



中國廣核電力股份有限公司  
CGN Power Co., Ltd.



# CGN POWER ( 1816.HK ) 2015 Annual Results

March 15 2016

**Disclaimer**

This presentation contains forecast statements, which may involve risks and unforeseeable factors. These statements generally apply words of predicative implications, such as think, expect, estimate, plan, predict, aim at, might, would and other similar words, which are utilized to express expectations, actions to adopt in the future, or possible results brought about by these actions. You should not excessively rely on these predicative statements in the presentation, since they are based on the Company's own materials and other materials the Company consider reliable. The Company's actual performance might be different from these predicted figures, which might be a cause of the fluctuations of the Company's H-share price.

## Part I

### Development Strategy

## Part II

### Business Performance

## Part III

### Financial Performance

## Part IV

### Q&A

# Part I

# Development Strategy

中广核  CGN

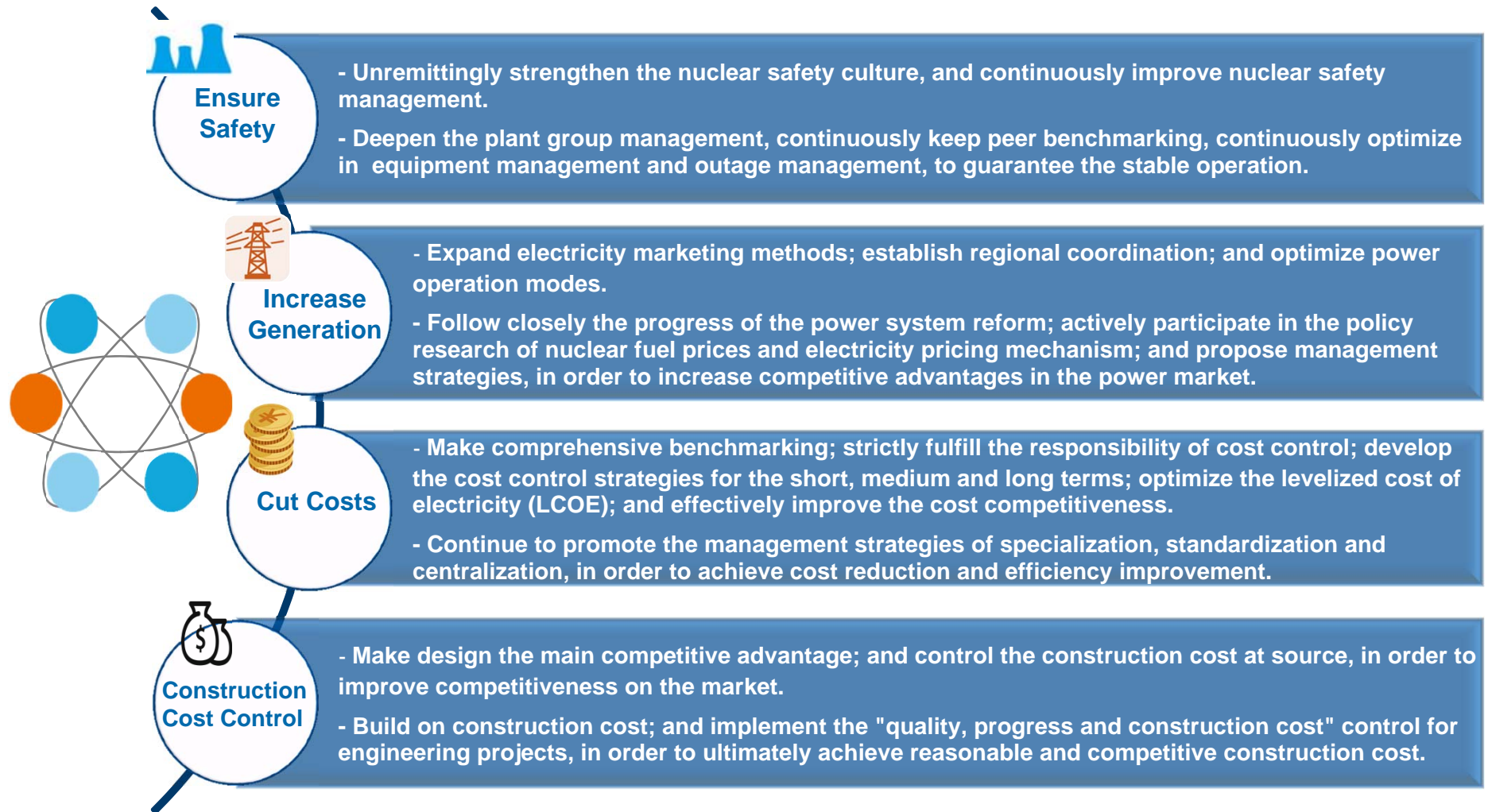
Natural Energy Powering Nature  
Clean Energy Makes Our Future Brighter





**"Bi-stable" = Stable Operation+ Stable Growth**





2015 was our first full year after listing on HKEx,  
through sound operation we achieved stable growth in business

**Market Share**

- With 3 Units Began Commercial Operations and 3 Units FCD, we are keeping Leading Position

**Safety and Quality**

- With safe and stable outages, and orderly construction, we made steady progress with safety and quality

**Operating Results**

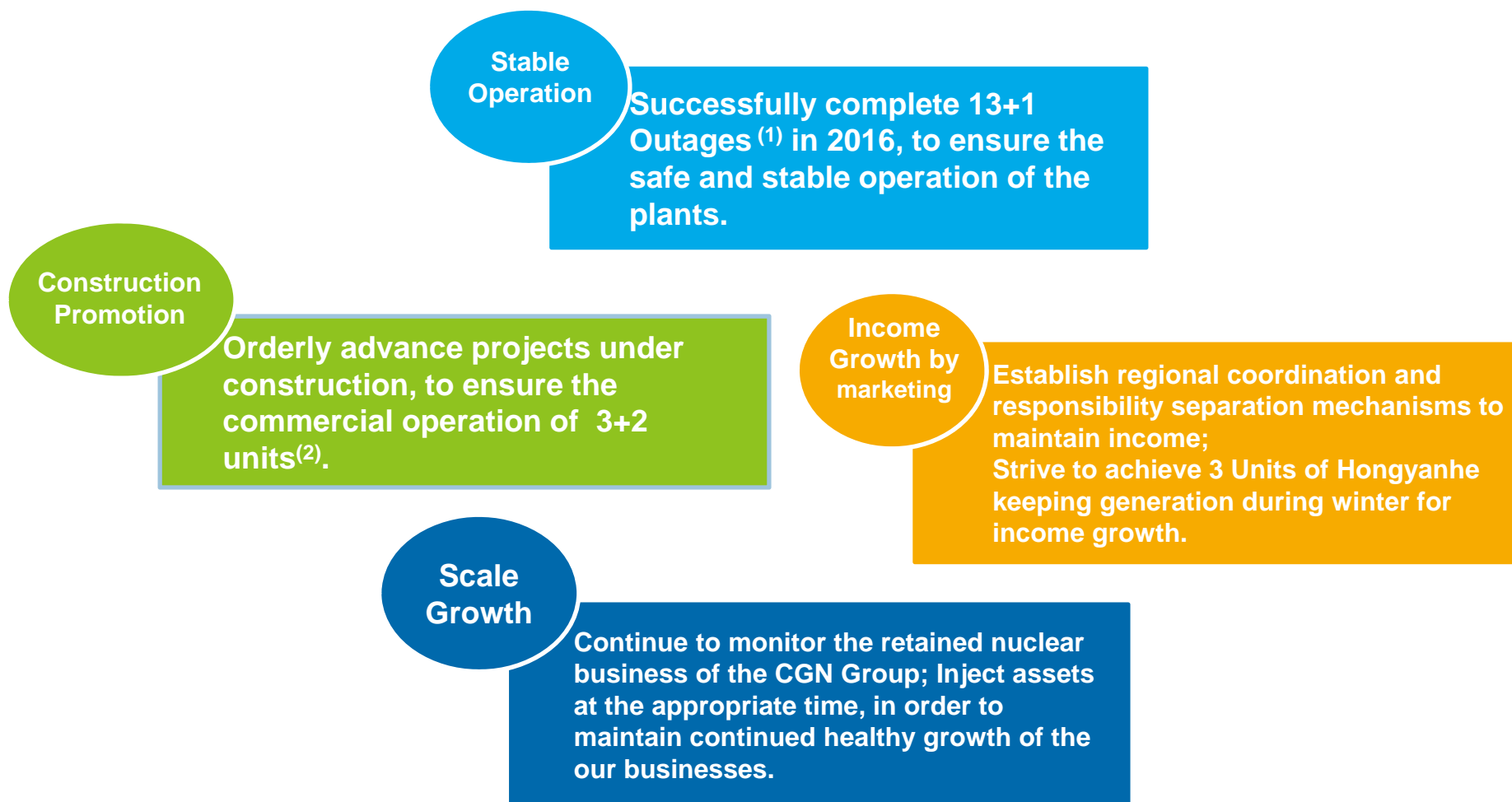
- On-grid power generation growing year after year; revenue and profit steadily increasing; and environmental benefits rising evidently

**Cost Level**

- Laying solid foundation to strengthen cost control; cost level was generally stable in 2015; our debt structure maintains robust

**Corporate Governance**

- Innovative connected transaction management, with directors stationed in connected company;
- Established Nuclear Safety Council and expanded the functions of the Audit Committee



Note 1: The outages include the first outage of Fangchenggang Unit 1 under custodian for CGN group.

Note 2: Units under construction that are planned to start commercial operation in 2016 include Yangjiang Unit 3, Hongyanhe Unit 4, Ningde Unit 4, Fangchenggang Unit 1 and 2 (under custodian for CGN group). Yangjiang Unit 3 and Fangchenggang Unit 1 began commercial operation on January 1, 2016.



# Part II

## Business Performance

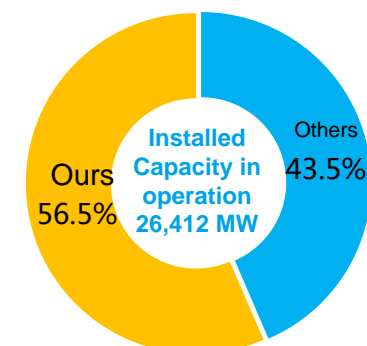
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### 3 Units Began Commercial Operations

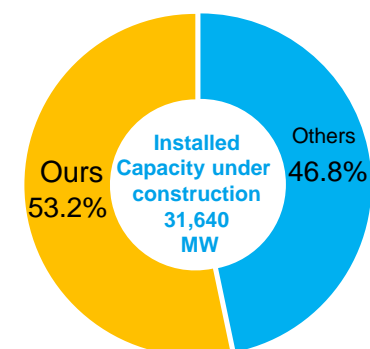
Yangjiang Unit 2	Ningde Unit 3	Hongyanhe Unit 3
<ul style="list-style-type: none"> <li>Commercial operation on 5<sup>th</sup> June 2015</li> <li>Subsidiary, 78.20%</li> <li>CPR1000, 1086 MW</li> </ul>	<ul style="list-style-type: none"> <li>Commercial operation on 10<sup>th</sup> June 2015</li> <li>Joint Venture, 32.29%</li> <li>CPR1000, 1089MW</li> </ul>	<ul style="list-style-type: none"> <li>Commercial operation on 16<sup>th</sup> August 2015</li> <li>Associate, 38.14%</li> <li>CPR1000, 1119MW</li> </ul>



As at 31 December 2015, 28 units in operation across China (only refers to the mainland China, the same below). Among these, we run 14 of them, with total installed capacity of 14,918 MW, accounting for approximately 56.5% of the market share.

### 3 Units FCD

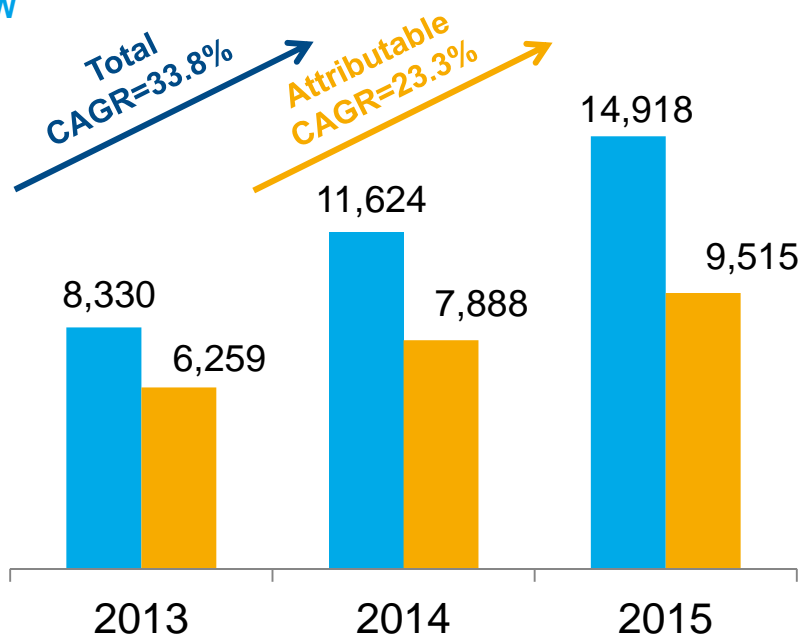
Hongyanhe Unit 5	Hongyanhe Unit 6	Fangchenggang Unit 3
<ul style="list-style-type: none"> <li>FCD on 29 March 2015</li> <li>Associate, 38.14%</li> <li>ACPR1000, 1119 MW</li> </ul>	<ul style="list-style-type: none"> <li>FCD on 24 July 2015</li> <li>Associate, 38.14%</li> <li>ACPR1000, 1119 MW</li> </ul>	<ul style="list-style-type: none"> <li>FCD on 24 December 2015</li> <li>Under custodian for CGN Group</li> <li>HPR1000, 1180 MW</li> </ul>



As at 31 December 2015, 28 units under construction. Among these, we managed total "10 + 4" (4 refers to Fangchenggang Units 1/2/3/4) units under construction, with total capacity of 16,822 MW and a market share of approximately 53.2%.

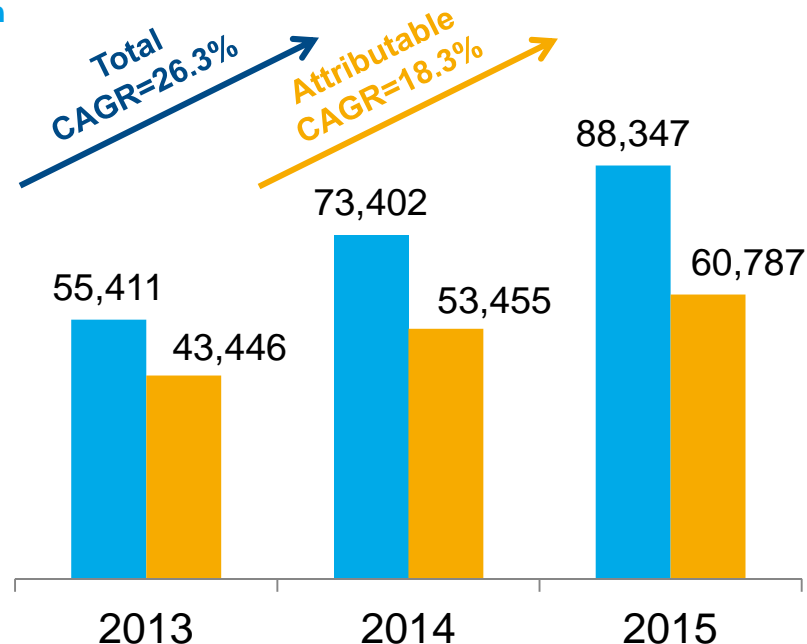
Installed Capacity Increased Year by Year

MW

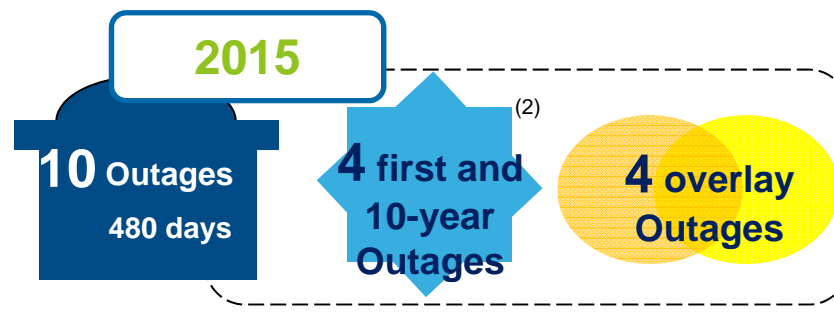
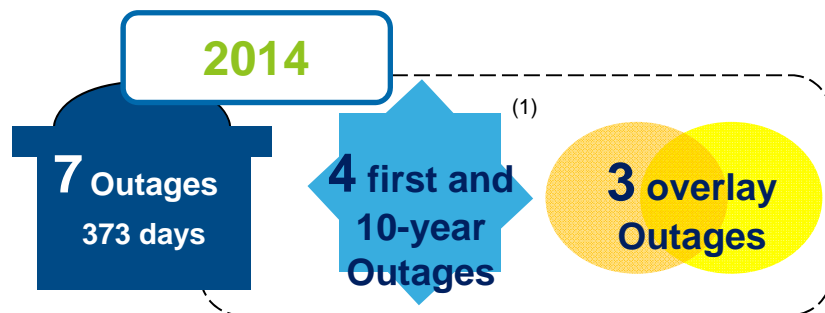


On-grid Power Generation Increased Year by Year

Gwh



Outages Completed as planned



Note 1: 4 first and 10-year outages in 2014 contains two 10-year outages and two first outages.

Note 2: 4 first and 10-year outages in 2015 contains one 10-year outages and three first outages.



WANO

World Association of Nuclear Operators

63.5% of 12 WANO indicators for every unit ranked among Top Decile globally.

55.5% (2014) → 65.3% (2015)

Ratio of indicators ranked among Top Decile globally

Name	Capacity Factor%		Load Factor%		Utilization Hours		Outage	
	2014	2015	2014	2015	2014	2015	2014	2015
Daya Bay Unit 1	99.66 ↓	78.83	100.02 ↓	79.65	8,764 ↓	6,979	--	10-year Outage
Daya Bay Unit 2 <sup>(2)</sup>	75.58 ↑	98.65	75.62 ↑	99.30	6,625 ↑	8,700	10-year Outage (2014-2015)	
Ling'ao Unit 1	90.44 ↓	86.80	88.59 ↓	86.37	7,758 ↓	7,564	Annual Outage	Annual Outage
Ling'ao Unit 2	94.55 ➡	93.64	93.46 ➡	91.01	8,184 ➡	7,970	10-year Outage (2013-2014)	Annual Outage
Lingdong Unit 1	89.42 ➡	90.10	87.88 ➡	88.90	7,692 ➡	7,781	Annual Outage	Annual Outage
Lingdong Unit 2	90.31 ➡	90.29	88.35 ➡	88.69	7,733 ➡	7,762	Annual Outage	Annual Outage
Average	89.99	89.72	88.99	88.99	7,793	7,793		

Note 1 : Mature units in operation include Daya Bay Unit 1, Daya Bay Unit 2, Ling'ao Unit 1, Ling'ao Unit 2, Lingdong Unit 1, Lingdong Unit 2. The amount of on-grid power of mature units in operation is 45,378 Gwh in 2015, which accounts for 51.4% of the total on-grid power of the company.

Note 2 : According to outage plan, outage days of Ling'ao unit 1 in 2015 is 14 days more than that in 2014.



WANO

World Association of Nuclear Operators

71.9% of 12 WANO indicators for every unit ranked among Top Quartile globally














56.7% (2014年) → 71.9% (2015)

Ratio of indicators ranked among Top Quartile globally

Name	Capacity Factor%		Load Factor%		Utilization Hours		Outage	
	2014	2015	2014	2015	2014	2015	2014	2015
Yangjiang Unit 1	99.93 ↓	79.45	98.78 ↓	78.86	8,653 ↓	6,908	--	First outage
Yangjiang Unit 2	Under construction	99.64	Under construction	99.94	Under construction	8,755	--	--
Ningde Unit 1	57.31 ↑	87.16	56.70 ↑	85.93	4,967 ↑	7,527	First outage	Annual Outage
Ningde Unit 2	99.83 ↓	78.95	98.66 ↓	73.72	8,638 ↓	6,458	--	First outage
Ningde Unit 3	Under construction	93.24	Under construction	81.67	Under construction	7,185	--	--
Hongyanhe Unit 1	71.48 ↑	87.75	67.17 ↑	82.57	5,881 ↑	7,233	First outage	Annual Outage
Hongyanhe Unit 2	82.68 ↓	65.53	76.29 ↓	39.26	6,558 ↓	3,439	--	First outage
Hongyanhe Unit 3	Under construction	100.00	Under construction	50.31	Under construction	4,407	--	--
Average	82.25	86.47	79.52	74.03	6,939	6,489		

Note1 : units with 3 or less fuel cycles are identified as new units. The amount of on-grid power of new units in operation is 42,969 Gwh in 2015, which accounts for 48.6% of the total on-grid power of the company.



Unit	Technology	Civil Construction	Equipment Installation	Commissioning Phase	Grid-Connection	Expected Date of Commencement of Operation
<b>Affiliate company</b>						
Yangjiang Unit 3	CPR1000				 <sup>(1)</sup>	2016H1
Yangjiang Unit 4	CPR1000					2017H2
Yangjiang Unit 5	ACPR1000					2018H2
Yangjiang Unit 6	ACPR1000					2019H2
Taishan Unit 1	EPR			 <sup>(2)</sup>		2017H1
Taishan Unit 2	EPR					2017H2
<b>Joint venture</b>						
Ningde Unit 4	CPR1000					2016H2
<b>Associate company</b>						
Hongyanhe Unit 4	CPR1000					2016H1
Hongyanhe Unit 5	ACPR1000					2020H2
Hongyanhe Unit 6	ACPR1000					2021
<b>Under a management contract for our controlling shareholder</b>						
Fangchenggang Unit 1	CPR1000				 <sup>(3)</sup>	2016H1
Fangchenggang Unit 2	CPR1000					2016H2
Fangchenggang Unit 3	HPR1000					--
Fangchenggang Unit 4 <sup>(4)</sup>	HPR1000					--

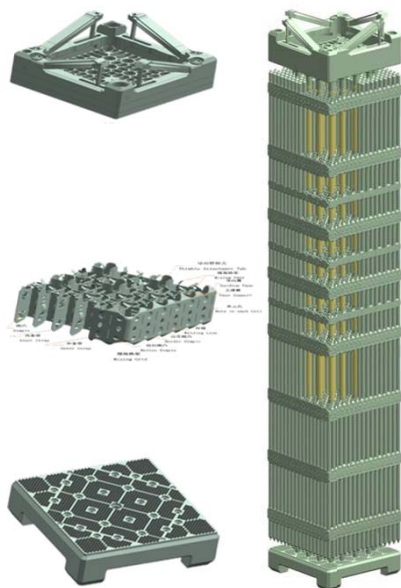
Note 1 : Yangjinag Unit 3 began commercial operation on January 1, 2016.

Note 2 : Taishan Unit 1 began cold function test on December 30, 2015 ; on January 27, 2016 it completed the test and became the world's first third generation EPR nuclear power unit to complete cold test .

Note 3 : Fangchenggang Unit 1 began commercial operation on January 1, 2016.

Note 4 : Fangchenggang Unit 4 was approved by government in 2015, which, as of Dec. 31, 2015, was waiting for FCD.

Independent R&D  
on nuclear fuel components



Break through the  
bottleneck to  
achieve a nuclear  
fuel assembly  
autonomy

**2015 IP  
achievement**

284 patent applications and  
180 licenses granted

- Improve  
equipment  
safety  
management  
- Improve the  
ability to prevent  
man-made  
mistake

Follow the market  
diversified  
technology  
roadmap

GW-level nuclear reactor  
Robots for nondestructive  
testing of pressure vessels

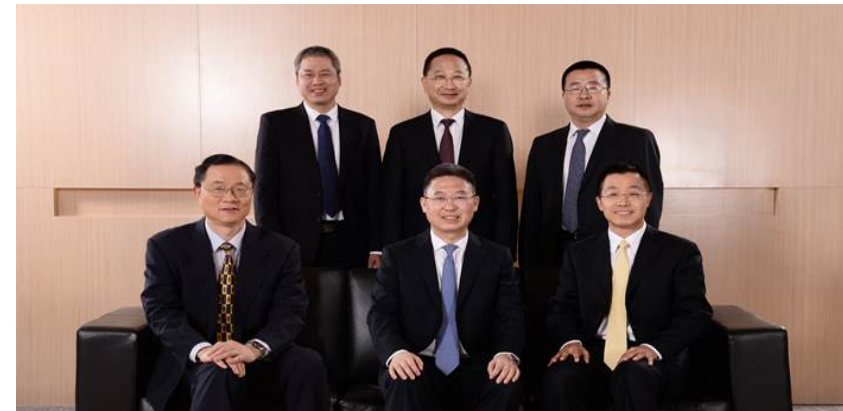


Offshore small-scale  
reactor ACPR50S



## Management

- Our directors each have extensive experience in the power industry, financial and accounting, legal, audit and other aspects, to understand their responsibilities, powers and duties, and can perform their duties with faith, integrity and diligence.
- Our executives have extensive industry experience, solid expertise and international perspective, leading the company to achieve sustained robust growth performance, continuing to create value for shareholders.

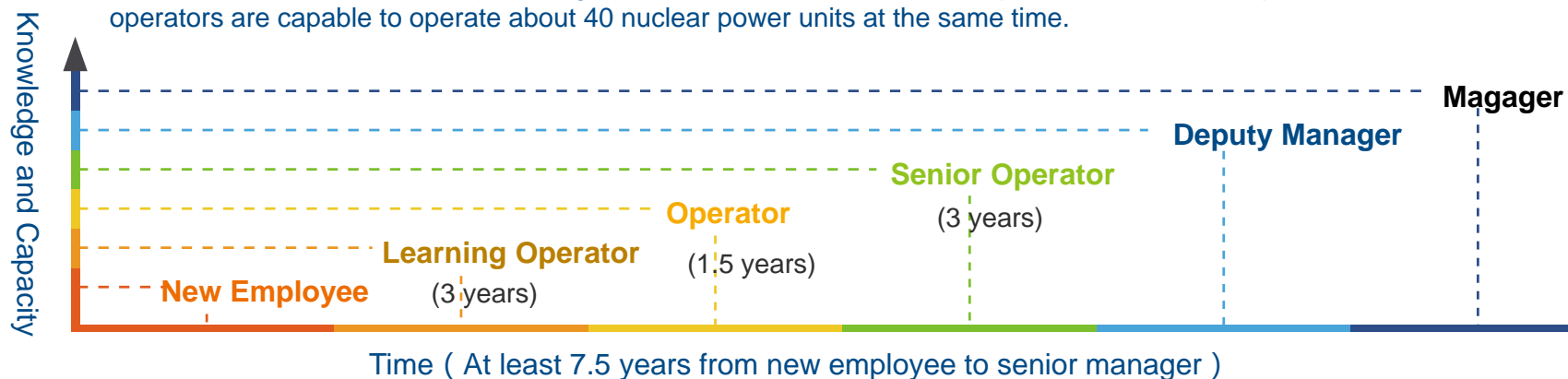


## Honor of the Company

- China Securities Bauhinia "Best Listed Company of the Year" and "Best Secretary of the Board" of Ta Kung Pao 2015
- "China Finance" magazine "2015 Best Listed Company"

## Reaction Operator Cultivation

- As of December 31, 2015, we (including our affiliates) have 405 licensed operators, 444 senior operators. Our current operators are capable to operate about 40 nuclear power units at the same time.



## Voluntary Information Disclosure

- The company established first "nuclear power plant nuclear and radiation safety information disclosure" platform in mainland China, to fully protect the public's right to know the operation of nuclear power plants.
- All operating events occurred of units in operation are disclosed within 2 working days.



Daya Bay Information Disclosure Platform



Hongyanhe Information Disclosure Platform



Ningde Information Disclosure Platform



Yangjiang Information Disclosure Platform

2015	Daya Bay <sup>(1)</sup> Base	Yangjiang	Ningde	Hongyanhe
Radioactive liquid waste according to national standards expressed as a ratio of (Non-gaseous radionuclides) emissions	0.21%	0.5%	0.24%	0.47%
Radioactive waste gases expressed as a ratio of national standards (Inert gas) emissions	0.133%	0.18%	0.15%	0.144%
Solid radioactive waste (cubic meters)	317.6	24.4	149.6	183.1
Environment monitoring results	Normal	Normal	Normal	Normal

### Sound environment monitoring system

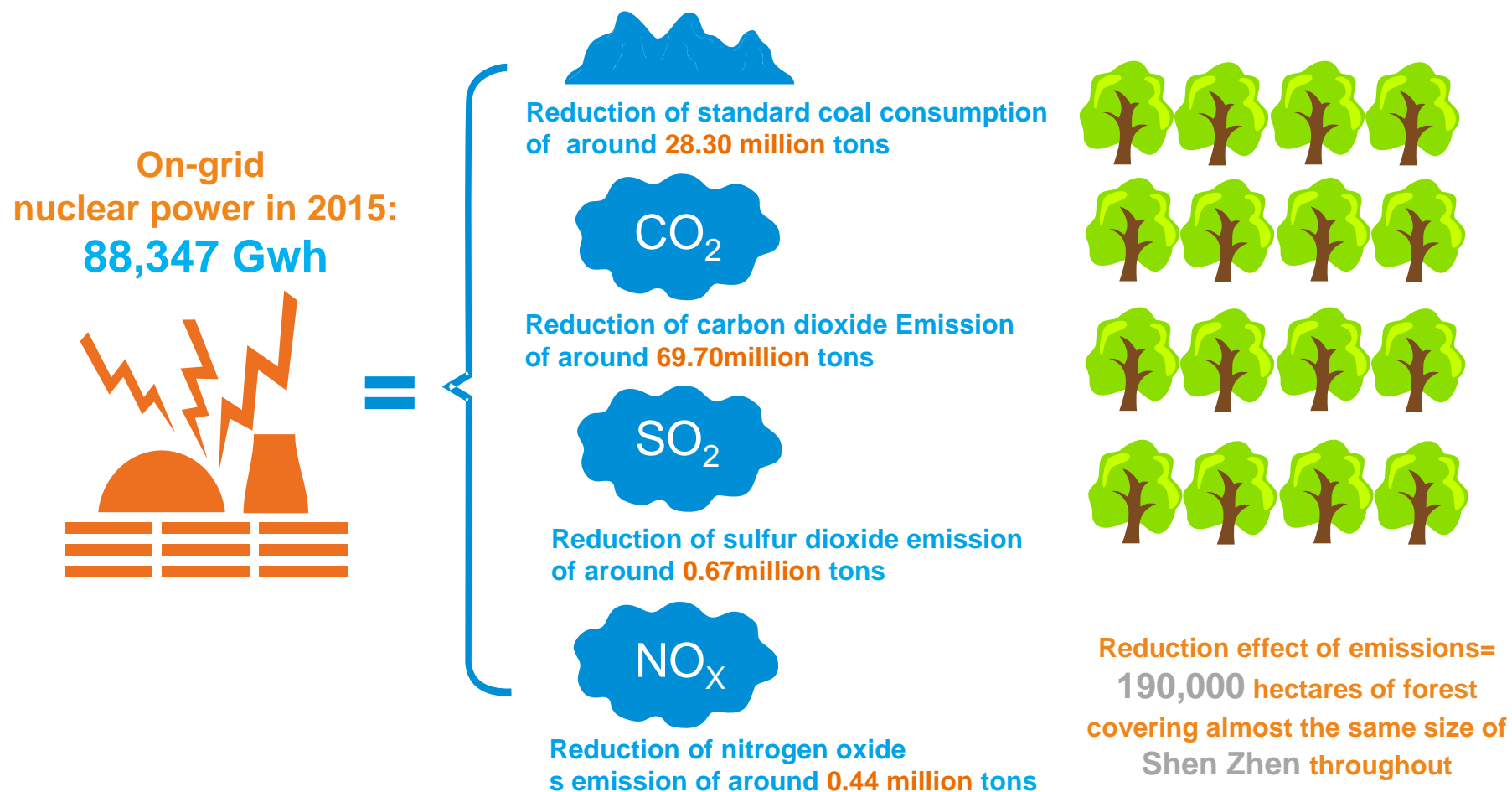
- In accordance with national regulations, our nuclear power bases have unified environment monitoring, forming a complete environment monitoring system.
- Each nuclear power plant obtains normal ambient monitoring results.

### Radioactive waste management optimization

- Our Radioactive waste gases and liquid waste emissions are far less than the national emission standards.
- Our radioactive solid waste are generated in the amount lower than the design criteria.

Note 1 : Daya Bay Base includes Daya Bay Station, Ling'ao Station and Lingdong Station.







# Part III

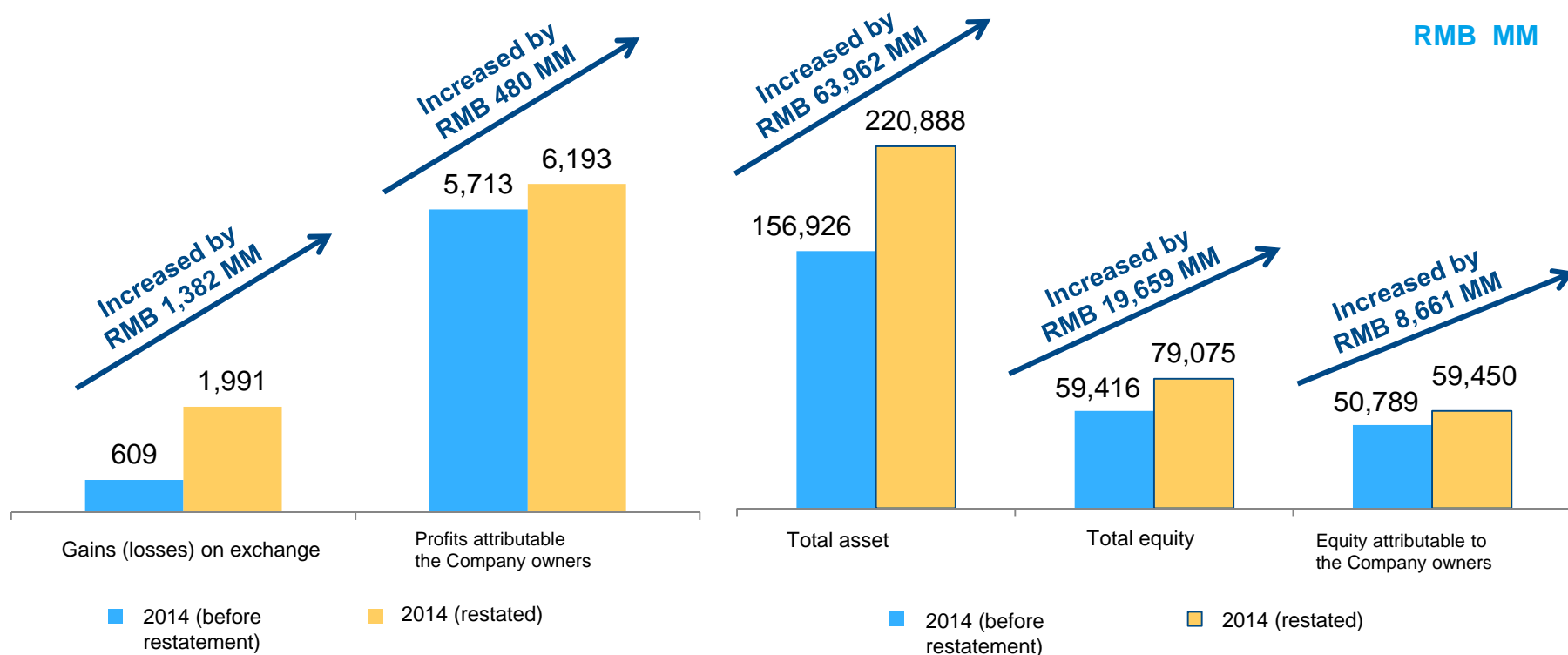
## Financial Performance

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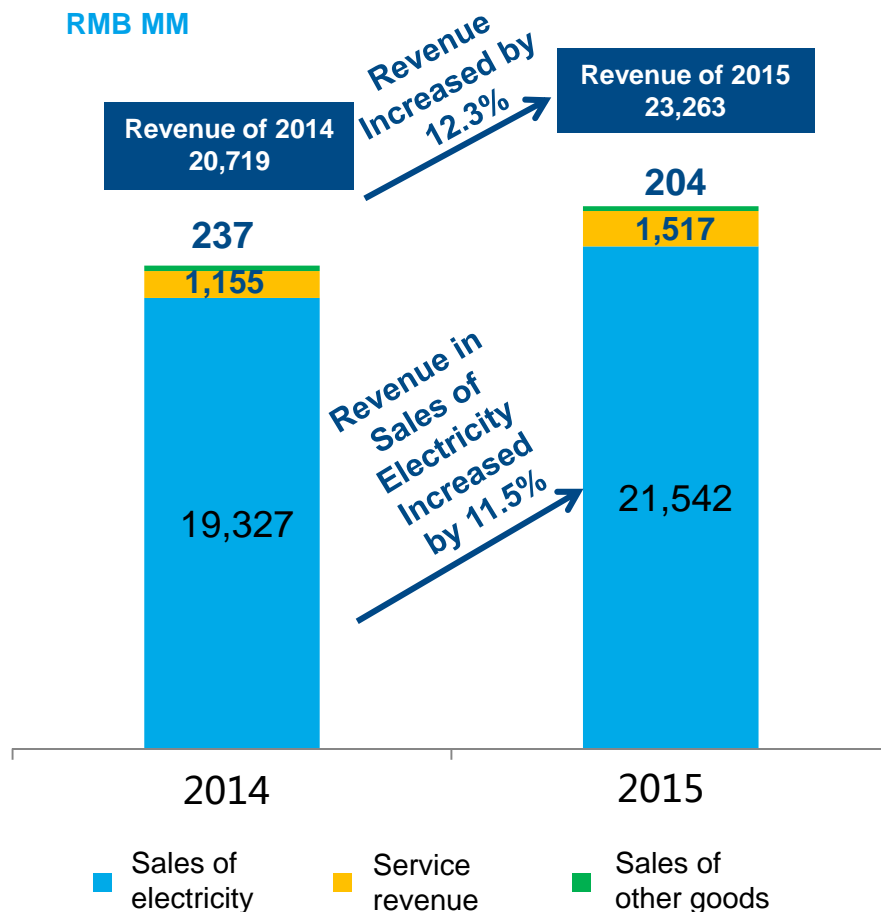


The Company completed the acquisition of 60% of the equity interests in Taishan Investment and 12.5% of the equity interests in Taishan Nuclear held by CGNPC, the ultimate controlling company of the Company in 2015. The financial data of 2014 in the consolidated financial statements of the Group have been restated as if the combination had occurred prior to the start of the earliest period presented. Except for where specially noted, the 2014 financials all refer to the restated data.

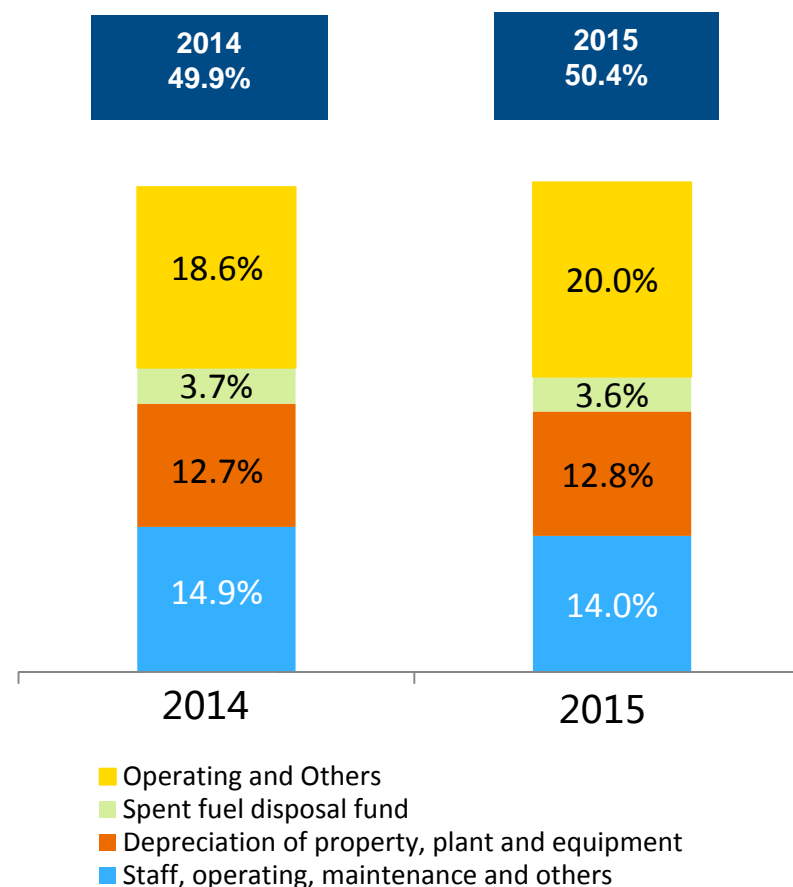


## Revenue and revenue in sales of electricity <sup>(1)</sup>

RMB MM



## The Operating Cost as % of Revenue

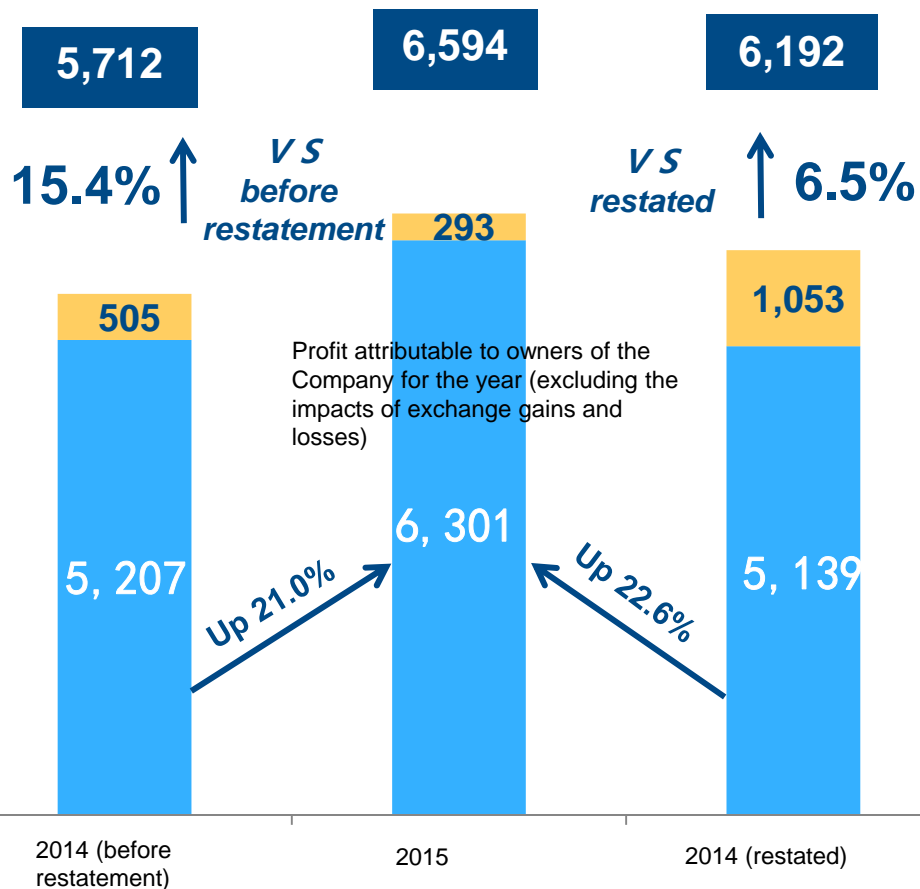


The reason for the rise of the proportion of operating and other costs is : the number of annual outage and units in operation goes up, which leads to the rise of operation and maintenance cost.

Note 1 : Hongyanhe Company and Ningde Company are not included in the consolidated financial statements, therefore the income from Hongyanhe Unit 1 and Unit 2 generator units, Ningde Unit 1 and Unit 2 generator units are not included into the Company's revenue.

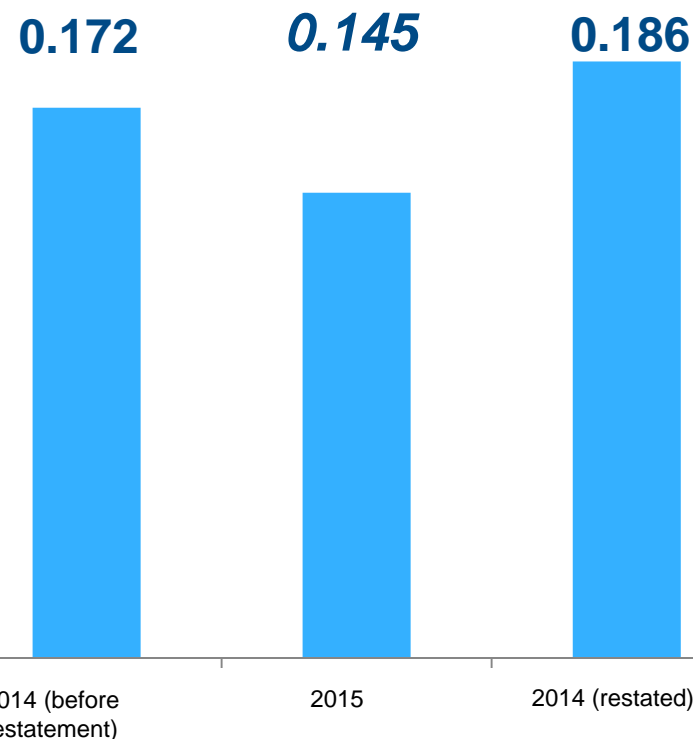
### Profits attributable to the Company owners

RMB MM



### Earnings per share attributable to the Company owners

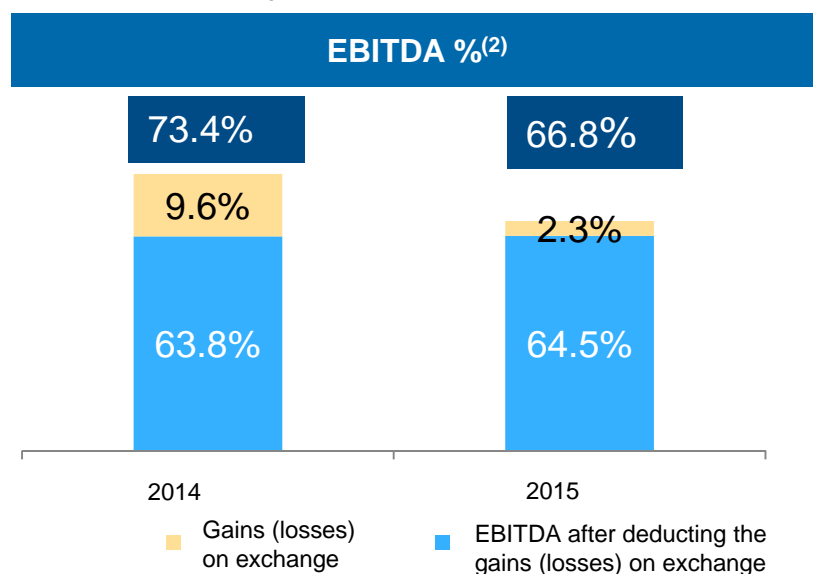
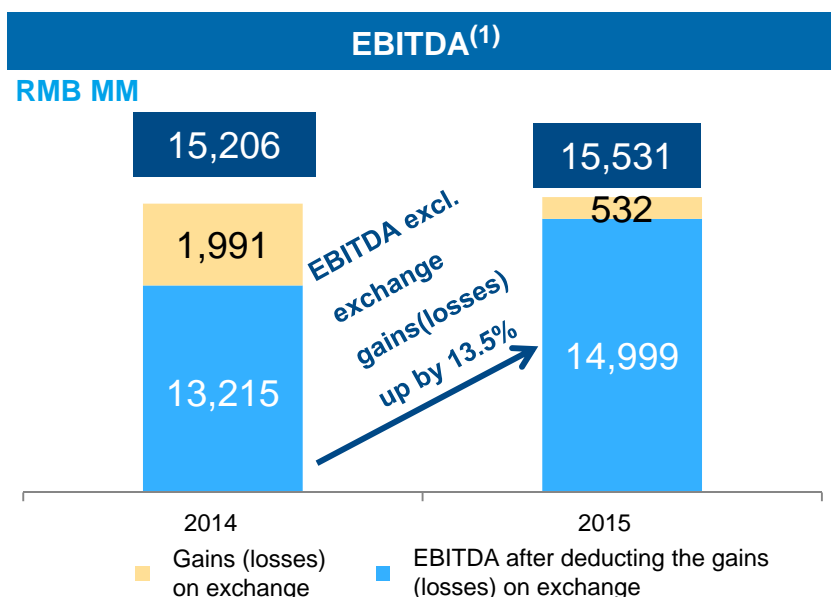
RMB



■ Gains (losses) on exchange attributable to the Company owners

■ After deducting the gains (losses) on exchange

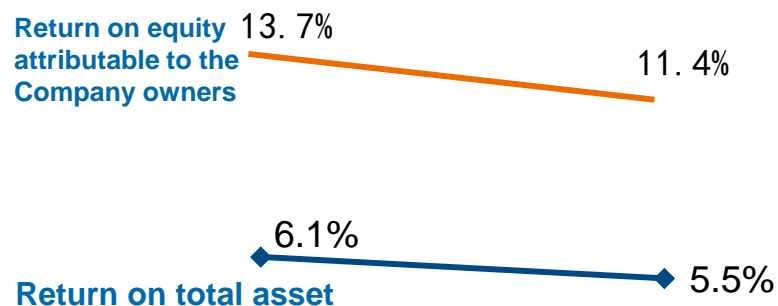
**Decrease of earnings per share attributable to the Company owners was mainly due to: the Company got listed on 10 December 2014, in which the weighted average common stock was 33,306 million shares but increased to 45,449 million shares in 2015, thus an increase of 36.5%.**



Note 1: EBITDA = Profit before tax + financial cost + Depreciation and amortization

Note 2: EBITDA profitability = EBITDA/income \* 100%

**Returns on equity attributable to the Company owners<sup>(3)</sup> and return on total asset<sup>(4)</sup>**



The decrease was mainly due to: the Company got listed on 10 December 2014, and in 2015 equity attributable to the Company owners and average total asset both experienced significant growth than those in 2014 (28.1% and 8.3%, respectively).

Note 3: returns on equity attributable to the Company owners = annual profits attributable to the Company owners / average equity interest attributable to the Company owners (arithmetic mean of the opening and ending number) \* 100%

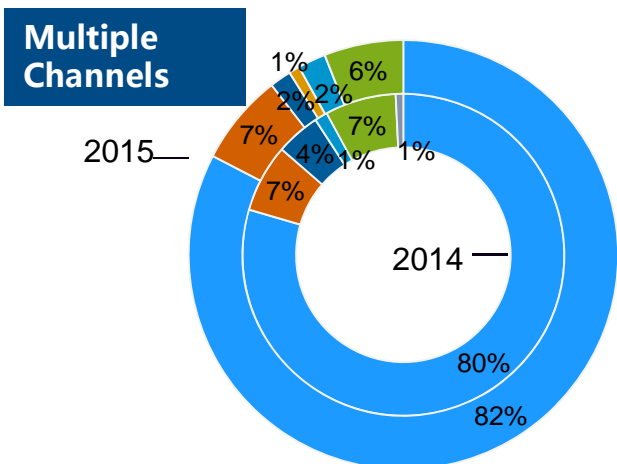
Note 4: total return on asset = (profit before tax + financial cost) / total average working capital and non-working capital (arithmetic mean of the opening and ending number) \* 100%



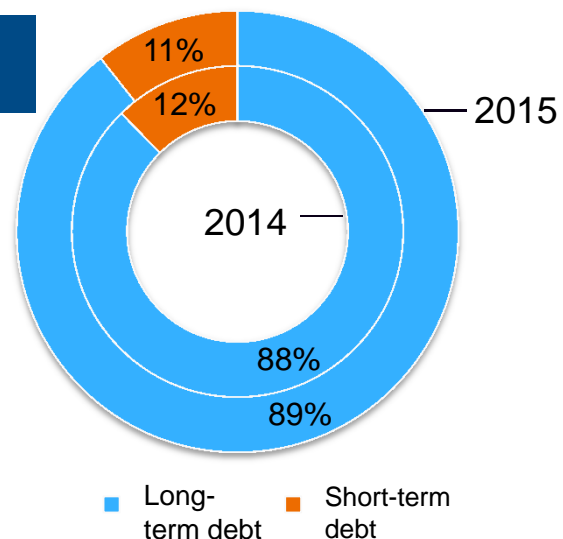
## Debt balance

RMB MM

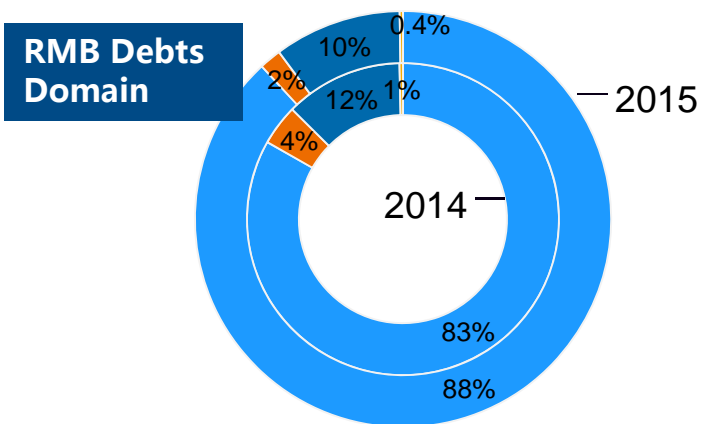
By financing product



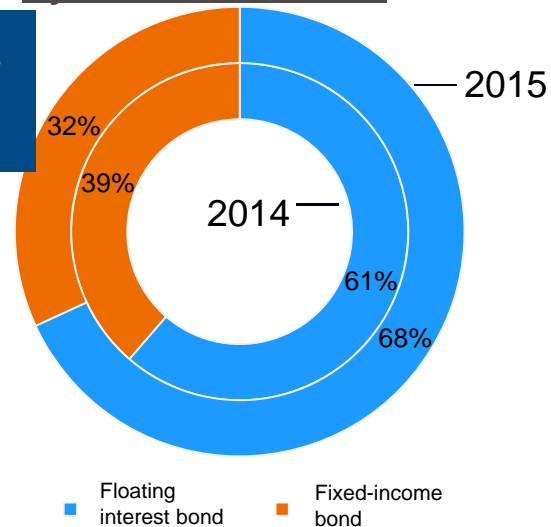
By maturity term



By currency type



By interest structure

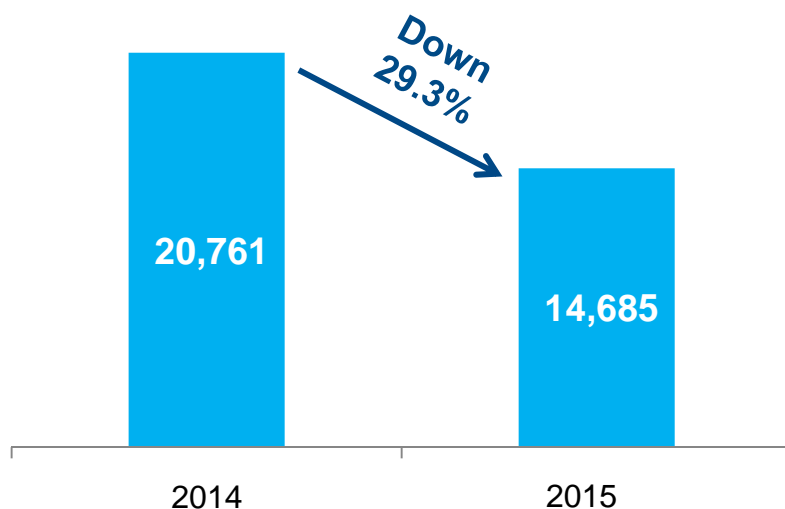


■ RMB ■ USD ■ Euro ■ Others

■ Floating interest bond ■ Fixed-income bond

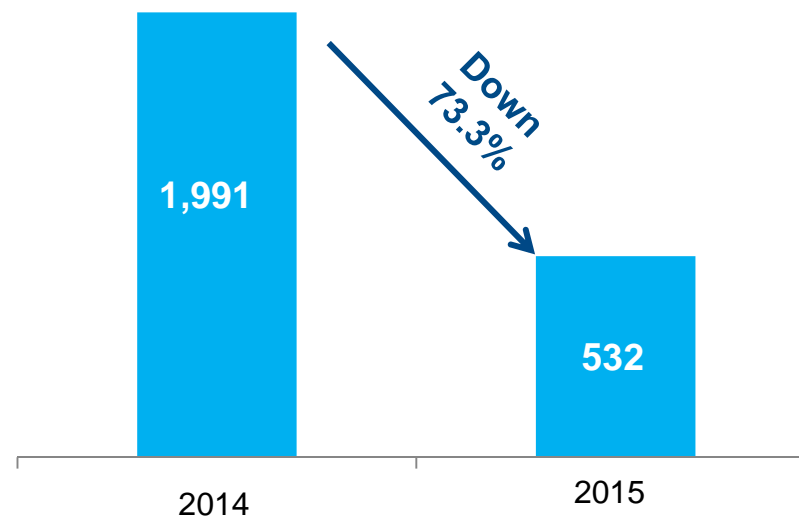
### Balance of Foreign Currency Bank Loans and Other Borrowings

RMB MM (Equivalent)



### Gains (Losses) on Exchange

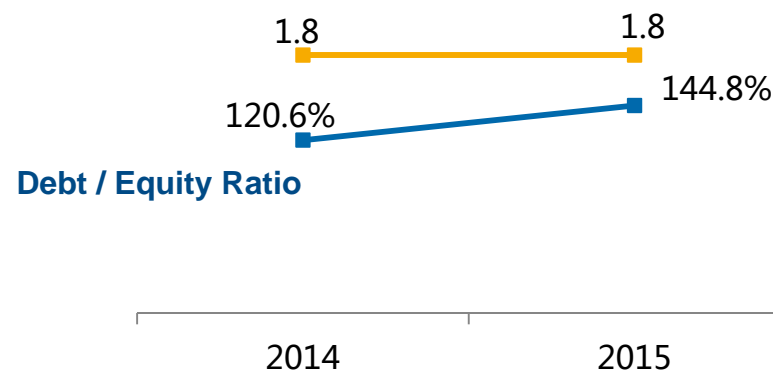
RMB MM



In 2015, the company continued to conduct proactive risk management of foreign currency debt through forward transactions, debt replacement and early repayment etc., and controlled new foreign currency debts by changing the financing methods for contracts with foreign parties. The foreign exchange risk was reduced.

### Debt / Equity Ratio <sup>(1)</sup> & Interest Coverage Ratio <sup>(2)</sup>

#### Interest Coverage Ratio



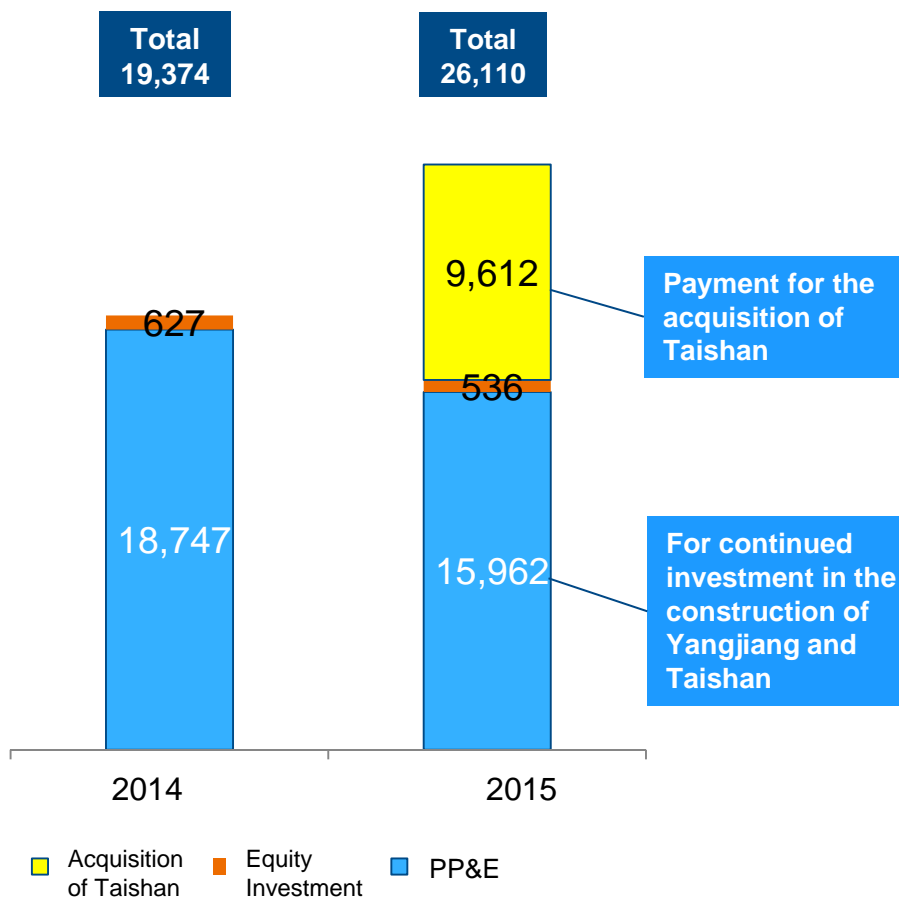
The main reason for increased debt / equity ratio is due to the impact of the use of funds raised. As of December 31, 2015, the company has used RMB19,763.3 (91.5% of net proceeds) mm of funds raised based on the use of proceeds stated in the prospectus, resulting a large decrease of cash and cash equivalents in 2015.

Note 1: Debt / equity ratio = Net debt (i.e., bank loans and other borrowings minus cash and cash equivalents and other bank deposits with maturity of more than 3 months) / total equity\*100%

Note 2: Interest coverage ratio = (EBT + finance expense) / (finance expense + capitalized interest).

### Capital Expenditure

RMB MM



# Part IV

## Q&A

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***Thank You!***