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CGN POWER CO., LTD

(01816.HK, 003816.SZ)

Three Quarters Results of 2020

October 2020

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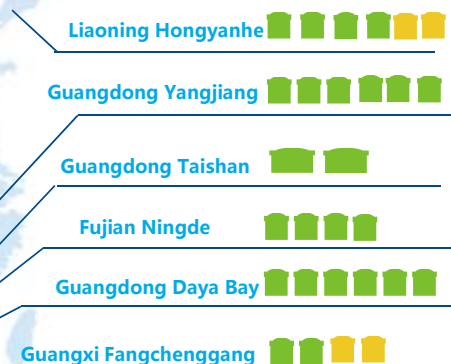


# Part I

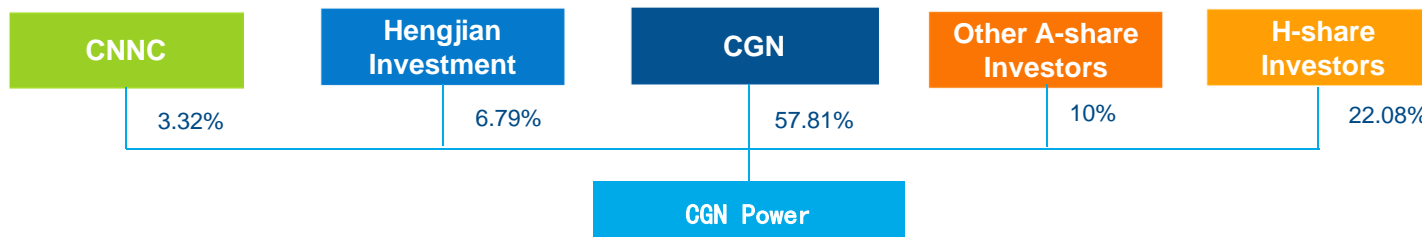
## Corporate Introduction

- The controlling shareholder of CGN Power Co., Ltd. (CGN Power) is the large-scale enterprise group, China General Nuclear Power Corporation (CGN).
- Incorporated on March 25, 2014, with a registered capital of RMB 35.3 billion.
- On December 10, 2014, CGN Power, began trading on Hong Kong Stock Exchange.
- On August 26, 2019, CGN Power, began trading on Shenzhen Stock Exchange.
- CGN Power has issued 50.5 billion shares.
- We build, operate and manage NPPs, sell electricity generated by our NPPs, and organize to develop the design and research & development of NPPs..

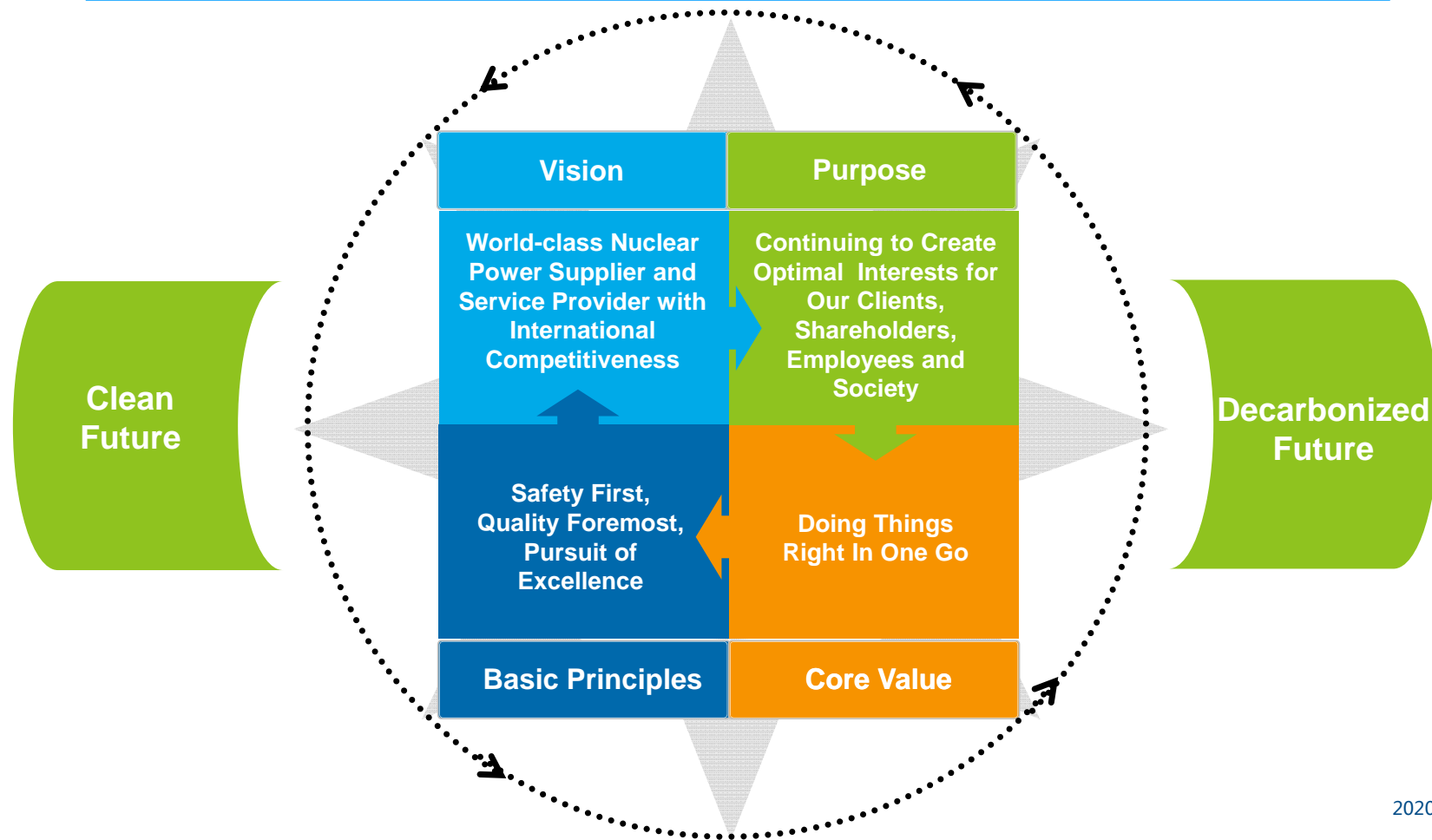
-  Unit in operation with installed capacity about 1000MW
-  Unit in operation with installed capacity about 1750MW
-  Unit under construction with installed capacity about 1000MW



### Equity Structure



China and world's energy has been becoming green and low-carbon, which is a solid foundation for CGN's sustainable development.



- Robust business, adhere to high standards, and achieve stable performance in high-quality operations and engineering construction;
- Financial stability, ensuring capital security, and ensuring overall stable operating performance;
- Stable returns, keep promises, implement long-term stable dividend policy.

- Keep improving safety performance by benchmarking with WANO standards;
- Practice "specialization, centralization and standardization"(SCS) strategy to continuously enhance multi-unit management and control capabilities;
- Implement lean management, constantly optimize operating and project construction costs..



- Dedicated to developing clean energy, focusing on nuclear power and nuclear energy utilization
- 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 business scale
- Adopting innovation driven strategy, keep applying new technologies to promote sustainable development of the company
- Tracking international market and seizing proper opportunities

Company	Shareholding	Units	Technology	COD	Installed Capacity (MW)
<i>Subsidiaries</i>					
Ling'ao	100.00%	Ling'ao Unit 1	M310	May,2002	990
		Ling'ao Unit 2	M310	Jan.,2003	990
Lingdong	93.14%	Lingdong Unit 1	CPR1000	Sept.,2010	1,087
		Lingdong Unit 2	CPR1000	Aug.,2011	1,087
GNPJVC	75.00%	Daya Bay Unit 1	M310	Feb.,1994	984
		Daya Bay Unit 1	M310	May,1994	984
Yangjiang	61.20%	Yangjiang Unit 1	CPR1000	Mar.,2014	1,086
		Yangjiang Unit 2	CPR1000	June,2015	1,086
		Yangjiang Unit 3	CPR1000	Jan.,2016	1,086
		Yangjiang Unit 4	CPR1000	Mar,2017	1,086
		Yangjiang Unit 5	ACPR1000	July,2018	1,086
		Yangjiang Unit 6	ACPR1000	July,2019	1,086
Taishan	51.00%	Taishan Unit 1	EPR	Dec.,2018	1,750
		Taishan Unit 2	EPR	Sept.,2019	1,750

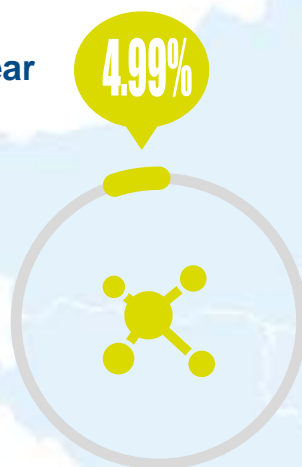
Note: Data as of September 30, 2020

Company	Shareholding	Units	Technology	COD	Installed Capacity (MW)
<i>Subsidiaries</i>					
Fangchenggang	36.60%	Fangchenggang Unit 1	CPR1000	Jan.,2016	1,086
		Fangchenggang Unit 2	CPR1000	Oct.,2016	1,086
		Fangchenggang Unit 3	HPR1000	under construction	1,180
		Fangchenggang Unit 4	HPR1000	under construction	1,180
Fujian Ningde	32.29%	Ningde Unit 1	CPR1000	Apr.,2013	1,089
		Ningde Unit 2	CPR1000	May,2014	1,089
		Ningde Unit 3	CPR1000	June,2015	1,089
		Ningde Unit 4	CPR1000	July,2016	1,089
<i>Associates</i>					
Liao'ning Hongyanhe	38.14%	Hongyanhe Unit 1	CPR1000	June,2013	1,119
		Hongyanhe Unit 2	CPR1000	May,2014	1,119
		Hongyanhe Unit 3	CPR1000	Aug.,2015	1,119
		Hongyanhe Unit 4	CPR1000	June,2016	1,119
		Hongyanhe Unit 5	ACPR1000	under construction	1,119
		Hongyanhe Unit 6	ACPR1000	under construction	1,119

Note: Data as of September 30, 2020

## Power Generation Proportion of Nuclear Power Nationwide

From January to September 2020, the national nuclear power generation is 270,000GWh, accounting for only 4.99% of the total national power generation, which is lower than the world average level of about 10% and far lower than those developed countries.



## Proportion of Total Installed Capacity in Operation of Nuclear Power Nationwide<sup>1</sup>

2.54%

## Proportion of Total Installed Capacity in Operation of NPPs Managed by CGN Power<sup>2</sup>

54.42%

## Proportion of Total Installed Capacity under Construction of NPPs Managed by CGN Power<sup>3</sup>

39.58%

Note\*: Statistics only include the China's mainland.

Note1: As of September 30, 2020, the total installed capacity of generators over 6,000kW in China's mainland was 1967.66GW, of which nuclear power was 49.89GW.

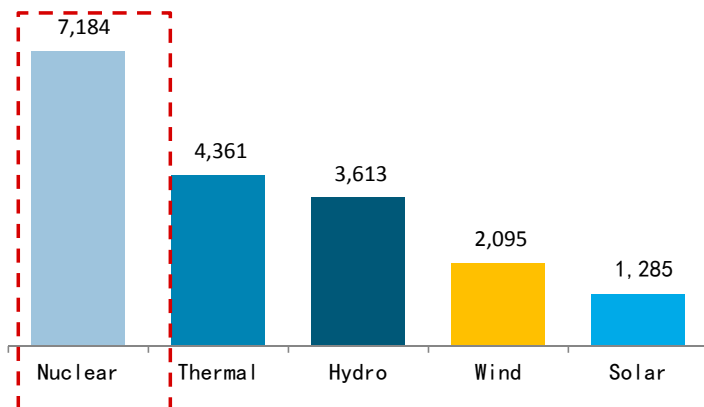
Note2: As of September 30, 2020, CGN Power has a total of 24 units in operation with a total installed capacity of 27.14GW.

Note3: As of September 30, 2020, CGN Power has a total of 5 units under construction with a total installed capacity of 5.8 GW, including the Huizhou Unit 1 managed by CGN Power as entrusted by the controlling shareholder.

## I、Reliability

- Nuclear power , with large electricity generation per unit, is stable, reliable and almost unaffected by nature environment.
- With lower variable cost and less affected by fluctuations of the energy prices.
- An important base-load power source for the power grid; higher priority for access to grid compared with thermal power; higher annual utilization hours.

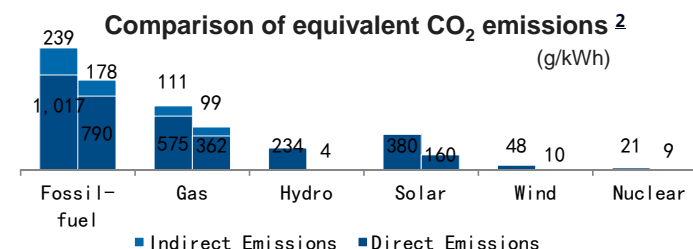
Annual utilization hours of units above 6000 kW in China 2019<sup>1</sup>



Note 1 : referred from China Electricity Council

## II、Clean

- No emissions of sulfur oxides, nitrogen oxides and greenhouse gases.
- Plays an irreplaceable role in reducing emissions and pollution.



Note 2 : referred from IAEA

## III、Efficiency

- Nuclear power is a highly efficient energy source that is small in size and convenient for transportation and storage.
- An extremely efficient way of generating electricity; according to statistics published by the European Nuclear Energy Association, 1,000 grams of standard coal, mineral oil and uranium produce about 8 kWh, 12 kWh and 24 MWh respectively.

2020 Three Quarters Results-11

## Part II

# Key Stats of Three Quarters of 2020



Business

On-Grid Power Generation

139,601.26GWh(Subsidiaries & Associates) +8.81%yoy  
116,834.61GWh(Subsidiaries) +10.37%yoy

Installed Capacity in Operation

27.14GW(Total) 0%yoy  
15.16GW(Attributable to owners) 0%yoy

Installed Capacity under Construction

4.60GW(Total) 0% yoy  
1.72GW(Attributable to owners) 0% yoy



Financial

Revenue

RMB 49,895M +15.7%yoy

Profit Attributable to Owners

RMB 8,185M -1.4%yoy

Profit Attributable to Owners

RMB 8,068M +0.6%yoy\*

\*excluding the non-recurrent gain and loss

## Part III

# Business Performance



China continues to introduce policies to support nuclear power development and consumption

## Action Plan for Clean Energy Consumption (2018-2020)

Under the condition of securing nuclear safety, most of nuclear power achieves guaranteed consumption in 2018-2019, nuclear power achieves total guaranteed consumption by 2020

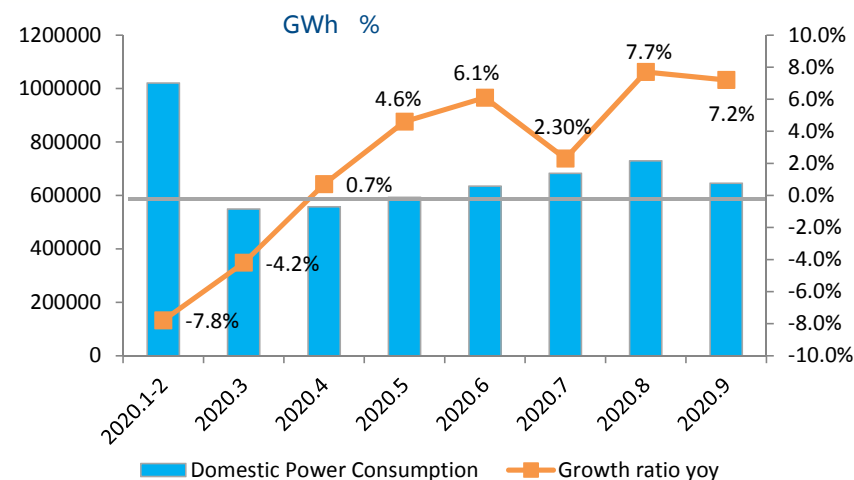
NEA

## Guidance of 2020 Energy Work (June 5<sup>th</sup>, 2020)

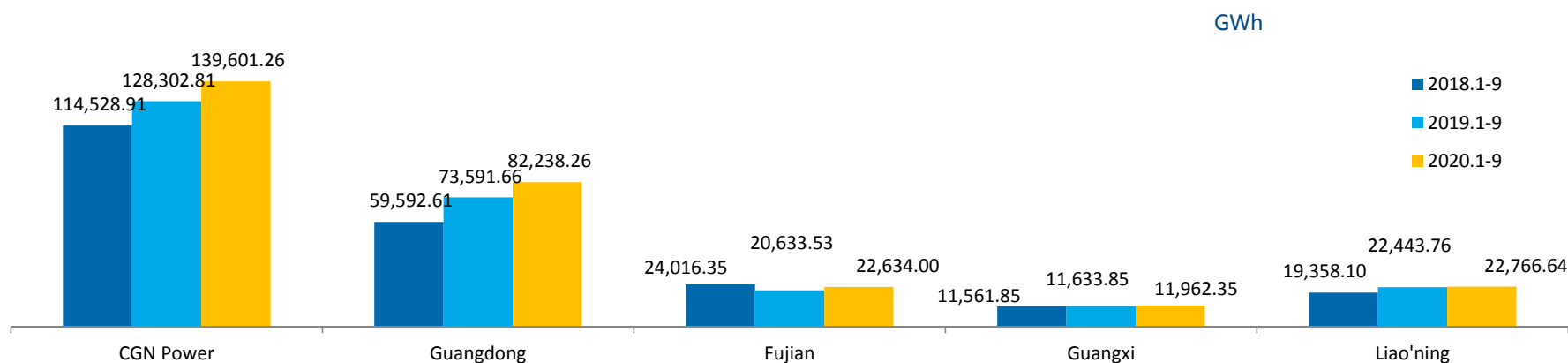
Adhering to the goal of clean and low carbon development. We will develop nuclear power in a safe manner and push forward project construction and integrated use of nuclear power steadily. We will continue to implement the interim measures on ensuring safe consumption of nuclear power so as to promote full load and maximum power generation.

NEA

## Domestic Electricity Demand



## Overall and Different Regions On-grid Power Generation

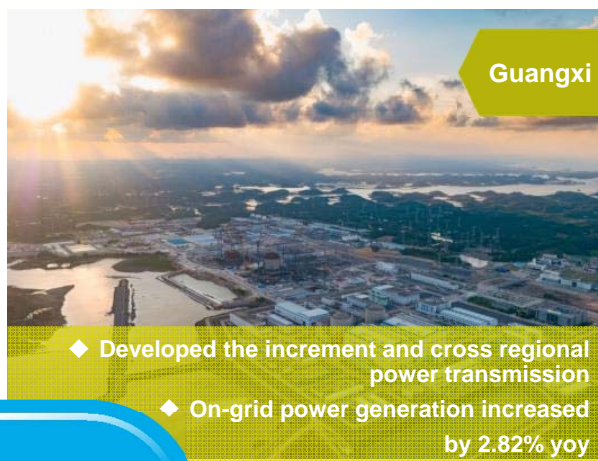


Guangdong



- ◆ "Maximized generation with favorable tariff" strategy
- ◆ On-grid power generation increased by 11.75% yoy

Guangxi



- ◆ Developed the increment and cross regional power transmission
- ◆ On-grid power generation increased by 2.82% yoy

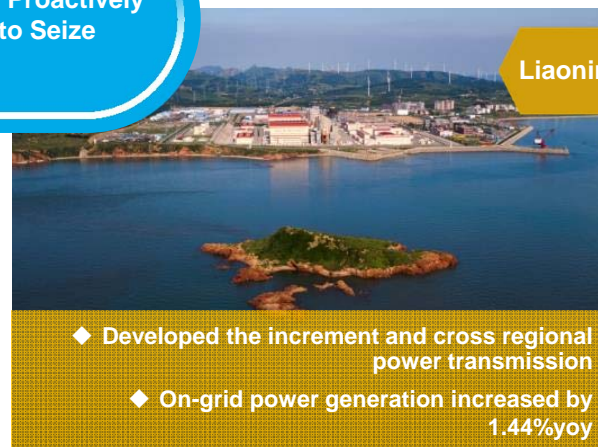
Plan Ahead, Adapt Proactively and Actively Seek to Seize Opportunities

Fujian



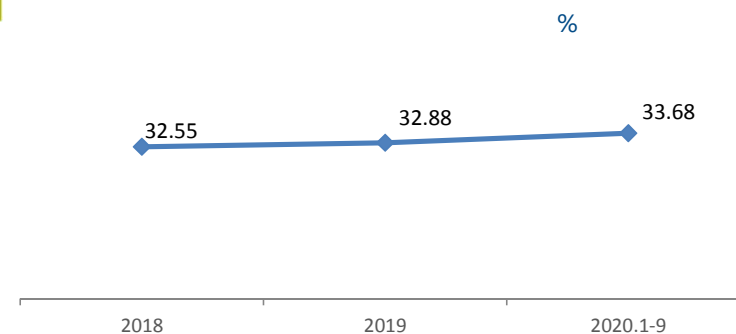
- ◆ Developed the increment and supplied to East China
- ◆ On-grid power generation increased by 9.70% yoy

Liaoning

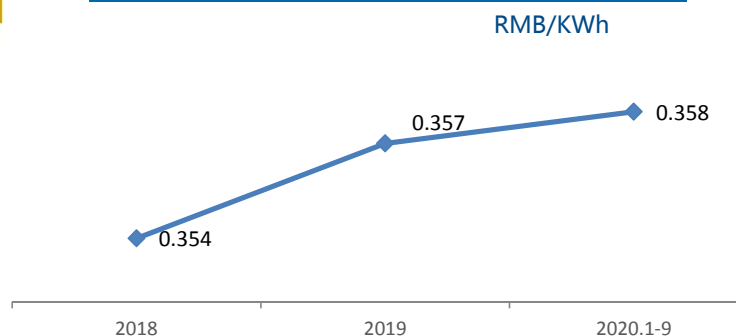


- ◆ Developed the increment and cross regional power transmission
- ◆ On-grid power generation increased by 1.44% yoy

Market-based Power Generation Proportion



Market-based Power Tariff (tax inclusive)



Note1: The market-based power generation proportion and the market-based power tariff calculation has taken into account of Guangdong Province.

Note2: Starting from April 1<sup>st</sup> 2019, VAT rate has been adjusted to 13% from 16%.

### Good Safety and Operation Record



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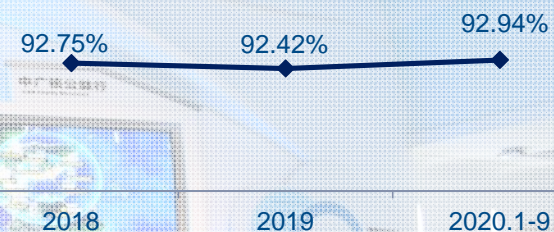
No operational events at level 2 or above of the International Nuclear Event Scale has occurred.



> 5000 Days

Ling'ao Unit 1 has no unplanned shutdown for 15 consecutive years. As of September 30, 2020, it has been operating safely more than 5000 days

### Average Capacity Factor maintained at a high level



### Completed Refueling Outages as Planned








2019.1-9

Completed 13 refueling outages



2020.1-9

Completed 9 refueling outages

Units	Civil Construction Phase	Equipment Installation Phase	Commissioning Phase	Grid Connection Phase	Expected COD
<b><u>Hongyanhe Nuclear</u></b>					
Hongyanhe Unit 5					2021H2
Hongyanhe Unit 6					2022H1
<b><u>Fangchenggang Nuclear</u></b>					
Fangchenggang Unit 3					2022
Fangchenggang Unit 4					2022
<b><u>Huizhou Nuclear*</u></b>					
Huizhou Unit 1					2025

Note 1: As of September 30, 2020

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 Unit 1 is managed by the Company as entrusted by the controlling shareholder.

Key Tasks in 2020	Performance of the 3 Quarters of 2020
<ul style="list-style-type: none"> <li>➤ To ensure that all in-service power units are operating safely and stably ; average utilization hours of the unit not lower than last year.</li> <li>➤ To implement the planned 17 outages throughout the year of 2020 successfully.</li> <li>➤ Strive for a reasonable mode of Guangdong NPPs to participate in the market-based power generation .</li> <li>➤ To promote the construction of all units under construction.</li> </ul>	<ul style="list-style-type: none"> <li>✓ In the three quarters of 2020, the average number of utilization hours was 5,472, which is 0.83% lower than the same period of last year, mainly due to the outbreak of COVID-19 pneumonia.</li> <li>✓ As of September 30, 2020, 9 outages have been completed.</li> <li>✓ We have been communicating with relevant authorities for the final plans of Guangdong NPPs to participate in the market-based power generation from 2021 to 2023.</li> <li>✓ As of September 30, 2020, the projects have basically been promoted as planned; the Cangnan NPP has been officially approved on 4<sup>th</sup> September.</li> </ul>
Key Tasks in the Following Quarter	
<ul style="list-style-type: none"> <li>➤ To guarantee the safe and stable operation of all in-service power units and achieve average utilization hours in 2020 not lower than last year</li> <li>➤ To strive for better tariff and more users, to compete for the market and to seek more incremental development</li> </ul>	<ul style="list-style-type: none"> <li>➤ To implement the rest outages</li> <li>➤ To promote the construction of all units under construction</li> <li>➤ To finalize the mode of Guangdong NPPs to participate in the market-based power generation.</li> </ul>

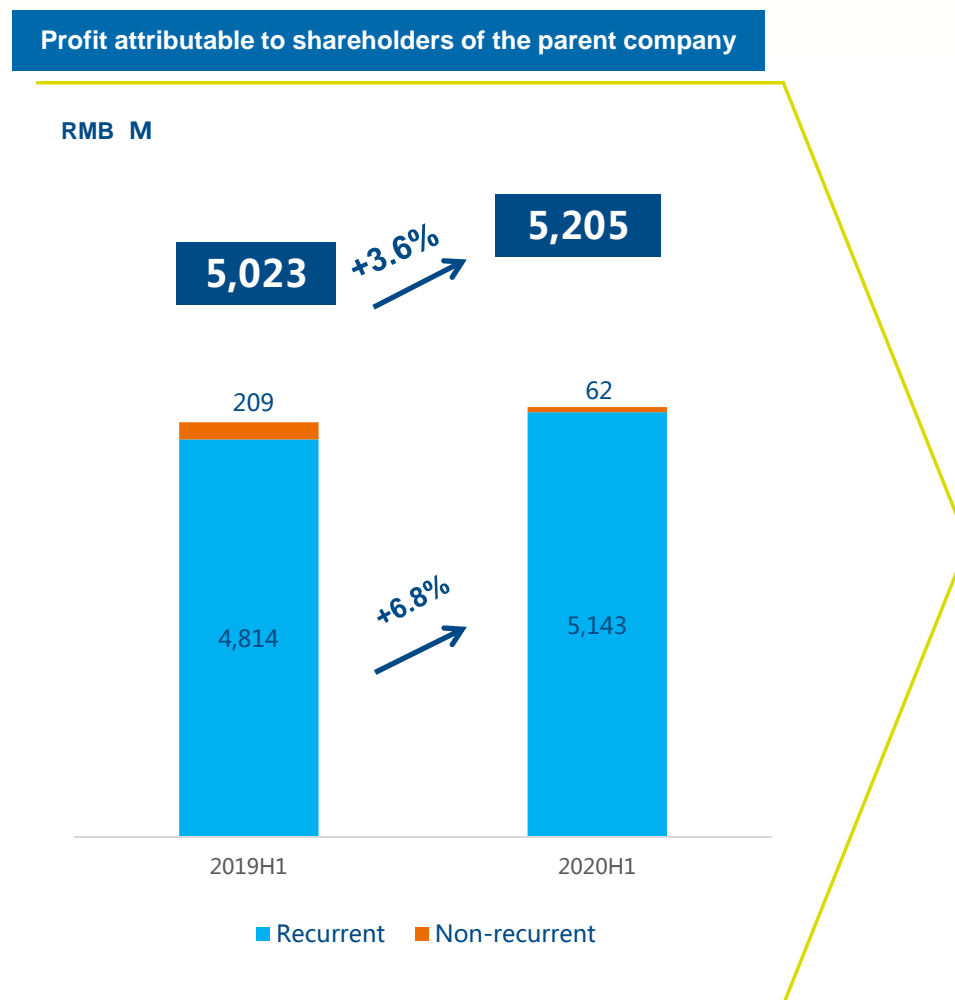
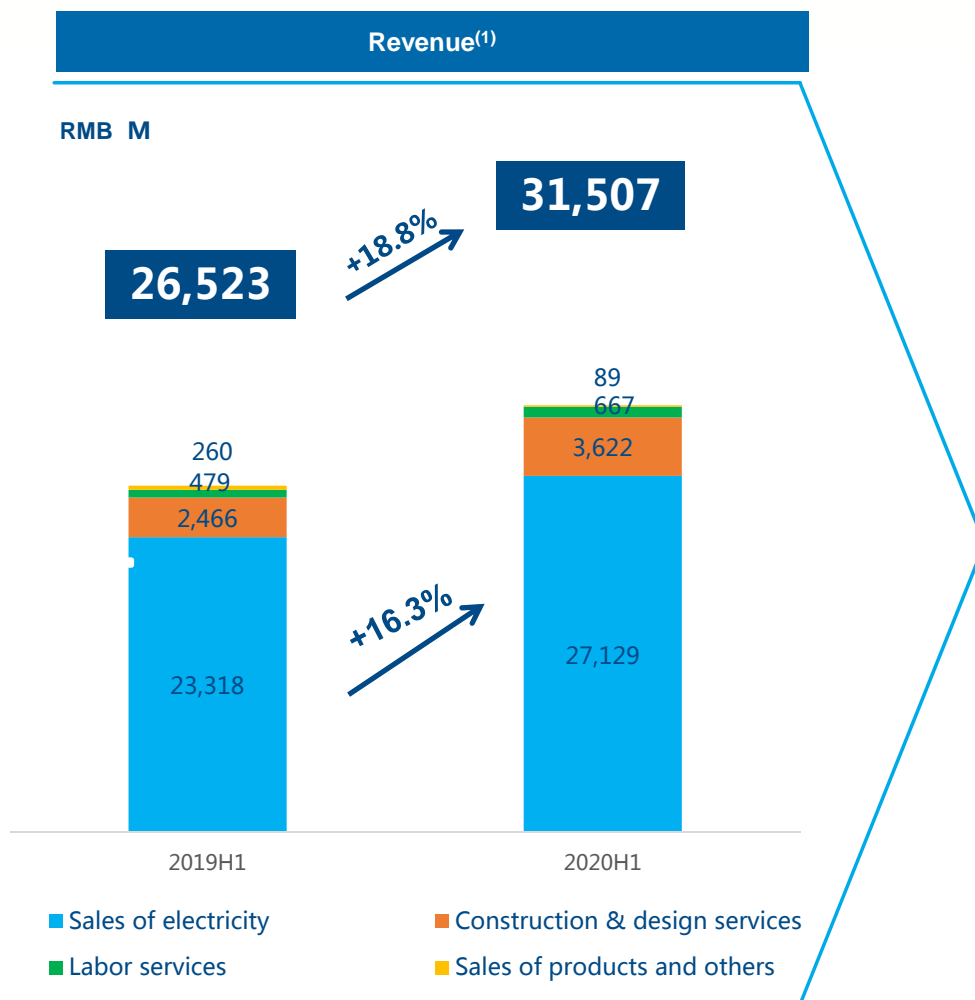
## Part IV

# Financial Performance





# I 2020 Interim Financial Performance

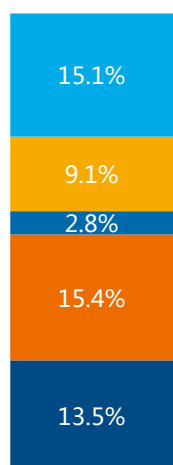


Note1: Hongyanhe Nuclear is not included in the consolidated financial statements, therefore the revenue of Hongyanhe Nuclear is not included in the Company's revenue.

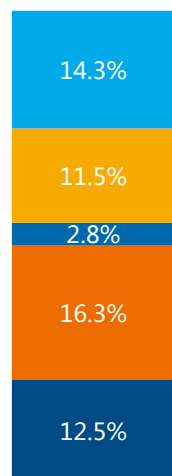
### Cost as % of Revenue

55.9%

57.4%



2019H1



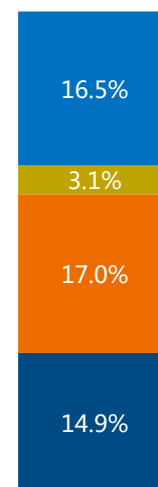
2020H1

- Operation and others
- Construction and design services
- Provision for spent fuel management
- Depreciation of properties, plants and equipment
- Cost of fuels

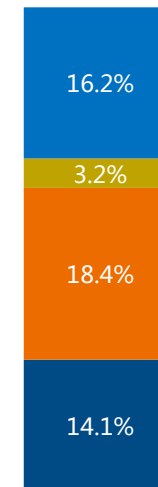
### Cost as % of Revenue ( Excluding construction and design services)

51.5%

51.9%



2019H1

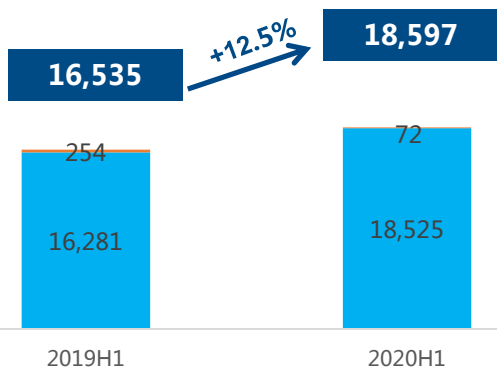


2020H1

- Operation and others
- Provision for spent fuel management
- Depreciation of properties, plants and equipment
- Cost of fuels

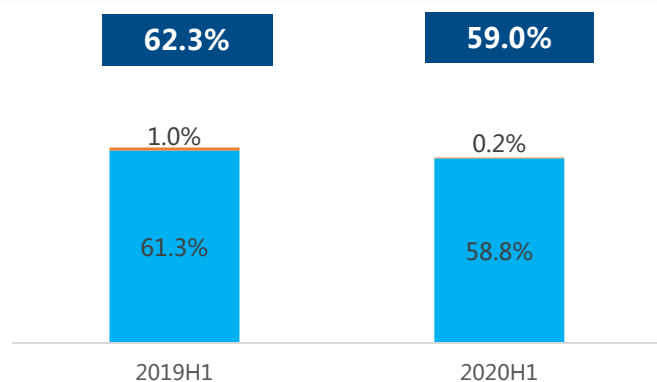
EBITDA<sup>(1)</sup>

RMB M



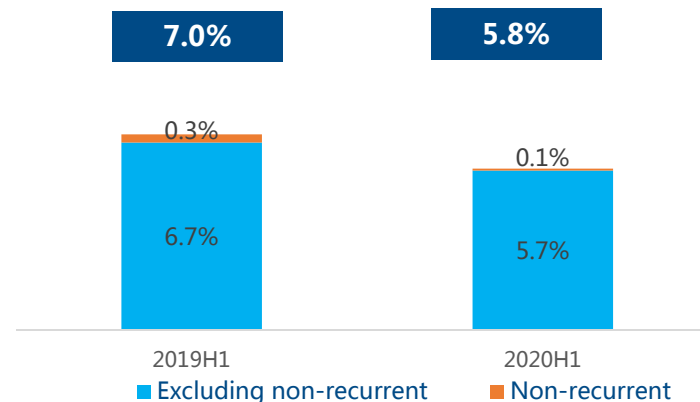
■ Excluding non-recurrent ■ Non-recurrent

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



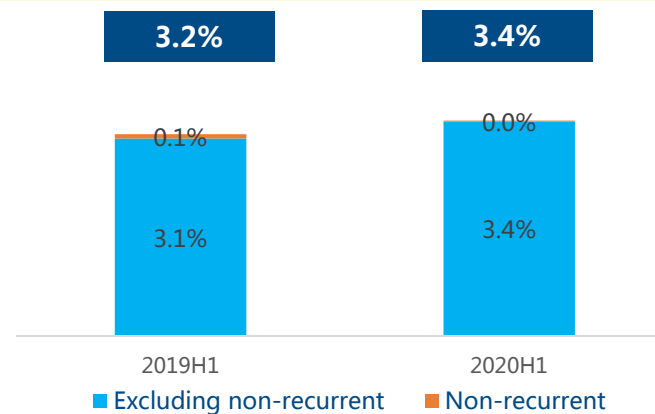
■ Excluding non-recurrent ■ Non-recurrent

ROE (Excluding non-controlling interests)<sup>(3)</sup>



■ Excluding non-recurrent ■ Non-recurrent

ROA<sup>(4)</sup>



■ Excluding non-recurrent ■ Non-recurrent

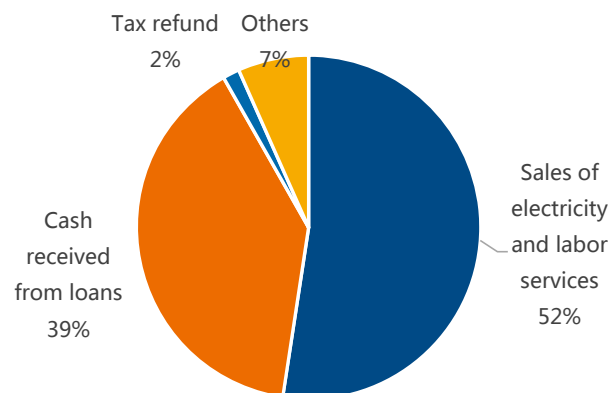
Note 1: EBITDA=Total profit + Interest expenses recognized in profit or loss + Depreciation and amortization

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%

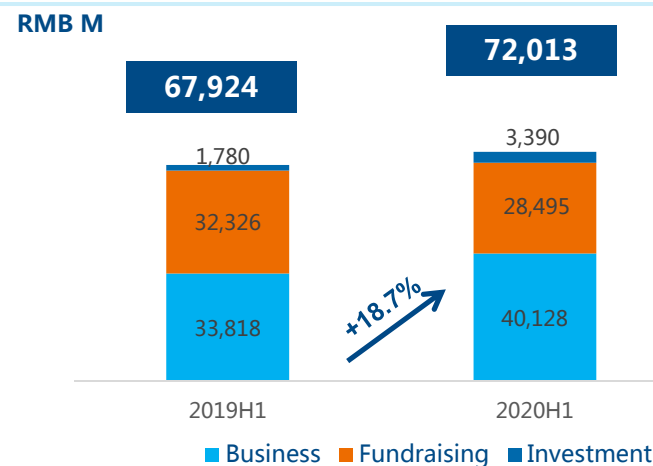
Note 2: EBITDA margin= EBITDA/Revenue \* 100%

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%

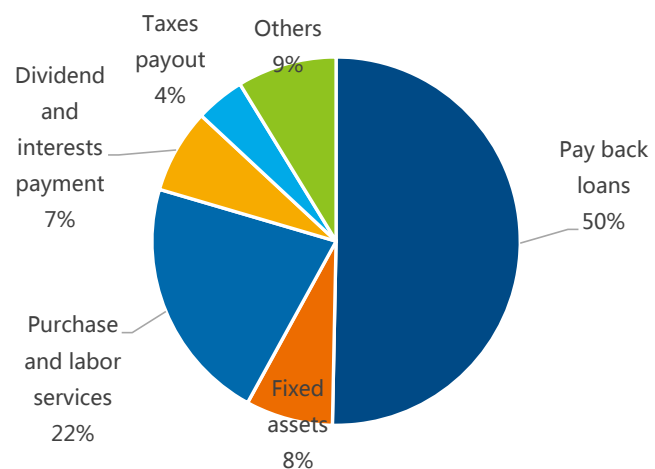
### Cash inflow Structure in 2020H1



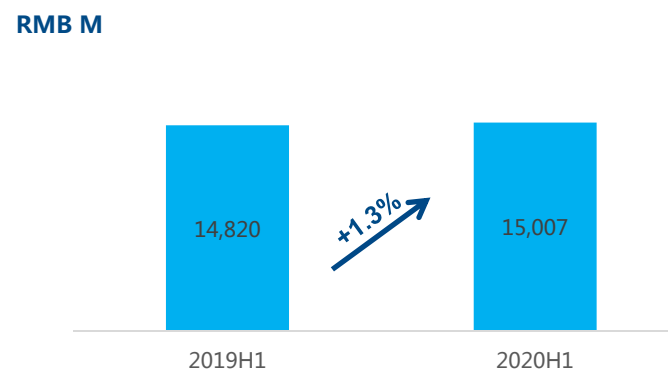
### Cash inflow in 2020H1



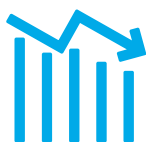
### Cash outflow Structure in 2020H1



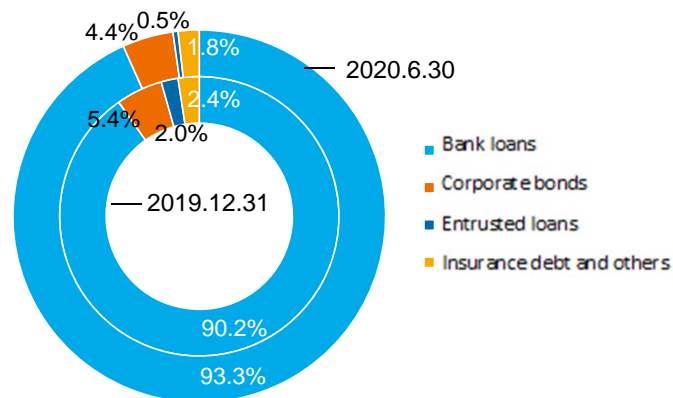
### Net operating cash flow in 2020H1



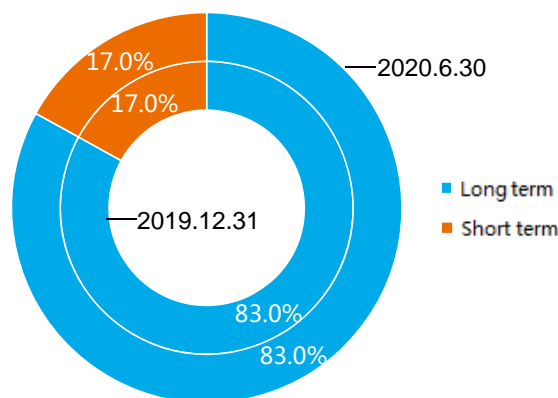
The Company follows the principle of considering both cost and security, ensures finance security and controlling finance costs through building solid debt structure.



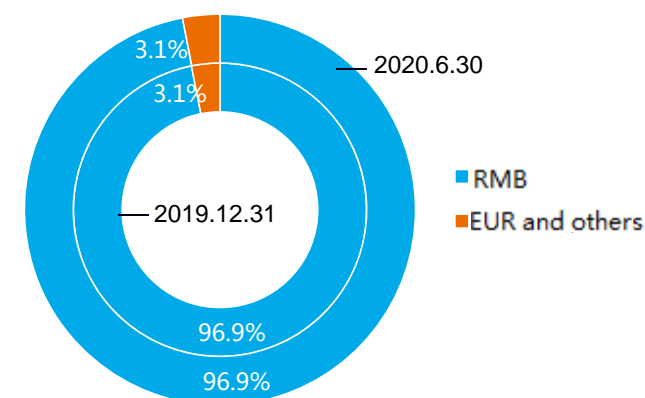
In the first half of 2020, in pace with the trend of the interest rate liberalization reform, the Company converted the basis of pricing for its existing long-term project loans to loan prime rate(LPR), and the interest rate level declined after the conversion, which will have a positive impact on the Company's finance cost saving in 2020.



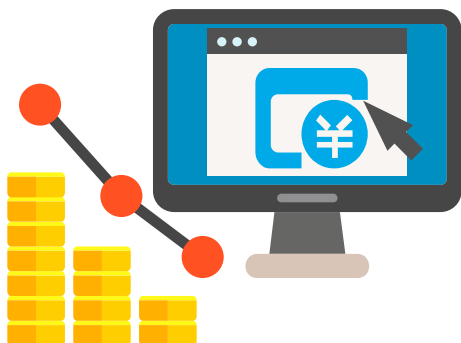
Debts are mainly from bank loans



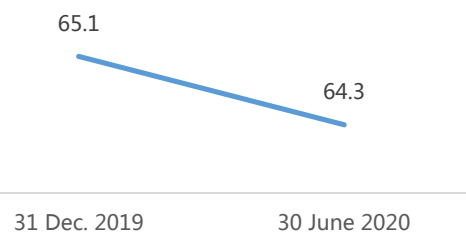
Long-term debt predominates



RMB debt predominates

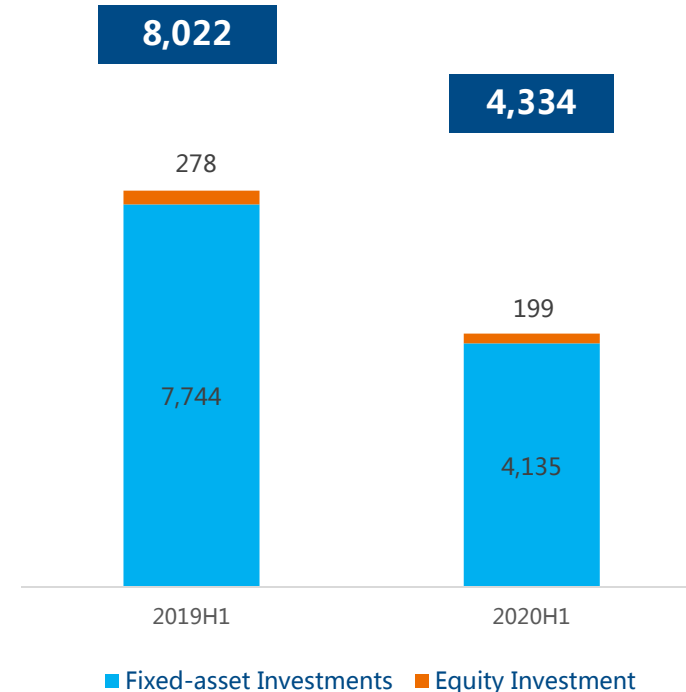


### Asset-Liability Ratio%<sup>(1)</sup>

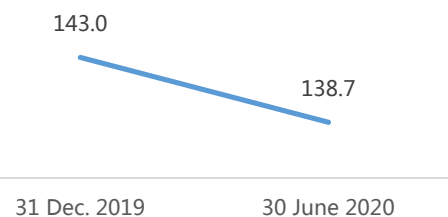


### Capital Expenditure

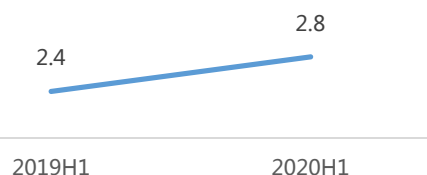
RMB M



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



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



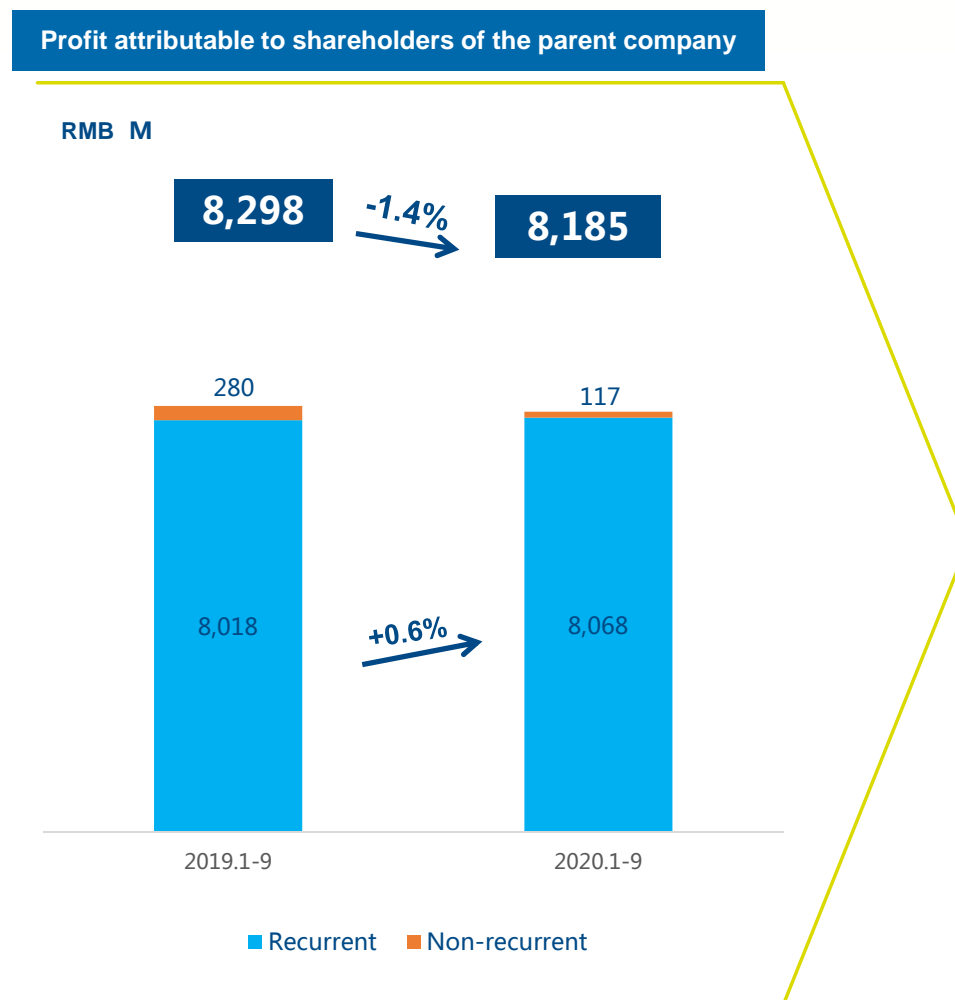
Note1 : Asset-Liability ratio=(Total liabilities / Total assets)\*100%

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)

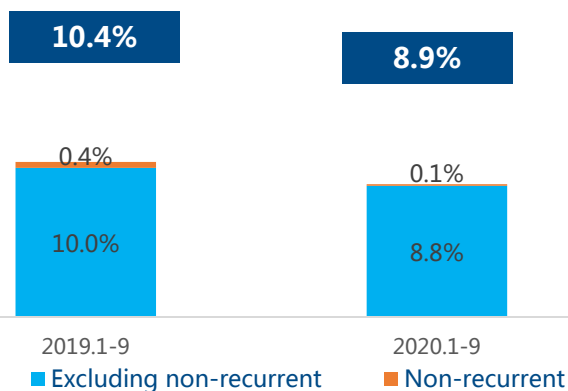


## II 3Qs Financial Performance

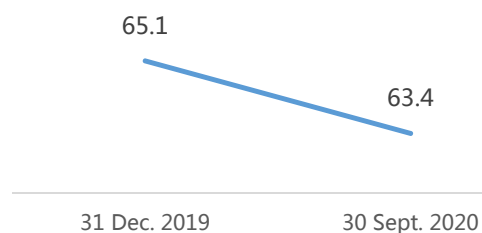


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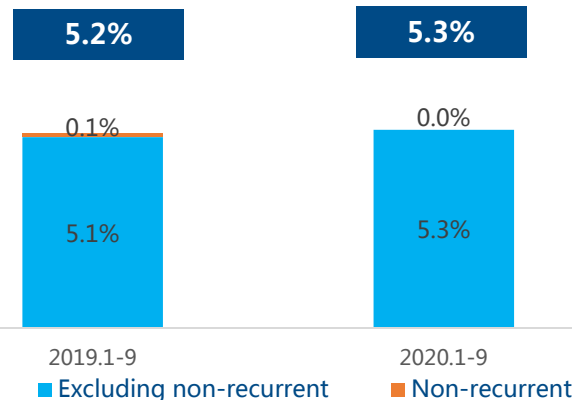
ROE (Excluding non-controlling interests)<sup>(1)</sup>



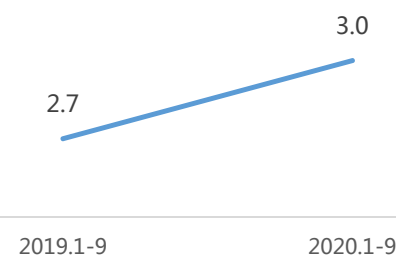
Asset-Liability Ratio%<sup>(3)</sup>



ROA<sup>(2)</sup>



Interest Coverage<sup>(4)</sup>

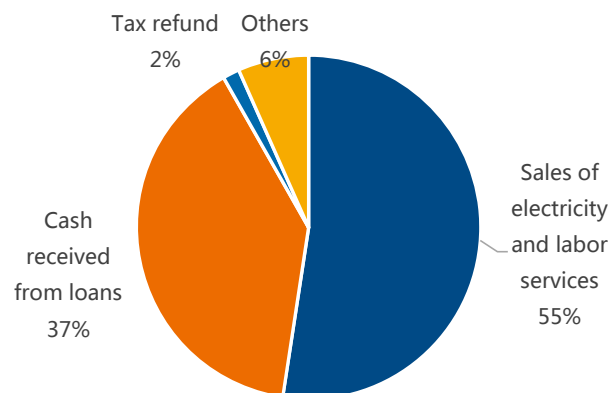


Note 1: ROE(Excluding non-controlling interests)= Net profit attributable to shareholders of the parent company/Average equity attributable to shareholders of the parent company (the arithmetic mean of the opening and closing balances) \* 100%  
 Note 2: ROA(Return on total assets)= ( Total profit + Interest expenses recognized in profit or loss)/Average total assets (the arithmetic mean of the opening and closing balances ) \* 100%

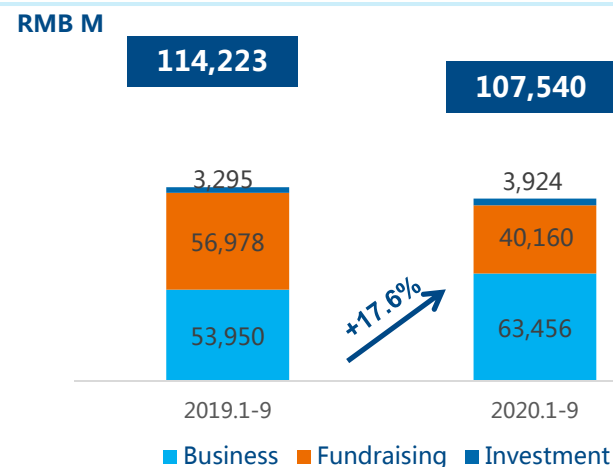
Note 3: Asset-Liability ratio=(Total liabilities / Total assets)\*100%

Note 4: Interest coverage=(Total profit + Interest expenses recognized in profit or loss)/(Interest expenses recognized in profit or loss + interest expenses capitalized)

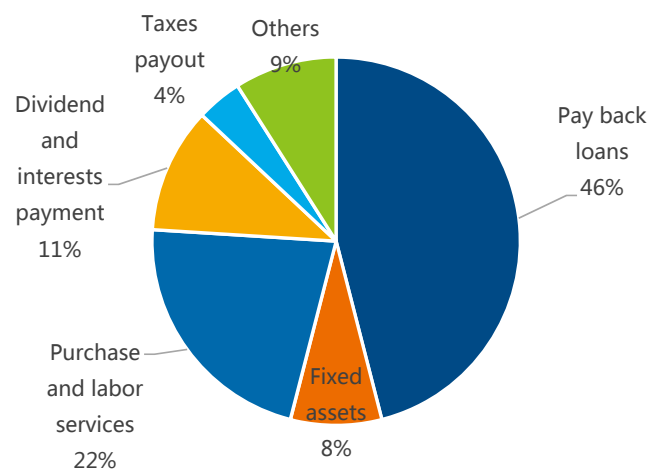
### Cash Inflow Structure in 3Qs 2020



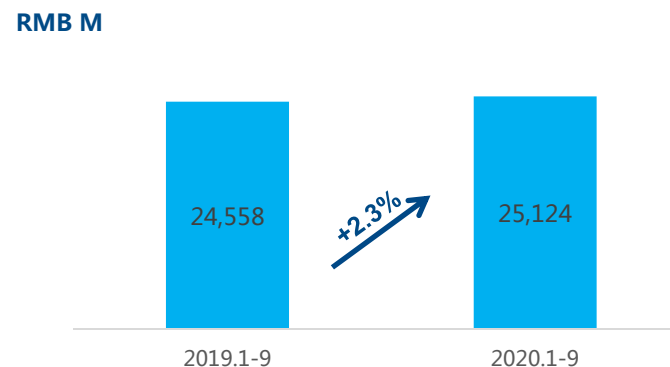
### Cash Inflow in 3Qs 2020



### Cash Outflow Structure in 3Qs 2020



### Net Operating Cash Flow in 3Qs 2020

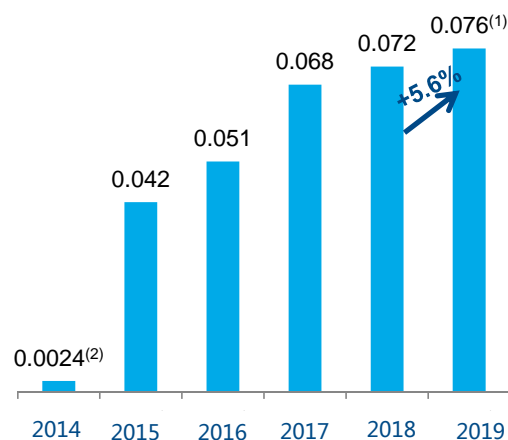




The Board and the management of the Company pay attention to providing its shareholders with steady and growing dividend. By attaching great importance to the safe and stable operation of nuclear power generating units and striving to achieve the stable growth of the Company's overall operation, the Company intends to achieve the target of maintaining a reasonable increase in dividend (subject to approval at the general meeting of the relevant financial year) for each of the three financial years of 2018, 2019 and 2020 based on the annual dividend per share for 2017.

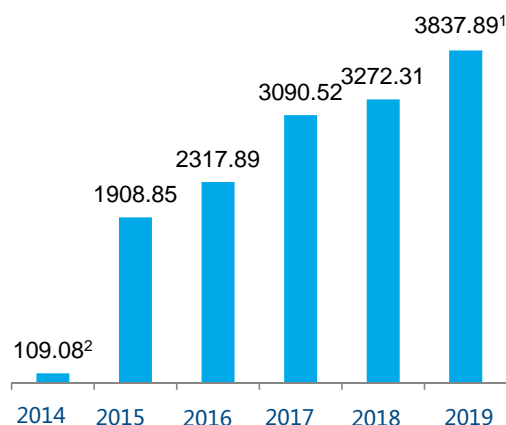
### Annual Dividend per Share

RMB per share



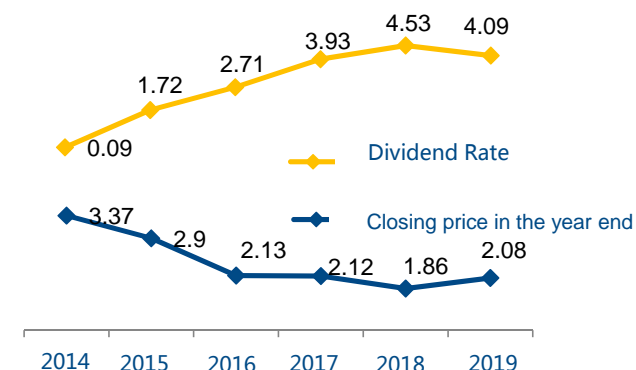
### Annual Dividend

RMB M



### Dividend Rate

%  
HKD



Note 1: The final dividend of 2019 has been distributed on 10<sup>th</sup> July 2020.

Note 2: Dividend period of 2014 was from 10<sup>th</sup> Dec to 31<sup>st</sup> Dec.

中广核  CGN

一次把事情做好

Thank you!