgment about the trend in the new era, CNNP gradually rolled out our diversified business strategy, which is characterized by simultaneous development of multiple new energy industries with nuclear energy at the core, and steadily pushed forward new technology projects of nuclear energy.

Case

CNNP breaks ground in Tibet on our first geothermal power project

On September 6, 2018, CNNP broke ground our first geothermal power project - a 16MW project in Xumai Township, Nyemo County, Tibet, unveiling the Company's initiative to enter the geothermal market and foster a new pillar of growth.

Geothermal energy is a green, low-carbon, recyclable clean energy. Its comprehensive development is key to implementing the strategic thinking of the central government, including promoting ecological civilization, innovation-driven development, aid to Tibet, etc. It is of great significance for optimizing the energy structure, fostering emerging industries and new areas of business growth, advancing urbanization and increasing employment.

Upon completion, the project will provide clean electricity of more than 8,000 operating hours per year for local areas, which will matter a lot to energy structure optimization, local economic and social development, the development of hot spring tourism, and new energy development and utilization.



CNNP's first geothermal power project

Building a brand of technological services

CNNP dedicates to boosting China's nuclear power technologies and services industry, keeps cultivating our own core capabilities, and actively forges a brand of technological services, so as to expand our influence. In 2018, the Company continued to enrich our eight product lines, introduced 63 new products and established stable partnership with institutions and associations in over 40 countries.

63

new products added

Production preparation

The preparation works performed during the period between the commencement of a project and the commercial operation of the power plant, including production staff preparation, preparation of management documents, technological documents and the documents with regard to license, development of production preparation information platform, material preparation etc.

Special maintenance

Conducting preventive and corrective maintenance for deficiencies appearing in major facilities of a nuclear power plant, to enable it to maintain or recover its designed functions.

Operational support

Conducting the development and control of document system, technology management and consultation, development of technological transformation methods for equipment and facilities, as well as actions like field application and post-evaluation, to ensure the safe construction as well as safe and efficient operation of nuclear power plants.

Nuclear energy overhaul

Consisting mainly of the development of overhaul safety management system, risk management system, quality management system and schedule management system, technological files preparation, overhaul organization and implementation, organization and management of major overhaul programs, etc.

Nuclear power commissioning

All the commissioning work involved in the period from "the acceptance of installation completion test" to "the end of temporary acceptance of a power plant", including the nonstop safe and stable operation for 100 hours at full capacity.

Nuclear power training

Providing special trainings for the staff of nuclear plants or their associated enterprises, to equip them with the knowledge, expertise and management abilities required by their positions, and enable them to acquire the qualification, authorization and capacities for their job.

Technological support

Conducting technological support activities, such as operational monitoring and examination, operational evaluation and demonstration, experience summarization and feedback, staff training and digitization, to ensure the safe, reliable and economical operation of nuclear power plants.

Nuclear power informatization

Designing the informatization framework, application system and data for the operation and management of nuclear power based on the experience in nuclear power plant construction, operation and maintenance.

Technological Innovation

CNNP puts significant efforts into building a strong tech-empowered company, keeps increasing investment in technological innovation, actively builds up innovation platforms, promotes the training of innovation talents, and pool resources to make breakthroughs in major core technologies, to constantly drive the development of nuclear power industry.

Building innovation platforms

The year 2018 saw the kick-off of CNNP's initiative of innovation platform building and intensive R&D. The Company continued to increase inputs in innovation, built R&D platforms towards "small cores and broad collaboration", gradually formed a research system characterized by "intensive R&D, association and coordination, and win-win cooperation", and actively developed and improved innovation platforms to advance research programs. In 2018, JNPC received the title of "National High Tech Enterprise of Jiangsu Province", and was certified as an Enterprise Technology Center of Lianyungang City.

Case

China Nuclear Power Operation Technology Corporation, Ltd. takes the lead in establishing the Nuclear Industry Robot and Intelligent Equipment Collaborative Innovation Alliance (NURIA)

On December 25, 2018, China Nuclear Power Operation Technology Corporation, Ltd. took the lead in establishing the NURIA. The alliance comprises 32 council members and three member units. It is a voluntary "industry-university-research" collaborative innovation organization, initiated by China Nuclear Power Operation Technology Corporation, Ltd. based on CNNP's major research forces and comprised of multiple research institutions, universities, and well-known corporations at home and abroad.

There is a huge demand for the application of robots and intelligent equipment across a whole range of areas in the nuclear industry. The NURIA will promote our collaboration with remarkable research institutions, universities, and corporations at home and abroad. Through the development of an "Industry-University-Research-Application" platform, we seek technology innovations through organizational innovations to form a mechanism characterized by "wise people seeking common interests". CNNP also focuses on deepening collaboration with our partners in areas such as breakthroughs in key technologies, integrated development of systems and engineering application, to promote technological progress in terms of the global supply chain of nuclear industry robot and intelligent equipment.



Launch of NURIA

Fostering innovative talents

CNNP focuses on fostering innovative talents, actively attracts and cultivates innovative talents, and helps them improve their innovation capabilities to reserve talents for the Company's innovation-driven development by means of collaborative cultivation, joint establishment of research institutes and application of setting up postdoctoral work stations, etc.

1

Collaborative cultivation

Signing collaborative cultivation cooperation agreements with Harbin Engineering University (HEU), North China Electric Power University (NECPU), Northeast Electric Power University (NEEPU), Lanzhou University (LZU), etc.

2

Joint establishment of research institutes

Jointly establishing research institutes with Tsinghua University, Shanghai Jiao Tong University (SJTU), and Xi'an Jiaotong University (XJTU) to boost the nuclear power technology innovation capabilities.

3

Application of setting up postdoctoral work stations

JNPC was authorized to set up a national postdoctoral research workstation to foster innovative talents and promote the innovation-driven development of CNNP.

Modes of fostering innovative talents

Case

CNNP establishes AP1000 operation support team

On May 20, 2018, CNNP's "325 Team" (AP1000 operation support team) was established. Our 325 members were selected from 56 professional fields that fell into the four major production aspects of all CNNP's power plants, namely operation, maintenance, technology and safety management, in order to provide comprehensive operational and technological support for Sanmen Nuclear Power Plant's AP1000 nuclear power units for the safe operation of loading, criticality, grid connection, commercial operation and first cycle, and operation support for the safe operation of other newly-built power plants. From the establishment to the end of 2018, the team had assigned 92 people to provide 33 efficient technological services to Sanmen Nuclear Power Plant and Haiyang Nuclear Power Plant.

The establishment of the AP1000 operation support team represents a good practice in building professional teams and cultivating an expert team. The team sees operational support as a bridge and encourages professionals to keep mastering new technologies by means of problem solving.

Case

Jiangsu Nuclear Power Co., Ltd. is approved to set up national postdoctoral research work station

In 2018, Jiangsu Nuclear Power Co., Ltd. got the approval to set up a national postdoctoral research work station, and became CNNP's first subsidiary to set up such a work station. Located in Tianwan, the work station will greatly promote nuclear power talent cultivation to help build a strong research team for CNNP.

Promoting the application of innovative achievements

CNNP regards technology innovation as the core driver for the sustainable development of an enterprise. Therefore, the Company is committed to continuously boosting our capabilities for technology innovation, promoting the transformation and application of innovations, adding an inexhaustible impetus to corporate development and the nuclear power industry. In 2018, CNNP received, altogether, 53 science and technology awards at and above the ministerial level, were granted 235 national patents, and actively promoted the application of technological achievements to the operation and production of nuclear power units and the construction of power plants, in a bid to constantly enhance our capabilities for independent innovation and core competitiveness.

- The underwater floating detection robot made the debut in the examination of baffle-former bolts of the nuclear reactor during the "Qinshan Nuclear Power 118 Overhaul".
- The full-scope simulator for the world's first nuclear power plant using "Hualong One" technology was delivered and utilized 115 days in advance, laying a solid foundation for the first batch of operators of Fuqing Nuclear Power Units 5 and 6 in receiving training, passing the examination and obtaining the license. Meanwhile, the simulator also incorporated an upgraded RINSIMWIN simulator platform with proprietary intellectual property right.
- The hexagonal tube ultrasonic eddy current automatic inspection technology and the inspection production line have been successfully applied to the key national project—the manufacturing of fast reactor pipes.
- The failed fuel component examination system has made a breakthrough in data analysis algorithms, leading to a boost in the efficiency and accuracy of data analysis for fuel rod ultrasonic inspection. It has also been successfully applied, along with the independently-developed fuel component repairing devices, to the fuel component repairing performed by Changjiang Nuclear Power Plant.
- Research achievements in the fields of nuclear safety and nuclear emergency response have realized quick transformation, and the multiple serious-accident simulators were developed, manufactured and delivered to Fuqing Nuclear Power Plant, Fangjiashan Nuclear Power Plant, and Qinshan Nuclear Power Phase I projects.

Case

Underwater floating detection robot has been applied for the first time in China

Our independently-developed underwater floating detection robot was put into use for the first time in the "118 Overhaul" of Qinshan I Nuclear Power Plant, and completed the ultrasonic inspection on baffle-former bolts within the nuclear reactor, providing key guarantee for the renewal of the license of Qinshan Nuclear Power Plant.

The robot used an eight-thruster vector controlling solution to move and locate itself, and realized a reliable underwater suspension and motion control at a millimeter level. CNNP developed an ultrasonic detection technology based on split-type self-focusing, and overcame the limitations made by the beam transmission path within an irregular hexagon socket bolt with check pins, and enabled the deficiency detection of 35% equivalent cross-section loss of baffle-former bolt, satisfying the proficiency requirements of European Proficiency Testing Information System (EPTIS).

The first application of the underwater floating detection robot has broadened the idea about in-service inspection for nuclear power, filling the technological blank in China, and marking another milestone of CNNP in cutting-edge research and the market segment applications.



Underwater floating detection robot is applied for the first time in China

Management Innovation

CNNP vigorously promotes management innovation, actively develops the standardization working system and informatization management platforms, promotes internal collaborative development, improves management quality and efficiency, and stimulates endogenous impetus to drive the efficient development of the Company.

Setting up standardization working system

In order to drive efficient development of the Company, CNNP has orderly promoted standardization in six areas, including basic systems, organizational structure, management guidelines, informatization, technological standards, and branding, and established a standardization working system. In 2018, CNNP finished the first year's groundwork for the standardization working system, developed standard nuclear power operational management system, and published 882 standardization management guidelines.

882

standardization management guidelines issued

Basic systems

Updating "Three Importance and One Greatness" policy (important decision making, appointment and removal of important cadres, important project arrangement, and the use of a large amount of money), sorting out the powers and responsibilities, and evaluating the system applicability to the headquarters etc.

Management guidelines

Publishing 882 standardization management guidelines.

Technological standards

Completing the research on the operational standard system for the enterprise standard of Hualong One corporate logo and Hualong One National Major Project Standardization Demonstration Program; two projects of Qinshan Nuclear Power Plant were approved by the International Organization for Standardization (ISO).



Standardization institutions

Further promoting the standardization in organizations, setting up standardization institutions, regulating the operation of newly-founded companies, and piloting shared institutions.



Information system

Further promoting the 3A/4E Information System.



Branding

Improving and optimizing the operation of culture promotion center, and forming an operational layout of "1+12+6"; further promoting the Company's culture and increasing brand visibility.

Building innovation management platforms

CNNP has allocated resources to promote the 3A/4E information system, providing a solid foundation for regulated, standardized and integrated business operation, effectively improving the management efficiency and realizing efficient internal operation.

During 2018, CNNP preliminarily established a production-focused work safety management platform (ASP), an operation management-focused operation management platform (AGP), a Party building culture platform (ADP), and a 4E system consisting of the production management system (EAM), staff-asset-material integrated management system (ERP), enterprise content management system (ECM) and equipment reliability database system (ERDB). These platforms and systems are undergoing further application and standardized promotion among the member units.

Case

CNNP's first shared management office starts trial operation

In order to comprehensively promote the standardization of the equipment reliability database system, tool solutions, software platform for nuclear power units, and further promote the application of equipment reliability database system (ERDB), CNNP set up our first shared management office, the equipment reliability office, in 2018, and put it into trial operation.

For all the associated nuclear power plants, the office, due to its "double identity", can deal with common affairs and save manpower and resources; for the headquarters, the office can help gather and use advantageous resources, enabling full use of manpower and technology across the office, and leading to intensive and specialized operation.



Coordinated Development with Partners for Win-Win Results

Our Actions

- Developing good interaction with industry authorities, think tanks and universities etc., and actively providing advice to policymakers
- Performing further supply chain management to establish an alliance-based operational mode for spare items and parts storage
- Promoting equipment localization constantly
- Signing a nuclear collaboration project with The State Atomic Energy Corporation ROSATOM, so far the biggest nuclear energy collaboration project between the two countries

Performance in 2018

- 135 strategic suppliers
- Forming stable partnership with over 40 countries, institutions and associations

Corresponding SDGs

12

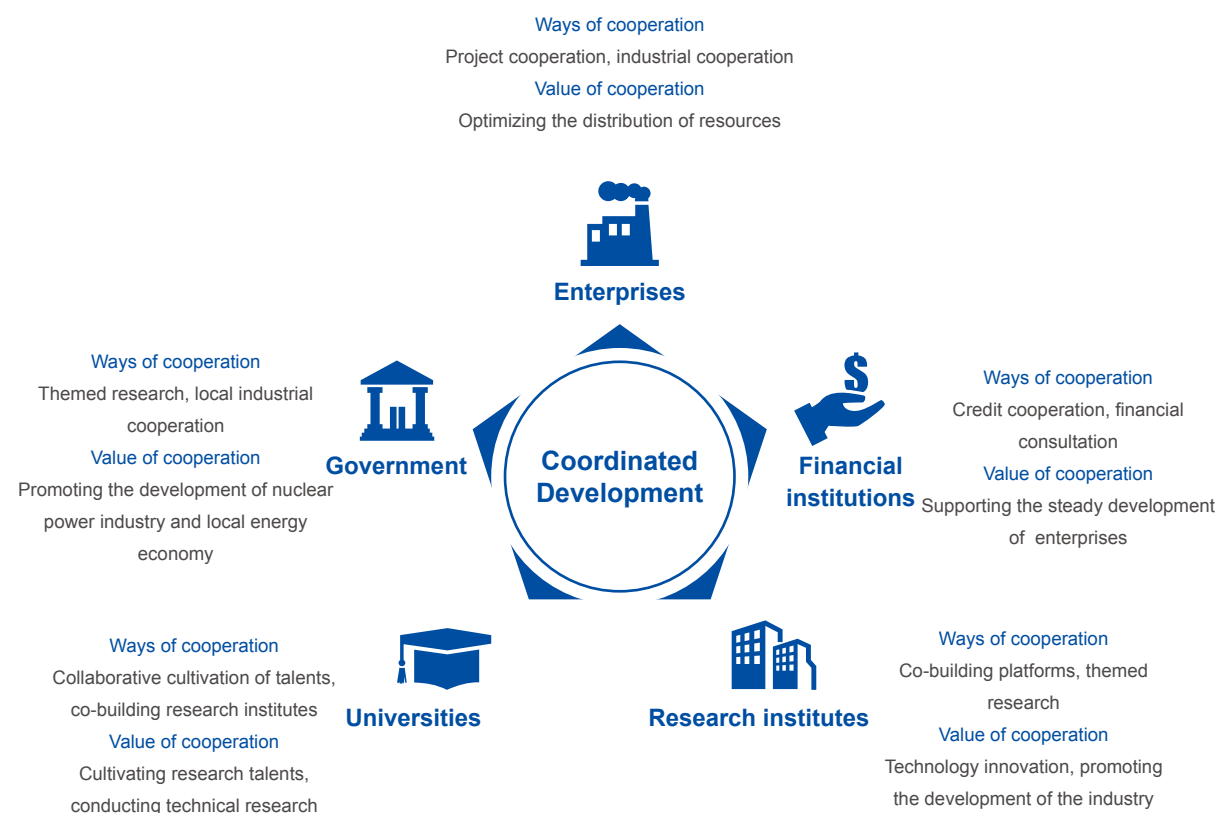
RESPONSIBLE CONSUMPTION AND PRODUCTION

17

PARTNERSHIPS FOR THE GOALS

Strategic Cooperation

CNNP always adopts an open and win-win attitude, takes the initiative to explore a collaborative and win-win partnership with our stakeholders such as government departments, other nuclear power companies, and equipment manufacturers, and performs technology communications and cooperation with them to collectively create a sustainable nuclear power chain. In 2018, centering on the safe and efficient development of nuclear power, CNNP stayed in sound interaction with authority (National Energy Administration), think tanks (industry associations, China Electricity Council, China Nuclear Power Development Center, etc.) and partners, actively provided advice to policymakers and played a leading role in nine research projects.



Case

CNNP signs strategic cooperation agreement with Nuclear Power Institute of China

On October 19, 2018, CNNP signed a *Long-term Strategic Cooperation Framework Agreement* with Nuclear Power Institute of China (NPIC), which will be an opportunity for both parties to perform long-term win-win strategic cooperation, improve the safe operating capacity of nuclear power units, deepen project construction cooperation and share achievements of research and innovation. The cooperation will accelerate the implementation of the innovation-driven development strategy and the structural upgrade, and deepen the integration of industry, research and application.

Building Responsible Supply Chains

In the pursuit of development, CNNP has built and improved the supplier management system, performs full-life-cycle supplier management covering supplier selection, procurement management, supplier evaluation etc., to support the growth of suppliers and realize win-win outcomes. In 2018, CNNP engaged nearly 300 new suppliers and maintained 135 existing strategic suppliers.

nearly

300 new suppliers

135 existing strategic suppliers



Case

CNNP promotes centralized procurement in a standardized way

From September 19 to 20, 2018, in order to help relevant staff well understand the new procurement management policy and process, promote centralized procurement in a standardized way and improve procurement efficiency and quality, CNNP convened a meeting to introduce the optimized and upgraded policy and process, and made deployments for follow-up procurement. The meeting invited external experts to interpret tending and bidding laws and regulations as well as the centralized government procurement policies. Also, staff exchange was conducted over the standardization of bidding and procurement to deepen their understanding and facilitate procurement-related work of the company.

Promoting the Development of the Industry

equipment localization
rate of the nuclear island
of Tianwan Phase II
project:

15%

equipment localization
rate of the conventional
island and BOP of
Tianwan Phase II
project:

98%

As an industry leader, CNNP continues to uphold the technology-driven strategy, promotes equipment localization, deepens communication and shares advantageous resources with other nuclear power companies to make contribution to the industry. In 2018, CNNP kept promoting equipment localization. A series of important advanced designs and localization work were performed for Tianwan Nuclear Power Plant Phase II project on the basis of Phase I. The equipment localization rate of the nuclear island reached 15%, and that of the conventional island and BOP reached 98%.

Case

WANO Shanghai Center established

On February 21, 2019, the WANO Shanghai Center was established. The establishment and operation of the WANO Shanghai Center help Chinese nuclear power industry further its communication and cooperation with the world and go global. Meanwhile, it marks China's active involvement in global governance, which would help Chinese nuclear power industry to contribute its intelligence and strengths to world nuclear power security.

In the future, CNNP, alongside with other Chinese nuclear power enterprises will make the WANO Shanghai Center a world-famous communication and cooperation platform for regional nuclear power operators.

Case

CNNP Heat Exchanger's Key Performance Testing and Verification Platform finds its name on the list of pilot open, shared major nuclear energy research facilities and verification platforms

The CNNP Heat Exchanger's Key Performance Testing and Verification Platform was included in the 2018 List of Pilot Open, Shared Major Nuclear Energy Research Facilities and Verification Platforms, as one of the three testing and verification-focused research platforms open to the public.

The Heat Exchanger's Key Performance Testing and Verification Platform include a number of experimental stands such as that of thermal state and cold state. The broad coverage of its parameters can satisfy different experimental purposes. Meanwhile, it boasts an experienced team, coming from such professional fields as thermal hydraulics, system, measurement and control, structure and vibratory noise, and dedicated to offering such services for Chinese and foreign research institutes and equipment manufacturers as equipment performance testing, software verification and testing and technology consultation.

The platform has served a multitude of major national engineering projects, provided equipment support and sound advisory services for relevant enterprises, research institutes, etc., generated broad social and economic benefits and contributed to the development of associated fields.



The first shared pilot platform under National Energy Administration: CNNP Heat Exchanger's Key Performance Testing and Verification Platform

Deepening International Exchange and Cooperation

CNNP responds actively to the Belt and Road Initiative, and follows the strategy of internationalization by broadening the global vision, deepening international communication, and promoting international cooperation to boost its overseas presence.

International exchanges

Through conferences, visits and forums, CNNP works to enhance international communication and experience sharing, takes the initiative to help Chinese nuclear power industry to "go global", and promotes the development of the nuclear power industry with nuclear energy experts, industry associations and world-advanced nuclear power enterprises.

Case

CNNP attends European Business Summit to discuss sustainable development

In May 2018, CNNP attended the European Business Summit and exchanged with more than 450 guests from over 200 institutions on subjects including: the development of SDGs in their countries, existing challenges, and actions taken. Through the summit, CNNP gained a deeper understanding of the current situation

of global sustainable development, foresaw the trend of global sustainable development, defined its development goals and actions, and was motivated to continuously improve sustainable development management and perform its responsibilities so as to ensure the healthy and sustainable development of the company.



CNNP attends the European Business Summit

International Cooperation

As an advocate of open development, CNNP actively seizes development opportunities, exerts its industrial advantages, and continues to deepen international cooperation to create a bright future with partners. In 2018, CNNP conducted communication with partners from countries like Pakistan, Saudi Arabia, Bulgaria, Belarus, and Bangladesh, and built reliable partnerships with those from Canada, Czech Republic, the Republic of Korea, Argentina, etc.

Case

Contract signed for the largest nuclear energy cooperation project between China and Russia in the presence of heads of state

On June 8, 2018, witnessed by the Chinese President Xi Jinping and the Russian President Vladimir Putin, CNNP and AtomStroyExport (a company of Rosatom State Corporation Engineering Division) signed *Tianwan Nuclear Power Plant Units 7 and 8 Framework Contract*, and *Xudabao Nuclear Power Plant Framework Contract*. The combined contract value of these two contracts and the *Chinese Demonstration Fast Reactor Equipment Supply and Service Procurement Framework Contract* signed by the CNNP reached 20 billion yuan, and their total investment amounted to over 100 billion yuan, making the project the biggest of its kind as of now between the two countries. The project will hugely spur bilateral trade and industrial cooperation, add more high-tech contents to the pragmatic China-Russia cooperation, and further deepen the convergence of bilateral interests.

Case

K2K3 Training Program in Pakistan helps Chinese nuclear power industry "go global"

As a large overseas training program undertook by Qinshan Nuclear Power Plant, the K2K3 Training Program in Pakistan, which started in December 2017 and was due to last for about two years, is expected to train six batches of about 200 trainees, totaling 1500 man-months. Qinshan Nuclear Power Plant has developed a complete training management system, set up a temporary organization for the program, developed foreign training service management programs, and prepared K2K3 training management instructions as well as a job training syllabus and training textbooks in both Chinese and English. At the same time, it selected a team of Chinese-English bilingual trainers from various fields, such as operation, maintenance, technology to transform the training facilities to meet the needs of local partners. The first batch of 34 operators will receive training on basic safety knowledge, intermediate and advanced systems, positions at Fangjiashan, simulators, Hualong One differentiation, etc.

The K2K3 training program serves as a bridge of friendship connecting Qinshan and Karachi, China and Pakistan. It is also a critical step for CNNP to embrace the Belt and Road Initiative and help Chinese nuclear power industry to "go global".





Being People-Oriented to Build a Top-notch Team

Our Actions

- Protecting employees' rights and interests in all aspects, building more inclusive workplace, and creating harmony between employers and employees
- Creating an all-round and multi-tiered training system
- Enhancing talent team building and promoting the human resources standardization system project

Performance in 2018

- 12,687 employees
- 52.012 million yuan invested in training
- 20 employees selected into the second batch of leading talents and 21 employees selected into the first batch of young officials at the deputy-division-chief level
- CNNP listed as one of *Forbes'* Global 2000 World's Best Employers 2018

Corresponding SDGs

<div>3</div> <div>GOOD HEALTH AND WELL-BEING</div> <div></div>	<div>4</div> <div>QUALITY EDUCATION</div> <div></div>	<div>5</div> <div>GENDER EQUALITY</div> <div></div>
<div>6</div> <div>CLEAN WATER AND SANITATION</div> <div></div>	<div>8</div> <div>DECENT WORK AND ECONOMIC GROWTH</div> <div></div>	<div>10</div> <div>REDUCED INEQUALITIES</div> <div></div>

a total of

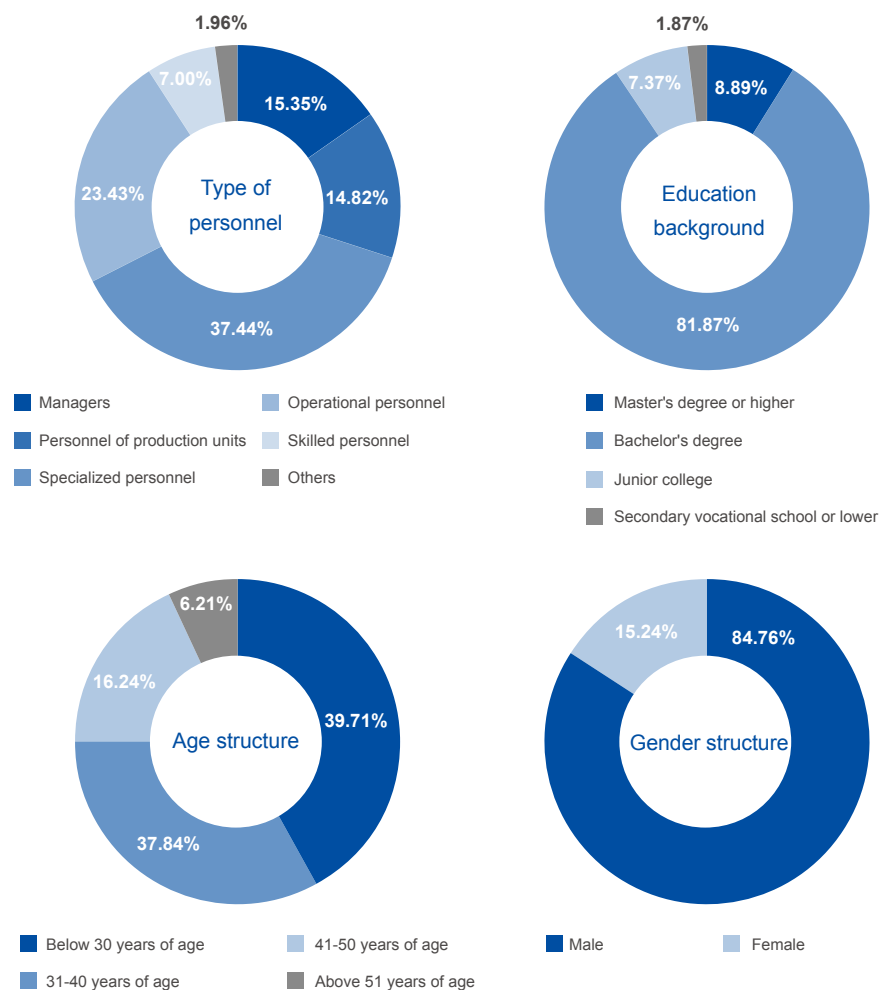
12,687 employees**100%**of the employees signed the
labor contract

Protecting Employees' Rights and Interests

Employees are the important asset of a company. We comply strictly with relevant laws and regulations, ensure employment equality, and constantly improve our compensation and benefits system. We also communicate actively with employees, safeguard occupational health, endeavor to create an overall environment conducive to healthy career development, and protect the basic rights and interests of our employees. In 2018, CNNP had a total of 12,687 employees, including 720 new recruits, and the employee turnover rate was 1.67%.

Employment equality

CNNP strictly observes related laws of China and international conventions to ensure equality in employment, forbids gender, age, ethnic, or cultural discrimination, child labor and forced labor, and offers equal employment opportunities to everyone who has dream and works hard for their dreams. In 2018, 3.81% of our employees were of ethnic minorities, women accounted for 0.3% of the middle management and above, and 100% of the employees signed the labor contract.



Compensation and benefits

In recognition of employees' hard work and dedication, we have formulated *CNNP Employee Compensation System*, *CNNP Total Compensation Management Regulations*, oriented towards corporate strategies, market, performance and equity, managed compensation and benefits in a compliant way, and built an integrated compensation system and a mechanism to link performance with compensation. We adjust the compensation and benefits against the market level to stay competitive and motivate employees. We also provide sustainable benefits and perks, including contribution to the five mandatory insurance schemes (pension fund, medical insurance, work injury insurance, unemployment insurance, and maternity insurance) plus a housing fund and paid annual leaves. These all help our employees live a better life and have a higher level of satisfaction and a stronger sense of security. In 2018, 100% of our employees were covered by social insurance schemes.

100%of employees were covered
by social insurance schemes

Workplace democracy

We hold regular employee representatives' conference and Party meetings, open a dedicated email account to hear from employees, and keep other communication channels smooth so as to ensure that our employees can have their voices heard and concerns addressed in a timely manner. This has made our employees more willing to participate in corporate management and fully ensured their rights to know, participate, express, and supervise. In 2018, all employees joined in the labor union, 370 pieces of advice from employees were adopted by the Company, and all the employees' concerns and complaints received a response.

100%of employees joined in the
labor union

Occupational health

CNNP has strictly observed *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases* and other related laws and regulations. We adopt a people-oriented approach to occupational health promotion, giving priority to prevention, supervision, and science-based management. We make active efforts to ensure that safety facilities are designed, built and put into use at the same time, keep occupational disease prevention facilities in good conditions, conduct regular inspections to identify hazards to occupational health, and carry out relevant awareness-raising and training programs and medical emergency drills. In 2018, 100% of the employees had their physical examination.

100%of employees had their
physical examination

Inspection on occupational disease prevention facilities: We carried out acceptance inspections on the occupational disease prevention facilities of Fangjiashan Nuclear Power Project, Units 3 and 4 of Fuqing Nuclear Power Plant, and other projects in the reporting period; the design of the occupational disease prevention facility of Jiangsu Nuclear Power Project passed the review.

Monitoring and evaluation of occupational risk factors: Hainan Nuclear Power Co., Ltd made it part of its routine work to monitor and notify occupational risk factors, and bettered the setting of warning signs and caution signs for workplace hazards. Qinshan Nuclear Power Co., Ltd conducted self-inspection on potential management risks in the area of occupational health and self-assessment of occupational disease prevention and control practices.

Awareness raising and training on occupational health: We are committed to fostering greater awareness of occupational health among employees so that they will take the initiative to protect themselves from possible hazards. To protect the occupational health of its employees, Sanmen Nuclear Power Co., Ltd has stepped up efforts in capacity building for medical emergency response and conducted medical emergency drills.

Supporting Employees Growth

Employees are the key to sustainable corporate development. CNNP has created an all-round and multi-tiered talent cultivation system to meet employees' demand for specialized knowledge and basic work skills and facilitate their career development. CNNP encourages employees to choose the career path that best suits themselves and can maximize their value. It has also endeavored to push forward the human resources standardization system project to realize an orderly internal flow of human resources.

Unimpeded development paths

We have opened up multiple channels for career development, and stepped up team building efforts along the three pipelines of technical talents, skilled workers, and management personnel. We offer diverse career development possibilities on equal basis for employees through secondment, job transfer, promotion, and various other means.

Selection of leading talent

In 2018, CNNP appointed 20 leading talents in production, operation, project, safety and quality, and management and encouraged them to play a leading role in promoting innovation-driven development, solving major issues and technical difficulties, and building up competitiveness in their respective fields.

Selection of young officials

Through secondment, we selected and appointed 21 young officials in the fields of workplace safety, Party building, marketing, and project management, a solid step towards building a management talent pool for CNNP's future development.

Cultivation of skilled workers

We organize competitions for skilled workers from all member units of CNNP to select a number of outstanding workers. We encourage power plants to establish skills certification and training facilities and have so far created six appraisal workstations of general nuclear power job skills, providing a platform for the cultivation of skilled workers.

Capacity building

We attach great importance to employees' capacity building, and have created a multi-tiered training system to meet the actual demand of employees. We provide Party building training, management training, orientation training, and foreign language training for employees to stimulate their capacity building and personal growth. For the senior management, we offer training sessions on management theories and practices to improve their competence; for 46 newly-appointed management personnel at the departmental-chief level, we provide leadership training, Party building training and management training; for new recruits, we organize orientation training, foreign language training, and safety training to help them fit in better and faster. In 2018, the Company organized a total of 54 generic training programs with a total investment of 52.012 million yuan, and the duration of employee training was up to 13,184.34 man-months. CNNP won China Talent Management Example Enterprise 2018.

54
generic specialized training
programs

52.012 million yuan
invested in training

13184.34
man-months total duration of
employee training

Case

CNNP holds 2018 Labor Union Management Training Workshop in Beijing

To enable labor unions to better play their roles in the new era, implement the guiding principles of the 17th National Congress of All-China Federation of Trade Unions, and strengthen the competencies of grassroots labor unions, CNNP held a training workshop for labor union officials in Beijing on November 15-16, 2018, attracting more than 50 heads and officials of labor unions of the CNNP headquarters and all member units. The training covered topics such as the guiding principles of the 17th National Congress of All-China Federation of Trade Unions, the work of labor unions, the operation of the Home of Staff, and democracy in labor unions. A special seminar was also held on the opportunities and challenges for grassroots labor unions in new circumstances.

Comments by some trainee:

"The training session offered us an opportunity to further our understanding of the basic theories on labor unions, improved our professional competency, and strengthened our sense of honor and responsibility. In the future, we will put what we learned here into use, live up to the expectation of employees, provide better services to their satisfaction, present a new image of labor unions in the new era, and contribute our wisdom and strength to CNNP's planning for two fifteen-year periods."

Innovation in talent management

Adhering to "human resource standardization," CNNP coordinates all its nuclear power plants to build a unified talent pool. It issued the *CNNP Integrated Position System Standard* to put in place a scientific, unified and generic official position system that applies to the headquarters and all member units. This system includes five channels of career development: management personnel, functional support staff, technical personnel, operators, and skilled workers. It takes detailed records of the staffing structure of each unit under CNNP in an effort to push forward human resource standardization system project and gradually shape an integrated human resources platform that is future-oriented and replicable. This will facilitate talent flow and promote the orderly allocation of human resources within CNNP.



Caring for Employees

CNNP cares for its employees. We organize all kinds of cultural and sports activities to enrich employees' life, and offer help to employees in need with material and emotional support in order to enhance their sense of belonging and happiness.

Diverse cultural and sports activities

We hold speech contests, table tennis competitions and other activities to create a positive and easy workplace, enrich employees' life, and build rapport between employees.

Case

CNNP holds a speech contest themed on the culture of excellence

To build a culture of excellence, CNNP held the final of the "pursuing excellence" speech contest on June 27, 2018, as part of its "culture of excellence" festival. The final encompassed three rounds: cultural storytelling, impromptu on cultural keywords, and comments from the panel. CNNP invited speech experts outside and CNNP corporate culture experts to tutor 22 contestants from 14 member units who told real-life stories and the heroic deeds of people around them that embodies the cause-oriented, responsibility-oriented, strictness/carefulness-integrated, and striving-based spirit of the nuclear industry and the value of "pursue excellence and be self-challenging."

Their speeches showcased in various ways how the culture of excellence was manifested in daily activities, showed the charm of the culture of excellence and motivated us to pursue excellence and learn from role models.



Warm care for employees in need

We attach great importance to extending care to employees. We have extended special care to employees in need, offered help to some female employees, visited retirees, and provided assistance for those in difficult situations so that everyone would feel the love of the CNNP Family.

Care for female employees

- We formulate breastfeeding leave rules that cater to the needs of nursing mother employees, and have female-only lounges where special devices and supplies are available to meet the special needs of female employees.
- We organize activities to celebrate the Women's Day to extend care to women employees.

Care for retirees

- We give out gifts to retirees on special occasions, and organize seminars and other cultural activities for them.
- We pay visits to sick and hospitalized retirees.
- We open WeChat group accounts for retirees to collect information on their special needs and offer help in a timely manner.

Assistance to employees in difficulties

- We visit employees who are sick or face other difficulties and earmark funds for assistance.
- In 2018, we registered 45 employees as in need and offered special assistance to 49 employees.

Case

Sanmen Nuclear Power Plant holds summer training programs for "little migratory birds"

Education resources and other life facilities are scarce in the vicinity Sanmen Nuclear Power Plant and employees have to travel long distance to and from work every day. To spend more time with their children, many workers would take their children to live with them at the plant during the summer vacation. Sanmen Nuclear Power Plant has organized a training program in cooperation with private training institutions for the visiting kids for five consecutive years to give them a safe, happy and meaningful vacation and ease the burden on their parents. The program is developed based on the age structure and varying hobbies and needs of these kids learnt in advance. In 2018, a total of 11 courses were offered to 105 kids in 6,900 class hours.





Community Engagement for Social Harmony

Our Actions

Hosting the "Appealing Light" national nuclear power science popularization event for the sixth consecutive year and organizing "China Nuclear Power Week"

Contributing to poverty alleviation through photovoltaic projects, agricultural and animal husbandry projects, education assistance, and industrial development projects in Tibet, and the latter wins praise on multiple occasions from the SASAC and the Tibet Autonomous Region

Leveraging our own strengths to attract investors to local communities, supporting the development of industrial tourism

Performance in 2018

Investment in targeted poverty alleviation: 6.52 million yuan

Outward donations: 3.6228 million yuan

Taxes paid: 6.221 billion yuan

Corresponding SDGs



Contributing to Community Harmony

We carry out science popularization and public awareness activities for nuclear power and disclose relevant information to ensure the public's right to know, participate and supervise, enhance communication with the general public, and contribute to community harmony.

Science popularization to raise public awareness

We carry out all-round activities to disseminate knowledge on nuclear energy, including online and offline events targeted at different groups, to share with the public the latest progress made in the nuclear energy sector, increase public understanding of nuclear energy, and win more support and understanding. In 2018, CNNP was named an "Advanced Unit in Nuclear Power Science Popularization in China."

Case

China Nuclear Power Week

From October 20 to November 4, 2018, Jiangsu Nuclear Power Co., Ltd. hosted the China Nuclear Power Week on campuses of Northeast Electric Power University, Harbin Engineering University, and North China Electric Power University for five days. Prior to the event, it distributed pamphlets and posted articles and videos on WeChat to disseminate nuclear power knowledge to students. Then at the opening ceremony of the event, experts and outstanding alumni were invited to give lectures and presentations on nuclear power knowledge and related topics, and fielded questions from students. A competition about nuclear power science popularization was staged, attracting online registration of 900 students from the three universities who gained a deeper understanding of nuclear power by answering relevant questions. At the closing ceremony, another quiz game was staged to further disseminate knowledge on nuclear energy. The diverse activities immersed college students in the world of nuclear power and helped them learn relevant knowledge and understand how nuclear power has shaped the world.



Case

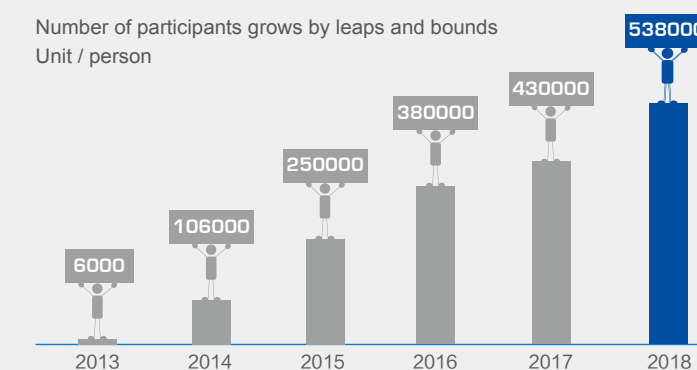
The sixth CNNP "Appealing Light" nuclear power science popularization event

To step up the publicity effort to raise awareness regarding nuclear power knowledge and help students gain a rational understanding of nuclear energy, CNNP launched the sixth "Appealing Light" Cup nuclear power science popularization event in 2018. We have continuously improved the contest rules, innovated the forms of activities to attract a large number of students to take part in. The contest was widely acclaimed in society.

The Sixth "Appealing Light" Cup Chinese Nuclear Power Science Popularization Knowledge Contest: On March 28, 2018, the Sixth "Appealing Light" Cup Chinese Nuclear Power Science Popularization Knowledge Contest kicked off under the theme of "Appealing nuclear power contributes to a beautiful China." Up to 538,000 middle school students and netizens from 34 provinces, municipalities, and autonomous regions of the Chinese mainland, Hong Kong, Macao, and Taiwan, and 19 other countries and regions around the world participated in the contest by answering questions on basic nuclear power knowledge, development history and principles of nuclear power, nuclear power application, and nuclear radiation and safety.

Since its inauguration in 2013, the "Appealing Light" event has been held for six consecutive years so far and the total number of participants amounted to nearly 1.7 million. The 2018 edition saw a more prominent brand effect. It won recognition from peer companies such as China General Nuclear Power Group, State Power Investment Corporation Limited, and China Huaneng Group Co., Ltd.. The "Appealing Light" has become a renowned brand of nuclear power science popularization in China and a good platform of nuclear power science popularization to middle school students and to the general public alike to raise their awareness regarding nuclear power and nuclear safety.

The Third CNNP Summer Camp for College Students: A total of 95 selected students and over 30 teachers from 22 top Chinese universities gathered at the opening ceremony of the third CNNP Summer Camp. During the four-day summer camp, participants visited Tsinghua University, China Institute of Atomic Energy, Liaoning Nuclear Power Base and Tianwan Nuclear Power Plant, received training on basic nuclear power theory, had face-to-face communication with academicians and experts, and attended seminars on nuclear safety and radiation protection. They not only learned about the history and cutting-edge knowledge of the nuclear industry, but also learnt to appreciate the spirit of the nuclear sector. Flash mobbing and Tic Toc were employed to enhance communication between participants and help disseminate nuclear power knowledge.



Wu Qianxiang, a participant of the "Appealing Light", said:

"The 'Appealing Light' brought me out of the mountain and showed me how big the world was. It filled me with passion and helped me realize my college dream. I would not have become who I am today without the 'Appealing Light'. It introduced nuclear power to me and gave me the compass and impetus to work hard."

Engaging the public to enhance a better experience

We emphasize communication and interaction with local communities near nuclear power project sites, create new ways to communicate with local residents, and invite them to participate in nuclear power awareness raising events so as to enhance their understanding of and win their support for nuclear power.

Case

"Summer Dandelion" young tour guide camp at Nuclear Power Science and Technology Museum

During August 20-30, 2018, CNNP organized the "Summer Dandelion" Young Tour Guide Camp at Nuclear Power Science and Technology Museum. Taking the museum as a pilot site, the camp was an attempt of CNNP at public communication that was more fun and replicable. It put ordinary people in a position to disseminate nuclear power knowledge instead of keeping them in the role of recipients of knowledge.

After receiving a brief training on posture, manners, articulation and presentation skills and private after-class rehearsals, a total of 45 primary and secondary school students became certified tour guides at the museum. The event deepens participants' understanding of nuclear power, and will be held as a long-term event in the future.



A young tour guide of "Summer Dandelion" at Qinshan Nuclear Power Science and Technology Museum

A young tour guide said:

"I want to learn more about nuclear power and pass the knowledge on to everyone."

Case

Employing part-time lecturers at Fuqing Nuclear Power Plant to present nuclear power knowledge to the general public

In order to enhance interactions with the public and better disseminate nuclear power knowledge, Fuqing Nuclear Power Plant establishes an exhibition hall at the project site, organizes science popularization training for teachers of local primary, secondary schools and universities, issues the certificate of appointment to those who completed the training, and in this way forms a team of over 50 part-time science popularization lecturers. By doing so, the company not only engages local teachers in the dissemination of nuclear power knowledge, but also satisfies the needs of students, experts, local communities, government officials and other visitors to learn nuclear power knowledge. The public can thus have a closer look at and a better understanding of nuclear power and feel for themselves the charm of nuclear energy.

Information disclosure for public supervision

We continue to disclose corporate information through press conferences, annual CSR reports, WeChat accounts and other online and offline channels to receive public supervision and show a good corporate image. By the end of 2018, the Company's official WeChat account had received over 890,000 views and more than 44,000 followers, up 27% over the previous year. In 2018, the Company released its sixth CSR report and was honored GoldenBee CSR China Honor Roll –GoldenBee Enterprise.

WeChat account views: over

890,000

WeChat account followers: over

44,000

Case

Press conference for "Taste of Nuclear Power" CSR mini-report

On March 28, 2018, CNNP held a press conference to issue its CSR mini-report 2017. This is the sixth CSR report of the Company. Themed on the "taste of nuclear power", the report consists of four parts: workplace safety, environmental protection, economic development and humanistic care to address public concerns. At the press conference, CNNP introduced five special local products from nuclear power plants, and told CSR fulfillment stories through a clapper talk performance, showcasing the Company's commitment to "Appealing nuclear power contributes to a beautiful China."



helped

10 poverty-stricken villages

invested

6.52 million yuan
for targeted poverty alleviation

Supporting Poverty Alleviation

Upholding the tradition of helping those in need, CNNP has always been committed to giving back to the society and enabling more people to feel to the charm of nuclear power. We support poverty alleviation through a variety of projects, including photovoltaic projects, agricultural and husbandry projects, education assistance and industrial development projects in Tibet. In 2018, we dispatched 11 officials for poverty alleviation purpose, helped 10 poverty-stricken villages and invested 6.52 million yuan for targeted poverty alleviation.

Supporting local industries

We take into consideration the needs of poverty-stricken villages, help them unlock potential, build a specialized industrial system that fits local conditions, and adopt the "cooperative +" and other models to lift them out of poverty.

Jiangsu Nuclear Power Co., Ltd has launched 13 poverty alleviation projects, fostered local photovoltaic industry and high-efficiency agriculture and created over 100 jobs. It has succeeded in lifting Xingsi Village out of poverty and will continue to fight poverty in Houyao Village and eradicate poverty there as soon as possible.

CNNP Guodian Zhangzhou Energy Co., Ltd. has fully analyzed the conditions of poverty-stricken villages it helps, created a "cooperative +" model, and launched a distributed rooftop solar power project with a combined installed capacity of 28 Kw and made particular efforts in animal farming and rural tourism.

CNNP (Tibet) Industrial Development Co., Ltd. contributes to poverty alleviation by providing a strong boost to the sale of local agricultural and animal products. The company supports the sales of local agricultural and animal products by opening a WeChat store dedicated to them to increase income for Tibetan farmers and herdsman and promote the development of local agriculture and husbandry.

Case

Tibetan industries development support program of CNNP receives repeatedly praise by the SASAC and the Tibet Autonomous Region

Based on its own strengths, CNNP (Tibet) Industrial Development Co., Ltd. actively shoulders its social responsible as a central enterprise and has successively launched the Xumai Geothermal Project, engaged in geological exploration in Gulu and sale of local agricultural products. In May 2018, it broke ground on the Zhanang Solar Power Project. Following the example set by the Xumai Geothermal Project and with local government coordination, the company hired local workers, paid a total of 520,000 yuan for labor cost for the construction work, and directly benefited 80 households in four villages. The company bought 350,000 yuan worth of building materials such as sand and stone locally and paid 850,000 yuan on rent of agricultural machinery to local suppliers, making a total of 1.72 million yuan. In 2018, the Tibetan industries development support program of CNNP was repeatedly praised by the State-owned Assets Supervision and Administration Commission of the State Council and the Tibet Autonomous Region.

Case

Fuqing Nuclear Power Plant empowers local people in the fight against poverty

In response to the calls of the government for targeted poverty alleviation, Fuqing Nuclear Power Plant sent employees to serve as village secretaries in poverty-stricken villages and lead local poverty alleviation efforts. In Lutun Village and Louxia Village, quality tea is a major source income for local households. Fuqing Nuclear Power Plant helped local people create the "Zhizhi" brand for top-quality tea products and form a value-added chain covering tea growing, tea processing, and tea selling. It organized local villagers to establish Fuding Lutun Agricultural Development Co., Ltd. for the professional operation of the brand based on agreements collectively signed between the company and local village. The brand has gradually expanded its market share and influence and formed a business model that involves tea farmers, tea factories, JD.com and physical stores, generating long-term stable income for the villages.

Infrastructure Construction

By drilling wells, building roads and repairing bridges, CNNP has improved the infrastructure in poor villages and local living standards.

To address chronic water shortage in poor villages, Hainan Nuclear Power Co., Ltd invested more than 2 million yuan in drilling wells and developing the irrigation system to ensure the access to drinking water for local farmers.

In the paired-up poverty alleviation program, CNNP Liaoning Nuclear Power Co., Ltd. helped destitute villages build and upgrade roads and bridges out of its own pocket to make travel easier and improved the water source to ensure local water supply.

Jiangsu Nuclear Power Co., Ltd. funded the construction of an outdoor public square, a villagers' recreational center in poverty-stricken villages, and multimedia electronic classrooms and reading rooms in local schools, to benefit local people with nuclear power development.



A project to improve the environment of the water intake site of CNNP Liaoning Nuclear Power Co., Ltd.

Education for poverty alleviation

poor students aided:

20

total grants:

220,000 yuan

Standing up to its social responsibility, the Company supports students from poverty-stricken families to pursue academic studies and personal growth. It supported 20 poor students with a total of 220,000 yuan and invested over 100,000 yuan to improve local education resources.

CNNP Guodian Zhangzhou Energy Co., Ltd. set up a volunteer teacher team to help primary schools in poor villages. The team made targeted efforts to solve the problems of poor teaching capabilities and conditions and limited diversity in teaching content by selecting suitable teachers and bringing additional teaching resources. Smooth progress has been made in the reconstruction of school buildings and the construction of the playground, facilitating the all-round development of students.

Taohuajiang Nuclear Power Co., Ltd. has launched a long-term plan to support economically disadvantaged students to finish schooling by pairing them up with donors. The plan has been carried out for six consecutive years and a total of 212,653 yuan was raised in 13 charity activities. Five of the supported students have been admitted to universities.

Jiangsu Nuclear Power Co., Ltd. has launched targeted assistance and incentive programs for students. It has launched the Tianwan Nuclear Power Spring Bud Scholarship and Tianwan Nuclear Power Spring Bud Scholarship to help students from poverty-stricken families chase their dream for a brighter future.

Leveraging its own strengths, CNNP organizes the nuclear power-themed summer camp, nuclear power science popularization events and visits to nuclear power exhibition halls for students from poverty-stricken areas to broaden their horizon, enhance their understanding of nuclear power and enlighten their future.

Case

Fuqing Nuclear Power Co., Ltd. organizes the Third Nuclear Power Summer Camp for outstanding poor students

In order to disseminate knowledge on nuclear power to students from poverty-stricken areas and take them to see the vast outside world, Fuqing Nuclear Power Co., Ltd. organized the Third Nuclear Power Summer Camp for outstanding poor students on August 6, 2018. Themed on "A Rendezvous with Hualong One," the summer camp welcomed over 100 teachers and students from the poverty-stricken Tongxin County of Ningxia and Shizhu County of Chongqing. Participants visited the construction site of Hualong One, a project equipped with the third-generation nuclear power technology independently developed by China, and learned basic knowledge on nuclear power.

A teacher from Shizhu County said:

"I would like to thank CNNP for giving us such an opportunity to take the students out of their hometown to see the outside world and broaden their horizon. Here, they made friends, saw new things, realized their dreams, and got new expectation for the future."



Driving Local Economy

tax payment totaled

6.221 billion yuan

CNNP has been offering full support to local economic development, paid taxes due, leveraged its strengths to attract investment to local areas, and boosted the development of industrial tourism. In 2018, its tax payment totaled 6.221 billion yuan.

Case

Qinshan Nuclear Power Co., Ltd. adds to the glamor of a specialty town

Qinshan Nuclear Power Co., Ltd. has made use of its strengths and mobilized various resources to promote balanced development in science and technology, economy, image, ecological environment, culture, red tourism and Party building in Haiyan nuclear power town by integrating into local community. Since its first nuclear power unit was put into operation, the power plant has paid a total of 1.1 billion yuan in urban construction tax, and invested nearly 560 million yuan in the construction of the Wunan Highway and multiple other dedicated highways. It has also helped attract many other nuclear power enterprises to make investment and settle in the town.

On July 2, 2018, the nuclear power science and technology museum in Haiyan nuclear power town was named one of the first 20 "Red Boat" Party education bases of Jiaying, bringing new prospect for the development of red tourism in the town. CNNP will make further efforts to develop the nuclear power town and benefit the local people.



Case

Fuqing Nuclear Power Co., Ltd. creates Fujian's first industrial tourism base

Fuqing Nuclear Power Co., Ltd. has established a 2,400 m2 exhibition center and opened it to the public free of charge based on local nuclear power industry. It introduces major nuclear power companies, basic nuclear power knowledge, and the application of nuclear technologies. The exhibition hall is mainly for science popularization on nuclear energy and nuclear power, but also retains functions of a business exhibition center and of industrial tourism. It is equipped with professional tour guides and has developed a nuclear power-themed tourism product in cooperation with Fuqing Municipal Tourism Bureau and Fuqing Visitor Center, offering free visits to the nuclear power plant. The company has become the first industrial tourism destination in Fujian Province. Since the inauguration of the tourism base in 2017, it has received over 30,000 visitors, building the influence of Fuqing Nuclear Power Co., Ltd.

Charity

CNNP encourages its employees to deliver volunteer services, extend care to the old and the young and build the Company's image as a responsible corporate citizen. We donated 3.6228 million yuan in 2018 alone.

3.6228 million yuan
donations in 2018

Case

Jiangsu Nuclear Power Co., Ltd. extends care to the disadvantaged

To support social welfare institutions, the widowers, the widows, the orphans and the childless elderly, people with disabilities, and victims of disasters and accidents in Lianyungang, Jiangsu Nuclear Power Co., Ltd. organized a series of charitable activities. Volunteers visited elderly people above 90 years old living alone on statutory festivals and holidays, delivered volunteer services and free medical consultation to the widowers, the widows, the orphans and the childless, provided company and counseling services for the left-behind children and offered help for those in need in general. In the past three years, the company spent over 5 million yuan organizing 156 charitable activities involving more than 2,100 volunteers, delivering services to four social welfare institutions, 7 villages, 3 communities, and 12 primary and secondary schools and kindergartens in Lianyungang and benefiting 351 students and 57 longevous people.

Case

CNNP Liaoning Nuclear Power Co., Ltd. cares for the old and the young

CNNP Liaoning Nuclear Power Co., Ltd. set up three play rooms for left-behind children in Yaowang Township of Xingcheng City and equipped them with computers and other supplies worth over 20,000 yuan. Ten female worker volunteers were recruited to care for them. On festive occasions, volunteers would visit local orphanage, autism care centers and old-age care facilities and bring with them gifts and condolences.



Outlook for 2019

The year 2019 will mark the 70th anniversary of the founding of the People's Republic of China and it will also be a year of critical importance for building a moderately prosperous society in all respects, and a decisive year for the implementation of the 13th Five-Year Plan for Nuclear Power Development. There will be opportunities for development, as well as risks and challenges on the journey ahead. In 2019, guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, CNNP will advocate the spirit embodied by the "Two Bombs, One Satellite" project and the cause-oriented, responsibility-oriented, strictness/carefulness-integrated, and striving-based spirit of the nuclear industry, steadily advance the strategies for large-scale, standardized and internationalized development, take a holistic approach towards its five major dimensions and three focuses, continue to act responsibly and pursue excellence, and strive to produce safe and efficient nuclear power, create a clean and low-carbon living environment, and become the most attractive first-class nuclear energy enterprise in the world.

We will continue to strengthen Party building, study and implement the guiding principles of the 19th CPC National Congress, uphold the leadership of the Party over state-owned enterprises and keep up our efforts to build modern enterprise systems. We will integrate Party building into the daily operations, clearly define duties and powers, follow Party leadership on an organizational, institutional and concrete basis, strengthen grassroots Party organizations, reinforce the foundation of our work by centering on the responsibilities of each job position, and endeavor to hone basic work skills, so as to strengthen our core competence. We will make more efforts to build the culture of nuclear safety, implement safety responsibilities, follow high and strict standards, conduct safety control over the whole production process, and build our regulation capacity, so as to ensure the sustainable, safe and sound development of the nuclear industry. We will continue to seek innovation on all fronts with technology innovation at the core, deeply implement the development strategy driven by technology innovation and contribute to the national economic and social development. We will continue to pursue energy-conserving, recycling, clean, and low-carbon green development, promote the application of new nuclear technologies and the development of renewable energy, and help improve and beautify the environment of China. We will remain open and committed to win-win cooperation, improve supplier management, build strategic alliances, push for the establishment of technical service unions, create the "nuclear power plus" service supply chain, and deepen exchanges and cooperation with peer companies for common prosperity. We will continue to strengthen team building along the three pipelines, and follow the 13th Five-Year Plan to bring up more talented leaders, talents with a global vision, and high-end technical talents, so as to support the long-term development of the nuclear energy sector. We will continue to share our achievements with more people, shoulder our responsibility as a central SOE, work harder to reduce poverty, and actively drive community development to enhance people's wellbeing.

In 2019, we will adhere to our core values of "responsibility, safety, innovation, and collaboration," and strive to create value for the Company, shareholders, and society and enhance the wellbeing of our employees. We will present more achievements to celebrate the 70th anniversary of our motherland, and contribute more to the sustainable development and beautiful environment of China.

Honors and Awards



Top 500 Most Credible Chinese Public Companies 2018

China Enterprise Reform & Development Society, and China Cooperative Trade Enterprises Association



Top 500 Most Credible Chinese Companies 2018

China Enterprise Reform & Development Society, and China Cooperative Trade Enterprises Association



China Talent Management Example Enterprise 2018

Beisen Talent Management Institute



Global 2000 World's Best Employers

Forbes



Outstanding Contributor to China's Reform and Opening Up, Best Public Company CEO, and Best Public Company CFO of Golden Bauhinia Awards

Hong Kong Dagong Wenhui Media Group, Listed Companies Association of Beijing, Hong Kong Chinese Enterprises Association, Chinese Financial Association of Hong Kong, Chinese Securities Association of Hong Kong, Hong Kong Institute of Chartered Secretaries, and Hong Kong Securities Professionals Association



The Golden Round Table Award for Best Board of Directors

China Association for Public Companies, and Board of Directors (journal of Phoenix Publishing & Media Group)



GoldenBee CSR Report Honor Roll – GoldenBee Enterprise

China Sustainability Tribune directly supervised by Ministry of Commerce



Corporate Culture Model in the 40 years of China's Reform and Opening Up

China Research Institute of Enterprise Culture

Appendix

Terminology

Nuclear energy	Nuclear energy (or atomic energy) is the energy released from the atomic nucleus through mass conversion, in line with Albert Einstein's equation $E=mc^2$, wherein, e = energy, m = mass, and c = constant of light velocity.
Nuclear power	Nuclear power is a way of electricity generation by using the thermal energy released by nuclear fission in nuclear reactors.
Pressurized water reactor	A nuclear reactor in which water is not boiling, with pressurized light water (ordinary water) as coolant and moderator without boiling.
Heavy water reactor	A nuclear reactor that uses tritium as moderator and can be directly fueled by natural uranium. It may use water or tritium water as the coolant, and includes two types: the pressure vessel type and the pressure pipe type.
Reactor year	One reactor year equals to one year of operation for one reactor in nuclear power plant.
WANO	The World Association of Nuclear Operators, which was founded in 1989 in Moscow.
WANO performance indicators	Indicators WANO develops and uses to evaluate member power nuclear power plants. The ranking results can be used to compare surveyed power plants.
Capacity factor	It is the ratio between the power capacity actually generated by a unit within a certain period and the power capacity calculated by nameplate capacity, and it reflects the safety operation and management level of a unit.
INPO	The Institute of Nuclear Power Operations which was founded in 1979 after the Three Mile Island accident to promote the information exchange and experience sharing between nuclear power plants, periodically assess nuclear power plants, establish performance goals and help train personnel for nuclear power plants.

IAEA	The International Atomic Energy Agency. It was founded in 1957 and is headquartered in Vienna, Austria. IAEA keeps a close relationship with the United Nations, and serves as a platform for research and technological cooperation of all countries in the field of atomic energy.
Equivalent dose	A product of multiplying radiation weighting factor by the average dose absorbed by tissues or organs, with the unit of sievert (Sv).
Millisievert	An international unit used to measure the effective dose of radiation and reflecting the degree of personal injury due to exposure to ionizing radiation.
Absorbed dose	Volume of radiation energy absorbed by unit mass of tissue or organ.
Gy	International unit of absorbed dose, 1Gy=1J/Kg, meaning the energy generated by radiation to tissues or organs of a kilogram is one joule.
Effective dose	Effective dose equivalent is the sum of product of the appropriate tissue weight factor and the average dose equivalent acceptable to all organs and tissues of the human body under the condition of stochastic effect as the radiation effect of human tissue or organ, and of inhomogeneous exposure of the whole body.
Environmental background	Environmental factors in unpolluted natural environment, which includes original basic chemical composition and energy distribution of environmental factors such as atmosphere, water, soil and biology during their natural formation and development before the disturbance from human activities.
Bq	Standing for "Becquerel" in French. It is an SI derived unit of radioactivity, used to measure radioactive materials or radioactive sources. GBq is equivalent to 10 ⁹ Bq; TBq is equivalent to 10 ¹² Bq.

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Expert Opinion

The 2018 Social Responsibility Report of China National Nuclear Power Co., Ltd. is the seventh issue of the CNNP CSR report. It showcases how CNNP has taken the initiative to identify and contribute to the Sustainable Development Goals closely related to its own operations, presents a full picture of the Company's mission, development strategy, and social responsibility practices, and dedication to sustainable development.

CNNP's social responsibility practices have kept abreast with the time. The report focuses on the highlight of reporting period as it marks the 40th anniversary of China's reform and opening up, gives a featured presentation of how CNNP has been working on major nuclear power projects of national and strategic significance, targeted poverty alleviation, and green power plants. It shows how the Company has been riding on the surge of reform and opening up, rising to its responsibility and forging ahead in the pursuit of safe, efficient, clean, green, responsible and innovation-driven development and its philosophy, practices and remarkable outcomes in sustainable production and development.

CNNP has supported development with a sound corporate culture. The report highlights CNNP's firm belief that development is the top priority, talents is the most important resource, and innovation is the top driving force, makes clear the Company's goals of becoming an internationally first-class nuclear power enterprise by 2035 and growing into a global leader of safe nuclear power/nuclear energy operation by 2050. In its pursuit of excellence, CNNP has comprehensively strengthened cultural integration and building. Bearing in mind the vision of becoming a global leader in nuclear technology and the mission of developing the nuclear industry to strengthen the country and serve society, CNNP has vigorously advocated the spirit embodied by the "Two Bombs, One Satellite" project, and the caused-oriented, responsibility-oriented, strictness/carefulness-integrated and striving-based spirit, seized development opportunities to upgrade its corporate culture in an all-round manner, highlight a global vision, and contribute its wisdom and energy to the global nuclear power industry.

CNNP has put its understanding of corporate social responsibility fully into practice. With the core values of "responsibility, safety, innovation, and collaboration," CNNP has pushed its overall understanding of corporate social responsibility up to a new level and shifted its CSR system from the previous four-part structure of "Workplace Safety, Environmental Protection, Economic Development, and Humanistic Care" to a six-pronged approach that covers safety, environment, innovation, collaboration, employees, and society. This approach is implemented in all aspects of CNNP's business operations, brand building, and other work, showcasing the Company's commitment to the realization of the Sustainable Development Goals through cooperation with various stakeholders.

In summary, the 2018 Social Responsibility Report of China National Nuclear Power Co., Ltd. is an excellent report that reflects the spirit of our time. It presents rich content, detailed data, and an elegant layout to show CNNP's commitments and actions, serving as a good example for enterprises to engage deeply in the sustainable development of the world. I hope that CNNP will continue to improve its CSR management and practices and join hands with stakeholders to drive the safe, innovation-driven, green and harmonious development all across China.

Cheng Duosheng

Director of the Enterprise Innovation Department, China Enterprise Confederation

Related Reports and Publications



CNNP System of Culture Excellence



CNNP Employee Code of Conduct



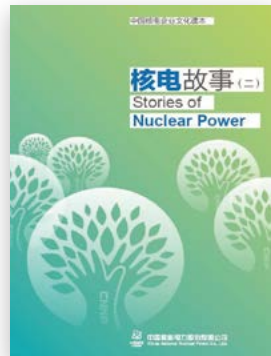
CNNP Training Material on Culture Excellence



Redefining Safety



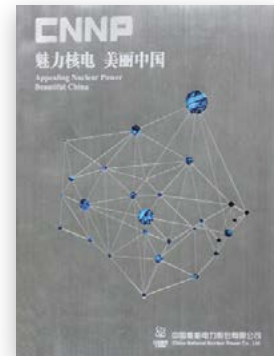
CNNP's 10 Principles of Excellent Nuclear Safety Culture



Stories of Nuclear Power



CNNP Visual Identification Standard Handbook



Appealing Nuclear Power, Beautiful China – A publicity album of CNNP



Nuclear Power Tide



Ideals and Culture



Tianwan Nuclear Power Plant



Youth of Hainan Nuclear Power Co., Ltd.

Feedback from Readers

Dear readers,

Thank you for reading our report!

This is the seventh issue of our social responsibility report. We look forward to your opinions and recommendations to help us improve in the future.

Please answer the following questions and fax the form to 010-6855 5928 or mail it to us.

Please tick ✓ the appropriate the answer.

Do you think the report highlights our economic, social and environmental work and our significant impacts?

☐ Yes ☐ Partially ☐ No

Do you think the information and indicators provided in the report is clear, accurate and complete?

☐ Yes ☐ Partially ☐ No

Do you think the arrangement of the content and style of the report is clear and helpful with your reading and understanding of the report?

☐ Yes ☐ Partially ☐ No

O p e n q u e s t i o n s :

Which part of the report are you most interested in? _____

What information needs to be provided about CNNP that is not provided herein? _____

What suggestions do you have for our future issues? _____

Please provide your contact information if that's ok with you:

Name: _____

Company: _____

Tel: _____

Address: _____

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