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# CGN Power CO., LTD 2020 Annual Results



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# Part I Development Strategy



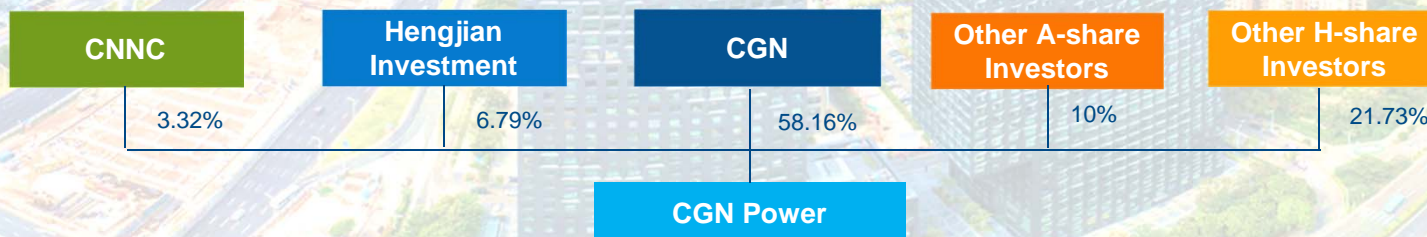
CGN Power has issued 50.5 billion shares and our controlling shareholder is CGN (supervised by SASAC of the State Council); We design, build, operate and manage nuclear power plants (NPPs), sell electricity generated by our NPPs, and organize R&D of NPPs.

Incorporated on  
March 25, 2014

H-share IPO on  
December 10, 2014

A-share IPO on  
August 26, 2019

### Equity Structure



Note: As of March 18, 2021.



### Units in operation

- 24 units
- Installed capacity: 27.14GW

### Units under construction<sup>1</sup>




- 7 units
- Installed capacity: 8.21GW

**53.19%**  
Share of installed  
capacity in operation

**50.70%**  
Share of installed  
capacity under  
construction

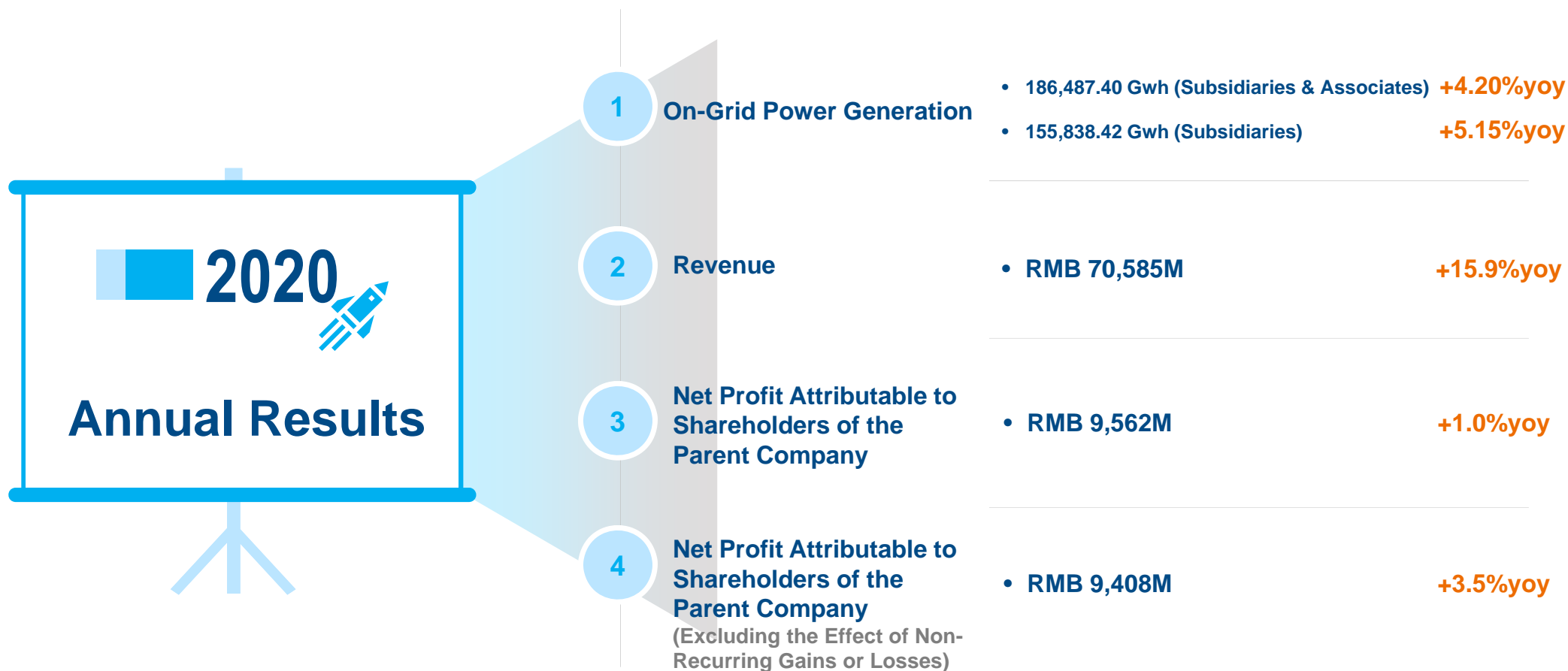
### 8 Nuclear Power Bases



-  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

Note: Statistics only include the China's mainland and as of March 18, 2021.

Note1: Units under construction include Huizhou Unit 1, Unit 2 and Cangnan Unit 1, which were entrusted to us by our controlling shareholder for management.



## Targeted Poverty Alleviation in 2020



40.37 million RMB was invested



1.36 million RMB worth of materials



2,308 people lifted out of poverty



Targeted areas, i.e. Lingyun and Leye County officially lifted out of poverty



## Contribution to Epidemic Control in 2020

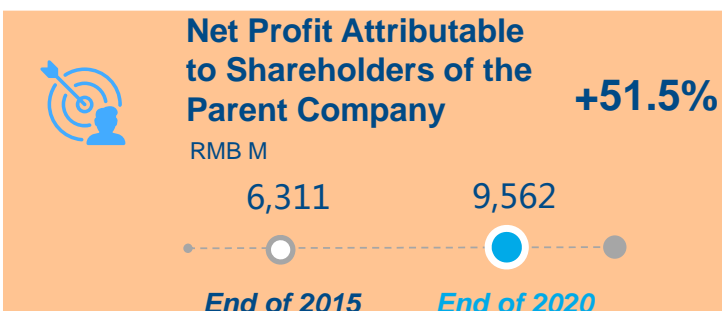
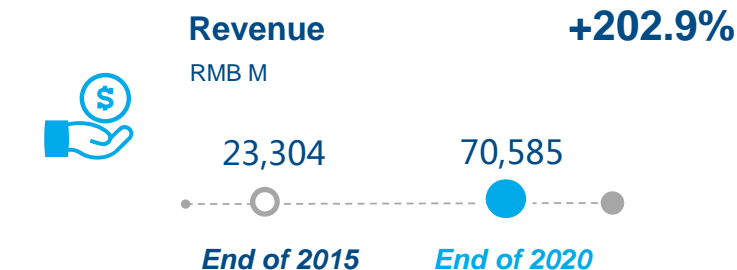
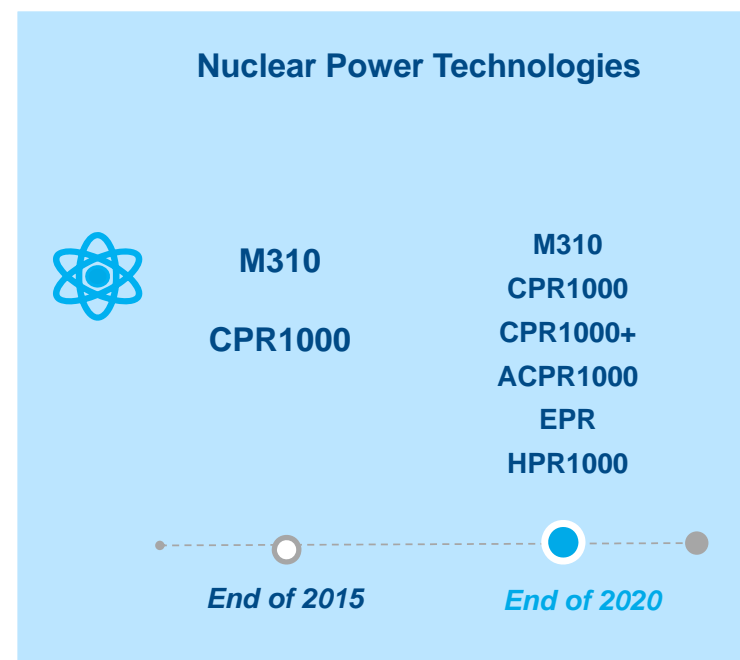
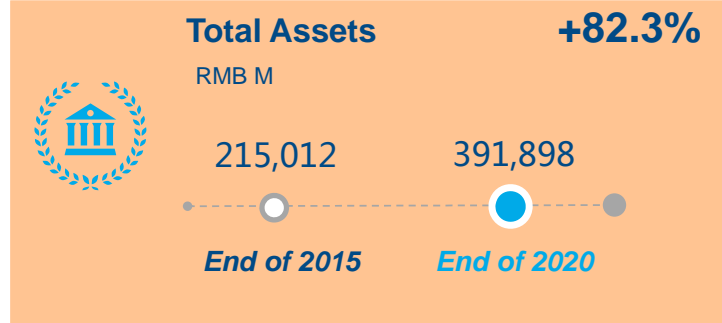
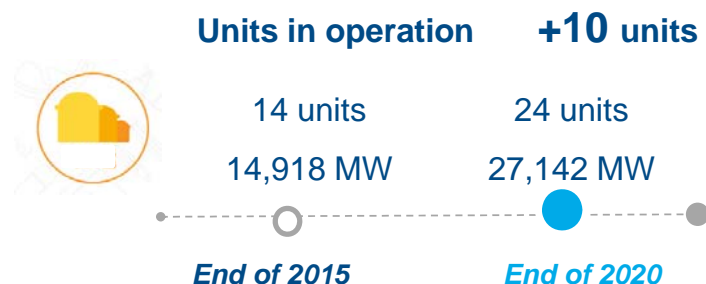


Donated 30 million RMB to support epidemic control in Hubei

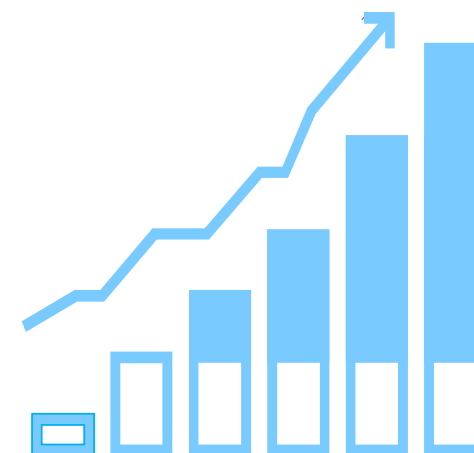


Provided anti-epidemic supplies in shortage

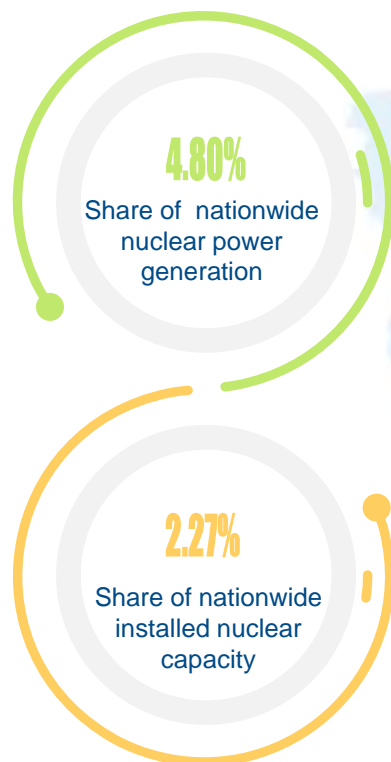




Year-end SUMMARY 2015-2020



Share of nationwide nuclear power generation and installed capacity<sup>1</sup>



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

Guidance on Energy Work in 2020  
(2020/6/5)

Adhering to the goal of clean and low carbon development. China will **develop nuclear power in a safe manner** and steadily promote project construction and comprehensive use of nuclear energy. China will **continue to implement Temporary Measures on Ensuring Safe Consumption of Nuclear Power**, and promote maximum generation of nuclear power.

NEA

White Paper on China's  
Energy Development  
(2020/12)

Building a clean and diversified energy supply system, prioritizing non-fossil energy, attaching equal importance to safety and development, and **developing nuclear power in a safe and orderly manner**.

State Council

Government Work Report  
(2021/3/5)

Take solid steps toward the goals of achieving peak carbon dioxide emissions and carbon neutrality. **Take active and well-ordered steps to develop nuclear energy on the basis of ensuring its safe use.**

State Council

National policies to support nuclear power development

Note1: Statistics from the 2020 National Power Industry Statistics Overview issued by the CEC.

## Vision

World-class nuclear power supplier and service provider with international competitiveness

- Robust business, achieving stable performance in operations and high-quality 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

## Purpose

Continuing to create optimal benefits for our customers, shareholders, employees and the society

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



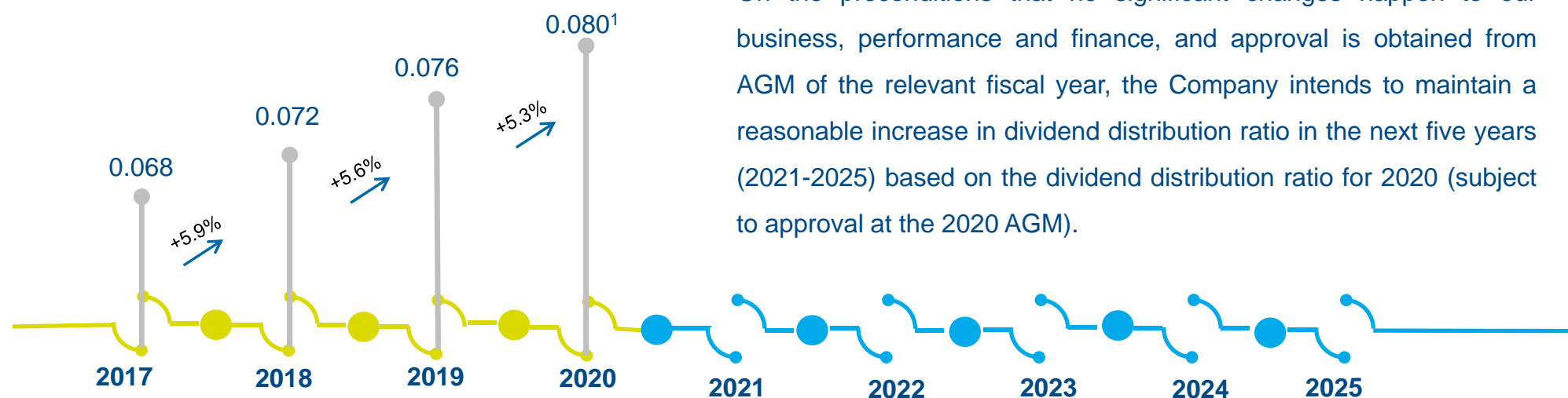
- Dedicated to developing clean energy, focusing on nuclear power and comprehensive use of nuclear energy
- Improving resources utilization rate and reducing resources consumption
- Controlling emissions strictly and protecting the environment

- Pushing ahead with the approval and kick-off of new projects to maintain leading position in installed capacity
- Actively developing and mastering nuclear power technologies to maintain sustainable development of the company
- Strengthening commercialization and promotion of research results to increase business opportunities where appropriate



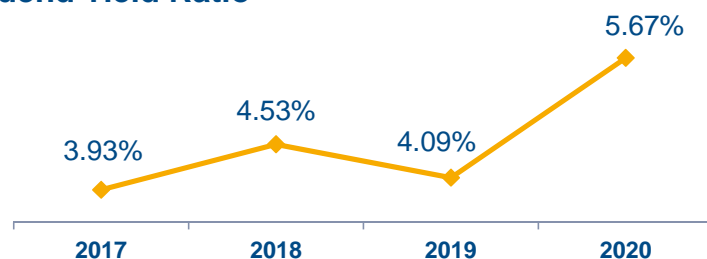
2018-2020 Dividend Payout Promise Honored

Dividend RMB/share



On the preconditions that no significant changes happen to our business, performance and finance, and approval is obtained from AGM of the relevant fiscal year, the Company intends to maintain a reasonable increase in dividend distribution ratio in the next five years (2021-2025) based on the dividend distribution ratio for 2020 (subject to approval at the 2020 AGM).

Dividend Yield Ratio



Note1: The final dividend of 2020 will be distributed after being approved by our shareholders at the 2020 AGM of the Company, and is expected to be distributed on or around July 8, 2021.

# Part II

## Business Review and Future Outlook





Optimized refueling outage plans and increased the annual power generation time by over 80 days



2019

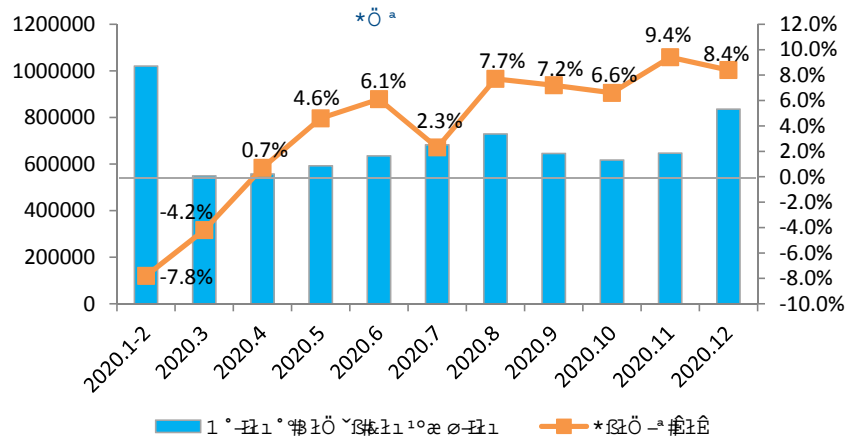
19 refueling outages  
564 days



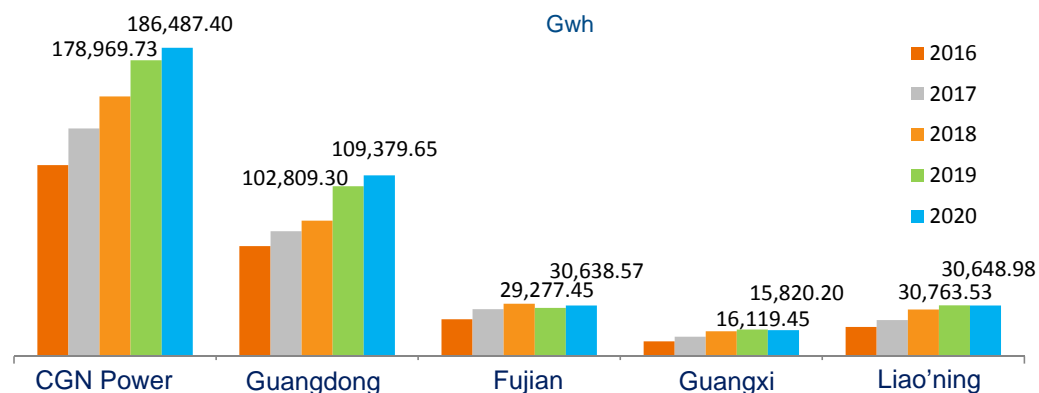
2020

17 refueling outages  
553 days

## National Power Demand



## On-grid Power Generation in Total and by Region





Guangdong



- ◆ Full load generation with favorable tariff
- ◆ On-grid power generation increased by 6.39% yoy

Guangxi



- ◆ Developed the increment and engaged in cross-regional power transmission
- ◆ On-grid power generation decreased by 1.86% yoy

Plan Ahead, Adapt Proactively and Actively Seek to Seize Opportunities

Fujian



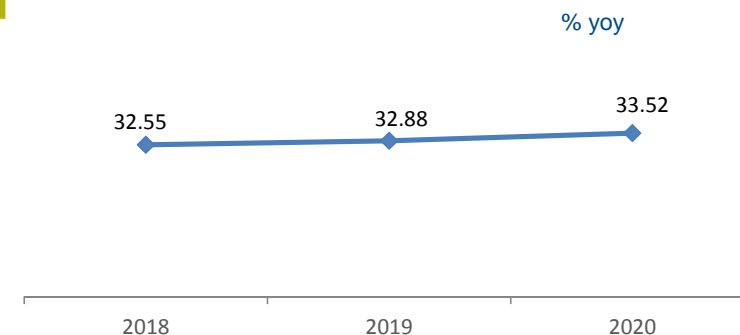
- ◆ Seized the rising local power demand and developed the increment
- ◆ On-grid power generation increased by 4.65% yoy

Liaoning

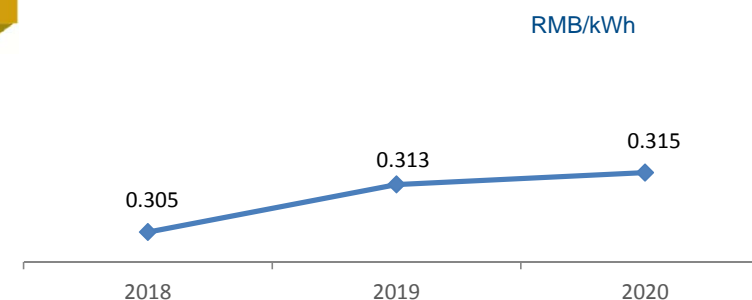


- ◆ Developed the increment and expanded cross-regional power transmission
- ◆ On-grid power generation decreased by 0.37% yoy

Share of Market-based Power Generation



Average Market-based Power Tariff (Tax Exclusive)



Note: The share and tariff of market-based power generation both include the 20% (following the "full load generation with favorable tariff" policy) in Guangdong. Starting from April 1, 2019, VAT rate has been adjusted from 16% to 13%.



0 Covid-19 Infection

Good Results against WANO<sup>(1)</sup> Indicators



0

No International Nuclear Event Scale (INSE) incidents at level 2 or above occurred.



0 Serious Injury and 0 Death

0 serious injury and 0 death during the nuclear project construction for 7 consecutive years.



National Gold Award

Yangjiang Units 3 and 4 won the National High Quality Engineering Gold Award and the National Quality Outstanding Project Award

2020 2019 2018  
72.57% 76.39% 78.79%

Advanced

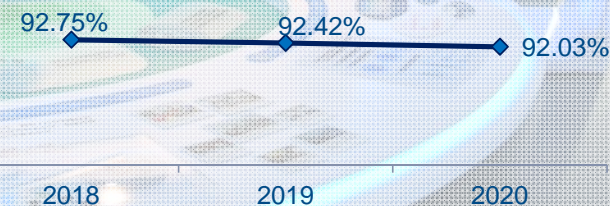
Percentage of indicators achieving top 1/4 worldwide

2020 2019 2018  
69.79% 72.22% 73.11%

Excellent








Percentage of indicators achieving top 1/10 worldwide

Average Capacity Factor Maintained at a High Level



Note 1: 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, the organization has successfully operated for 31 years.



Units	Civil Construction Phase	Equipment Installation Phase	Commissioning Phase	Grid Connection Phase	Expected COD
<b><u>Hongyanhe Nuclear</u></b>					
Hongyanhe Unit 5					2H2021
Hongyanhe Unit 6					1H2022
<b><u>Fangchenggang Nuclear</u></b>					
Fangchenggang Unit 3					2022
Fangchenggang Unit 4					2022
<b><u>Huizhou Nuclear*</u></b>					
Huizhou Unit1					2025
Huizhou Unit2 ★ 2020.10.15 FCD					2026
<b><u>Cangnan Nuclear*</u></b>					
Cangnan Unit1 ★ 2020.12.31 FCD					2026

Note 1: As of March 18, 2021.

Note 2: Civil construction phase refers to the process from the First Concrete Day ("FCD") to the proper roof installation of the main plant of the nuclear reactor.

Note3: 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.

Note4: Commissioning phase refers to the process of conducting cold function tests for nuclear island main system and commencing joint commissioning for the power plant.

Note 5: 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.

Note \*:Huizhou and Cangnan NPPs are managed by the Company as entrusted by the controlling shareholder.





Innovation of  
Construction  
Technology



Shortened the construction time for critical path of Huizhou Unit 2 by 2 months

Laser Technology



Use laser technology to assist inspection and repair of turbines, reducing the outage time by 37.5 hours



### 01. Proactive information disclosure and continuous public education on nuclear power



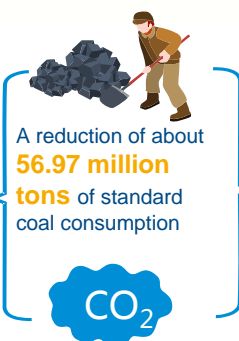
### 02. Normal environmental monitoring results and on-going ecological environment protection



### 03. Significant energy saving and emission reductions



On-grid nuclear power generation in 2020 was about **186,487 Gwh**, represented



A reduction of about **56.97 million tons** of standard coal consumption

A reduction of about **156.27 million tons** of CO<sub>2</sub> emissions

With an equivalent effect of planting a forest of **0.41 million hectares**.







## ESG—Environmental, Social and Governance

ESG investment philosophy has become one of the most important development directions in the responsible investment field globally.

Strengthening the disclosure  
of ESG information



Self-drive for continuous  
improvement



## ESG Governance



Actively communicating with  
international ESG rating  
agencies, and comparing our  
indicators with industry peers



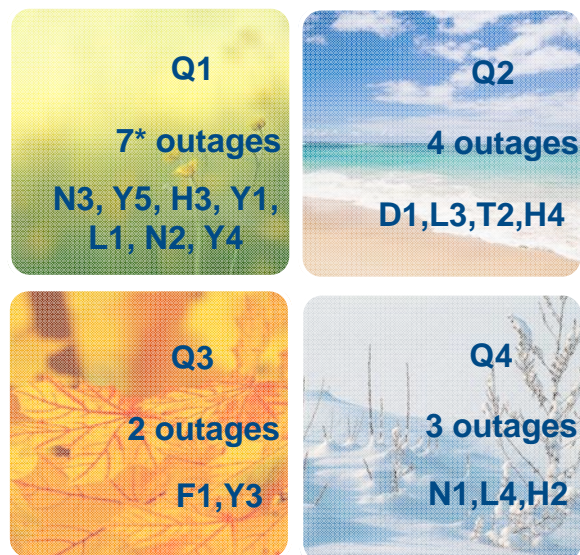
Paying attention to  
feedback and identifying  
weaknesses



- ✓ Our ESG ratings continue to improve (MSCI, Dow Jones, CDP, etc.)
- ✓ Shortlisted for the "China ESG Golden Awards" organized by Sina Finance for the first time and won the "Best Corporate Governance Award" and "Best Enterprising Award for Responsibility"

- ✓ Safe and stable operation of in-services units
- ✓ High-quality commercial operation of Hongyanhe Unit 5
- ✓ Average utilization hours not lower than the average of last three years
- ✓ 16 refueling outages

Refueling Outage Plan for 2021



- ✓ Breakthrough in key technologies and application of research results
- ✓ Lean management and strict control of construction and operation costs
- ✓ Developing marketing capabilities for power market and engaging in marketing actively
- ✓ Pushing forward the approval of new projects and preparing for kick-off of those projects

Note\*: The 7 outages in 2021 Q1 include two cross-year outages of N3 and Y5, which started in late December, 2020 and were completed in January 2021.

Note: D-Daya Bay. L-Ling'ao & Lingdong. Y-Yangjiang. N-Ningde. H-Hongyanhe. F-Fangchenggang. T-Taishan

## Part III Financial Performance







In 2020, facing the impact of the epidemic, we put forward the action request of "tightening our belts" to all employees in order to achieve our business goals.



Improving business analysis



Strictly controlling various non-essential and non-urgent expenses

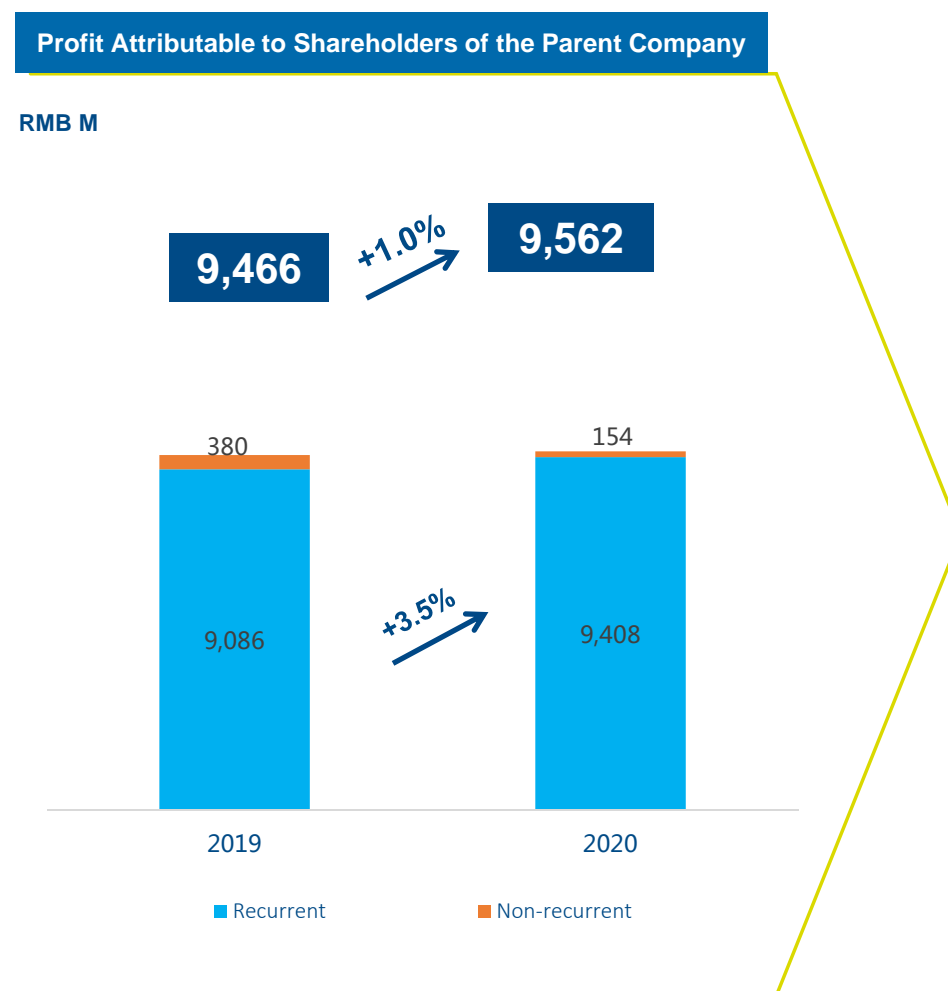
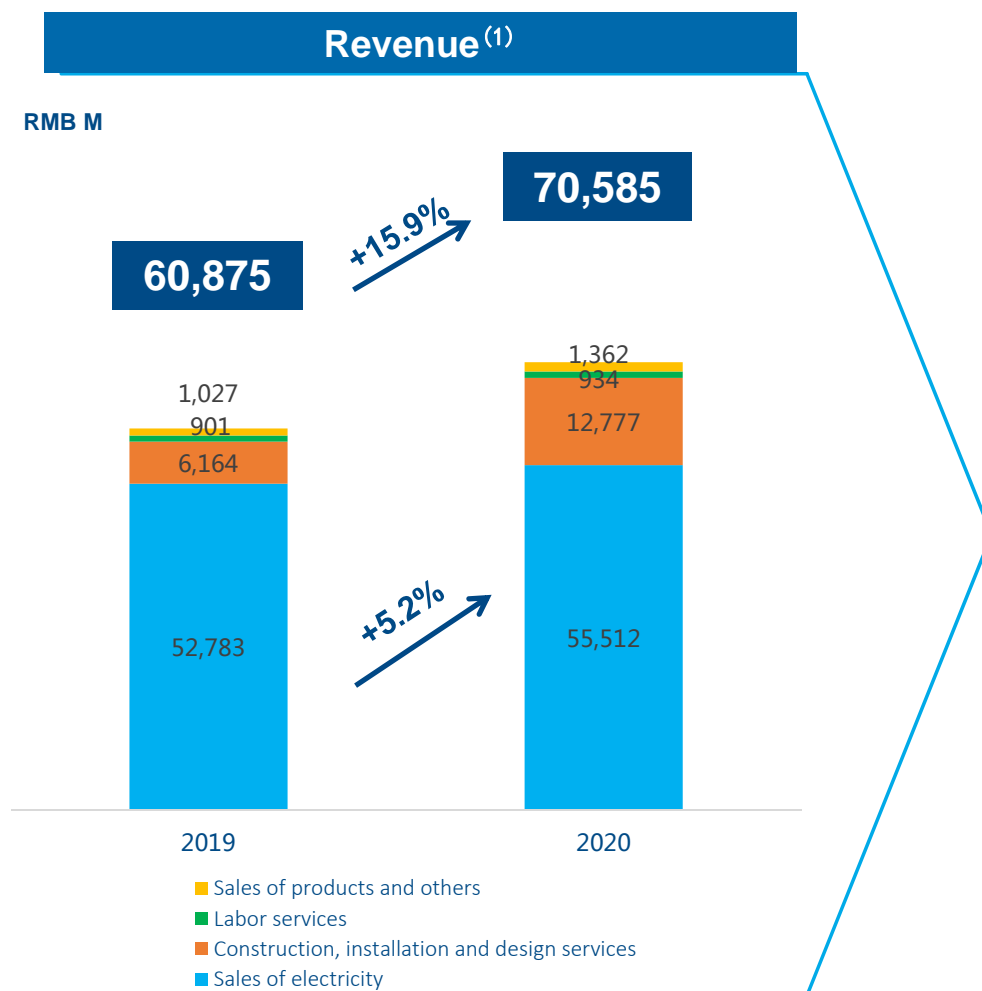


Strictly controlling the construction cost of nuclear power projects



Constantly optimize nuclear power operation and maintenance costs



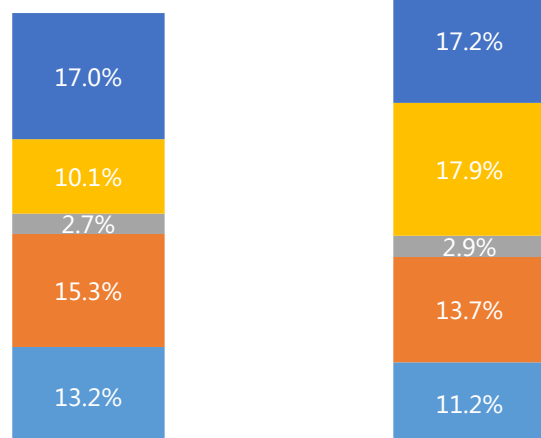


Note1: Hongyanhe Nuclear is not included in the consolidated financial statements, therefore the revenue of Hongyanhe Nuclear is not included in the Company's revenue.

### Cost as % of Revenue

58.3%

62.9%



2019

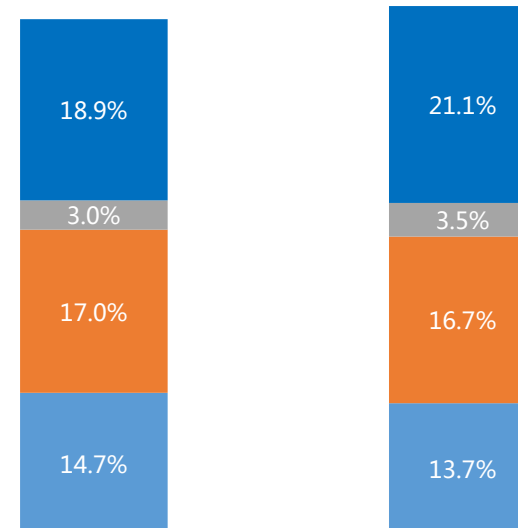
2020

- Operating and others
- Construction, installation and design services
- Provision for spent fuel management
- Depreciation of fixed assets
- Cost of nuclear fuel

### Cost as % of Revenue ( Excluding Construction, installation and Design Services)

53.6%

55.0%



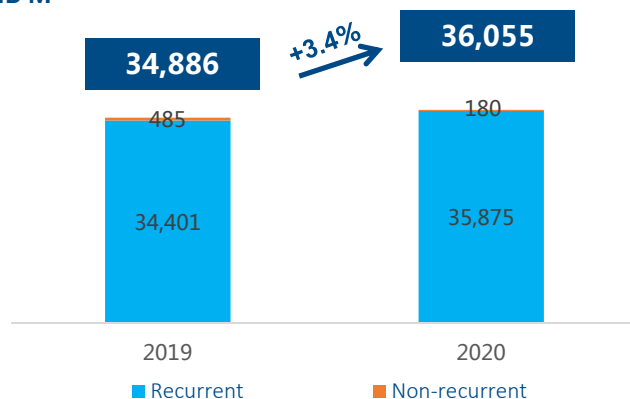
2019

2020

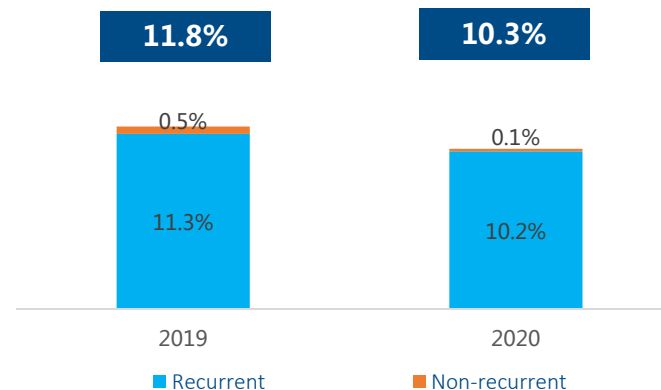
- Operating and others
- Provision for spent fuel management
- Depreciation of fixed assets
- Cost of nuclear fuel

### EBITDA<sup>(1)</sup>

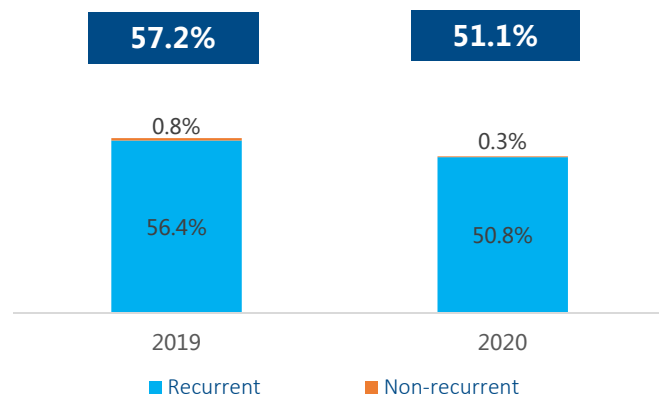
RMB M



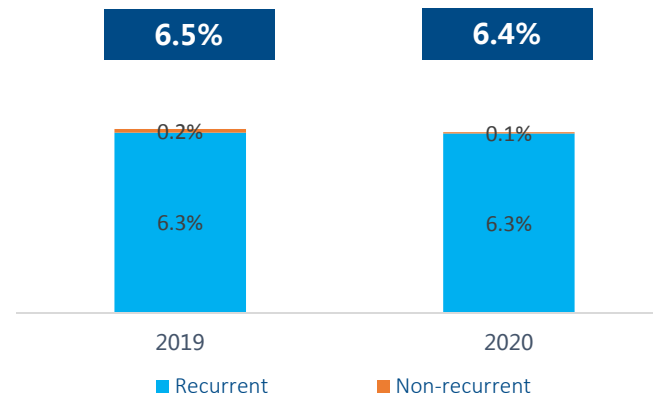
### ROE (Excluding Non-controlling Interests)<sup>(3)</sup>



### EBITDA Margin<sup>(2)</sup>



### ROA<sup>(4)</sup>



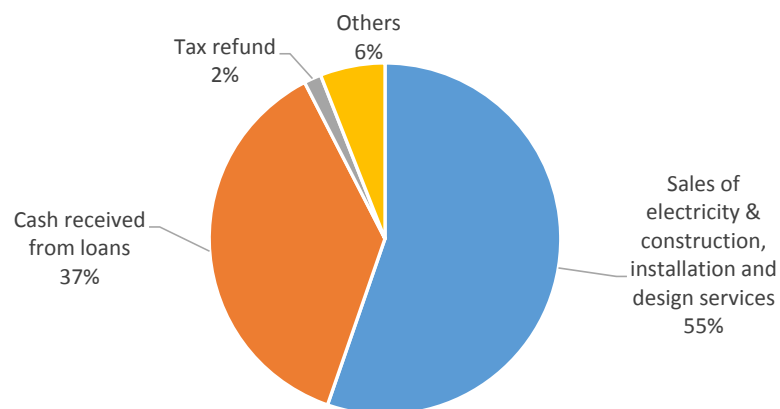
Note 1: EBITDA=Total profit + Interest expenses recognized in profit or loss + Depreciation and amortization

Note 3: ROE(Excluding non-controlling interests)= Net profit attributable to shareholders of the parent company/Average equity attributable to shareholders of the parent company (the arithmetic mean of the opening and closing balances) \* 100%

Note 2: EBITDA margin= EBITDA/Revenue \* 100%

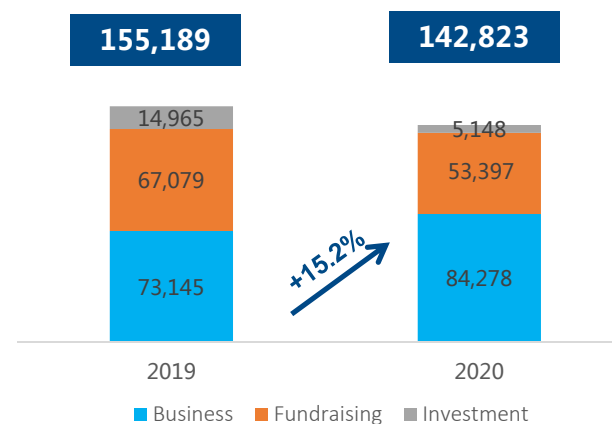
Note 4: ROA(Return on total assets)= ( Total profit + Interest expenses recognized in profit or loss)/Average total assets (the arithmetic mean of the opening and closing balances ) \* 100%

### Cash Inflow Structure in 2020

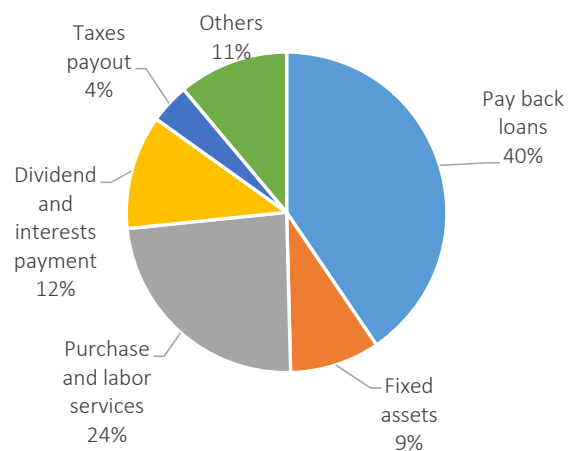


### Cash Inflow

RMB M

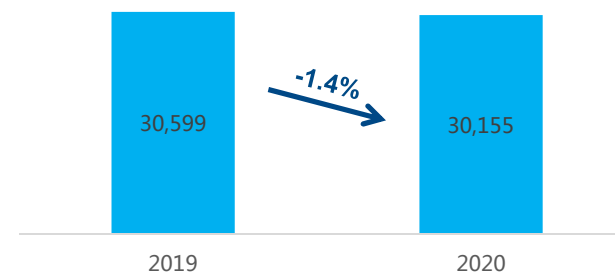


### Cash Outflow Structure in 2020

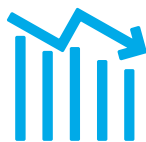


### Net Operating Cash Flow

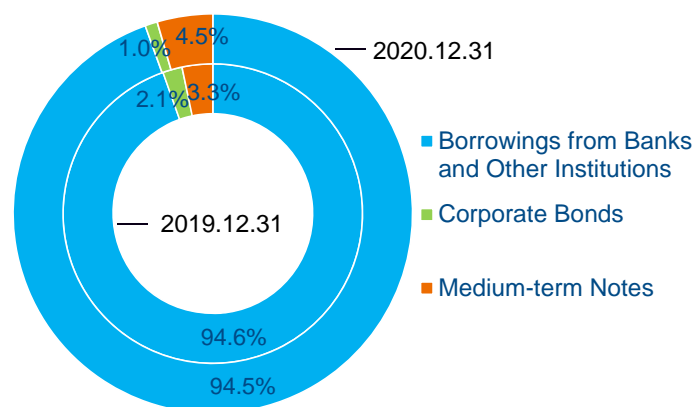
RMB M



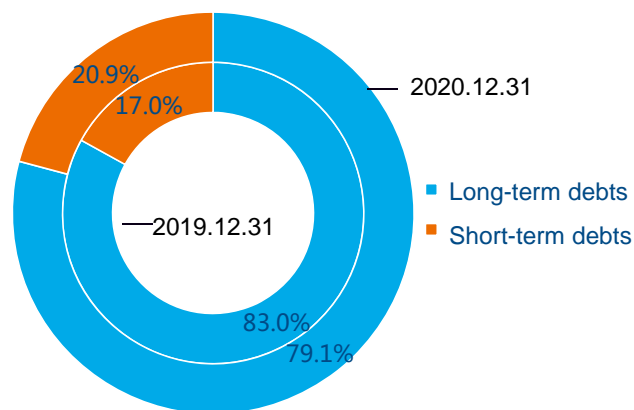




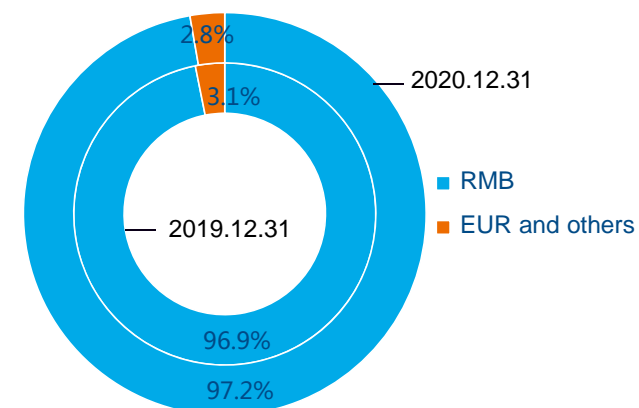
In 2020, we carefully planned to complete the conversion of the loan prime rate(LPR) of existing long-term loans ahead of schedule, reducing annual financial expenses by approximately RMB200 million.



Debts are mainly from bank borrowings

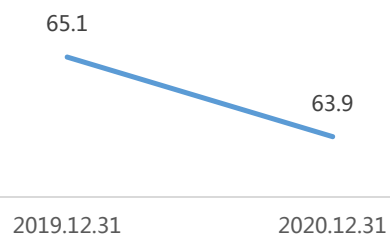


Long-term debt predominates

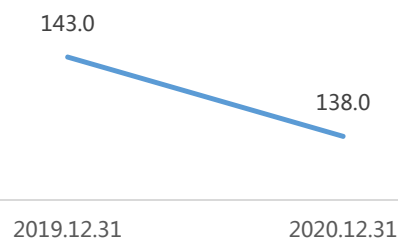


RMB debt predominates

Asset-Liability Ratio %<sup>(1)</sup>



Debt to Equity Ratio %<sup>(2)</sup>

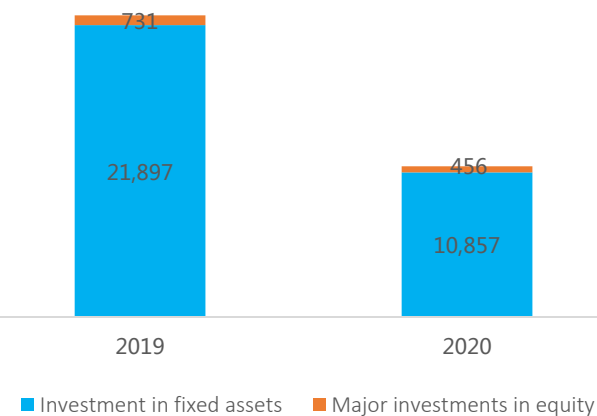


Capital Expenditure

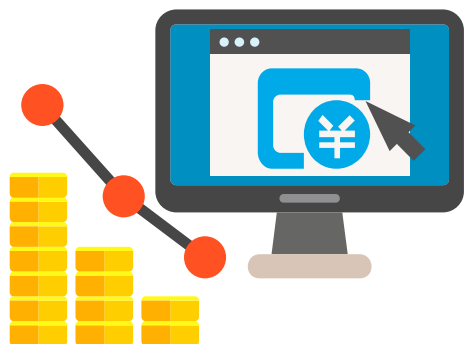
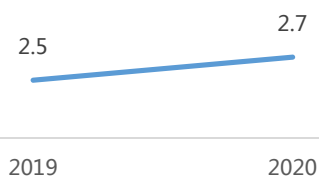
RMB M

22,628

11,313



Interest Coverage<sup>(3)</sup>



Note1 : Asset-Liability ratio=(Total liabilities / Total assets)\*100%

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

Clean · Green · Nature

中广核  CGN

严 · 慎 · 细 · 实

Thank you !

