

中国广核电力股份有限公司

CGN Power Co., Ltd.

01816. HK 003816. SZ 2023 Annual Results



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Business Review and

Future Outlook

Development Strategy

Financial Review



中国广核电力股份有限公司 CGN Power Co., Ltd.







CGN Power

Core Business: We design, build, operate and manage nuclear power plants (NPPs), sell electricity generated by our NPPs, and organize R&D of NPPs.

CGN Power has issued 50.5 billion shares and our controlling shareholder is CGN (supervised by SASAC of the State Council).



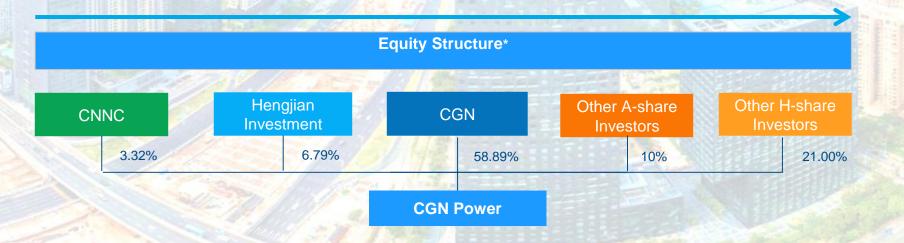
Incorporated on March 25,2014



H-share IPO on December 10,2014



A-share IPO on August 26,2019





Nuclear power generation as the mainstay, with a wide range of expertise, such as nuclear power operation and maintenance(O&M) and engineering construction

Units in operation 27 Units
Share of installed capacity 53.60%

Units under construction¹
11 Units

Share of installed capacity 30.29%

- Total installed capacity: 43.814 GW
- Share of total installed capacity of nuclear power in China:

43.48%2

Nuclear Power O&M Services

Maintenance services

Training services

Spare parts management

Production preparation

Engineering Construction Services

Engineering design

Engineering procurement

Construction management

Commissioning and start-up

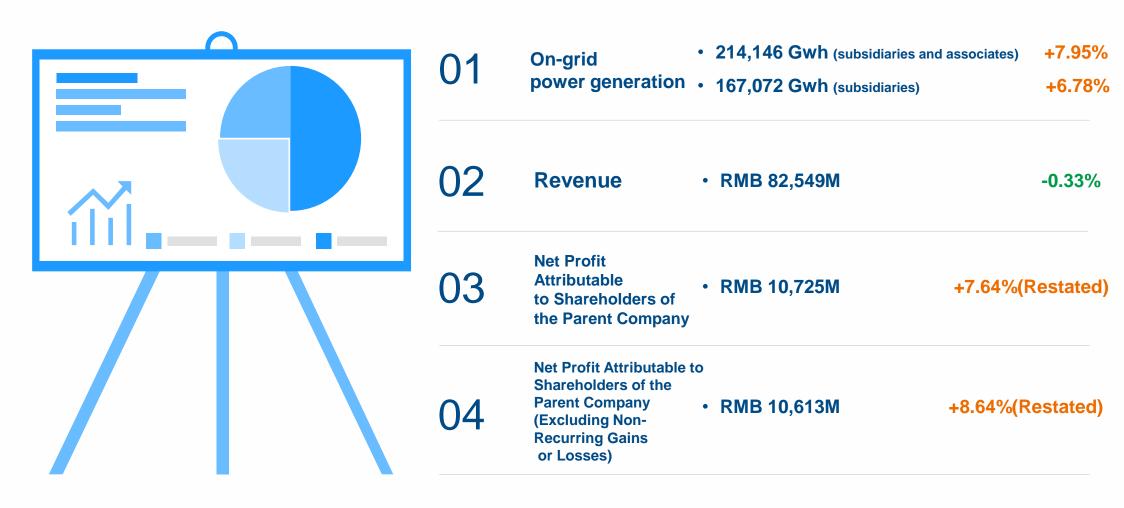
Note 1: Units under construction include approved units preparing for FCD, as well as Huizhou Unit 1-4
and Cangnan Unit 1, Unit 2, which were entrusted to us by our controlling shareholder for management.
Note 2: Statistics only include the Chinese mainland and as of December 31, 2023.

	Daya Bay	22222
	Yangjiang	22222
Guangdong	Taishan	
	Lufeng	
	Huizhou	
Guangxi	Fangcheng gang	
Fujian	Ningde	
Liaoning	Hongyanhe	222222
Zhejiang	Cangnan	

- Unit in operation with an installed capacity of 1000MW
- Unit in operation with an installed capacity of 1750MW
- Unit under construction with an installed capacity of 1000MW
- Approved unit preparing for FCD with an installed capacity of 1000MW



Key Stats of 2023

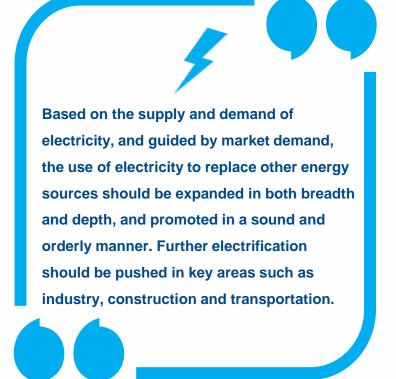




Trend towards Clean Electricity

Nationwide installed capacity of clean energy from 2019-2023

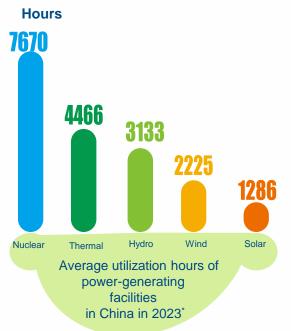






Unique Advantages of Nuclear Power





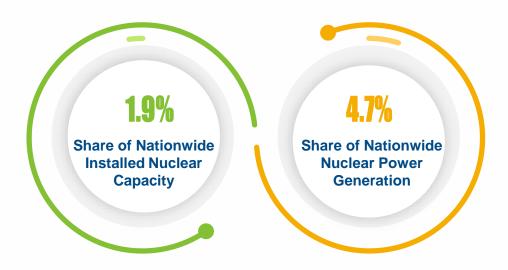








Share of nationwide nuclear power generation and installed capacity from 2023 January to December*







Chinese and global energy industry is shifting towards green and low-carbon development. China strives to achieve carbon dioxide emissions peaking before 2030 and carbon neutrality before 2060. Nuclear power development presents broad prospects.





National policies to support nuclear power development

Report to the 20th National Congress of the CPC

Working actively and prudently toward the goals of carbon peaking and carbon neutrality. **Developing nuclear power in an active, safe and orderly manner,** and strengthening systems for energy production, supply, storage, and marketing to ensure energy security.

Guiding Opinions on Energy Work for 2023 NEA

Advancing the construction of nuclear power projects. Taking well-ordered steps to promote the approval for construction of new coastal NPP projects on the premise of ensuring safety. Promoting nuclear energy for heating and comprehensive use in accordance with local conditions.

2024 National Energy Work Conference

Continuously optimizing and adjusting the energy structure, promoting the use of safe and reliable new energy to replace other energy sources, and accelerating the green and low-carbon transition of energy. 4 units of nuclear power projects will be completed and put into operation in 2024, with an additional installed capacity of about 5 million kilowatts.

2022

2023

2024



As of December 31 2022,10 units, including **Lufeng Unit 5 and 6**, were approved As of December 31
2023,10 units, including
Ningde Unit 5 and 6,
Huizhou Unit 3 and 4,
were approved

Preliminary work is underway for multiple projects, including Cangnan phase 2, Fangchenggang phase 3, which are yet to be approved by the State





14th Five-Year

- ✓ Focusing on the five first-class goals in respect of safety, quality and environmental protection, project construction, technology innovation, operational efficiency, and corporate management;
- ✓ Hongyanhe Unit 5&6 and Fangchenggang unit 3 have been put into operation. We will push forward the high quality commercial operation of Fangchenggang Unit 4 and Huizhou Unit 1 as planned;
- ✓ Striving to commence the construction of 2 to 3 new units every year.

By 2035

- ✓ Becoming a world-class nuclear power company with global competitiveness;
- ✓ Achieving significant enhancement in the comprehensive competitiveness of the industry, ranking first in terms of the total installed nuclear power capacity in operation and under construction in the world, with world-class performance of safe operation;
- ✓ Influential as a well-known brand;
- Achieving greater self-reliance and strength in science and technology;
- Becoming a benchmark for building a modern enterprise system with Chinese characteristics.



Mission

Developing nuclear energy to benefit mankind

- Robust business, achieving stable performance in operations and highquality commercial operations of construction projects
- Financial stability, ensuring capital security, and stable operating performance
- Stable returns, keeping promises and maintaining long-term stable dividend payout

Vision

A world-class nuclear power supplier and service provider with global competitiveness

- Keeping improving safety performance by benchmarking against world-class standards
- Adopting "standardization, centralization and specialization"
 (SCS) strategy to enhance multi-unit management and control
- Implementing lean management, strictly controlling project construction costs and optimizing O&M costs



- Dedicated to developing clean energy, focusing on nuclear power and comprehensive use of nuclear energy
- Improving resources utilization rate and reducing resources consumption
- Controlling emissions strictly and protecting the environment
- Pushing ahead with the approval and kick-off of new projects to maintain good development momentum
- Actively developing and mastering new nuclear power technologies to maintain sustainable development
- Strengthening commercialization and promotion of research results to increase business opportunities where appropriate
- Developing energy storage projects related to nuclear power as appropriate and expanding nuclear heating services and etc.



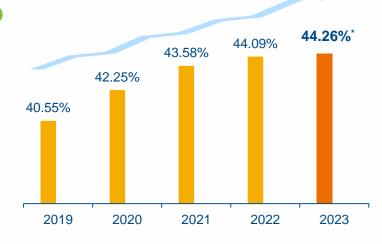


Dividend Distribution Plan for 2021-2025

On the preconditions that there are no significant changes and approval is obtained from AGM of the relevant fiscal year, the Company aims to achieve a moderate increase in the annual dividend ratio from 2021-2025 based on the dividend ratio in 2020 (42.25%).

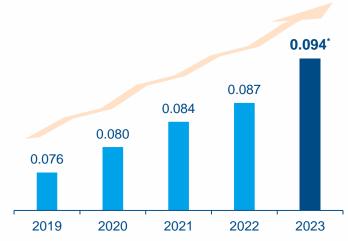
Cumulative dividend payout since IPO

27.217 Billion RMB



Dividend Ratio (total dividends/net profit attributable

to shareholders of the parent company*100%)



Dividend RMB/share

^{*:} Dividend of 2023 is subject to approval by 2023 AGM and is expected to be distributed in July 2024.



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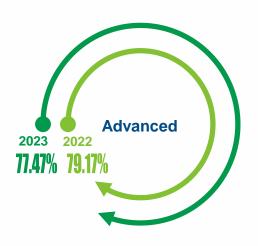
Nuclear safety is the cornerstone of the company's survival and development

Senior management on site for four consecutive years





The ratio of WANO¹ indicators achieving the world's advanced and excellent level remained leading among peers²





Achieving the world's top 1/4 level

Achieving the world's top 1/10 level

30 years

Daya Bay NPP has been operating safely for over 30 years³

99%

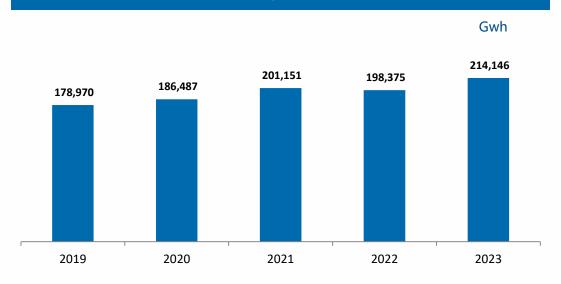
Over 99% annual completion rate of problem/hazard rectification as per plan

Note1:WANO-World Association of Nuclear Operators, WANO organizations, through their members, use them to formulate internationally common performance indicators for unified management and coordination, which is conducive to strengthening the exchange of nuclear power technology, experience and accident information to continuously improve the safety and reliability of NPPs in the world.

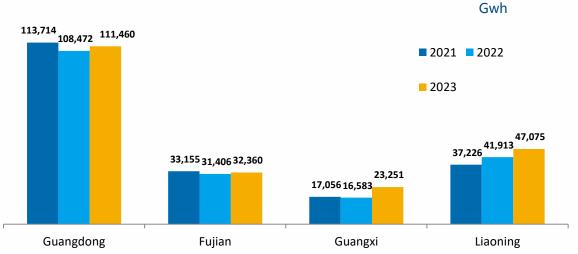
Note 2:The statistics of 2023 include 27 units. The statistics of 2022 include 26 units.



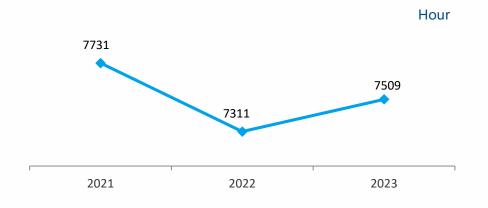
2019-2023 Total On-grid Power Generation



On-grid Power Generation by Region



Average Utilization Hours



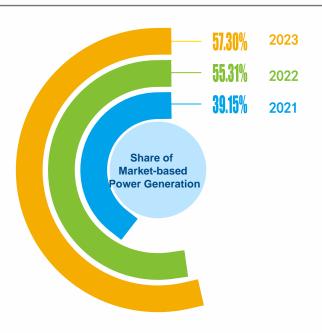
Refueling Outages



19 refueling outages completed with a 19 refueling outages conducted total of 655 days

and 17 completed with a total of **920 days**





Guang dong

> ◆ 10 units in the Ling'ao,Lingdong and Yangjiang bases have participated in the market transaction

> Market-based power generation was 38.03 billion kwh, accounting for 38.1%



◆ Fangchenggang Unit1-3 have all participated in the market transaction

 Market-based power generation was 23.07 billion kwh, accounting for 99.2%

Liaoning

Average Market-based Power Tariff (Tax Inclusive)

RMB/kwh





- Ningde Unit1-4 have all participated in the market transaction
- Market-based power generation was 32.36 billion kwh, accounting for 100%

- Hongyanhe Unit1-4 have participated in the market transaction
- Market-based power generation was 29.18 billion kwh, accounting for 62%



Units	FCD Preparation	Civil Construction	Equipment Installation		Grid Connection	Expected COD	Evented	in a la la d		
Fangchenggang Nuclear Unit 4				<u>In</u>		2024H1		installed managed by t five years ²		
Lufeng Nuclear									Mw	
Unit 5		A.I.				2027				
Unit 6		A.A.				2028				
Ningde Nuclear Unit 5 Unit 6 Huizhou Nuclear Unit 1 Unit 2 Unit 3 Unit 4						2025 2026	32,9	35,368 958	37,776	38,976
Cangnan Nuclear ¹					X		2024 202	25 2026	2027	2028
Unit 1	-		Lu -			2026				
Unit 2			- Lu	- 34		2027				

Civil construction phase: refers to the process from the FCD to the proper roof installation of the main plant of the nuclear reactor.

Equipment installation phase: refers to the process from the installation of nuclear island equipment upon the roof installation of the main plant of the nuclear reactor to the nuclear island main system meeting the conditions to conduct cold function tests.

Commissioning phase: refers to the process of conducting cold function tests for nuclear island main system and commencing joint commissioning for the power plant.

Grid connection phase: refers to the commissioning of generators upon the first grid connection with the power grid, demonstrating that the power generating units are capable for power generation.

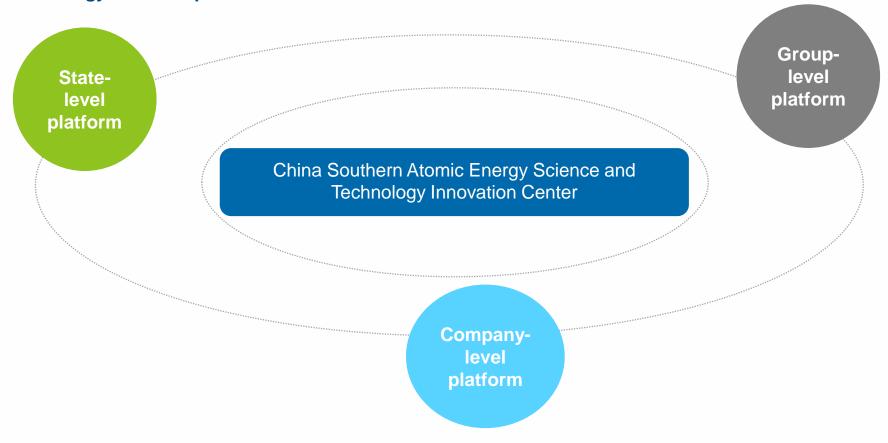
Construction Progress as of December 31, 2023

- 1: Huizhou Unit 1-4 and Cangnan Unit 1, Unit 2 are units under construction managed by the Company as entrusted by the controlling shareholder.
- 2: Installed capacity in operation managed by the Company in the future will consist of units entrusted by the controlling shareholder for management.



Technology R&D

Leveraging the geographical advantages, and combining the national regional development strategy and the Group's technological innovation needs, we have established an overall plan with the Southern Center as the core and the integrated operation of technology research platforms and facilities at different levels.





Technology Innovation Platform



State key laboratory

 State Key Laboratory of Nuclear Power Safety Technology and Equipment

State-level engineering and technology research center

 State Nuclear Power Plant Safety and Reliability Engineering Technology Research Center



Intellectual property

- 1668 patents applied
- 1 China Patent Gold Award, 4 China Patent Excellence Awards



Five state-level energy R&D centers

- State Energy Nuclear-grade Equipment R&D Center
- State Energy NPP Digital Instrumentation and Control System R&D Center
- State Energy Nuclear Power Engineering & Construction Technology R &D (Experiment) Center
- State Energy Nuclear Power Operation and Life-cycle Management Technology R&D Center
- State Energy Ocean Nuclear Power Platform Technology R&D Center



Group-level R&D Platform

- Nuclear Power Plant In-service Inspection Technology R&D Center
- Nuclear Power Simulation Technology R&D Center
- R&D Center for Decommissioning of Nuclear Facilities and Radioactive Waste Management Engineering Technology









approximately 64.67 million tons

CO₂ Emission Reduction

approximately 176.45 million tons



SO₂ Emission Reduction

approximately 17,800 tons

NO_x Oxynitride Emission Reduction

approximately 28,500 tons





In 2023, a total annual on-grid power generation of 214,146 GWh, equivalent to **0.48 million** hectares of forest





ESG

Diversity: The new board members have a variety of professional backgrounds, including power industry management, financial and accounting management, law, safety management, supervision and management of state-owned enterprises, with representation of two female directors.

Independence of independent directors: The Audit and Risk Management Committee of the Board consists **entirely** of independent non-executive directors.























ESG Rating

Overseas

- S&P rating: 43
- ✓MSCI rating: BB
- ✓ Morningstar risk rating: 30.6

Domestic

- CNI Index ESG rating: AAA
- CSI Index ESG rating: AAA
- Wind ESG rating: AA
- IIGF rating: A+
- SynTao Green Finance rating: A

ESG Awards

Rating A by
Shenzhen Stock
Exchange for
information
disclosure for three
consecutive years

Best Practices of Corporate Governance and ESG Award, Excellent Case for Boards of Directors by CAPCO

New Fortune Best IR HK-listed Company(A+H shares) LCAP Platinum Award for annual report and ESG report

China Securities Golden
Bauhinia Award
"Outstanding Listed
Company for High-quality
Development"

Golden Bull Award for Listed Companies "Best Investment Value Award"





Main tasks in 2024

To further develop safety system and ensure absolute safety in nuclear development



To maintain safe and stable operation of in-service units and conduct 18 refueling outages



To accelerate the development of sources of original technologies and strengthen transformation of research results



To follow changes in external environment and ensure stable development of the company



To push forward construction of units as planned and achieve high quality commercial operation of F4



To follow the market changes closely and strengthen marketing capabilities



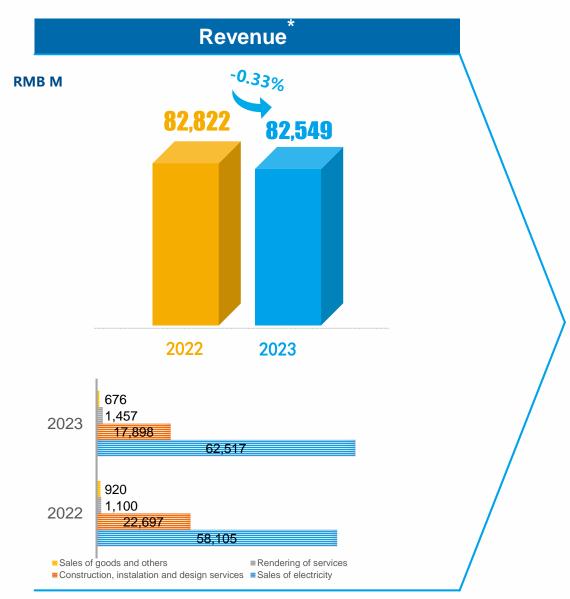
To strengthen implementation of SCS strategy and lean management

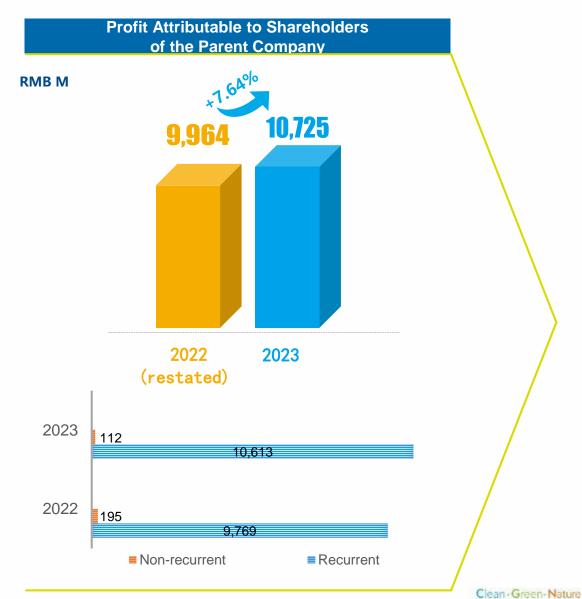


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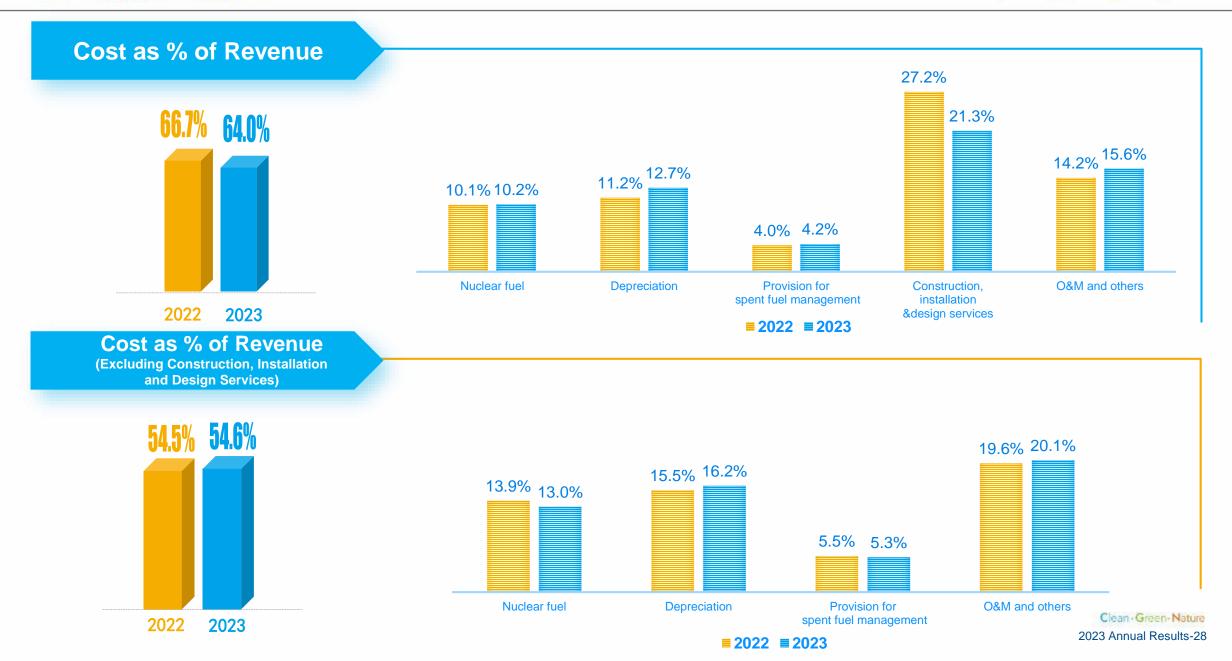






^{*:} Hongyanhe Nuclear is not included in the consolidated financial statements, therefore the revenue of Hongyanhe NPP is not included in the Company's revenue.

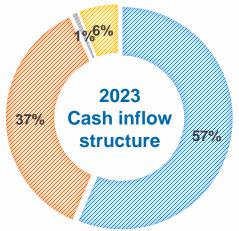




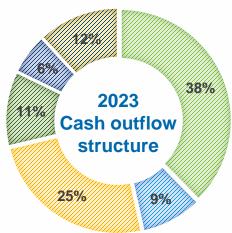








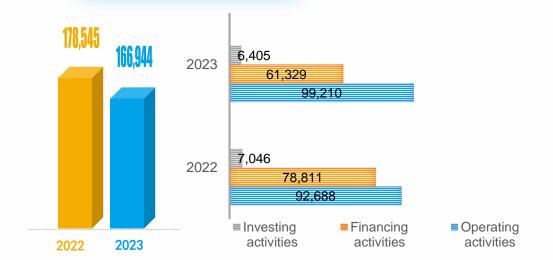
- Sales of electricity &costruction, installation and design services
- Cash received from loans
- Tax refund
- Others



- Pay back loans
- Fixed assets
- Purchase and labor services
- Divedend and interests payment
- Taxes payout
- Others

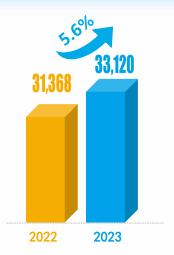
Cash inflow in 2023

RMB M



Net Operating Cash Flow in 2023

RMB M

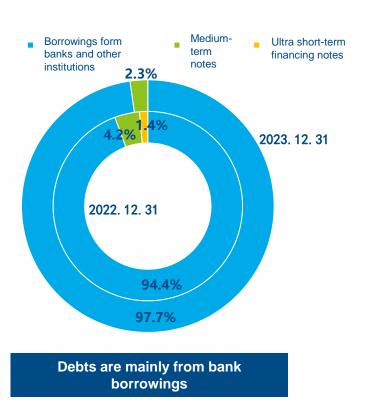


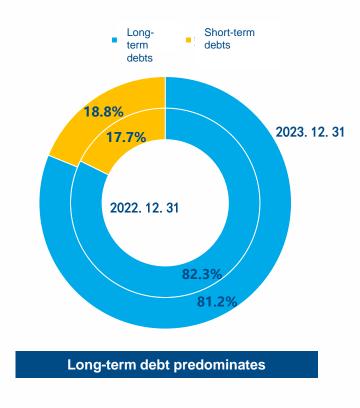
Clean Green Nature
2023 Annual Results-30

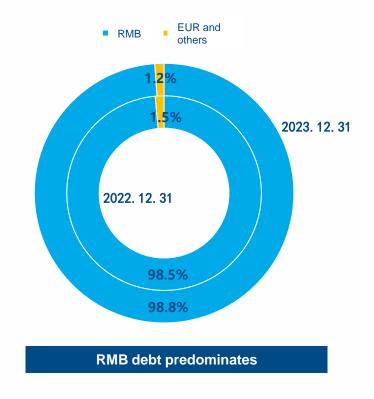




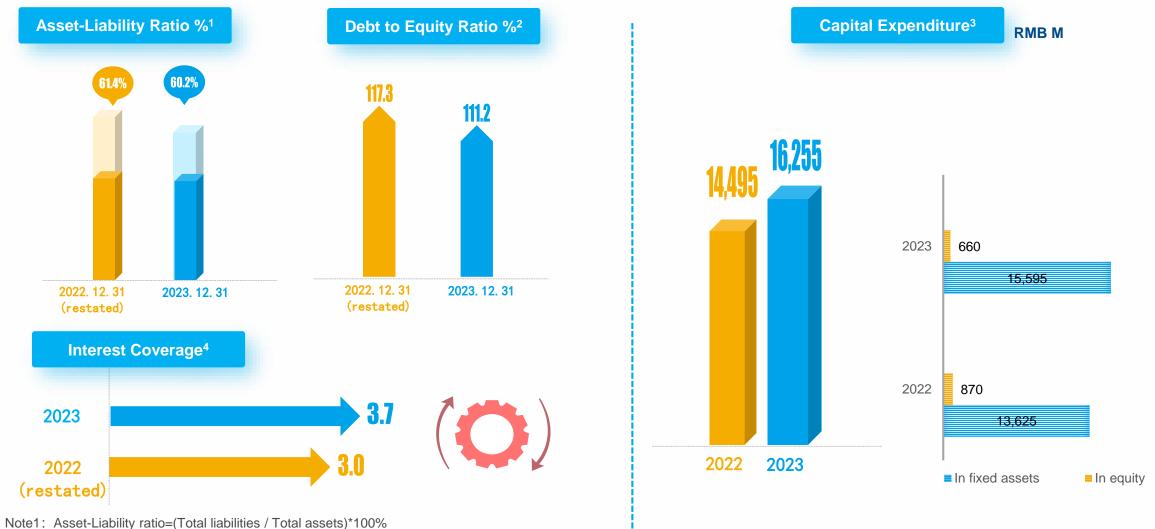
In 2023, the Company continued to strengthen communication with its banking partners, seizing the advantages of phrasal credit financing to meet capital needs and replace due debts with bank borrowing at a better interest rate, thereby reducing financing costs. Average financing costs in 2023 fell by about 52BP year on year.











Note2: Debt to equity ratio=Net debt (the total amount of bank and other borrowings less cash and cash equivalents and other deposits over three months)/Total shareholders' equity*100%

Note3: The CAPEX here refers to cash flows.

Note4: Interest coverage=(Total profit + Interest expenses recognized in profit or loss)/(Interest expenses recognized in profit or loss + interest expenses capitalized)



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Part IV Q&A





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