華能國際電力股份有限公司
Huaneng Power International, Inc.

Stock Code : 902

Powering Tomorrow

Annual Report 2016

The Objectives of the Company

As a power company, devoted to providing sufficient, reliable and eco-friendly energy to the community; as a listed company, devoted to creating long-term, stable and increasing returns for shareholders; and as a first class power producer, devoted to having excellency in operation, becoming a leading power enterprise in China and an advanced enterprise internationally.

Contents

Overview

Financial statements prepared in accordance with International Financial Reporting Standards

Financial statements reconciliation between PRC GAAP and IFRS

COMPANY PROFILE

Huaneng Power International, Inc. ("the Company", "Huaneng Power" or "Huaneng International") and its subsidiaries are mainly engaged in developing, constructing, operating and managing large-scale power plants throughout China. As at 31 December 2016, the Company is one of China's largest listed power producers with controlling generation capacity of 83,878 MW and equity-based generation capacity of 76,618 MW, and its domestic power plants are located in 22 provinces, municipalities and autonomous regions. The Company also has a wholly-owned power company in Singapore.

The Company was incorporated on 30 June 1994. It completed its initial global public offering of 1,250,000,000 overseas listed foreign shares ("foreign shares") in October 1994, which were listed on the New York Stock Exchange (Stock Code: HNP) in the United States by issuing 31,250,000 American Depository Shares ("ADS"). In January 1998, the foreign shares of the Company were listed on The Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange") by way of introduction (Stock Code: 902). Subsequently, in March 1998, the Company successfully completed a global placing of 250,000,000 foreign shares along with a private placing of 400,000,000 domestic shares. In November 2001, the Company successfully completed the issue of 350,000,000 A Shares (Stock Code: 600011) in the People's Republic of China ("China", "PRC"), of which 250,000,000 domestic public shares were listed on the Shanghai Stock Exchange. In December 2010, the Company completed the non-public issuance of 1,500,000,000 A Shares and 500,000,000 H Shares. In November 2014, the Company completed the non-public issuance of 365,000,000 H Shares. In November 2015, the Company completed the non-public issuance of 780,000,000 H Shares. Currently, the total share capital of the Company amounts to approximately 15.2 billion shares.

The core business of the Company is to develop, construct and operate large-scale power plants throughout China by making use of modern technology and equipment and financial resources available domestically and internationally. As a power generation enterprise, the Company has been insisting on innovations in technologies, structure, and management since its incorporation; and on aspects regarding the advancement in power technologies and construction and management of power plant. The Company has been the pioneer and has created various milestones within the domestic power industry, which facilitated the great-leap development of the power business and technological advancement of the power station equipment manufacturing industry in China, and also significantly contributed to the improvement of technical and management standards of the domestic power generation enterprises. The Company was the first to introduce a 600 MW supercritical generating unit into China and we also started operating the first domestically built single 1,000 MW ultra-supercritical coal-fired generating unit, and the first digitalized 1,000 MW ultra-supercritical coal-fired generating unit in China. We completed the construction of the first 1,000 MW generating unit in the world using sea water desulphurization facilities and the 660 MW efficient ultra-supercritical coal-fired generating unit with the highest parameter in China. We completed the construction of the first high-efficiency ultra-supercritical and double reheat ultra-supercritical coal-fired generating unit with the highest parameter in China. We developed the technology for synergistic treatment of fuel gas of coal-fired power plants, which was successfully applied in various environmental protection renovation and newly-constructed projects. The Company was the first power company in China to get listed in New York, Hong Kong and Shanghai. The technical and economic indicators as well as the overall manpower efficiency of the Company have been remaining at the forefront in China's power industry. The Company constantly optimizes the power structure and regional distribution, and accelerates development of new energy while consolidating its leading position in conventional energy, aiming to enhance industrial synergy effect. Furthermore, it has expanded the service range for delivery and sales to achieve an overall improvement in operation, quality and corporate vigour.

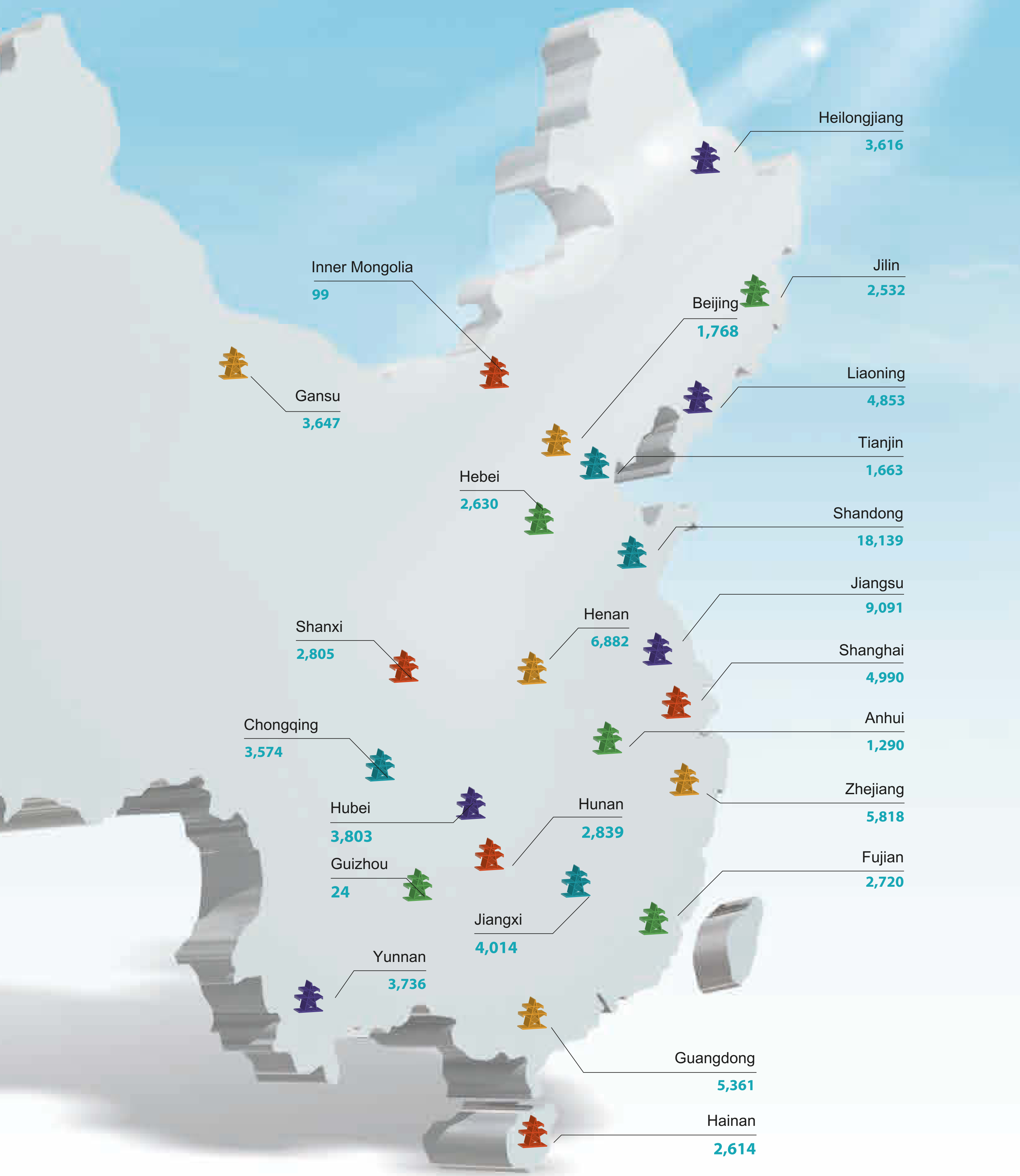
Throughout the years, with efforts in seeking expansion and operating our business in a prudent manner, the Company has expanded gradually with steady growth in competitive strengths. The success of the Company is attributable to its various advantages, including advantages in scale and equipment, advantages in strategic layout of power plants, strong support from major shareholders, sound corporate governance structure, advantages in market reputation, extensive experience in the capital markets, advantages in overseas development, staff with high calibre and professional management.

The objectives of the Company are: as a power company, devoted to providing sufficient, reliable and eco-friendly energy to the community; as a listed company, devoted to creating long-term, stable and increasing returns for shareholders; and as a first class power producer, devoted to having excellency in operation, becoming a leading power enterprise in China and an advanced enterprise in the international market.

Huaneng International Power Development Corporation ("HIPDC"), the Company's parent company and controlling shareholder, was incorporated as a Sino-foreign joint stock company in 1985.

Distribution of Power Plants of the Company

The controlled power generation capacity of the Company as at 21 March 2017 is 101,116 MW, distributed in areas as depicted in the chart (Unit: MW)



Heilongjiang
3,616
Inner Mongolia
99
Jilin
2,532
Beijing
1,768
Gansu
3,647
Liaoning
4,853
Tianjin
1,663
Hebei
2,630
Shandong
18,139
Jiangsu
9,091
Henan
6,882
Shanxi
2,805
Shanghai
4,990
Anhui
1,290
Chongqing
3,574
Zhejiang
5,818
Hubei
3,803
Hunan
2,839
Guizhou
24
Fujian
2,720
Jiangxi
4,014
Yunnan
3,736
Guangdong
5,361
Hainan
2,614

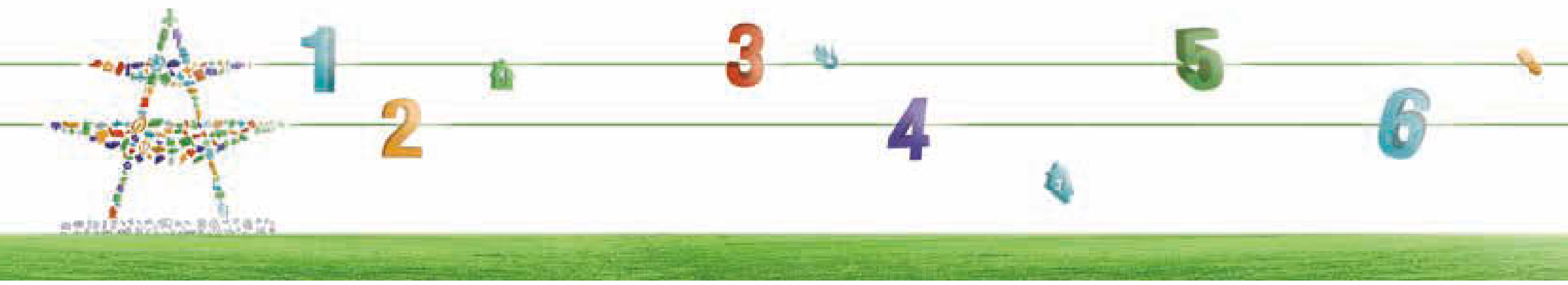
MAJOR CORPORATE EVENTS IN 2016

January

- The Company announced that its total power generation within China for 2015 recorded an increase of 8.9% year-on-year.

March

- The Company announced its operating results for 2015. According to the PRC GAAPs, the net profit attributable to shareholders of the Company was RMB13,786 million, representing an increase of 30.73% over the previous year.
- The Company held investor and press conferences within and outside China for its results for 2015.



April

- The Company announced that its total power generation within China for the first quarter of 2016 recorded a decrease of 6.89% year-on-year.
- The Company announced its results for the first quarter of 2016. According to the PRC GAAPs, the net profit attributable to shareholders of the Company was RMB3,948 million, representing a decrease of 21.58% over the corresponding period of the previous year.
- The Company held global investor telephone conferences for its results for the first quarter in 2016.
- The Company announced and paid the interest of its 10-year bonds issued in 2008 for the period from 8 May 2015 to 7 May 2016.

June

- The Company publicly issued 5-year and 10-year corporate bonds at aggregate principal amounts of RMB3.0 billion and RMB1.2 billion respectively, to qualified investors.

July

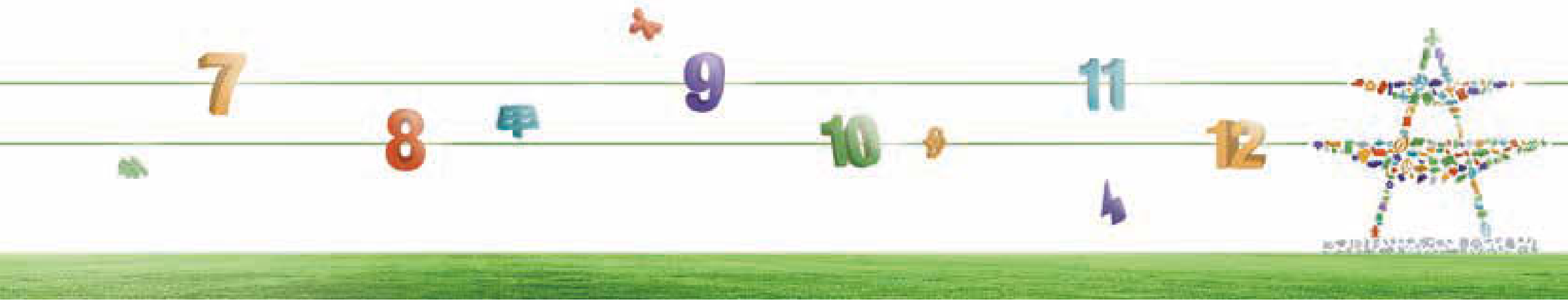
- The Company announced the implementation of the profit distribution plan for the year of 2015 and distributed the cash dividends of RMB0.47 (including tax) to all shareholders for each ordinary share.
- The Company announced that the domestic power generation in the first half of 2016 decreased by 8.60% year on year.
- In 2016, the Company ranked the 323rd among the "Forbes" list of global listed companies, 30 positions up from last year. In addition, the Company ranked the first among those domestic power companies on the list.

September

- The Company ranked 27th in the "Platts Top 250 Global Energy Listed Company", with its ranking continuing to move higher.

November

- The Company received "the Most Investment Value Award for Listed Companies" and "the Best Board Secretary" in the China Securities Golden Bauhinia Awards Competition.



August

- The Company announced its interim results for the year of 2016. According to the PRC GAAPs, the net profit attributable to shareholders of the Company was RMB6,292 million, representing a decrease of 30.54% over the corresponding period of the previous year.
- The Company held global investor telephone conferences for its interim results for the year of 2016.

October

- The Company entered into equity transfer agreements with Huaneng Group to acquire 80% equity interest of Shandong company, 100% equity interest of Jilin company, 100% equity interest of Heilongjiang company and 90% of Henan Zhongyuan Gas Generator (河南中原燃機) from Huaneng Group, its parent company, at a consideration of RMB15.114 billion.
- The Company announced that its total domestic power generation for the first three quarters of 2016 recorded a decrease of 3.49% year-on-year.
- The Company announced its results for the first three quarters of 2016. According to the PRC GAAPs, the net profit attributable to shareholders of the Company was RMB9,389 million, representing a decrease of 29.06% over the corresponding period of the previous year.
- The Company held global investor telephone conferences for its results for the three quarters in 2016.
- The Company's 2015 annual report of the H shares won Gold Award in the 30th International ARC Awards Competition.

December

- The Company announced payment of interest on its 10-year corporate bonds issued in 2007 for the period from 25 December 2015 to 24 December 2016.
- The Company was awarded the "Golden Governance 2016 Listed Company Outstanding Board Secretaries" (as to investor relations) (金治理二零一六年度上市公司優秀董秘) by the Shanghai Securities News.

FINANCIAL HIGHLIGHTS

(Amounts expressed in thousands of RMB, except per share data)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME *(Note 1)*

	Year ended 31 December				
	2012	2013	2014	2015	**2016**
Operating revenue	133,966,659	133,832,875	125,406,855	128,904,873	**113,814,236**
Profit before income tax expense	8,876,785	17,422,689	19,049,580	22,958,050	**13,813,138**
Income tax expense	(2,510,370)	(4,522,671)	(5,487,208)	(5,698,943)	**(3,465,151)**
Profit after income tax expense	6,366,415	12,900,018	13,562,372	17,259,107	**10,347,987**
Attributable to:					
– Equity holders of the Company	5,512,454	10,426,024	10,757,317	13,651,933	**8,520,427**
– Non-controlling interests	853,961	2,473,994	2,805,055	3,607,174	**1,827,560**
Basic earnings per share (RMB/share)	0.39	0.74	0.76	0.94	**0.56**
Diluted earnings per share (RMB/share)	0.39	0.74	0.76	0.94	**0.56**

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION *(Note 2)*

	As at 31 December				
	2012	2013	2014	2015	**2016**
Total assets	259,100,372	262,232,760	275,171,768	308,866,354	**314,839,739**
Total liabilities	(193,140,030)	(187,039,786)	(190,389,062)	(207,172,665)	**(212,653,002)**
Net assets	65,960,342	75,192,974	84,782,706	101,693,689	**102,186,737**
Equity holders of the Company	56,130,134	62,450,665	70,129,491	84,141,948	**86,002,995**
Non-controlling interests	9,830,208	12,742,309	14,653,215	17,551,741	**16,183,742**

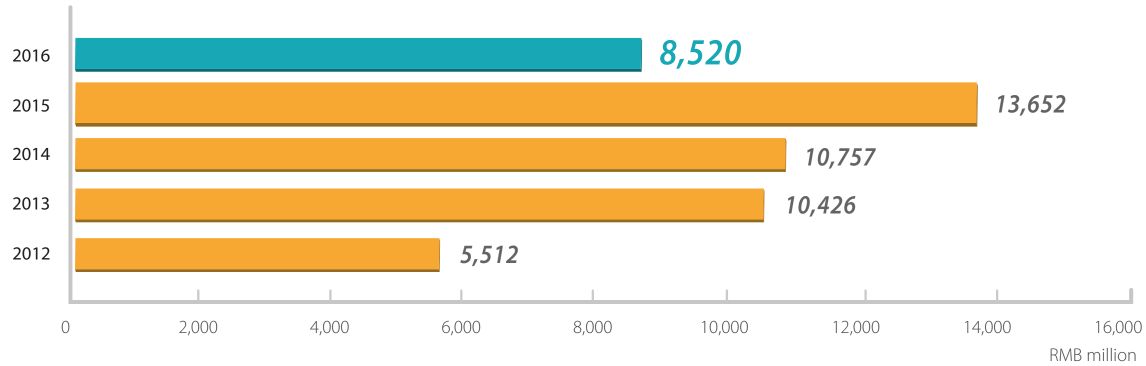
Notes:

1. The results for the years ended 31 December 2012, 2013, 2014 are derived from the historical financial statements of the Company. The results for the years ended 31 December 2015 and 2016 are set out on pages 107 to 108. All such information is extracted from the financial statements prepared under International Financial Reporting Standards ("IFRS").

2. The consolidated statements of financial position as at 31 December 2012, 2013, 2014 are derived from the historical financial statements of the Company. The consolidated statements of financial position as at 31 December 2015 and 2016 are set out on pages 109 to 111. All such information is extracted from the financial statements prepared under IFRS.

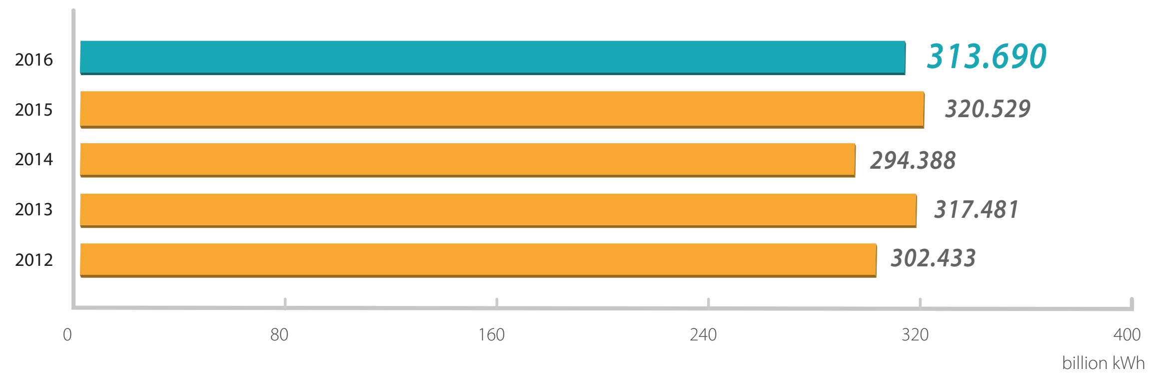
Profit attributable to equity holders of the Company under IFRS

For the years ended 31 December



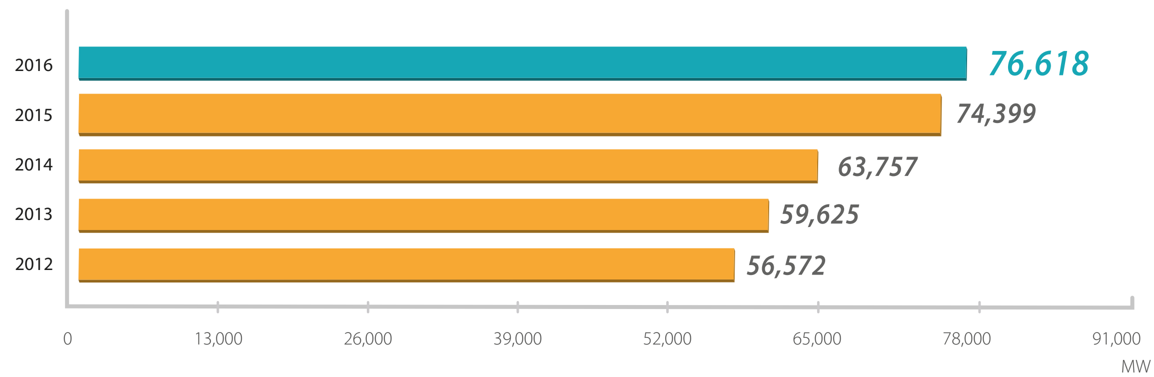
Domestic power generation

For the years ended 31 December



Generation capacity on an equity basis

As at 31 December



LETTER TO SHAREHOLDERS

CAO Peixi
Chairman

Dear Shareholders,

The development objectives of Huaneng International are: as a power company, devoted to providing sufficient, reliable and ecofriendly energy to the community; as a listed company, devoted to creating long-term, stable and increasing returns for shareholders; and as a first-class power producer, devoted to having excellency in operation, becoming a leading power enterprise in China and an advanced enterprise in the international market.

In 2016, the Company continued to focus on improving corporate development quality and operation benefits to sharpen its competitive edge in the market. It took initiatives to cope with changes arising from the power system reform and the sharp rise of the coal prices as well as other challenges. Solidly various work was then applied to ensure safe and clean production in a generally stable way as well as the transformation carrying on steadily. As a result, the annual business objectives were achieved to a good extent. In the face of a complex business environment, the Company realized the net profit attributable to the shareholders of the Company of RMB8,520 million, representing a year-on-year decrease of 37.59%.

In 2016, the safe and clean production remained stable, and the reliability of the equipment was further improved. There was no ordinary equipment accident in the whole year. The level of energy saving and emission reduction was still at the leading position, and the coal consumption for power supply continued to decline. With the promotion of low-carbon clean development and active development of low-carbon clean energy projects, clean development was achieved. The Company took initiatives to adapt to changes in the electricity market to carry out actively transactions with large users, hold non-controlling interests in regional power trading center and participate in incremental power distribution market, so as to strive to enhance its market competitiveness. Through optimizing fuel procurement structure and transportation structure and making timely adjustment of procurement strategies in response to market changes, the Company established strict control over its fuel costs. In addition, the Company made efforts to reduce costs and optimize the financing structure, so that the capital cost was further reduced. Achievements were made in respect of capital operation since the Company entered into equity transfer agreements to acquire the equity interests of four subsidiaries of the parent company, which was deemed as the ever largest capital operation for the Company in terms of assets size and which in turn further consolidated the Company's position as the largest listed power generation company in domestic market.

The Company continued to perform well in the capital market. It was awarded the "Golden Governance 2016 Listed Company Outstanding Board Secretaries" (as to investor relations) (金治理二零一六年度上市公司優秀董秘) by the Shanghai Securities News, "the Most Investment Value Award for Listed Companies" and "the Best Board Secretary" in the China Securities Golden Bauhinia Awards Competition. In addition, the Company's 2015 annual report of the H shares won Gold Award in the 30th International ARC Awards Competition. Besides, the Company was on the list of "Platts Top 250 Global Energy Listed Companies Award" for eight consecutive years and ranked 27th in 2016 with its ranking continuing to move higher.

The Board of Directors of the Company has resolved to propose the following profit distribution plan for 2016: a cash dividend of RMB0.29 (inclusive of tax) per share will be paid to all shareholders of the Company. In the future, the Company will continue to follow a proactive, balanced and stable dividend policy, keep enhancing its profitability and strive for continuous growth of return on equity.

In 2017, the Company will take initiatives to adapt to the "new normal", cope with new challenges and participate actively in the reform of the power system. With the focus on improving development quality and benefits and the general direction to speed up transformation and upgrading, the Company will establish a new mechanism under which its management will be carried out to facilitate enhancement of competitiveness, its operation will be carried out to focus on customers and its development will be carried out to focus on market demand, and strengthen the leading role of innovation, so as to further enhance its core competitiveness. While consolidating its leading position in conventional energy, the Company will accelerate development of new energy sources, improve the effect of industrial synergies and expand the service area of electricity distribution and sales in an effort to gain an overall promotion of its operation, quality, benefits and the enterprise vitality. We are dedicated to building the Company into an international leading power generation listed company with standardized management, leading technology, energy conservation and environmental protection, rational structure, outstanding operation, and excellent corporate governance and market value.

Being a responsible enterprise, we insist on supporting the continued enhancement of our corporate competitive edges through a responsible approach; insist on duly performing our economic responsibilities to provide our shareholders with long-term, stable and increasing returns; continue to perform our safety responsibilities, to be people-oriented and be focused on safety development for the sake of developing itself into an enterprise with the highest safety standard; continue to perform our environmental responsibilities by paying heed to people's livelihood and concerning clean development to ensure utilization of resources in an efficient and energy-saving manner, thus turning the Company into a "green corporation"; continue to perform our social responsibilities by creating mutual benefits and win-win scenarios that are conducive to the harmonious development of the Company and its stakeholders, so that the Company may serve as an excellent corporate citizen.

CAO Peixi
Chairman

Beijing, the PRC
21 March 2017

INCREASE ENVIRONMENTAL EFFICIENCY
REALIZE GREEN DEVELOPMENT

MANAGEMENT'S DISCUSSION AND ANALYSIS

OPERATING AND FINANCIAL REVIEWS AND PROSPECTS

Management's Discussion and Analysis

(Prepared under International Financial Reporting Standards ("IFRS"))

General

The principal activities of the Company are investment in and construction, operation and management of power plants. The Company provides consistent and reliable electricity to customers through grid operators where its operating plants are located. The Company is committed to scientific development through increasing economic efficiency, enhancing returns for shareholders, conserving resources and protecting the environment. The Company also attaches importance to social responsibilities and makes active contribution to the building of a harmonious society.

Since its incorporation, the Company has continued to expand its operational scale and has been the leader in its industry in competitiveness, resource utilization efficiency and environmental protection. The Company is Asia's largest listed power producer and China's most dynamic power generator. Its power generation operations are widely located in China with coverage in Northeastern China Grid, Northern China Grid, Northwestern China Grid, Eastern China Grid, Central China Grid and Southern China Grid, as well as overseas market in Singapore.

Looking back in 2016, with strong support of its shareholders, the employees of the Company made active and concerted efforts to respond to the changes in power, coal and capital markets by expanding overseas market, improving marketing analysis and enhancing internal management with focus on key operations, as well as thorough planning and sound internal control. These efforts have contributed to growth of the Company in various aspects. During 2016, the Company maintained its leading position in major technological and economic indices and utilization hours through safe production and active marketing activities. Fuel management was enhanced and financial costs were effectively controlled. The Company achieved a remarkable improvement in its growth quality as a result of active power generation restructuring efforts. The Company has also made new developments in energy saving, ultra-low emission and technological renovation, diligently fulfilling its social responsibilities as a reliable provider of sufficient, stable and environment-friendly power to the society.

A. OPERATING RESULTS

1. 2016 operating results

The power generation of the Company's domestic power plants for the year ended 31 December 2016 are as listed below (in 100 million kWh):

Domestic Power Plant	Power Generation		Electricity sold	
	2016	Change	2016	Change
Liaoning Province	**198.24**	-2.21%	**186.28**	-2.11%
Coal-fired	**194.76**	-2.28%	**182.84**	-2.18%
Wind power	**2.97**	2.75%	**2.95**	2.60%
Hydropower	**0.34**	-32.36%	**0.34**	-32.41%
PV	**0.160**	–	**0.157**	–
Inner Mongolia	**2.18**	12.82%	**2.16**	12.84%
Wind power	**2.18**	12.82%	**2.16**	12.84%
Hebei Province	**130.63**	3.54%	**122.90**	3.88%
Coal-fired	**129.31**	3.29%	**121.69**	3.65%
Wind power	**1.16**	19.68%	**1.09**	19.75%
PV	**0.16**	–	**0.121**	–
Gansu Province	**97.16**	37.76%	**94.06**	39.96%
Coal-fired	**84.43**	40.24%	**81.85**	42.72%
Wind power	**12.73**	23.15%	**12.21**	23.91%
Beijing	**75.43**	-6.67%	**70.06**	-6.49%
Coal-fired	**34.06**	-13.19%	**29.65**	-13.47%
Combined Cycle	**41.36**	-0.54%	**40.41**	-0.61%
Tianjin	**72.53**	-1.88%	**68.43**	-1.91%
Coal-fired	**52.80**	-2.71%	**49.18**	-2.74%
Combined Cycle	**19.73**	0.35%	**19.24**	0.28%
Shanxi Province	**107.07**	12.53%	**100.67**	17.09%
Coal-fired	**81.61**	-2.55%	**75.94**	-2.85%
Combined Cycle	**25.46**	123.53%	**24.73**	216.65%
Shandong Province	**413.54**	-2.31%	**389.28**	-2.34%
Coal-fired	**413.54**	-2.31%	**389.28**	-2.34%
Henan Province	**214.52**	6.23%	**194.53**	2.86%
Coal-fired	**214.34**	6.14%	**194.41**	2.80%
Wind power	**0.19**	–	**0.12**	–
Jiangsu Province	**430.21**	2.33%	**408.8**	2.08%
Coal-fired	**389.25**	4.31%	**368.66**	4.11%
Combined Cycle	**35.17**	-18.05%	**34.54**	-17.89%
Wind power	**5.79**	32.99%	**5.59**	31.00%
Shanghai	**181.38**	0.06%	**171.81**	0.01%
Coal-fired	**164.89**	0.84%	**155.72**	0.82%
Combined Cycle	**16.49**	-7.11%	**16.09**	-7.17%

Domestic Power Plant	Power Generation		Electricity sold	
	2016	**Change**	**2016**	**Change**
Chongqing	**100.16**	-6.43%	**93.14**	-6.04%
Coal-fired	**81.54**	-16.51%	**75.01**	-16.68%
Combined Cycle	**18.62**	98.50%	**18.13**	99.02%
Zhejiang Province	**247.11**	0.15%	**237.05**	0.50%
Coal-fired	**241.71**	-0.92%	**231.77**	-0.58%
Combined Cycle	**5.18**	91.87%	**5.06**	90.83%
PV	**0.215**	169.30%	**0.215**	158.25%
Hubei Province	**140.85**	6.52%	**132.07**	7.02%
Coal-fired	**136.02**	4.48%	**127.51**	4.90%
Wind power	**1.88**	248.65%	**1.74**	289.00%
Hydropower	**2.94**	97.31%	**2.83**	100.71%
Hunan Province	**83.16**	-3.41%	**78.27**	-3.21%
Coal-fired	**74.44**	-5.28%	**69.67**	-5.36%
Wind power	**5.37**	38.78%	**5.32**	44.13%
Hydropower	**3.34**	-7.94%	**3.28**	-7.88%
Jiangxi Province	**174.42**	13.35%	**166.41**	15.50%
Coal-fired	**173.35**	13.33%	**165.40**	15.51%
Wind power	**1.07**	19.14%	**1.01**	13.65%
Anhui Province	**58.46**	-2.17%	**55.76**	-1.98%
Coal-fired	**56.17**	-3.94%	**53.54**	-3.70%
Wind power	**0.89**	–	**0.82**	–
Hydropower	**1.40**	8.66%	**1.40**	8.87%
Fujian Province	**76.77**	-29.52%	**72.29**	-30.00%
Coal-fired	**76.77**	-29.52%	**72.29**	-30.00%
Guangdong Province	**174.53**	-16.70%	**166.94**	-16.82%
Coal-fired	**174.45**	-16.74%	**166.87**	-16.85%
PV	**0.07**	–	**0.064**	–
Yunnan Province	**38.83**	-32.19%	**35.73**	-32.41%
Coal-fired	**35.84**	-35.76%	**32.96**	-36.02%
Wind power	**2.99**	103.21%	**2.78**	103.98%
Guizhou Province	**0.45**	16515.56%	**0.38**	–
Wind power	**0.45**	16515.56%	**0.38**	–
Hainan Province	**119.28**	-28.00%	**111.00**	-28.10%
Coal-fired	**115.28**	-28.52%	**107.11**	-28.65%
Combined Cycle	**1.27**	-48.64%	**1.21**	-49.29%
Wind power	**1.01**	1.93%	**0.99**	1.86%
Hydropower	**1.64**	75.99%	**1.61**	77.21%
PV	**0.083**	–	**0.082**	–
Total	**3,136.90**	-2.13%	**2,958.00**	-2.05%

The decrease in the Company's power generation for the year was mainly attributable to the following reasons: (1) the installed capacity growth outpaced the growth of the nationwide power consumption while the utilization hours of coal-fired power generation units saw a year-on-year fall; (2) the growth of the Company's installed capacity was below the regional average; and (3) the launch of new nuclear power generators in areas including Liaoning, Guangdong, Fujian and Hainan provinces had a relatively great impact on the output of the coal-fired power generation units in these regions.

For the year ended 31 December 2016, the accumulated power generation of Tuas Power Ltd., the Company's wholly owned subsidiary in Singapore, accounted for a market share of 21.5%, representing a decrease of 0.2% compared to the same period last year.

In respect of the tariff, the Company's domestic average tariff for the year ended 31 December 2016 was RMB396.60 per MWh, decreased by RMB46.66 per MWh from the year ended 31 December 2015. SinoSing Power's average tariff for 2016 was RMB514.00 per MWh, representing a decrease of 17.88% from last year.

In respect of fuel costs, the effective cost controls of the Company contributed to reduced fuel costs of the Company. Compared with 2015, the Company's fuel cost per unit of power sold of domestic power plant decreased by 1.76% to RMB170.62 per MWh.

Combining the forgoing factors, for the year ended 31 December 2016, the Company recorded an operating revenue of RMB113.814 billion, representing a decrease of 11.71% from RMB128.905 billion of last year, and the net profit attributable to equity holders of the Company of RMB8.520 billion, representing a decrease of 37.59% from RMB13.652 billion of last year.

For the year ended 31 December 2016, the net profit attributable to equity holders of the Company from domestic operations was RMB8.760 billion, representing a decrease of RMB4.951 billion from RMB13.711 billion for the same period last year. The decrease was primarily attributable to lowered on-grid tariff for coal-fired power generator administered by the National Development and Reform Commission ("NDRC"), reduced domestic power generation of the Company and increased volume of market power transactions. The net loss attributable to equity holders of the Company from its operations in Singapore was RMB240 million, representing an increase of RMB181 million compared to the same period last year.

2. Comparative Analysis of Operating results

2.1 Operating revenue and tax and levies on operations

Operating revenue mainly consists of revenue from electricity sold. For the year ended 31 December 2016, the consolidated operating revenue of the Company and its subsidiaries amounted to RMB113.814 billion, representing a decrease of 11.71% from RMB128.905 billion for the year ended 31 December 2015. The operating revenue from domestic operations of the Company decreased by RMB13.706 billion over the same period of last year, while the operating revenue generated from newly acquired entities and newly operated generating units was RMB3.525 billion.

The operating revenue from the operations of the Company in Singapore decreased by RMB1.385 billion over the same period of last year, which was mainly attributed to the continued oversupply in the Singapore power and natural gas market, causing continued decline of electricity tariff and a drop of the operating revenue.

	Average tariff rate (VAT inclusive) *(RMB/MWh)*		
Region/type of power generation	**2016**	2015	Change
Liaoning Province			
Coal-fired	**344.42**	374.38	-8.00%
Wind power	**618.74**	593.25	4.30%
Hydropower	**332.67**	329.96	0.82%
PV	**950.00**	–	Not applicable
Inner Mongolia			
Wind power	**471.22**	520.00	-9.38%
Hebei Province			
Coal-fired	**358.48**	401.79	-10.78%
Wind power	**554.60**	538.14	3.06%
PV	**784.95**	–	Not applicable
Gansu Province			
Coal-fired	**207.63**	259.51	-19.99%
Wind power	**398.34**	483.75	-17.66%
Beijing			
Coal-fired	**454.99**	480.70	-5.35%
Combined Cycle	**687.33**	959.91	-28.40%
Tianjin			
Coal-fired	**370.82**	416.54	-10.98%
Combined Cycle	**726.44**	817.57	-11.15%
Shanxi Province			
Coal-fired	**252.98**	333.78	-24.21%
Combined Cycle	**682.40**	703.80	-3.04%

Region/type of power generation	Average tariff rate (VAT inclusive) (RMB/MWh) 2016	2015	Change
Shandong Province			
Coal-fired	**381.99**	436.47	-12.48%
Henan Province			
Coal-fired	**355.46**	400.54	-11.25%
Wind power	**610.00**	–	Not applicable
Jiangsu Province			
Coal-fired	**378.06**	410.86	-7.94%
Combined Cycle	**661.52**	731.69	-9.59%
Wind power	**570.50**	568.33	0.38%
Shanghai			
Coal-fired	**385.59**	424.38	-9.14%
Combined Cycle	**899.62**	937.13	-4.00%
Chongqing			
Coal-fired	**376.92**	427.84	-11.90%
Combined Cycle	**649.74**	872.20	-25.51%
Zhejiang Province			
Coal-fired	**407.76**	460.76	-11.50%
Combined Cycle	**887.70**	1,278.17	-30.55%
PV	**1,076.50**	1,125.67	-4.37%
Hubei Province			
Coal-fired	**378.65**	439.98	-13.94%
Wind power	**610.00**	610.00	0.00%
Hydropower	**378.81**	376.60	0.59%
Hunan Province			
Coal-fired	**449.87**	480.55	-6.38%
Wind power	**610.00**	611.43	-0.23%
Hydropower	**404.19**	410.00	-1.42%
Jiangxi Province			
Coal-fired	**399.78**	439.7	-9.08%
Wind power	**610.00**	610.00	0.00%
Anhui Province			
Coal-fired	**351.24**	409.79	-14.29%
Wind power	**610.00**	–	Not applicable
Hydropower	**385.60**	392.89	-1.86%
Fujian Province			
Coal-fired	**348.95**	392.29	-11.05%
Guangdong Province			
Coal-fired	**448.36**	487.41	-8.01%
PV	**980.00**	–	Not applicable

Region/type of power generation	Average tariff rate (VAT inclusive) (RMB/MWh) 2016	2015	Change
Yunnan Province			
Coal-fired	**579.58**	311.78	85.89%
Wind power	**494.71**	–	Not applicable
Guizhou Province			
Wind power	**610.00**	–	Not applicable
Hainan Province			
Coal-fired	**420.72**	459.31	-8.40%
Combined Cycle	**672.26**	629.32	6.82%
Wind power	**609.78**	571.95	6.61%
Hydropower	**400.07**	399.78	0.07%
PV	**1,010.00**	–	Not applicable
Domestic total	**396.60**	443.26	-10.53%
SinoSing Power	**514.00**	625.88	-17.88%

Note: The tariff of combined-cycle power plants in Shanghai and Zhejiang consists of on-grid settlement price and capacity subsidy income.

Tax and levies on operations mainly consist of surcharges of value-added tax. According to relevant administrative regulations, these surcharges include City Construction Tax and Education Surcharges calculated at prescribed percentages on the amounts of the value-added tax paid. For the year ended 31 December 2016, the tax and levies on operations of the Company and its subsidiaries were RMB1.178 billion, representing an increase of RMB20 million from RMB1.158 billion for the same period of last year, of which the tax and levies on operations attributable to newly acquired entities and new generating units accounted for RMB14 million.

2.2 *Operating expenses*

For the year ended 31 December 2016, the total operating expenses of the Company and its subsidiaries was RMB94.259 billion, representing a decrease of 4.41% from the same period last year. The operating expenses in domestic operations of the Company decreased by RMB2.823 billion, or 3.19%, from the same period last year, of which the newly acquired entities and the new generating units accounted for RMB2.945 billion; the costs attributable to the existing entities decreased by RMB5.768 billion, which was primarily attributable to the decreased fuel costs for domestic operations in China.

The operating expenses from the operations in Singapore decreased by RMB1.522 billion, or 14.89%, from the same period last year, which was mainly due to the decline of fuel costs resulting from decreased natural gas price.

2.2.1 *Fuel costs*

Fuel costs account for the majority of the operating expenses for the Company and its subsidiaries. For the year ended 31 December 2016, fuel costs of the Company and its subsidiaries decreased by 4.43% to RMB56.618 billion from the RMB59.242 billion for the year ended 31 December 2015. The fuel costs from domestic operations of the Company and its subsidiaries decreased by RMB1.603 billion, which was primarily attributable to the decreased power generation in the domestic market. The fuel costs of the newly acquired entities and new generating units were RMB2.043 billion and the fuel costs of the existing generating units decreased by RMB3.646 billion from same period last year. Fuel costs in Singapore decreased by RMB1.022 billion from the same period last year, mainly due to decreased fuel costs arising from decreased natural gas prices. For the year ended 31 December 2016, the average price (excluding tax) of natural fuel coal consumed of the Company and its domestic subsidiaries was RMB376.30 per ton, representing a 2.73% increase from RMB366.30 per ton for the year ended 31 December 2015. The fuel cost per unit of power sold by the Company’s domestic power plants decreased by 1.76% to RMB170.62/MWh from RMB173.67/MWh in 2015.

2.2.2 *Maintenance*

For the year ended 31 December 2016, the maintenance expenses of the Company and its subsidiaries amounted to RMB4.343 billion, representing a decrease of RMB213 million from RMB4.556 billion for the year ended 31 December 2015. The maintenance expenses of the Company’s domestic operations decreased by RMB225 million compared to the same period last year. The maintenance expenses of operations in Singapore increased by RMB12 million compared to the same period last year.

2.2.3 *Depreciation*

For the year ended 31 December 2016, depreciation expenses of the Company and its subsidiaries increased by 2.80% to RMB14.816 billion, compared to RMB14.412 billion in the year ended 31 December 2015; the increase is mainly due to the expansion of the Company’s operations. The depreciation expenses of domestic operations increased by RMB397 million compared to the same period last year, of which the depreciation costs incurred by the newly acquired entities and new generating units was RMB605 million. The depreciation expenses of the operations in Singapore increased by RMB7 million compared to the same period last year.

2.2.4 *Labor*

Labor costs consist of salaries to employees and contributions payable for employees’ housing funds, medical insurance, pension and unemployment insurance, as well as training costs. For the year ended 31 December 2016, the labor costs of the Company and its subsidiaries amounted to RMB8.043 billion, representing an increase of RMB291 million from RMB7.752 billion for the year ended 31 December 2015. This is mainly attributable to labor costs of the newly acquired entities and new generating units, which were RMB164 million. Labor costs for Singapore operations increased by RMB14 million compared to the same period last year.

2.2.5 *Other operating expenses (including electricity power purchase costs and service fees paid to HIPDC)*

Other operating expenses include environmental protection expenses, land fee, insurance premiums, office expenses, amortization, Tuas Power's electricity power purchase costs, impairment losses, government subsidies and net losses on disposal of properties, plant and equipment. For the year ended 31 December 2016, other operating expenses (including electricity power purchase costs and service fees paid to HIPDC) of the Company and its subsidiaries was RMB10.439 billion, representing a decrease of RMB2.203 billion from RMB12.642 billion for the year ended 31 December 2015. The other operating expenses from the Company's domestic operations decreased by RMB1.669 billion; other operating expenses of the existing entities decreased by RMB1.650 billion compared to the same period last year. The impairment loss experienced a decrease of RMB1.886 billion compared to the same period last year.

Other operating expenses of the operations in Singapore decreased by RMB534 million compared to the same period last year. The electricity power purchase cost decreased by RMB523 million compared to the same period last year, which was largely due to the decreased price of electricity in retail business.

2.3 *Financial expenses*

Financial expenses consist of interest expense, bank charges and net exchange differences.

2.3.1 *Interest expenses*

For the year ended 31 December 2016, the interest expenses of the Company and its subsidiaries were RMB6.818 billion, representing a decrease of 14.20% from RMB7.946 billion for the year ended 31 December 2015. The interest expenses from the Company's domestic operations decreased by RMB1.157 billion. The interest expenses from the newly acquired entities and new generating units were RMB303 million and those incurred by the existing entities in China decreased by RMB1.460 billion, which is largely attributable to decreased benchmark interest rate of RMB. The interest expenses of Singapore operations increased by RMB29 million compared to the same period last year.

2.3.2 *Net exchange differences and bank charges*

For the year ended 31 December 2016, the Company and its subsidiaries recorded a net loss of RMB250 million in net exchange losses and bank charges, representing a net loss increase of RMB226 million compared with the net loss of RMB24 million for the year ended 31 December 2015, mainly due to the weakened exchange rate of RMB against U.S. dollar.

The operations in Singapore recorded net gains of RMB50 million from net exchange difference and bank charges, representing a decrease of RMB120 million from the net gains of RMB170 million for the year ended 31 December 2015, mainly due to the strengthened exchange rate of U.S. dollar against Singapore dollar.

2.4 Share of profits less losses of associates and joint ventures

For the year ended 31 December 2016, the share of profits less losses of associates and joint ventures was RMB1.299 billion, representing a decrease of RMB227 million from RMB1.526 billion from last year, mainly due to decreased profit of associates and joint ventures.

2.5 Income tax expenses

For the year ended 31 December 2016, the Company and its subsidiaries recognised income tax expense of RMB3.465 billion, representing a decrease of RMB2.234 billion from RMB5.699 billion for the year ended 31 December 2015. The income tax expenses for the domestic operations decreased by RMB2.445 billion primarily attributable to the decrease of pre-tax profit. The income tax expenses of the operations in Singapore increased by RMB211 million. It is mainly due to RMB204 million of income tax credit granted by Singapore government last year and no such tax credit was granted in the current year.

2.6 Net profit, net profit attributable to the equity holders of the Company and non-controlling interests

For the year ended 31 December 2016, the Company and its subsidiaries achieved a net profit of RMB10.348 billion, representing a decrease of RMB6.911 billion, or 40.04% from RMB17.259 billion for the year ended 31 December 2015; the net profit attributable to equity holders of the Company was RMB8.520 billion, representing a decrease of RMB5.132 billion from RMB13.652 billion for the year ended 31 December 2015.

The net profit attributable to equity holders of the Company from its domestic operations was RMB4.951 billion, mainly contributable to lowered on-grid tariff for coal-fired power generators administered by NDRC, reduced domestic power generation of the Company and increased volume of market power transactions. The net loss attributable to equity holders of the Company from its operations in Singapore was RMB240 million, representing an increase of RMB181 million from the same period last year. This was mainly due to commenced operation of many generators during the recent years, which led to the continued oversupply in the Singapore's power and natural gas market and subsequently continued reduction of power tariff and a marked drop in the profitability of the Company's overseas power generation business.

The Company's recorded net profit attributable to non-controlling interests decreased to RMB1.828 billion for the year ended 31 December 2016 from RMB3.607 billion for the year ended 31 December 2015, mainly attributable to reduced profit of the Company's non-wholly owned subsidiaries.

2.7 Comparison of financial positions

2.7.1 Comparison of asset items

As of 31 December 2016, consolidated total assets of the Company and its subsidiaries were RMB314.840 billion, representing an increase of 1.93% from RMB308.866 billion as of 31 December 2015; total assets of the domestic operations increased by RMB5.312 billion to RMB286.557 billion, including a net increase of RMB2.004 billion in non-current assets, which is mainly attributable to the capital expenditure on construction projects.

As of 31 December 2016, total assets of the operations in Singapore were RMB28.283 billion, representing an increase of RMB661 million as of 31 December 2015. Non-current assets increased by RMB568 million to RMB24.174 billion, primarily attributable to appreciation of Singapore dollar against RMB resulting in higher RMB value of goodwill, power generation license and other non-current assets.

2.7.2 Comparison of liability items

As of 31 December 2016, consolidated total liabilities of the Company and its subsidiaries were RMB212.653 billion, representing an increase of 2.65% from RMB207.173 billion as of 31 December 2015.

As of 31 December 2016, interest-bearing debts of the Company and its subsidiaries totaled RMB176.098 billion. The interest-bearing debts consist of long-term loans (including those maturing within a year), long-term bonds payable (including those maturing within a year), short-term loans, short-term bonds and financial leases payable. The interest-bearing debts denominated in foreign currencies amounted to RMB3.290 billion.

As of 31 December 2016, the total liabilities of the operations in Singapore were RMB15.205 billion, representing a decrease of 4.09% from RMB15.853 billion as of 31 December 2015, principally due to fair value changes of fuel swap contract.

2.7.3 Comparison of equity items

Excluding the impact of profit and profit appropriations, total equity attributable to the equity holders of the Company increased as of 31 December 2016, including a decrease of post-tax impact of RMB890 million arising from disposal of available-for-sale financial asset and fair value changes of available-for-sale financial assets held by the Company and its subsidiaries, a decrease of post-tax impact of RMB181 million arising from changes in other comprehensive income of the Company's investees accounted for under equity method, an increase of post-tax impact of RMB1.015 billion arising from fair value changes of cash flow hedge instruments, an increase of RMB540 million from translation difference of the financial statements of foreign operations.

Non-controlling interests as of 31 December 2016 increased by RMB1.368 billion.

2.7.4 Major financial position ratios

	2016	2015
Current ratio	**0.28**	0.27
Quick ratio	**0.23**	0.23
Ratio of liability to shareholders' equity	**2.47**	2.46
Multiples of interest earned	**2.84**	3.55

Formula of the financial ratios:

Current ratio = $\dfrac{\text{balance of current assets as of the year end}}{\text{balance of current liabilities as of the year end}}$

Quick ratio = $\dfrac{\text{(balance of current assets as of the year end – net inventories as of the year end)}}{\text{balance of current liabilities as of the year end}}$

Ratio of liabilities to shareholders' equity = $\dfrac{\text{balance of liabilities as of the year end}}{\text{balance of shareholders' equity (excluding non-controlling interests) as of the year end}}$

Multiples of interest earned = $\dfrac{\text{(profit before tax + interest expense)}}{\text{interest expenditure (inclusive of capitalized interest)}}$

The current ratio increased as of 31 December 2016 compared to that of 31 December 2015 mainly due to increase of current assets especially inventories and other current assets. The ratio of liabilities to shareholders' equity as of 31 December 2016 increased compared to that of 31 December 2015 mainly due to the increase in loans at the year end. The multiples of interest earned decreased mainly due to reduced pre-tax profit for the year ended 31 December 2016.

B. LIQUIDITY AND CASH RESOURCES

1. Liquidity

	2016 *RMB billion*	2015 *RMB billion*	Change %
Net cash provided by operating activities	**31.511**	42.363	-25.62
Net cash used in investing activities	**-17.650**	-33.015	-46.54
Net cash used in financing activities	**-13.602**	-14.141	-3.81
Currency exchange impact	**0.073**	0.033	122.01
Net increase/(decrease) in cash and cash equivalents	**0.332**	-4.760	–106.98
Cash and cash equivalents as at the beginning of the year	**7.478**	12.238	-38.90
Cash and cash equivalents as at the end of the year	**7.810**	7.478	4.44

For the year ended 31 December 2016, net cash provided by operating activities of the Company and its subsidiaries was RMB31.511 billion, representing a decrease of 25.62% from last year, mainly attributable to reduced operating revenue as a result of decrease of power generation and tariff. Net cash provided by operating activities in Singapore was RMB772 million. The net cash used in investing activities was RMB17.650 billion, representing a decrease of 46.54% from last year, mainly due to consideration paid for newly acquired entities in 2015. The net cash used in financing activities was RMB13.602 billion, representing a decrease of 3.81% from last year. As of 31 December 2016, the cash and cash equivalents of the Company and its subsidiaries denominated in RMB, Singapore dollar and U.S. dollar were RMB6.620 billion, RMB870 million and RMB320 million, respectively.

As of 31 December 2016, net current liabilities of the Company and its subsidiaries were approximately RMB93.230 billion. Based on the Company's proven financing record, readily available banking facilities and sound credibility, the Company believes it is able to duly repay outstanding debts, obtain long-term financing and secure funding necessary for its operations. The Company has also capitalized on its good credit record to make short-term loans at relatively lower interest rates, thus reducing its interest expenses.

2. Capital expenditure and cash resources

2.1 Capital expenditure on infrastructure construction and renovation projects

The capital expenditures for the year ended 31 December 2016 were RMB20.285 billion, mainly for construction and renovation of projects, including RMB1.558 billion for Rudong Baxianjiao Offshore Wind Power project, RMB878 million for Beijing Cogeneration project, RMB594 million for Hainan Power project, RMB587 million for Xianrendao Cogeneration project, RMB558 million for Jiangxi Clean Energy project, RMB537 million for Guilin Gas Distributed Energy project, RMB534 million for Tongwei Wind Power project, RMB520 million for Suzhou combined cycle project, RMB493 million for Taiyuan Combined Cycle project, RMB467 million for Mianchi Cogeneration project, RMB458 million for Yuhuan project, RMB448 million for Luoyuan Power project, RMB423 million for Dezhou project, RMB405 million for Shang'an project, RMB401 million for Qinbei Power project, RMB384 million for Nanjing Cogeneration project, RMB348 million for Wuhan Power project, RMB325 million for Jieshan Wind Power project, RMB323 million for Changxing project, RMB299 million for Luoyang Power project, RMB274 million for Weihai Power project, RMB267 million for Guanyun Cogeneration project, RMB259 million for Shidongkou Power project, RMB252 million for Yingcheng Cogeneration project, RMB239 million for Fuzhou project. The capital expenditures of the Company's operations in Singapore were RMB151 million. The expenditures on other projects were RMB8.303 billion.

The above capital expenditures are sourced mainly from internal capital, cash flows provided by operating activities and debt financing.

The Company expects to have significant capital expenditures in the next few years. During the course, the Company will make active efforts to improve project planning process on a commercially viable basis. The Company will also actively develop newly planned projects to pave the way for its long-term growth. The Company expects to finance the above capital expenditures through internal capital, cash flows provided by operating activities, and debt and equity financing.

The cash requirements, usage plans and cash resources of the Company are as following:

(Unit: RMB100 million)

Capital Expenditure Project	Capital Expenditure Plan for 2017	Cash resources arrangements	Financing costs and note on use
Thermal power projects	58.74	Including internal cash resources and bank loans	Within the floating range of benchmark lending interest rates of PBOC
Hydropower projects	0	Including internal cash resources and bank loans	Within the floating range of benchmark lending interest rates of PBOC
Wind power projects	103	Including internal cash resources and bank loans	Within the floating range of benchmark lending interest rates of PBOC
Coal mining projects	0	Including internal cash resources and bank loans	Within the floating range of benchmark lending interest rates of PBOC
Photovoltaic power projects	13.50	Including internal cash resources and bank loans	Within the floating range of benchmark lending interest rates of PBOC
Others	0	Including internal cash resources and bank loans	Within the floating range of benchmark lending interest rates of PBOC
Technology renovation	51.83	Including internal cash resources and bank loans	Within the floating range of benchmark lending interest rates of PBOC

2.2 *Cash resources and anticipated financing costs*

The Company expects to finance its capital expenditure and acquisition costs primarily with internal capital, cash flow provided by operating activities, and debt and equity financing.

Good operating results and sound credit status provide the Company with strong financing capabilities. As of 31 December 2016, the undrawn banking facilities available to the Company and its subsidiaries amount to approximately RMB262.8 billion, which are granted by Bank of China, China Construction Bank and Industrial and Commercial Bank of China, etc.

The Company completed issuances of unsecured short-term notes in two installments on 4 August 2016 and 14 October 2016, each at a principal amount of RMB3 billion with nominal annual interest rates of 2.5% and 2.6%, respectively. Each installment of the notes was denominated in RMB, issued at par value, and would mature in 365 days from the value date.

The Company completed issuances of unsecured super short-term notes in nine installments on 3 March, 9 March, 23 March, 8 April, 20 April, 26 May, 13 July, 9 November, and 1 December 2016, at a principal amount of RMB2 billion, RMB2 billion, RMB2 billion, RMB4 billion, RMB3 billion, RMB3 billion, RMB4 billion, RMB2 billion and RMB2 billion with nominal annual interest rates of 2.59%, 2.48%, 2.48%, 2.42%, 2.62%, 2.73%, 2.50%, 2.79% and 3.45%, respectively. Each installment of the notes was denominated in RMB, issued at par value, and would mature in 270 days from the value date.

The Company completed issuance of one installment of unsecured super short-term note on 16 November 2016 at a principal amount of RMB3 billion with a nominal annual interest rate of 2.98%. The note was denominated in RMB, issued at par value, and would mature in 180 days from the value date.

The Company completed issuances of unsecured corporate notes in two installments on 8 June 2016 at a principal amount of RMB3 billion and RMB1.2 billion with nominal annual interest rates of 3.48% and 3.98%, respectively. Each installment of the notes was denominated in RMB, issued at par value, and would mature in five years and ten years, respectively, from the value date.

As of 31 December 2016, short-term loans of the Company and its subsidiaries totalled RMB57.669 billion (2015: RMB49.883 billion). Loans from banks were charged at interest rates ranging from 2.77% to 4.35% per annum (2015: 3.19% to 5.60%).

Short-term bonds payable by the Company and its subsidiaries were RMB27.311 billion (2015: RMB19.348 billion).

As of 31 December 2016, long-term loans (including those maturing within a year) of the Company and its subsidiaries totalled RMB74.551 billion (2015: RMB78.379 billion), including RMB denominated borrowings of RMB58.876 billion (2015: RMB62.441 billion), U.S. dollar denominated loans of approximately US$410 million (2015: US$473 million), Euro denominated loans of approximately €39 million (2015: €49 million), Singapore dollar denominated loans of S$2.581 billion (2015: S$2.697 billion), and Japanese yen denominated loans of ¥2.703 billion (2015: ¥2.812 billion). Among them, all loans denominated in US dollar and Singapore dollar were floating rate, and loans denominated in all other foreign currencies were fixed rate. As of 31 December 2016, long-term bank loans of the Company and its subsidiaries had interest rates ranging from 0.75% to 5.65% per annum (31 December 2015: 0.75% to 6.55%).

The Company and its subsidiaries will closely monitor any change in the exchange rate and interest rate markets and cautiously assess the currency rate and interest rate risks.

Combining the current development of the power generation industry and the growth of the Company, the Company will make continuous efforts to not only meet cash requirements of daily operations, constructions and acquisitions, but also establish an optimal capital structure to minimize the cost of capital and manage financial risks through effective financial management activities, thus maintaining sustainable and stable returns to the shareholders.

2.4 *Other financing requirements*

The objective of the Company is to bring steadily growing returns to shareholders in the long run. In line with this objective, the Company follows a proactive, stable and balanced dividend policy. In accordance with the profit appropriation plan of the board of directors of the Company (subject to the approval at annual general meeting) for 2016, the Company expects to pay a cash dividend of RMB4.408 billion.

2.5 *Maturity profile of loans and bonds*

(RMB billion)

Maturity Profile	**2017**	**2018**	**2019**	**2020**	**2021**
Principal amount planned for repayment	97.530	16.090	13.203	9.221	9.407
Interest amount planned for repayment	5.545	3.150	2.443	1.755	1.386
Total	103.075	19.240	15.646	10.976	10.793

Note: The amount of principle to be paid in 2017 is relatively large because this includes expected repayment of short-term loans and short-term bonds.

C. LONG-TERM DEVELOPMENT STRATEGY AND PLANNING

The Company is committed to innovation, coordination, green, open and shared development in line with China's energy production and consumption reforms, taking initiatives to adapt to new norm, respond to new challenges, follow the objective to establish first-class company with international competitiveness, focus on improving the quality and performance of its development, and seek to accelerate transformation and upgrading. The Company will also put in place a new mechanism under the principle that management shall be centered on competitiveness improvement, operations shall be centered on customers, development shall be centered on market demands, so as to strengthen the strategic leadership and continuously improve its core competitiveness. The Company aims to consolidate its leading position in the conventional energy sector, speed up the new energy development, improve the synergy within the industry, expand the sales service region, accelerate the international layout, digitize Huaneng International, realize the all-around improvement of the Company's operating results, quality performance and corporate vitality, and build the Company into an internationally leading public power producer with standardized management, advanced technologies, energy saving and environment-friendly, reasonable operating structure, outstanding operations, sound corporate governance and superior market value.

D. TREND ANALYSIS

It is predicted by China Electricity Council that in 2017, total electricity consumption nationwide will grow by approximately 3%.

2017 will see newly installed generating capacity of approximately 110 million kW, including new non-petrochemical energy capacity of 60 million kW; the installed generating capacity nationwide is expected to reach 1.75 billion kW, representing 6% increase from 2016, of which non-petrochemical energy capacity will reach 660 million kW, increasing its percentage to approximately 38% in the total installed capacity.

2017 is expected to witness a generally abundant power supply in China with redundant generating capacities in certain regions. Specifically, Northern region is expected to have a balanced supply and demand power market; Central, Eastern, and Southern regions will experience generally sufficient power supply with abundant generating capacities in many provinces; Northeast and Northwest regions will see a market of generally redundant power supply with abundant capacities in some provinces. In 2017, the annual power generation utilization hours nationwide are expected to be 3,600 hours, and utilization hours of thermal generating units are estimated to reduce to 4,000 hours.

According to the Center for Forecasting Science of Chinese Academy of Sciences, thermal generating units are expected to use less coal in 2017 than in 2016 as a result of the government policy to reduce production capacities in the coal sector and a weakened power market in China. Total coal consumption is expected to experience a year-on-year decrease of 3% in 2017, while excessive coal supply will continue due to the generally weak-supply-and-weak-demand and structural-oversupply situation nationwide. Railway transport and air freight capacity will further loosen. Considering the effect of RMB exchange rate and a gradually stabilized domestic coal market, less coal may be imported than in 2016 while coal imports are expected to have certain impact on domestic coal price. The Company estimates that the coal price in 2017 will gradually stabilize after fluctuation within a narrow range.

E. PERFORMANCE OF SIGNIFICANT INVESTMENTS AND THEIR PROSPECTS

The Company acquired 25% equity interest in Shenzhen Energy Group for RMB2.39 billion on 22 April 2003. In 2011, Shenzhen Energy Group divided into a remainder company of the same name and a new company Shenzhen Energy Management Company ("SE Management"), and the Company holds 25% equity interests in each of the two successors. The Company acquired 200 million shares from Shenzhen Energy Corporation ("Shenzhen Energy"), a subsidiary of Shenzhen Energy Group, in December 2007. Shenzhen Energy allotted shares with its capital surplus in 2011. In February 2013, Shenzhen Energy merged SE Management through the combination of directional seasoned offering and cash payment to the shareholders of SE Management, Shenzhen State-owned Assets Administration Commission and the Company. After the merger, the Company directly held 661 million shares of Shenzhen Energy, representing 25.02% of its equity interests. In 2016, Shenzhen Energy distributed two shares of stock dividend out of every 10 shares to its shareholders, and therefore the Company held 992 million shares of Shenzhen Energy by 31 December 2016. These investments brought a net profit attributable to the equity holders of the Company of RMB435 million for the Company for the year ended 31 December 2016 under IFRS. This investment is expected to provide steady returns to the Company.

The Company held 60% direct equity interest in Sichuan Hydropower as of 31 December 2006. In January 2007, Huaneng Group increased its capital investment in Sichuan Hydropower by RMB615 million, thus reducing the Company's equity interest in Sichuan Hydropower to 49% and making Huaneng Group the controlling shareholder of Sichuan Hydropower. This investment brought a net profit attributable to the equity holders of the Company of RMB85 million for the year ended 31 December 2016 under IFRS. This investment is expected to provide steady returns to the Company.

F. EMPLOYEE BENEFITS

As of 31 December 2016, the Company and its subsidiaries had 42,210 employees within and outside the PRC. The Company and its subsidiaries provide employees with competitive remuneration and linked such remuneration to operating results to provide incentives for the employees. Currently, the Company and its subsidiaries do not have any stock or option based incentive plan.

Based on the development plans of the Company and its subsidiaries and the requirements of individual positions, together with consideration of specific characteristics of individual employees, the Company and its subsidiaries tailored various training programs for their employees on management, technology and the skills. These programs enhanced the comprehensive skills of the employees.

G. GUARANTEE FOR LOANS AND RESTRICTED ASSETS

As of 31 December 2016, the Company provided guarantees of approximately RMB12.379 billion for the long-term bank loans of Tuas Power.

As of 31 December 2016, the details of secured loans of the Company and its subsidiaries were as follows:

(1) As of 31 December 2016, short-term loans of RMB126 million represented the notes receivable that were discounted with recourse. As these notes receivable had not yet matured, the proceeds received were recorded as short-term loans.

(2) As of 31 December 2016, long-term loans of RMB2.902 billion of the Company and its subsidiaries were secured by certain property, plant and equipment with net book value of approximately RMB3.105 billion.

(3) As of 31 December 2016, long-term loans of approximately RMB9.032 billion were secured by future electricity revenue of the Company and its subsidiaries.

As of 31 December 2016, the restricted bank deposits of the Company and its subsidiaries were RMB71 million.

As of 31 December 2016, the property, plant and equipment leased under finance lease of the Company and its subsidiaries with net book value amounted to RMB1.763 billion.

H. ACCOUNTING STANDARDS HAVING MATERIAL IMPACT ON THE COMPANY'S FINANCIAL STATEMENTS

For the accounting standards that have a material impact on the Company's financial statements, please refer to the Note 2 to the financial statements prepared in accordance with IFRS.

I. IMPAIRMENT SENSITIVITY ANALYSIS

1. Goodwill impairment

The Company and its subsidiaries conducts impairment test on each individually recognised goodwill at the end of each year. In 2016, the management recognized no goodwill impairment based on the impairment assessment.

For goodwill allocated to CGUs in the PRC, changes of assumptions in tariff and fuel price could have affected the results of goodwill impairment assessment. As at 31 December 2016, if tariff had decreased by 1% or 5% from management's estimates with other variables constant with the expectations, the Company and its subsidiaries would have to recognize impairment against goodwill by approximately RMB176 million and RMB1,043 million, respectively. If fuel price had increased by 1% or 5% from the management's estimates with other variables constant with the expectations, the Company and its subsidiaries would have to recognize impairment against goodwill by approximately RMB37 million and RMB899 million, respectively.

2. Impairment of other non-current assets

The Company and its subsidiaries will test its property, plant and equipment, land use rights and mining rights suffered any impairment whenever an impairment indication exists.

In 2016, impairment losses for certain property, plant and equipment and land use rights of approximately RMB1,064 million and RMB52 million have been recognized, respectively. Factors leading to the impairment of operating projects primarily included lower utilization hours and tariff of two coal-fired power plants as a result of over supply of electricity in two provinces, as well as low utilization hours of a hydropower plant as a result of low level of water inflow.

Changes of assumptions in tariff and fuel price will affect the result of property, plant and equipment, land use rights and mining rights impairment assessment. As at 31 December 2016, if tariff had decreased by 1% or 5% from management's estimates with other variables constant with the expectation, the Company and its subsidiaries would have to further recognise impairment against property, plant and equipment and land use rights by approximately RMB92 million and RMB779 million, respectively; if fuel price had increased by 1% or 5% from the management's estimates with other variables constant with the expectations, the impairment against property, plant and equipment, land use rights and mining rights of the Company and its subsidiaries would decrease by approximately RMB8 million and RMB38 million, respectively.

J. RISK FACTORS

1. Risks relating to power market

Due to the distribution characteristics of the Company's coal-fired power generating units and the gradual development of power market reforms, the previous market competition pattern will be further affected. All above factors will have a significant impact on the power generation growth of the Company.

The Company will further implement various government policies and improve its power supply pattern, strengthen its efforts in analyzing and studying relevant policies and conditions of power market, design effective marketing strategies to respond to market change, and make efforts to effectively participate in both market transactions and the transactions subject to government plans. By leveraging strengths on efficiency, energy saving and environment protection of its generating units, the Company will take initiatives to participate in various transactions, maintain and strive to expand market share, effectively increase equipment utilization hours and strictly control the risks in electricity market.

2. Risks relating to electricity tariff

With the gradually relaxed control of planned power generation, continuously deepened market competition and policies behind changes of coal price, the Company's electricity tariff faces reduction pressure.

The Company will closely monitor relevant government policies and power market reform development, strengthen communication with central and local pricing authorities, actively call for continuous improvement of the mechanism of coal-electricity price linkage, and strongly support the government to establish a reasonable, fair and regulated market environment. The Company will also strictly implement state tariff policies to seek timely utilization of the policies regarding environmental protection tariff as well as standard tariffs for the electricity generated by newly operated generating units are timely put in place.

3. Risks relating to environmental protection policies

In 2016, the Action Plan on Air Pollution Prevention and Treatment, Action Plan of Energy Saving, Emission Reduction, Upgrading and Transformation (2014-2020), and Target Missions for Central Generating Enterprises in Energy Saving, Emission Reduction, Upgrading and Transformation (2015), Integrated Reform Plan for Promoting Ecological Progress, as well as the new Environmental Protection Law came gradually into force in China. National standards for energy saving environmental protection are increasingly higher, environmental protection restrictions for energy development are further tightened, which will increase the energy saving and transformation costs of the coal-fired generating sets which account for a high percentage of the Company's installed capacity.

To respond to the state's proposition actively, the Company diligently promoted environmental protection projects focused on ultra-low emission renovation to coal-fired generating units. By the end of 2016, most coal-fired generating units had completed the ultra-low emission renovation, of which all generating units of 21 subsidiaries had met the ultra-low emission standards and all subsidiaries in five regions (i.e. Northern China, etc.) had completed the renovation projects.

4. Interest rate risks

The interest-bearing debts of the Company are mostly denominated in RMB. Fluctuations of interest rates applicable to RMB loan contracts will directly affect the company's debts cost. The monetary policy of PBOC will be more neutral and prudent in 2017. With the anticipation of raising interest rates of U.S. dollar, the likely interest rate hike of U.S. dollar will bring about certain impact on our U.S. dollar debt costs, which is not expected to have material adverse effect due to its small percentage in the overall debt costs of the Company. In the Singapore capital market, the SOR interest rate will be influenced by increased U.S. dollar lending rates as well as fluctuated exchange rate of Singapore dollar, which will bring uncertainties to financing costs of Tuas Power.

With close watch on changes in domestic and overseas capital markets, the Company will make reasonable financing arrangements, explore new financing methods, and strive to control financing costs subject to the satisfaction of funding requirements, and strive to control risks of foreign currency interest rate by RMB debt replacement and interest rate swap and other methods.

5. Risks relating to coal market

In 2017, China will further the "Supply Side" reform of the coal market, which will bring certain degree of risks to the fuel cost control. Fluctuation of exchange rate of RMB and change of coal policies of Indonesia and other major coal export countries will also bring uncertainties to the coal import. On the other hand, with the issuance of Notice on Distributing the Memorandum of Stabilizing the Abnormal Fluctuations of Coal Price, Chinese government has established early warning mechanism monitoring price abnormal fluctuation, and make clear that the green range of coal price is between RMB500 to RMB570 per ton. These measures are expected to significantly reduce the possibility of excessive fluctuation of coal price. In 2017, the coal supply and price situations will gradually return to normal.

The Company will closely monitor the changes in policies and coal market, enhance its cooperation with major competent mine operators, continuously explore new sourcing channels, conduct bidding of existing commodities, strengthen the refining management of the fuel and strive to control fuel costs.

CORPORATE GOVERNANCE REPORT

The Company has been consistently stressing the importance of corporate governance. Through years of exploration and practice, it has gradually built up a sound and regulated corporate governance structure and an effective system of rules that caters for the development of the Company. The Company insists on adopting the principle of "maximizing the benefits of the Company and all shareholders" as the starting point and treats all shareholders fairly in order to strive for the generation of long-term, stable and growing returns for shareholders.

The Company has complied with the provisions of the Corporate Governance Code in Appendix 14 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") during this Reporting Period. In 2016, in order to fully implement the requirements of the Hong Kong Stock Exchange's Guidelines on Environmental, Social and Governance Reporting, the Company attached great importance to organizing and arranging the preparation and disclosure, and the Environmental, Social and Governance Report with good quality was finished well on time, which further enhanced the good reputation of the Company in the capital market. The Company's Environmental, Social and Governance Report for the year 2016 will be published on the website of the Company and the website of the Hong Kong Stock Exchange.

(a) Corporate Governance Practices

In recent years, the Company adopted the following measures to strengthen corporate governance and to enhance the Company's operation quality:

(1) Enhancing and improving corporate governance

Apart from complying with the provisions of the applicable laws, as a public company listed in three markets both domestically and internationally, the Company is subject to the regulations of the securities regulatory authorities of the three listing venues and the supervision of investors at large. Accordingly, our fundamental principle is to adopt a corporate governance structure that balances and coordinates the decision-making powers, supervisory powers and operating powers, acting with honesty and integrity, complying with the law and operating in accordance with the law.

Over the past years, the Board of the Company has formulated and implemented such various rules as the Rules of Procedures for General Meetings, the Rules of Procedures for the Board Meetings; the Rules of Procedures for the Supervisory Committee Meetings, the Detailed Rules on the Work of the General Manager, the Terms of Reference of the Strategy Committee under the Board of Directors, the Terms of Reference of the Audit Committee under the Board of Directors, the Terms of Reference of the Nomination Committee under the Board of Directors, the Terms of Reference of the Remuneration and Appraisal Committee under the Board of Directors, and the System on Work of Independent Directors, the System on Work of Independent Directors, on the Annual Report and the Working Guidelines on Annual Report for the Audit Committee etc.. A standardized and optimized corporate governance structure has been gradually formed, and an effective mechanism with a good match for the Company's needs in its development has been established and further improved.

Aiming to further enhance its corporate governance, the Company adopted the Board Member Diversity Policy (the "Diversity Policy"). The Diversity Policy consists of seven parts, namely Purpose, Significance, Representation of Policy, Measurable Targets, Monitoring and Reporting, Audit Policy and Disclosure of the Policy. Up to now, the Board of Directors of the Company consists of 15 people, including five Independent Directors. The members of the Board of Directors have diversified characteristics in terms of gender, age, culture and educational background, professional experience, skills and knowledge, which provides guarantee for the efficient decision-making of the Board and the improvement of the Company's operation quality.

The Board takes joint responsibility for the corporate governance of the Company. During the Reporting Period, the Board has included the following in its scope of powers and duties:

- Formulating and reviewing the Company's corporate governance policy and general rules, and making such amendments as it deems necessary to such policy and rules in order to maintain the effectiveness thereof;
- Reviewing and monitoring the training and sustained professional development of the Company's directors and senior management;
- Reviewing and monitoring the Company's policy and general rules for complying with laws and regulations;
- Formulating, reviewing and monitoring the codes of conduct and compliance handbook (if any) applicable to the Company's directors and employees; and reviewing the Company's compliance with the Code and the disclosures made in the Corporate Governance Report.

(2) Enhancing and improving the information disclosure system

The Company has been stressing the importance of public information disclosure. The Company has established the Information Disclosure Committee comprised of managers of various departments and headed by the Vice President and the Chief Accountant, which is responsible for examining the Company's regular reports. The Company has implemented the system of holding regular information disclosure meetings every Monday, chaired by the Vice President and the Chief Accountant who will report on the Company's important matters of the week, thereby warranting the Company's performance of the relevant information disclosure obligations. The Company has successively formulated and implemented the relevant information disclosure system, and has made timely amendments thereto according to regulatory requirements. The current systems which have been implemented include the Measures on Information Disclosure Management, the Measures on Connected Transactions Management, the Measures on Investor Relations Management, the Detailed Rules on the Work of the Information Disclosure Committee, the Management Measures of Insider Information, the Annual Report Information Disclosure Significant Errors Accountability Regulations and the Rules on the Management of the Shares held by the Directors, Supervisors and Senior Management of Huaneng Power International, Inc..

Relevant departments of the Company compiled answers (and subsequent updates) to questions regarding the hot topics of market concerns, the Company's production, operation and operating results in a timely manner, which shall become the basis of external communication of the Company after being approved by the Company's management and the authorized representatives of the Information Disclosure Committee. Also, the Company engages professional personnel to conduct specialized training for the staff of the Company responsible for information disclosure on an irregular basis in order to continuously enhance their level of professionalism.

(3) Regulating financial management system

In 2016, the Company continued to carry out various detailed work on the preparation of financial reports, standardized financial operation and internal control under the principle of acting with honesty and integrity and treating shareholders in a fair manner. The credibility of a listed company, to a large extent, relates to the quality of the preparation of financial statements and a regulated operation of financial activities. In order to regulate its financial management, the Company has completed a large amount of specific and detailed work, including:

1. In order to strictly implement the accounting regulations, accounting standards and accounting systems, to strengthen accounting and accounts supervision, and to truthfully and fairly reflect the financial position, operating results and cash flow, the Company has formulated the Measures on Accounting, the Provisions on Construction Accounting, the Provisions on Fixed Assets Management, Lists of Fixed Assets and the Provisions on Cost Management. The Company's Board, Supervisory Committee and the Audit Committee have examined the Company's financial reports on a regular basis and the Company has fulfilled the requirements of making the Chairman, the President and the Chief Accountant responsible for the authenticity and completeness of the financial reports.

2. In order to safeguard the independence of the listed company, the Company realized the separation of personnel in organizational structure and specifically established the relevant institution responsible for the entrusted business so that the Company may realize the complete separation of the listed company and the controlling shareholder in terms of personnel, assets and finances according to the laws and regulations of the State and the requirements of regulatory rules.

3. In regard to fund management, the Company has successively formulated a number of management measures including the Measures on Financial Management, the Measures on the Management of Funds Receipts and Expenses, the Measures on the Appraisal of Management of Funds Receipts and Expenses, the Measures on Use and Management of Funds in Large Sums by the Company, the Measures on the Management of Bills of Exchange, the Measures on Management of Fund Raising, the Measures on the Management of Derivative Financial Product Transactions, the Measures on the Management of External Guarantee and the Measure on the Management of Regulating Fund Transfers with Related Parties. The Company's Articles of Association also set out provisions relating to loans, guarantees and investment. In the annual reports of the Company over the previous years, the Company has engaged registered accountants to conduct an examination on the use of funds by the controlling shareholder and other related parties and issue individual statements according to the requirements of the China Security Regulation Commission ("CSRC") and the Shanghai Stock Exchange ("SSE"), and there has not been any violation of rules relating to the use of funds. Moreover, the Company also conducted quarterly checking and clearing with related parties in relation to the operational fund transfers in order to ensure the safety of funds.

(4) Risk Management and Internal Control

The Board of Directors attaches great importance to management on enterprise risk and internal control, thus the Company establishes a system of risk monitoring & internal control, and keeps optimizing it to ensure its effectiveness, with a hope to create value for the Company, promote the realization of business development goals, and protects the interests of shareholders and the company assets.

1. Risk Management

To enhance its anti-risk ability and promote the sustainable development, the Company has formulated the "Comprehensive Approach of Risk Management", which requires in every aspect of the management and operation the basic risk control procedures must be applied. Meanwhile, a comprehensive risk management system is established (including organization, systems, procedures and methodologies, etc.) and the Company has cultivated a good risk management culture and carried out the risk control throughout the Company.

The Company headquarters and all management units have set up a risk management function with a clear definition of their respective responsibilities, and has established a smooth risk reporting and early warning mechanism, so that risk management is carried out throughout the daily work.

Each functional department of the Company is responsible for risk analysis, and they will carry out regular risk assessment and submit reports to the Company's Risk Management Leading Group Office. The Risk Management Leading Group Office is responsible for collecting information of risks, identifying risks, risk evaluation, and preparing the Company's periodic risk assessment report and summarizing recommendations on preventive measures for risk control. The Company's Risk Management Leading Group, as the enforcement body, will manage the Company and its subordinate units to carry out the overall risk control, including but not limited to examining and approving on the general objectives, the system & procedures, working plan and reporting of the Company's overall risk management. The Strategy Committee of the Board of Directors is responsible for the decision-making of the Company's overall risk management and listens regularly to the relevant reports, and its responsibilities include but not limited to the examining and approving on the annual report on the overall risk management, the assessment of the risk management and the assessment of its effectiveness and the risk assessment report for significant decisions. The Board of Directors has an Audit Committee to identify and evaluate the fraud risk of senior management and the board of directors and to form an independent fraud risk assessment report.

In 2016, the Strategy Committee of the Board of Directors held two meetings in total to discuss and approve the Company's Overall Risk Management Report for the Year 2016 and the Company's Risk Analysis and Assessment Report for the Half-Year of 2016. In line with the amendments to the Code, the Company revised the Working Rules of the Strategy Committee of the Board of Directors and further clarified the right of the Strategic Committee for decision-making on the overall risk management of the Company and emphasized the responsibilities of the Strategic Committee for the Company's risk management. At the same time, the Company's Approach of Risk Management has been revised thoroughly so as to further consolidate the system basis of the Company's risk management and provide the system guarantee for the Company's overall risk management. During the Reporting Period, the Company has complied with the Corporate Governance Code and the relevant provisions on risk management and internal control.

In 2016, with the joint efforts of the whole company on risk identification, risk assessment, risk prevention and control and implementation of relevant measures, the risk management get more standardized in daily work with continuous improvement, and the company has generally achieved positive results in the prevention and control over major risks and other risks, and minimized the impact of risk on business development.

2. *Internal Control*

The overall objective of the Company's internal control work is to promote the implementation of corporate strategies, in particular, to provide reasonable assurance for the compliance of the Company's operation and management with applicable laws and regulations, the security of the Company's assets and the authenticity and completeness of the Company's financial reports and relevant information, so as to promote the overall improvement in efficiency and effectiveness of operations.

The Company has developed sound system rules for five types of operations including development and construction, production and operation, financial assets, comprehensive management and supervision and evaluation, thereby achieving systematic management. In addition, the Company fully collated the potential internal and external risks and various business processes and compiled the Internal Control Handbook, and in the fifth edition of the Internal Control Handbook it sets out detailed provisions for 23 business processes (including income, procurement of materials, fuel management, fund management) and 19 soft elements (including organizations structure, human resources management, anti-embezzlement, risk management) from five perspectives (control environment, risk evaluation, control process, information and communication, monitoring), fully describes the policy and principles of the Company, clarifies the working procedure and responsibility of each job position in the Company and regulates the standard procedure for dealing in the businesses of the Company, thus setting out clear procedures for its system. The Company has also complied the Internal Control Assessment Handbook to help implement the three-level management system for internal control assessments as well as internal control assessment mode which integrates routine assessments with focused surveillance, with a view to standardize the procedures and assessment method of internal control assessments and regulate the procedures and standards for deficiency definition, striving to standardize and regulate its internal control assessments. Each year, the Company evaluates the applicability and effectiveness of the above systems and makes regular modifications and improvements to them as part of the dynamic maintenance of the internal control system.

The Company has defined 48 items of risks related to 16 categories of business, including strategic management, production and operation, legal affairs, financial management, capital operation, security assurance, energy saving, infrastructure projects and compliance, and assigned risk control to business units at all levels. The Internal Control Handbook provides for control measures against the risks identified and defines key control points through which the responsibility of internal control is allocated to each working position, so that all the staff members of the Company become a part of the internal control construction force. The Company adopts a routine assessment system, where internal control assessors are designated to all the departments and subordinate entities to conduct monthly internal control assessments. It also builds up three levels of assessments (the Company, the regional branches, the grass roots units) through the internal control management system to track the implementation of control in real time. During the year, the Company has successfully completed the 12-month routine internal control assessments and examined the high risk entities based on the risk evaluation results, thereby effectively safeguarding and promoting the sustained and healthy development of the Company's businesses and ensuring the sound and stable operation of the internal control system. Taking into account the new requirements on and changes in its business and management as well as its advanced experience and common issues accumulated over the years, each year the Company organizes all-around multi-level internal control trainings to deliver a full-range propaganda on the philosophy and knowledge for internal control, which helps building up the internal control environment inside the Company.

The internal control management department, the internal audit department and the external auditors made regular report separately on their internal control work to the Audit Committee of the Board of Directors, which ensures the sustained and effective operation of the internal control system. The Company improved constantly the internal control examination system, formulated the "Regulations on the Internal Control Review and Evaluation", and conducted regularly the assessment and comprehensive evaluation on the internal control targets, and the results of the comprehensive evaluation are announced throughout the Company, and appraisal results are timely published to draw all levels' attention to the quality of the internal control work so as to achieve effectively the objective of strengthening management through internal control.

Based on a comprehensive assessment, the Board of Directors consider that, as of 31 December 2016, the Company has maintained effective internal control over financial reporting in all material respects in accordance with the Fundamental Regulatory Guidelines on Enterprise Internal Control (and its guidance) and Section 404 of the Sarbanes-Oxley Act. Besides, the Company has not found any material defect in non-financial reporting about internal control.

During the Reporting Period, the Board of Directors has assessed the risk management and internal control system of the Company and its subordinate enterprises and reviewed their effectiveness and found neither violation of laws, regulations and rules, nor insufficiency or any major mistake in compliance monitoring and risk management. The Board considers that the risk management and internal control systems of the Company and its subordinate enterprises are effective.

The above systems and measures have formed a sound management framework for our production and operation. They ensure the ongoing standardization of operations of the Company and gradual enhancement of corporate management quality. In 2016, the Company won "the Most Investment Value Award for Listed Companies" and Mr. Du Daming, as the vice general manager and the secretary of the Board of Directors, was awarded "the Best Board Secretary" in the China Securities Golden Bauhinia Awards Competition. In addition, the Company's 2015 annual report of H shares won Gold Award in the 30th International ARC Awards Competition. These honours helped improve further the corporate image of the Company in the domestic and overseas capital markets.

(b) Securities Transactions by Directors

As the Company is listed in three jurisdictions, the Company has strictly complied with the relevant binding provisions on securities transactions by directors imposed by the regulatory authorities of the US, Hong Kong and China and we insist on the principle of complying with the strictest clause, which is, implementing the strictest clause among three places. We have adopted a set of standards not less exacting than the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix 10 to the Listing Rules as the model code for securities dealings by Directors of the Company, namely, Management Rules regarding the Company's Securities Information and Trading. The Company has also formulated and implemented the Management Rules in respect of the Shares of the Company held by the Directors, Supervisors and Senior Management of Huaneng Power International, Inc. The model codes for the trading of securities by the Company's Directors include: trading the Company's shares strictly in accordance with the stipulations under the Company Law and relevant regulations, prohibiting those who are in possession of securities transaction insider information using insider information in securities trading; and setting out detailed rules for those who are in possession of insider information. Following a specific enquiry on all the Directors and senior management of the Company, all the Directors and senior management currently do not hold any shares in the Company and there is no material contract in which the directors and senior management directly or indirectly have material interests.

(c) Board of Directors

The Company's Board of Directors comprised 15 members. In the Eighth Session of the Board of Directors, Mr. Cao Peixi is the Chairman, and Mr. Guo Junming is the Vice Chairman of the Board; the Executive Directors of the Company are Mr. Cao Peixi, Mr. Liu Guoyue (President) and Mr. Fan Xiaxia (Vice President); the Non-executive Directors are Mr. Guo Junming, Mr. Li Shiqi, Mr. Huang Jian, Mr. Mi Dabin, Mr. Guo Hongbo, Mr. Zhu Yousheng and Ms. Li Song. The Company has five Independent Non-executive Directors comprising one-third of the members of the Company's Board of Directors, namely, Mr. Li Zhensheng, Mr. Yue Heng, Mr. Geng Jianxin and Mr. Xia Qing, Mr. Xu Mengzhou (it was Mr. Zhang Shouwen before 23rd June 2016)

The Board of Directors of the Company had held eleven meetings during this Reporting Period including regular meetings and ad hoc meetings. For details, please see related announcements.

Details of the attendance of directors at the Board meetings are as follows:

Name	**Number of meetings to be attended**	**Number of meetings attended in person**	**Number of meetings attended by proxy**	**Attendance rate** *(%)*
Executive Directors				
Cao Peixi	11	10	1	90.91% (Attendance by proxy rate: 9.09%)
Liu Guoyue	11	11	0	100%
Fan Xiaxia	11	11	0	100%
Non-executive Directors				
Guo Junming	11	10	1	90.91% (Attendance by proxy rate 9.09%)
Li Shiqi	11	11	0	100%
Huang Jian	11	11	0	100%
Mi Dabin	11	10	1	90.91% (Attendance by proxy rate 9.09%)
Guo Hongbo	11	10	1	90.91% (Attendance by proxy rate 9.09%)
Zhu Yousheng	11	11	0	100%
Li Song	11	10	1	90.91% (Attendance by proxy rate 9.09%)
Independent Non-executive Directors				
Li Zhensheng	11	10	1	90.91% (Attendance by proxy rate 9.09%)
Yue Heng	11	10	1	90.91% (Attendance by proxy rate 9.09%)
Geng Jianxin	11	9	2	81.82% (Attendance by proxy rate 18.18%)
Xia Qing	11	10	1	90.91% (Attendance by proxy rate 9.09%)
Xu Mengzhou	5	5	0	100%
Resigned Directors				
Zhang Shouwen	6	5	1	83.33% (Attendance by proxy rate 16.67%)

As stated in previous Corporate Governance Reports of the Company, the Company's Articles of Association set out in detail the duties and operational procedures of the Board (please refer to the Company's Articles of Association for details). The Board of the Company holds regular meetings to hear and review the report on the Company's operating results. Material decisions on operation shall be discussed and approved by the Board. Ad hoc meetings may be held if necessary to make timely decision. Board meetings include regular meetings and ad hoc meetings. Regular meetings of the Board include: annual meeting, first quarterly meeting, half-yearly meeting and third quarterly meeting.

All arrangements for regular meetings have been notified to all directors at least 14 days in advance and the Company has ensured that each director thoroughly understood the agenda of the meeting and fully expressed his/her opinions, while all Independent Non-executive Directors expressed their independent directors' opinions on their respective duties. Minutes have been taken for all the meetings and filed at the Office of the Board of Directors of the Company.

Moreover, the Independent Non-executive Directors of the Company have submitted their annual confirmation letters of 2016 in relation to their independence according to the requirements of the Listing Rules.

The Directors of the Company complied with the provisions of laws, administrative regulations and the Company's Articles of Association and actively fulfilled their duty of loyalty and diligence. Apart from regular and ad hoc meetings, the directors of the Company obtained adequate information through the Chairman office meetings and the President office meetings in a timely manner in order to monitor the objectives and strategies of the management, the Company's financial position and operating results and the execution and implementation of clauses of material agreements. The directors of the Company reviewed corporate briefings and other data on a regular basis to learn about the production and operation of the Company. The Independent Directors provided opinions and suggestions on operation and management for the Company via on-site survey. The professional committees under the Board proactively performed their duties and made suggestions and proposals for the development of the Company, which provides grounds for the Board to make correct decisions.

During the period when the Board was not in session, the Chairman, together with the Vice Chairman, discharged part of the duties of the Board of Directors, including (1) to examine and approve the establishment or cancellation of proposals to develop construction projects; (2) to examine and approve the proposals of the President in relation to the appointment, removal and transfer of managers of various departments of the Company and managers of external branches; (3) to examine and approve plans on the use of significant funds; (4) to examine and approve proposals on the establishment or cancellation of branch or branch organs; (5) to examine and approve other major issues.

The Board has summarized work for the past year and, in doing so, considered the opinions of the Supervisory Committee and the management. It believes that it has effectively fulfilled its duties and protected the interests of the Company and its shareholders.

The Directors who attended the First Extraordinary General Meeting for year 2016 of the Company held on 12th January 2016 were Liu Guoyue (Director), Mi Dabin (Director), and Geng Jianxin (Independent Director, chief member of the Remuneration and Appraisal Committee). The Directors who attended the Annual General Meeting for year 2015 of the Company held on 23rd June 2016 were Fan Xiaxia (director), Mi Dabin (Director), and Li Zhensheng (Independent Director, chief member of the Nomination Committee of the Board of Directors). The Directors who attended the Second Extraordinary General Meeting for year 2016 of the Company held on 30th November 2016 were: Guo Junming (vice chairman of the Board of Directors), Mi Dabin (Director), Geng Jianxin (Independent Director, chief member of the Remuneration and Appraisal Committee) and Xu Mengzhou (Independent Director).

(d) Chairman and President

The Company shall have a Chairman and a President who shall perform their duties respectively according to the Articles of Association. During the Reporting Period, Mr. Cao Peixi acts as Chairman of the Board and Mr. Liu Guoyue acts as President of the Company.

The division of duties of the Board and the senior management is the same as what has been disclosed in previous Corporate Governance Reports.

(e) Non-executive Directors

According to the provisions of the Articles of Association, the term of office of members of the Board of the Company shall not exceed three years (including three years) and the members are eligible for re-election. However, the term of office of Independent Non-executive Directors shall not exceed six years (including six years) according to the relevant provisions of the CSRC.

The respective terms of office of the Non-executive Directors are as follows:

Names of Non-executive Directors	Term of office
Guo Junming	2014.9.18-2017
Li Shiqi	2014.9.18-2017
Huang Jian	2014.9.18-2017
Mi Dabin	2014.9.18-2017
Guo Hongbo	2014.9.18-2017
Zhu Yousheng	2015.6.25-2017
Li Song	2014.9.18-2017

(f) Directors' Remuneration

According to the relevant laws of the PRC and the relevant provisions of the Articles of Association, the Board of the Company has established the Remuneration and Appraisal Committee. The committee operates normally under the Detailed Rules on the Work of the Remuneration and Appraisal Committee and is mainly responsible for studying the appraisal standards of the directors and senior management personnel of the Company, conducting appraisals and making proposals; responsible for studying and examining the remuneration policies and proposals of the directors and senior management personnel of the Company. As the executive directors of the Company are also the senior management of the Company, their performance appraisals were reflected in the appraisal of the senior management by the Board of Directors. During the Reporting Period, our executive director Mr. Fan Xiaxia received remuneration from the Company, which was recorded in the annual total remuneration and managed in accordance with the Company's internal pay rules. The total remuneration, after examined by the Remuneration and Appraisal Committee, was then submitted to the Board of Directors. The Executive Directors have entered into the director service contracts in compliance with the requirements of the Hong Kong Stock Exchange.

Members of the Eighth Session of the Remuneration and Appraisal Committee comprised seven directors. Members of the Remuneration and Appraisal Committee are Mr. Geng Jianxin, Mr. Liu Guoyue, Mr. Guo Hongbo, Mr. Zhu Yousheng, Mr. Li Zhensheng, Mr. Yue Heng and Mr. Xia Qing, of whom Mr. Geng Jianxin, Mr. Li Zhensheng, Mr. Yue Heng and Mr. Xia Qing are Independent Non-executive Directors. Mr. Geng Jianxin acts as Chief Member of the Remuneration and Appraisal Committee.

The operation of the Remuneration and Appraisal Committee under the Board of Directors properly follows the Detailed Rules on the Work of the Remuneration and Appraisal Committee. The first meeting for 2016 was convened on 21 March 2016, at which the Report of Total Wage Expenses was reviewed and the Company's arrangement for the total wage in 2016 was approved. In the new financial year, the Remuneration and Appraisal Committee will carry out its work in a timely manner pursuant to the above rules on work according to the actual situation.

During the Reporting Period, the attendance of meeting of the Remuneration and Appraisal Committee of the Board was as follows:

Name of meeting	Date of meeting	Members who attended the meeting in person	Members who attended the meeting by proxy
2016 First Meeting of the Remuneration and Appraisal Committee of the Eighth Session of the Board of Directors	21 March 2016	Liu Guoyue, Guo Hongbo, Zhu Yousheng, Li Zhensheng, Yue Heng, Xia Qing	Geng Jianxin

(g) Nomination of Directors

According to the relevant laws of the PRC and the relevant provisions of the Articles of Association, the Board of the Company has established the Nomination Committee. The Committee operates normally under the Detailed Rules on the Work of the Nomination Committee and is mainly responsible for studying the selection standards and procedures for candidates for directors and senior management personnel of the Company according to the directors' qualifications under the Companies Law and Securities Law and the needs of the operational management of the Company, and making proposals thereon to the Board; searching for qualified candidates for directors and suitable persons for senior management personnel on a wide basis; and examining the candidates for directors and suitable persons for senior management personnel and making proposals thereon. Currently, the nomination of the candidates of directors of the Company is mainly made by the shareholders. The nominations, after examination of the relevant qualification by the Nomination Committee, will be submitted to the Board of Directors. The President of the Company was appointed by the Board and the candidates for the Vice President and management were nominated by the President. Such nominations, after examination of the relevant qualification by the nomination Committee, will be submitted to the Board of Directors.

The Nomination Committee of the Board of Directors shall comprise 7 members. Members of the Eighth Session of the Nomination Committee under the Board are Mr. Li Zhensheng, Mr. Fan Xiaxia, Mr. Mi Dabin, Ms. Li Song, Mr. Yue Heng, Mr. Geng Jianxin and Mr. Xu Mengzhou (was elected Independent director of the 8th Meeting of the Board of Directors on 23rd June 2016) of which Mr. Li Zhensheng, Mr. Yue Heng, Mr. Geng Jianxin and Mr. Xu Mengzhou are Independent Non-executive Directors. Mr. Li Zhensheng acts as Chief Member of the Nomination Committee (Mr. Zhang Shouwen resigned his post as member of the Board and the Nomination Committee on 23rd June 2016).

The Nomination Committee of the Board operates normally under the Detailed Rules on the Work of the Nomination Committee of the Company. On 20th January 2016, the Committee held its first meeting for 2016, at which the Proposal on Change of Senior Managers of the Company was discussed and approved, and the Committee examined the qualifications of the candidates for the chief accountant. On 21st March 2016, the Committee held its second meeting for 2016, at which the Proposal on Change of Independent Directors of the Company was discussed and passed. The Committee examined the qualifications of the candidates for senior management and independent directors of the Company and submitted corresponding examination reports to the Board for reference in decision-making. In the coming financial year, the Nomination Committee will carry out relevant work in accordance with the aforesaid detailed work rules based on actual conditions in due course.

During the Reporting Period, the attendance of meeting of the Nomination Committee of the Board was as follows:

Name of meeting	Date of meeting	Members who attended the meeting in person	Members who attended the meeting by proxy
2016 First Meeting of the Nomination Committee of the Eighth Session of the Board of Directors	20 January 2016	Li Zhensheng, Fan Xiaxia, Mi Dabin, Li Song, Zhang Shouwen, Yue Heng, Geng Jianxin	/
2016 Second Meeting of the Nomination Committee of the Eighth Session of the Board of Directors	21 March 2016	Li Zhensheng, Fan Xiaxia, Li Song, Zhang Shouwen, Yue Heng,	Mi Dabin, Geng Jianxin

(h) Remuneration of Auditors

KPMG and KPMG Huazhen LLP were appointed as the international and domestic auditors of the Company for 2016, respectively. For the twelve months ended 31 December 2016, the total auditors' remuneration amounted to RMB43.61 million (including remuneration paid to other auditors in addition to that of the principal auditors).

(i) Audit Committee

According to the requirements of the regulatory authorities of the jurisdictions where the Company is listed and the relevant provisions of the Articles of Association, the Board of Directors of the Company has established the Audit Committee which operates normally under the Detailed Rules on the Work of the Audit Committee and is mainly responsible for assisting the Board of Directors in supervising: (1) the authenticity of the financial statements of the Company; (2) the compliance by the Company with laws and regulatory requirements; (3) the qualification and independence of the independent auditors of the Company; (4) the performance of the independent auditors and the internal audit department of the Company; and (5) the control and management of the related-party transactions of the Company.

The Audit Committee under the Board of the Company holds four regular meetings per annum and has at least two separate meetings with the external auditor of the Company to hear reports on audit plans, work arrangements, audit results, etc. The Board formulates the Management Measures on Hotlines and Mailboxes for Informants, pursuant to which the Audit Committee is responsible for the management of the informants' hotlines and mailboxes.

Members of the Audit Committee of the Board of Directors shall comprise five independent non-executive Directors. Members of the Audit Committee of the Eighth Session of the Board of Directors are Mr. Yue Heng, Mr. Li Zhensheng, Mr. Geng Jianxin, Mr. Xia Qing and Mr. Xu Mengzhou respectively. Mr. Yue Heng acts as the Chief Member. (Mr. Zhang Shouwen resigned from his post as members of the Board and the Audit Committee on 23rd June 2016).

During the Reporting Period, the Audit Committee had held eight meetings. As per Audit Committee's duties, the Audit Committee interviewed with the Company's legal advisors, external auditors, management and the relevant departments separately and exchanged ideas and communicated with them. With the understandings on the applicable laws and regulations of those jurisdictions in which the shares of the Company are listed, anti-fraud position in the Company, recruitment of staff, implementation and execution of internal control mechanism, audit work carried out by external auditors, and the preparation of the financial statement, the Audit Committee has rendered their views and opinions and made certain proposals.

During the Reporting Period, the attendance of meetings of the Audit Committee was as follows:

Name of meeting	Date of meeting	Members who attended the meeting in person	Members who attended the meeting by proxy
2016 First Meeting of the Audit Committee of the Eighth Session of the Board of Directors	26 February 2016	Yue Heng, Li Zhensheng, Zhang Shouwen, Geng Jianxin, Xia Qing	–
2016 Second Meeting of the Audit Committee of the Eighth Session of the Board of Directors	21 March 2016	Yue Heng, Li Zhensheng, Zhang Shouwen, Geng Jianxin, Xia Qing	–
2016 Third Meeting of the Audit Committee of the Eighth Session of the Board of Directors	25 April 2016	Yue Heng, Li Zhensheng, Zhang Shouwen, Geng Jianxin, Xia Qing	–
2016 Forth Meeting of the Audit Committee of the Eighth Session of the Board of Directors	1 August 2016	Xia Qing, Xu Mengzhou	Yue Heng, Li Zhensheng, Geng Jianxin
2016 Fifth Meeting of the Audit Committee of the Eighth Session of the Board of Directors	14 October 2016	Yue Heng, Li Zhensheng, Geng Jianxin, Xia Qing, Xu Mengzhou	–
2016 Sixth Meeting of the Audit Committee of the Eighth Session of the Board of Directors	24 October 2016	Yue Heng, Li Zhensheng, Geng Jianxin, Xia Qing, Xu Mengzhou	–
2016 Seventh Meeting of the Audit Committee of the Eighth Session of the Board of Directors	25 October 2016	Yue Heng, Li Zhensheng, Geng Jianxin, Xia Qing, Xu Mengzhou	–
2016 Eighth Meeting of the Audit Committee of the Eighth Session of the Board of Directors	5 December 2016	Yue Heng, Li Zhensheng, Geng Jianxin, Xia Qing, Xu Mengzhou	–

(j) Responsibility assumed by the Directors in relation to the Financial Statements

The Directors of the Company confirm that they shall assume the relevant responsibility in relation to the preparation of the financial statements of the Company, ensure that the preparation of the financial statements of the Company complies with the relevant regulations and applicable accounting standards and also warrant that the financial statements of the Company will be published in a timely manner.

The reporting responsibility statements made by the auditors of the Company in relation to the financial statements of the Company are set out in auditor's reports on pages 101 to 106.

(k) Senior Management's Interest in Shares

None of the senior management of the Company holds any shares of the Company.

(i) Strategy Committee

According to the requirements of regulatory authorities of the jurisdictions where the Company is listed and the requirements of the Company's Articles of Association, the Board of Directors of the Company set up the Strategy Committee. The Strategy Committee operates normally under the Detailed Rules on the Work of the Strategy Committee and mainly takes the following responsibilities: (1) to study and make suggestions on the Company's long-term development strategies and plans; (2) to study and make suggestions on material investment and financing proposals which require the approval of the Board of Directors; (3) to study and make suggestions on material production and operational decision-making projects which require the approval of the Board of Directors; (4) to study and make suggestions on other material matters that will impact the Company's development; (5) to monitor the implementation of the above matters; (6) to be responsible for the Company's overall risk management and improve the Company's overall anti-risk ability; and (7) other matters required by the Board of Directors.

Members of the Strategy Committee of the Eighth Session of the Board of Directors comprised six Directors, namely Mr. Liu Guoyue, Mr. Li Shiqi, Mr. Huang Jian, Mr. Fan Xiaxia, Mr. Li Zhensheng and Mr. Xia Qing, of whom Mr. Li Zhensheng and Mr. Xia Qing are Independent Non-executive Directors. Mr. Liu Guoyue acts as the Chief Member of the Strategy Committee.

On 25 April 2016, the Strategy Committee discussed and approved the Comprehensive Risk Management Report of Huaneng Power International, Inc. for 2016 and the Proposal on Revising the Company's Risk Management Measures, the former of which was submitted to the Audit Committee of the Board of the Company for consideration on 1 August 2016. On 12 September 2016, the Strategy Committee discussed and approved the Risk Analysis and Evaluation Report of Huaneng Power International, Inc. for the first half of 2016.

The risk management work operates effectively to cover all kinds of risks, thus continuously strengthening and improving the internal control and risk management mechanism of the Company.

During the Reporting Period, the attendance of meetings of the Strategy Committee was as follows:

Name of meeting	Date of meeting	Members who attended the meeting in person	Members who attended the meeting by proxy
2016 First Meeting of the Strategy Committee of the Eighth Session of the Board of Directors	25 April 2016	Liu Guoyue, Li Shiqi, Huang Jian, Fan Xiaxia, Li Zhensheng, Xia Qing	–
2016 Second Meeting of the Strategy Committee of the Eighth Session of the Board of Directors	12 September 2016	Liu Guoyue, Li Shiqi, Huang Jian, Fan Xiaxia, Li Zhensheng, Xia Qing	–

(m) Trainings for Directors and Senior Management

Each year the Company organizes its Directors and Supervisors to attend trainings arranged by regulatory authorities. During the Reporting Period, the Directors and Supervisors of the Company attended the 2016 Training for Directors and Supervisors organized by CSRC Beijing Regulatory Bureau. The Secretary to the Board of the Company attended the Continuing Development Training for Board Secretaries and some seminars held by the Hong Kong Institute of Chartered Secretaries.

For every six months, the Company holds a meeting where legal counsels of all three listing jurisdiction and the Audit Committee makes presentations to all the Independent Directors of the Audit Committee about latest updates on regulatory requirements, application of the Company's corporate systems and rules and the compliance by the Company with regulations of the listing places.

According to the records provided by the Directors and Supervisors, we set forth below a summary of the trainings received by the Company's Directors and Supervisors during the period from 1 January 2016 to 31 December 2016:

Name of director/supervisor	Type of Continuing Professional Development Plan
Cao Peixi	A, B
Guo Junming	A, B
Liu Guoyue	A, B
Fan Xiaxia	A, B
Li Shiqi	A, B
Huang Jian	A, B
Mi Dabin	A, B
Guo Hongbo	A, B
Zhu Yousheng	A, B
Li Song	A, B
Li Zhensheng	A, B
Yue Heng	A, B
Geng Jianxin	A, B
Xia Qing	A, B
Xu Mengzhou	A, B
Ye Xiangdong	A, B
Mu Xuan	A, B
Zhang Mengjiao	A, B
Gu Jianguo	A, B
Zhang Xiaojun	A, B
Zhu Daqing	A, B

Notes:

A: attending briefings and/or seminars.

B: reading seminar materials and updates on the latest developments of the Listing Rules and other applicable regulatory requirements.

All the Directors and Supervisors must submit their training records to the Company on a quarterly basis. The Company Secretary will keep the records for regular inspections. Each of the directors and supervisors of the Company had received more than 15 hours of trainings in 2016.

The Company attaches great significance to the training and continuing professional development of its senior management personnel, and actively attends all kinds of training programs held by relevant State authorities, industry administrative authorities and associations.

(n) Formulation, Review and Inspection of Code of Conduct and Compliance Handbook for Employees and Directors

The Company has formulated the Employee Handbook to set standards of conduct and regulate the employees' behavior. The employees of the Company conscientiously comply with the Employee Handbook to enhance moral standards and strengthen correct value orientations.

(o) Shareholders' Rights

To convene extraordinary general meetings

When any shareholders holding, individually or in aggregate, ten percent or more of the shares of the Company request, the Board shall convene an extraordinary general meeting within two months.

The shareholders holding, individually or in aggregate, ten percent or more of the Company's shares shall submit a written request to the Board for convening of an extraordinary general meeting, which shall specify the agenda of such meeting. Upon receipt of the said written request, the Board shall convene an extraordinary general meeting as soon as possible. If the Board does not send any notice of convening the meeting within 30 days upon receipt of the written request, the requesting shareholders may convene the meeting on their own within four months upon the Board's receipt of the request. The procedures for convening such a meeting shall be as close to the procedures adopted by the Board as possible.

To make proposals to the shareholders' meeting

Any shareholder holding, individually or in aggregate, three percent or more of the total voting shares of the Company may, no later than ten days before a shareholders' meeting is held, submit provisional proposals to the Board in writing. The Board shall send out a supplementary meeting notice of details of such proposals within two days of the receipt thereof.

Any shareholder holding, individually or in aggregate, one percent or more of the total issued shares of the Company may propose candidates for independent directors for election at the shareholders' meeting.

To convene extraordinary Board meetings

An extraordinary Board meeting may be held at the request of any shareholders representing one tenth or more of the voting rights of the Company. The Chairman shall, within ten days upon receipt of such request, convene and chair such meeting.

To make enquiries to the Board

The shareholders shall have access to the relevant information of the Company in accordance with the provisions of the Articles of Association, including the Articles of Association of the Company, the share capital, the minutes of shareholders' meetings and the resolutions of Board meetings and meetings of the Supervisory Committee.

(p) Insurance for Directors

The Company has renewed its Directors' Liability Insurance policy of US$10,000,000 in 2016.

(q) Company Secretary

Mr. Du Daming (Deputy General Manager and Board Secretary of the Company) has been acting as the Company Secretary of the Company under the Listing Rules since 3 May 2012, whose resume is set out in the section headed "Profiles of Senior Management". During the Reporting Period, Mr. Du had complied with the provisions regarding relevant professional training under Rule 3.29 of the Listing Rules

SOCIAL RESPONSIBILITY REPORT

The Board of Directors of the Company and all the directors thereof guarantee that this report does not contain any false statement, misleading representation or material omission, and jointly and severally accept responsibilities as to the truthfulness, accuracy and completeness of the content of this report.

This report systematically summarizes the works of Huaneng Power International, Inc. (the "Company") in 2016 in fulfilling its economic responsibilities, safety responsibilities, environmental responsibilities, staff responsibilities, social responsibilities and so on, with a view to giving a true presentation of the Company's concrete achievement in promoting comprehensive, healthy and sustainable development in 2016.

This report has been prepared in accordance with the "Guidelines on Preparation of Corporate Report on Performance of Social Responsibilities" issued by the Shanghai Stock Exchange, and with reference to the "G4 Sustainable Development Reporting Guidelines" issued by Global Reporting Initiative (the "GRI") and the actual performance by the Company. This report is the Company's social responsibility report published to the general public and the data and contents contained herein are on the basis of the Company's domestic business.

I. CORPORATE OVERVIEW AND CORPORATE GOVERNANCE

1. Corporate Overview

Incorporated on 30 June 1994, the core business of the Company is to develop, construct and operate power plants throughout China by making use of modern technology and equipments and financial resources available domestically and internationally. In October 1994, the Company completed its initial global public offering of 1,250,000,000 overseas listed foreign shares ("foreign shares"), and was listed on the New York Stock Exchange (Stock Code: HNP) in the United States by issuing 31,250,000 American depository shares ("ADS"). In January 1998, the foreign shares of the Company were listed on the Hong Kong Stock Exchange by way of introduction (Stock Code: 902). Later in March, the Company completed a global placing of 250,000,000 foreign shares along with a private placing of 400,000,000 domestic shares. In November 2001, the Company successfully completed the issue of 350,000,000 A Shares (Stock Code: 600011) on the Shanghai Stock Exchange ("SSE"), of which 250,000,000 domestic public shares were listed on the SSE. In December 2010, the Company completed the non-public issuance of 1,500,000,000 A Shares and 500,000,000 H Shares. In November 2014, the Company completed the non-public issuance of 365,000,000 H Shares. In November 2015, the Company completed the non-public issuance of 780,000,000 H Shares. Currently, the total share capital of the Company amounts to approximately 15.2 billion shares.

As at 31 December 2016, the Company's controlling generation capacity and equity-based generation capacity amounted to 83,878 MW and 76,618 MW respectively. The power plants of the Company are widely located in 22 provinces, autonomous regions and centrally-administered municipalities in China. In addition, the Company has a wholly-owned power operating company in Singapore.

Since its incorporation, the Company has been committed to system, technology and management innovations. The Company has been the pioneer and has created various milestones within the domestic power industry in areas such as power technology advancement and power plant construction and management, which dramatically facilitated the great-leap forward development of the power business and technological advancement of the power station equipment manufacturing industry in China, and also greatly contributed to the improvement of technical and management standards of domestic power generation enterprises.

2. Corporate Governance

As a public company listed in three stock exchanges both domestic and overseas, the Company has been subject to regulation by securities regulatory authorities of the three domestic and overseas places of listing, and supervision from its vast shareholders. The Company has highly valued the importance of corporate governance by enhancing its corporate governance system, which comprises the general meetings, the Board, the Supervisory Committee and the operation team. It has established an operating mechanism with clear terms of reference among decision authority, supervisory authority and operation authority to enable each of them to perform their respective liabilities subject to balance and coordination among the same parties, so that the right of the Board to make decision over material issues and the right of the Supervisory Committee to supervise relevant matters can be effectively exercised to ensure the operation team can deal with operational issues in an effective way. Through years of exploration and practices, the Company has gradually formulated a regulated, efficient and enhanced corporate governance structure, and also established a sound and effective system that suits the own development needs of the Company.

The Company has been consistently treating all shareholders on a fair basis, and striving for generating long-term, stable and increasing returns for shareholders. The Company has been highly recognized by regulatory authorities and the capital markets by virtue of its regulated integrity, professional transparency and respect for shareholders. In 2016, the Company was honored as "The Best Listed Company in Terms of Investment Value" under the China Securities Golden Bauhinia Awards, and was granted with other prizes such as "Outstanding Performance in Information Disclosure" issued by the SSE. The Company stresses on the importance of information disclosure. Accordingly, the Company has established the Information Disclosure Committee, comprised of managers of various departments (as members thereof) and headed by the Vice President and the Chief Accountant, which is responsible for reviewing the Company's regular reports. The Company has also adopted the policy of holding weekly information disclosure meetings chaired by the Vice President and the Chief Accountant. The Company's material issues of the week will be reported in the meeting, thereby ensuring the establishment of a system through which the Company is able to duly perform relevant information disclosure obligations. The Company made 14 press releases and 224 announcements in both domestic and overseas markets, and took participation in 8 investment forums organised by investment banks within and outside China in 2016 to reinforce effective communications with investors.

II. ECONOMIC RESPONSIBILITY OF THE COMPANY

The Company continued to further strengthen comprehensive budget management. Based on the general guidelines of the comprehensive budget management, the Company has implemented the functions under the budget management, including target-oriented, process control and review guidance, which enabled the Company to achieve the target of budget management, namely "target secured, transformation progressed and risks prevented". The Company spared no efforts to push ahead the construction of the "Digitalized Huaneng International" platform, and the Company's control platform featuring "data platform support, intensive process control and standardized front-end construction" was basically constructed, resulting in constant improvement of intelligent production, operation and management.

Marketing efforts achieved remarkable results. The Company completed reforms regarding to its marketing system. In specific, regional energy sales companies were established to guide our relevant units to actively participate in power system reforms to secure market share in advance. In terms of coal-fired utilization hours, we ranked the first in benchmarking in Shanxi, Shanghai, Henan, Hunan, Chongqing, Anhui, etc. Due to the vigorous efforts made by the Company in heat supply market, the heat volume supplied and revenue from heat supply for the whole year recorded substantial increases as compared to the corresponding period of last year. By implementation of the policy regarding linkage development between coal-fired and gas-fired businesses, the extents to which power price of coal-fired and combined cycle was downward adjusted, all below the average in various provinces and regions. Besides, the Company was endeavored to implement transactions with our major customers. There was a total of 450 contracted users secured through direct transactions, and the share of power directly traded with our major customers exceeded the capacity share with 0.93 percentage point throughout the year.

The Company exerted strict control over fuel costs. With increased market research, the Company promptly adjusted its fuel purchase strategy, sought for government supports and strengthened its cooperation and alliance with other industries, to effectively respond to the substantial fluctuation of fuel market. The increase of unit price for procurement of standard coal maintained at the lowest level in benchmarking of the industry throughout the year. Besides, the Company identified the middle and long-term cooperation targets in advance through tender and bid negotiation for import of coal resources, which enabled it to save costs of approximately RMB2.0 billion. Through an optimized bidding management system and an adjusted bidding procurement strategy, all the regional companies enjoyed a unified platform for bidding procurement.

The Company maintained its leading edge in finance management. The Company has optimized its financial structure by issuing certain low-cost financing products such as super short-term commercial paper, resulting in a substantial decrease of financing costs as compared to the corresponding period of last year. Corporate bonds with terms of five years and ten years were issued in a total principal of RMB4.2 billion, bearing interest at 3.48% and 3.98%, respectively, which was the relatively low level among the same types of corporate bonds issued during the same period.

III. SAFETY RESPONSIBILITY OF THE COMPANY

The Company has established and improved the relevant standards regarding determining whether a specific safety production responsibility is performed properly. Moreover, the Company has also emphasized proper performance of these responsibilities, which helped it constantly enhance its safety production. During the year, no accident occurred during production involving injury or death of the in-house or outsourced staff. The Company learnt good lessons from the major or extremely major accidents occurred whether within the Group or not while conducting a general safety inspection through combination of self-review and supervision by others to eliminate any potential accident. The Company intensified management on unplanned suspension of operation. Benefiting from our highly reliable working units, 30 power plants recorded no unplanned suspension of operation. Lingang Combined Cycle, in spite of the close-down caused by the supply interrupt of natural gas from external channels, emergently started connection with the heat collection device steam pipeline of the IGCC power station to ensure normal heat supply for residents.

In 2016, the Company did not experience any serious accident or any of above incident, or any environment pollution issue, or accident threatening the safe operation of power grids, thus maintaining safe production as a whole. The Company incurred an average of 0.2 unplanned outages per unit per annum, representing a decrease of 0.04 outages per unit per annum as compared to the corresponding period of last year.

IV. ENVIRONMENT RESPONSIBILITY OF THE COMPANY

In strict compliance with the latest environmental protection laws of the PRC, the Company actively assumed the responsibility of environmental protection, pushed forward technical innovation, improved resources utilization efficiency, vigorously developed clean energy projects, and endeavored to develop quality coal-fired power plants highlighting energy conservation and environment protection, leading to constantly improved results in energy conservation and emission reduction. Company has fully accomplished its annual targets as set forth in the Statement of Responsibility for Energy Saving and Environment Protection with no violation of the national environmental laws and regulations. In 2016, the raw coal consumed by the Company was 84.27 million tons of standard coal equivalent, and the average coal consumption for power supply of our domestic coal-fired generating units decreased by 0.87g/kWh as compared to the same period of last year. Sulphur dioxide and nitrogen oxides emission arising from generation of power per unit were 0.17g/kWh and 0.21g/kWh respectively, representing a decrease of 0.04g/kWh and 0.05g/kWh respectively as compared to the same period of last year.

Its major technological and economic indicators continued to maintain the leading position in domestic market, and advanced in international market. The major units, such as 1,000 MW and 600 MW ultra-super critical units, took the leading position in terms of coal consumption for power supply. 22 units were granted with various prizes in the large units competition organized by China Electricity Council. Among which, 4 were granted with the first prize, 4 were recognized as the optimal units in terms of coal consumption for power generation and 5 were honored as the best units in terms of house consumption rate.

Vigorous efforts were made to improve ultra-low emission reforms for units. The flue gas synergic treatment technology highlighting energy conservation and environment protection was promoted. As at the end of previous year, the capacity of our coal-fired generating units with ultra-low emission accounted for over 60% of the total capacity of our coal-fired generating units. Changxing Power Plant was acknowledged by the National Energy Administration with the title as one of the first batch of "Demonstration Power Plants with Outstanding Performance in Energy Conservation and Emission Reduction in China". During the G20 Summit, 17 power plants and 49 generating units involved by the Company all met the relevant environment standards in respect of emission. Notwithstanding the haze in northern China, the relevant power plants of the Company all met the required emission standards and successfully passed various environment inspections.

Proactive promotion of technological innovation. The project firstly developed by the Company named "Flue Gas Synergic Treatment Key Technology and Cluster Projects Application of Coal-Fired Power Plants" was awarded the China Power Science and Technology First Prize in 2016. A systematic research in relation to flexibility improvement of generating units has been propelled actively. In particular, the No.2 generating units of Dandong Power Plant realized AGC load shifting to 20% of rated load. The project of "Feasibility Study of 650°C 1000 MW Efficient Ultra-supercritical Generating Units System Integration and Key Technologies" has been progressed well in selection of pipeline materials. The 700°C test platform operated by Nanjing Power Plant has been maintaining safety operation for over 100 successive days. The Company also communicated with GE, Simens and other international advanced enterprises to share technologies in relation to construction of digital power plants, flexibility of thermal power plants and lower-wind based power generation.

V. STAFF RESPONSIBILITY OF THE COMPANY

1. Protection of Staff Benefits

(1) Staff overview

With the belief that "elites are the forefront important assets", the Company has actively implemented the strategy of developing the enterprise by talents, focused on the tri-tasks of attracting, training and making good use of talents, accelerated the establishment of a team with high-level and highly skilled talents as core members. As a result, a team of talents with excellent quality, which is well structured, professionally equipped, devoted to careers in Huaneng and in line with the Company's developmental and strategic needs, has been formed.

As at the end of 2016, the Company had 42,210 employees, 75% of whom had college qualifications or above.

(2) Rights protection

The Company has consistently implemented a fair, just and open employment policy, and endeavors to implement requirements of the Employment Contract Law and other laws and regulations. As such, the Company has entered into employment contracts with employees by laws.

The Company has focused on the improvement of the Staff Representative Congress System and the Plant Affairs Publicity System, supporting their active participation in democratic management and guaranteeing their rights to be informed and rights to participate, express and supervise. The Company has improved the accounting system for complaint handling and formulated the special system and standards relevant for interests claims made by employees.

All of the Company's subsidiaries have established their respective trade unions in accordance with the Trade Union Law, and the rate of staff joining those unions remained at 100%. Trade unions at all levels have earnestly performed their duties, safeguarded legal interests of employees, encouraged employees to participate in management of decision making, jointly accomplished various objectives of the enterprises and assisted in mediating disputes between staff and enterprises.

The Company has attached great importance to staff health and safety. All of its subsidiaries have established a protection mechanism for staff health and safety. The enterprises have organized physical examinations for all staff annually, and special physical examinations for the staff who have been exposed to occupational hazards.

(3) Incentives and protection

The Company has further improved its remuneration allocation system, devised a series of remuneration management procedures in line with the overall strategies, standardized the pay system and criteria and optimized the income allocation structure. The Company has fully implemented the annual salary system for major principals, and management of remuneration has become more regulated. Staff remuneration has been determined in accordance with the principles of "determining salaries based on the specific positions, receiving compensation based on performance, giving priority to efficiency and emphasizing fairness" and linked to individual performance, thereby establishing a scientific and effective incentive mechanism.

In compliance with relevant laws, the Company has established various social insurance schemes and housing provident fund, and made due contribution to these schemes and fund in full, to secure the social benefits of its staff covering pensions, medical, work related injuries, unemployment, maternity and housing. In addition, as required under the national policies, the Company has also established corporate annuities and supplementary medical insurance to serve as a supplement to the basic pension and medical benefits of employees. The Company has concerned about staff's personal life, and actively organized "warmth and care delivery" activities to provide living supports and assistance for staff in need.

2. Support for Staff Development

(1) Staff training

As the Company emphasizes training for all staff, it has fully capitalize on its systematic training resources and increased cooperation with external training organizations to carry out multi-level, multi-channel and multi-dimensional trainings, targeting to reinforce general quality of the staff. The major types of training include orientation training, post training, skill training and international cooperation training.

As at the end of 2016, the Company had 1 employee recognized as one of the national "Millions of Talents (百千萬人才)", 13 entitled to the special government allowance, 8 rated as national technical experts, 73 rated as technical experts of state-owned enterprises and 31 rated as technical experts of the power industry.

(2) Development opportunities

The Company has emphasized provision of growth opportunities for employees so as to realize joint development of both employees and enterprise. To reinforce establishment of leadership, the Company has amended the Provisional Administration Measures on Leadership Establishment and the Administrative Measures on Management Reserve of Common Enterprises of the Company to further emphasize cultivation of management reserve. Besides, the Company has also enhanced the system under which human resources may be efficiently allocated to achieve the optimal arrangement of human resources. Qualifications facilitate learning; contests facilitate training; rotation and assessment facilitate the overall improvement of the staff. The development of skill-based talents is facilitated by the implementation of dual-channels promotion system emphasizing the approach of "positions come first, skills come second".

VI. SOCIAL RESPONSIBILITY OF THE COMPANY

The Company has taken the establishment of a “three-color” company as its corporate mission, i.e. a “red” company that serves the socialism country with the special characteristics of China, a “green” company with focuses on scientific and technological advancement and environment protection, and a “blue” company that keeps abreast of the latest development and is open world widely for innovative learning. The Company has capitalized on its capacity of a “three-color” company to guide positive culture, seek for sustainable development, serve the Country, benefit the society, proactively fulfill social responsibilities, create a sound internal and external environment, work together with all interested parties to promote economic and social development and share corporate development achievements in order to make its own contribution to construction of a harmonious socialist society.

The Company has attached great importance to supply of power. Our power plants have formulated specific contingency plans and management measures in order to ensure safe and stable power generation during critical periods. Emphasis has also been put on heat supply management to assure safe and stable functioning of the heating system. In particular, the Company successfully accomplished the challenges to secure power generation and supply during important festivals and special time periods, and delivered a satisfying performance against the extreme abnormal weather conditions such as freezing and black rainstorm.

The Company has actively participated in social public welfare activities, including new socialism-based rural development, poverty alleviation, education assistance and charitable donations, and positively reciprocated the society and showed our care via a variety of innovative cooperative services. In 2016, the Company donated a total of RMB6,676,400 under its name to support local public welfare activities.

In the future, the Company will continue to strive for delivery of long-term, stable and increasing returns for shareholders, provision of adequate, reliable and environmental friendly power for the society, and developing itself as an international first-class listed power producer with leading technology, excellent management, reasonable layout, optimized structure, industry synergy and remarkable efficiency.

INVESTOR RELATIONS

PHILOSOPHY OF INVESTOR RELATIONS

Huaneng International always highly values the management of investor relations since its listing. The Company communicates with all investors in a wholehearted, equal and respectful manner through timely and diversified two-way channels, enhancing and perfecting the management of investor relations of the Company. In addition, the Company also values the two-way interactive communication of “disclosure” and “adoption”. With its investors “disclosure”, the Company discloses information including financial position and operating performance to investors accurately, fairly and comprehensively in a responsible manner, which helps investors to understand and recognize the current situation and future development strategy of the Company. As to “adoption”, the Company makes ready various channels to collect opinions of investors to adopt suggestions and ideas related to its operating activities. Such two-way communication effectively improves the operation management ability of the Company and ultimately maximizes the interests of the Company as a whole and all shareholders.

MECHANISM OF INVESTOR RELATIONS

- ### Establishing meticulous organization and enhancing system development

The Company sets up specific information disclosure organizations (Information Disclosure Committee and Information Disclosure Work Team) and holds routine information disclosure meetings every Monday, making clear the work flow for information disclosure of the Company and guaranteeing the compliance and time effectiveness of information disclosure.

In the meantime, the Company has established the “Measures on Information Disclosure Management”, the “Measures on Connected Transactions Management”, the “Rules on Investor Relations Management”, the “Detailed Rules on the Work of the Information Disclosure Committees”, “Measures on Insider Information Management” and the “Regulations on Accountability for Significant Errors in Annual Report Information Disclosure”, setting out in detail the basic principles, targets, procedures, contents of disclosure, registration and filing of insider information and related accountability. The promulgation and implementation of these regulations further enhanced the information disclosure system of the Company, strengthened the discipline of the Company’s information disclosure, prevented and minimized the insider dealing activities, improved the authenticity, accuracy, completeness and timeliness of information disclosure, so as to protect the legal interests of shareholders.

In addition, the Company has also formulated the “Internal Control System” according to the relevant requirements of the state and Sections 302 and 404 of the “Sarbanes-Oxley Act of 2002”, as well as prepared the “Internal Control Handbook”, further enhancing our corporate governance and ensuring truthful, timely, accurate and complete information disclosure.

Having established a complete and effective control system targeting at the entire process of the Company’s information disclosure, the Company has been able to control potential risks in information disclosure effectively and ensure that all information disclosed by the Company is regulated and effective since its listing. With its timely, accurate and sufficient information disclosure, the Company has been well recognized by domestic and overseas investors and won various awards granted by domestic and overseas investment institutions and professional institutions.

- **Diversified channels and effective communication**

In view of the different needs and nature of different investors – existing investors, potential investors, institutional investors and retail investors, the Company actively holds a variety of investor relations activities in various forms, including phone enquiries, emails, analyst conferences, one-on-one meetings, investment forums, roadshows and reverse roadshows, according to the characteristics of different investors, with a view to achieve all-round and effective communication and establish long-term and stable relations of mutual trust.

The Company insists on handling daily calls and visits made by investors properly. By consistently updating and sorting out the investor database, expanding the investor communication network of the Company, and holding two-way interactive investor relations activities, the Company is able to enhance the understanding and knowledge of investors about the Company, adopt suggestions and ideas put forward by investors, create two-way communication channels and platforms for smooth communication with investors and maximize the interests of the Company and investors.

- **Timely disclosure and continuous follow-up**

The Company discloses its information in a truthful, accurate, complete and timely manner strictly according to the requirements of the regulatory authorities of its listing places, thereby increasing the transparency of and drawing market attention to the Company and enhancing the image of the Company in capital markets. In the meantime, the Company follows up feedbacks from investors consistently and ensures effective communication, with a view to establish stable investor relations.

The Company made 14 overseas press releases and issued 224 announcements within and outside China in 2016.

NOTE TO SHAREHOLDERS

- **Dividend distribution**

The Board proposed a dividend of RMB0.29 (inclusive of tax) per share for 2016. Dividends will be denominated and declared in Renminbi. Dividends on domestic shares will be paid in Renminbi. Save as the dividends on foreign shares traded on the Hong Kong Stock Exchange that will be paid in Hong Kong dollars, dividends on other foreign shares will be paid in US dollars. Exchange rates for dividends paid in US dollars and Hong Kong dollars are USD1 to RMB6.91240 and HK$1 to RMB0.89006 respectively. All the dividends payable to shareholders shall be subject to shareholders' approval at the annual general meeting of the Company.

DIVIDENDS

- **Dividend policy**

The Company's Articles of Association clearly define the Company's cash dividend policy, i.e. when the Company's earnings and accumulative undistributable profits for the current year are positive, and on the condition that the Company's cash flow is able to meet the need for its ordinary operation and sustainable development, the Company shall adopt a cash dividend policy on the principle that the cash dividend payout shall be no less than 50% of the realized distributable profit stated in the consolidated financial statement that year.

In the future, the Company will continue to adhere to a proactive, balanced and stable dividend policy, persistently enhance its profitability, striving for realization of increasing returns to shareholders.

- ## Declaration of dividends

Since listing, Huaneng International has been given tremendous support and concern by shareholders. The Company has also rewarded shareholders with a persistent, stable and increasing return over the years. The Company has been declaring dividends to shareholders every year since 1998. The accumulated dividend paid amounted to RMB50.245 billion.

Dividend Year	**Dividend per share** *(RMB)*	**Earnings per share** *(RMB)*	**Payout Ratio**
1994		0.17	
1995		0.24	
1996		0.27	
1997		0.33	
1998	0.08	0.33	24.24%
1999	0.09	0.33	27.27%
2000	0.22	0.44	50.00%
2001	0.30	0.60	50.00%
2002	0.34	0.65	52.31%
2003*	0.50	0.90	55.56%
2004	0.25	0.44	56.82%
2005	0.25	0.40	62.50%
2006	0.28	0.50	56.00%
2007	0.30	0.51	58.82%
2008	0.10	-0.33	N/A
2009	0.21	0.41	51.22%
2010	0.20	0.28	71.43%
2011	0.05	0.08	62.50%
2012	0.21	0.39	53.85%
2013	0.38	0.74	51.35%
2014	0.38	0.76	50.00%
2015	0.47	0.94	50.00%
2016**	0.29	0.56	51.74%

* The Company's profit distribution plan for 2003 included a cash dividend of RMB5 together with bonus issue of 10 shares for every 10 shares.

** The dividend plan of the Company for 2016 will be subject to shareholders' approval at the annual general meeting.

INVESTOR RELATIONS ACTIVITIES

- ### Conferences

In 2016, the Company organized one Hong Kong press conference, one large-group presentation with investment analysts in Hong Kong, one large-group presentation with investment analysts and fund managers in China, two global telephone conferences for the quarterly results and one global telephone conference for interim results.

- ### Roadshows

Roadshow is a commitment of the Company to investors and a specific reflection of respect shown to them. The Company believes that regular face-to-face meetings with investors are instrumental in promoting mutual understanding and providing better services to shareholders. Since its listing, the Company has all along attached importance to communication with investors and has a good reputation in the investment sector.

- ### Visits by and general enquiries from investors

The Company received nearly 30 groups of institutional investors for company visits and nearly 100 phone enquiries from investors during the year.

- ### Investment forums

In 2016, the Company attended 8 large investment forums within or outside China, in which over 100 institutional investors were met.

MAJOR CHANGES IN THE ARTICLES OF ASSOCIATION

With the general mandate of the Company's Annual General Meeting in year 2014 and the approval of the relevant departments of the Government, the Company has completed the issuance of 780 million foreign shares (H shares) listed overseas in November 2015, and the registered capital of the Company was increased correspondingly. At the same time, with the marketization of national electricity, related content in the Company's regulations to the existing business scope need to be adjusted to match with the changes in the company's actual business development. According to the actual situation mentioned above and the relevant laws and regulations of the state, the Company has revised and optimized the contents of the existing regulations as follows:

(1) Article 10 on the business scope of the Company, the wording of "heat production and supply" was changed to "heat production and sales" and the wording of "electricity production and sales" was added.

(2) Article 15 on the Company's capital changes was adjusted and varied as follows: "With the specific mandate obtained at the Company's Annual General Meeting and the approval of the relevant departments of the Government, the Company completed the issuance of 780 million foreign shares (H shares) listed overseas in November 2015. Currently, the Company's shareholding structure is: the total number of the issued ordinary shares of the Company is 15,200,383,440 shares, of which 10,500,000,000 shares listed in the domestic market accounted for approximately 69.08% of the total, and 4,700,383,440 shares listed overseas accounted for about 30.92% of the total.

(3) Article 19 on the Company's registered capital was revised as follows: "The registered capital of the Company is RMB15,200,383,440."

REPORT OF THE BOARD OF DIRECTORS

The Directors hereby submit their annual report together with the audited financial statements for the year ended 31 December 2016.

RESULTS SUMMARY

The Board of Directors (the "Board") of Huaneng Power International, Inc. (the "Company" or "Huaneng International") hereby announces the audited operating results of the Company and its subsidiaries for the year ended 31 December 2016.

For the twelve months ended 31 December 2016, the Company realized operating revenue of RMB113.814 billion, representing a decrease of 11.71% compared to the same period last year, and net profit attributable to equity holders of the Company amounted to RMB8.520 billion, representing a decrease of 37.59% as compared with the same period last year. Earnings per share amounted to RMB0.56. The Board is satisfied with the Company's results last year.

The Board of the Company proposed to declare a cash dividend of RMB0.29 (inclusive of tax) for each ordinary share of the Company held by shareholders.

BUSINESS REVIEW OF YEAR 2016

In 2016, the Company actively responded to the new changes of power system reform and the significant rise of coal price, and took proactive initiatives to progress the relevant work, so as to maintain overall stable operation in clean and safe production and strict cost control, thereby achieving a better annual operating objective. Meanwhile, the Company continued to fulfill the duties of providing sufficient, reliable and green power to the society.

1. Operating Results

For the twelve months ended 31 December 2016, the Company realized operating revenue of RMB113.814 billion, representing a decrease of 11.71% compared to the same period last year. Net profit attributable to equity holders of the Company amounted to RMB8.520 billion, representing a decrease of 37.59% as compared with the same period last year. Earnings per share amounted to RMB0.56.

As at 31 December 2016, net assets per share attributable to the equity holders of the Company amounted to RMB5.66, representing an increase of 2.21% as compared with the year end of last year.

The Audit Committee of the Company convened a meeting on 20 March 2017 and reviewed the 2016 annual results of the Company.

2. Power Generation

Total power generated by the Company's domestic operating power plants for the year of 2016 on consolidated basis amounted to 313.69 billion kWh, representing a year-on-year decrease of 2.13%. The electricity sold amounted to 295.80 billion kWh, representing a year-on-year decrease of 2.05%. The annual average utilization hours of the Company's domestic power plants reached 3,921 hours. The utilization hours of coal-fired power generating unit was 4,107 hours. In most of the areas where the Company's coal-fired power plants are located, the utilization hours of the Company was in a leading position within those areas.

3. Cost Control

Throughout 2016, the Company procured coal in an aggregate of 132 million tons. By continuously reinforcing cooperation with major coal mines, innovating cooperation mode and procurement strategy, optimizing regional supply structure, accurately judging coal market trends, targeting high-quality low-cost imported coal resources in advanced basis, and reducing the unit procurement price of standard coal, the Company controlled the fuel procurement costs in a better way, while the coal price rose significantly in the second half of the year. The unit fuel cost of our domestic power plants throughout the year occurred for sales of power was RMB170.62/MWh, representing a year-on-year decrease of 1.76%.

4. Energy Saving and Environmental Protection

The Company has always placed energy saving and environmental protection as its utmost priority. In 2016, the Company continued to lead its peers in terms of production safety, technical, economic and energy consumption indicators. The average equivalent availability ratio of coal-fired units of the Company's domestic power plants was 95.05% and its weighted average house consumption rate was 4.57%. The average yearly coal consumption rate of the Company's coal-fired units for the power generated was 290.34 grams/kWh, which was 0.62 grams/kWh lower than that of the same period last year. The Company's average coal consumption rate for power sold was 307.69 grams/kWh, representing a decrease of 0.87 grams/kWh from that of the same period last year.

Under the policy of green development and with the targets of "nil pollution to environment" and maintaining "leading position in various indicators", the Company has been vigorously promoting business upgrade and reform to emphasize energy conservation and emission reduction. It continues to reinforce maintenance and operation of environment protection equipment, and continues to optimize its systems for the sake of long term development. Its core technology in relating to flue gas synergic management won the first prize in sector of power technology of China in 2016, and has been successfully applied in a number of our environment enhancement and new related projects. Also, the Company will continue to implement the requirements on ultra-low emissions and new energy consumption standards on coal-fired generating plants and improve the performance of the Company in energy conservation and environmental protection, realizing clean and green development.

5. Capital Operation

In 2016, the Company signed agreement to acquire interests in four companies from parent company for the consideration of approximately RMB15.114 billion, so that it expanded the asset scale, operational scale and territory scope of the Company. Upon completion of the transaction on 1 January 2017, the Company increased its controlled generating capacity in operation by 15,607 MW, and capacity under construction by 3,666 MW.

Besides, the Company completed the acquisition of 100% equity interest in Luoyang Yangguang Cogeneration (with an installed capacity of 270 MW) in the third quarter of 2016.

6. Project Development

The Company progressed smoothly in construction of power supply projects. During the year, the controlled generation capacity of the newly commissioned coal-fired generating units, wind power generating units and photovoltaic units of the Company was 850 MW, 328 MW and 99 MW, respectively. As of 31 December 2016, the Company's controlled and equity-based generation capacity was 83,878 MW and 76,618 MW, respectively.

Besides, the Company has commenced operation of certain photovoltaic units and coal-fired generating units recently. As of 21 March 2017, the Company's controlled and equity-based generation capacity was 101,116 MW and 89,545 MW, respectively.

7. Overseas Business

In 2016, Tuas Power Ltd. ("Tuas Power"), a wholly-owned subsidiary of the Company in Singapore, maintained safe and stable operation of the generation units throughout the year. The total market share of Tuas Power in the power generation market for the whole year was 21.5%, representing a year-on-year decrease of 0.2 percentage point, mainly attributable to the ongoing oversupply in the power market in Singapore as a result of the fact that large number of generating units were put into operation in recent years.

The Company continues to deliver promising performance in the capital markets. It was awarded "Golden Governance 2016 Listed Company – Outstanding Board Secretaries" by the Shanghai Securities News (investor relations), and "the Most Investment Value of Listed Company" and "the Best Board Secretary" of the China Securities Golden Bauhinia Awards. The Company's annual report of H Shares in 2015 won Gold Award in the 30th International ARC Awards Competition. Besides, the Company was on the list of "Platts Top 250 Global Energy Listed Company Ranking" for eight consecutive years and ranked 27th in 2016 with its ranking moving higher continuously.

PROSPECTS FOR 2017

In 2017, the Company will further firmly establish a sense of leadership, competitive awareness, market awareness and risk awareness. The Company will adhere to an issue-oriented approach, strengthen innovation drive, undertake responsibility and missions, enhance corporate vitality, and place more emphases on quality and efficiency, transformation and upgrading, standardizing management and risk prevention work, constantly improve the profitability, competitive strength and sustainable development capability of the Company.

In respect of the power market, the Company will continue to deeply research market supply and demand situation, and take active part in market competition. We will ensure market share is higher than capacity share, and strive for a leading position in the region in terms of utilization hour benchmark in an effort to achieve a power generation of 392.0 billion kWh and 3,800 utilization hours for the year.

Regarding the fuel market, the Company will adhere to the market-oriented development, and reinforce the benchmark system construction, deepen the refined management and thus creating a cost advantage. We will continue to optimize fuel procurement chain and production and operation chain.

In respect of the capital market, the Company will make active response to changes in the financial market, expand financing channels, strengthen internal control over capital and improve capital usage efficiency, continuing to maintain the Company's leading position in the industry in terms of financing cost.

In respect of innovative development, the Company will further perform innovation-driven development strategy, strengthen production management innovation and improve intelligent production, enhance management efficiency and effectiveness. Innovation will become the Company's primary driver for establishing its new competitive advantages and for steering the Company's future development.

SUMMARY OF FINANCIAL INFORMATION AND OPERATING RESULTS

Please refer to the Financial Highlights on page 8 for the summary of the operating results and assets and liabilities of the Company and its subsidiaries as at 31 December 2016 and for the accounting year ended 31 December 2016.

Please refer to pages 107 to 108 of the financial statements for the operating results of the Company and its subsidiaries for the accounting year ended 31 December 2016, which have been reviewed by the Company's Audit Committee.

DISTRIBUTABLE RESERVE

The distributable reserve as at 31 December 2016 calculated in accordance with the Company's Articles of Association is set out in Note 22 to the financial statements prepared under the International Financial Reporting Standards (the "IFRS").

DIVIDENDS

Since the listing of the Company, shareholders have given great support to and cared much for the Company. The Company has also generated returns that have been growing continuously and steadily over the years. The Company has been paying dividends to shareholders every year since 1998, with an accumulated dividend distribution of RMB50.245 billion.

The Company's Articles clearly defines the Company's cash dividend policy, i.e. when the Company's earnings and accumulative undistributed profits for the current year are positive, and on condition that the Company's cash flow can satisfy the Company's normal operation and sustainable development, the Company shall adopt a cash dividend appropriation policy on principle that the cash dividend payout will not be less than 50% of the distributable profit realized in the then year's consolidated financial statements.

In the future, the Company will continue to follow a proactive, balanced and stable dividend policy and persistently enhance its profitability, striving for realization of increasing returns to shareholders.

In accordance with the requirements of relevant laws and regulations and the articles of association of the Company, the Company adheres to the profit distribution policy whereby the distributable profits shall be the lower of distributable profits as stated in the financial statements prepared under the China Accounting Standards for Business Enterprises and the International Financial Reporting Standards.

With respect to the dividend distribution plan for 2016, the Company proposed to declare a cash dividend of RMB0.29 (inclusive of tax) for each share to all shareholders. All dividends payable to shareholders will be subject to shareholders' approval at the annual general meeting of the Company.

In accordance with the "Enterprise Income Tax Law of China" and its implementation regulations which came into effect on 1 January 2008, the Company is required to withhold and pay enterprise income tax at the rate of 10% on behalf of the non-resident enterprise shareholders whose names appear on the register of members for H share of the Company when distributing final dividends to them. For H shares of the Company registered other than in the name(s) of individual(s), including HKSCC Nominees Limited, other nominees, trustees, or other organizations or groups, shall be deemed to be shares held by non-resident enterprise shareholder(s). On the basis, enterprise income tax shall be withheld from dividends payable to such shareholder(s).

As the Company is yet to confirm the date of the 2016 annual general meeting, the record date(s) and the period(s) for closure of register for determining the eligibility to attend and vote at the 2016 annual general meeting and the entitlement to the final dividend, the Company will upon confirmation thereof announce such details in the notice of the 2016 annual general meeting. Such notice is expected to be issued to the shareholders in April 2017.

The Company shall comply with the relevant rules and regulations to withhold and pay enterprise income tax on behalf of the relevant shareholders with reference to the register of members of the Company as of the record date.

The standard and amendments to published standards adopted by the Company and its subsidiaries for the current year, which are effective for accounting year beginning on 1 January 2016 and relevant to the Company and its subsidiaries, are set out in Note 2 to the financial statements prepared under the IFRS.

PRINCIPAL BUSINESS

The domestic power plants of the Company and its subsidiaries are located in 22 provinces, municipalities and autonomous regions. The Company also has a wholly-owned power plant in Singapore. The core business of the Company is to develop, construct and operate large-scale power plants throughout China by making use of modern technology and equipment and financial resources available domestically and internationally. The power plant facilities of the Company are technically advanced, highly efficient and stable.

SUBSIDIARIES AND ASSOCIATES

Please refer to Notes 9 and 8 to the financial statements prepared under the IFRS for details of the Company's subsidiaries and associates.

BONDS

During the year, the Company successfully issued bonds with a total principal amount of RMB37.2 billion in meeting its operational needs. Please refer to Note 25 and 29 to the financial statements prepared under the IFRS for details.

BANK LOANS AND OTHER BORROWINGS

Please refer to Notes 24 and 30 to the financial statements prepared under the IFRS for details of bank loans and other borrowings of the Company and its subsidiaries as at 31 December 2016.

CAPITALIZED INTERESTS

Please refer to Note 7 to the financial statements prepared under the IFRS for details of the capitalized interests of the Company and its subsidiaries during the year.

PROPERTIES, PLANTS AND EQUIPMENT

Please refer to Note 7 to the financial statements prepared under the IFRS for details of properties, plants and equipment of the Company and its subsidiaries during the year.

RESERVES

Please refer to the consolidated statement of changes in equity on pages 112 to 113 of the financial statements prepared under the IFRS for details of statutory reserves of the Company and its subsidiaries during the year.

PRE-EMPTIVE RIGHTS

According to the Articles of the Company and the laws of the PRC, there are no provisions for pre-emptive rights requiring the Company to offer new shares to the existing shareholders of the Company in proportion to their shareholdings.

LARGEST SUPPLIERS AND CUSTOMERS

The five largest suppliers of the Company and its subsidiaries for 2016 were China Huaneng Group Fuel Co., Ltd., Shanxi Yangquan Coal Industry Group Company, China Shenhua Group, Huating Coal Group Limited Liability Company and China National Coal Group Corporation respectively. The total purchase from them amounted to approximately RMB28.6 billion, representing approximately 51.41% of the total coal purchase of the year.

As a power producer, the Company sells the electricity generated by its power plants through local grid operators only and has no other customer. The five largest customers of the Company and its subsidiaries for 2016 were State Grid Jiangsu Electric Power Company, State Grid Shandong Electric Power Company, State Grid Zhejiang Electric Power Company, Guangdong Power Grid Corporation, and State Grid Shanghai Municipal Electric Power Company. The five customers accounted for approximately 41.64% of the operating revenue for the year while the largest customer, namely State Grid Jiangsu Electric Power Company, accounted for approximately 11.86% of the operating revenue.

None of the directors, supervisors of the Company and their respective close associates (as defined under the Listing Rules) had any interest in the five largest suppliers and customers of the Company mentioned above in 2016.

CONTINUING CONNECTED TRANSACTIONS AND CONNECTED TRANSACTIONS

The following are the major continuing connected transactions and connected transactions of the Company in 2016 according to the requirements of the Listing Rules:

Continuing Connected Transactions

1. *Continuing Connected Transactions with Huaneng Group and Huaneng Finance*

The major continuing connected transactions of the Company are those transactions conducted between the Company and its subsidiaries and certain subsidiaries and/or associates of China Huaneng Group ("Huaneng Group"). HIPDC, as the controlling shareholder of the Company, holds 33.33% of the total issued share capital of the Company. Huaneng Group holds a 75% direct interest and a 25% indirect interest in HIPDC. In addition, Huaneng Group holds a 10.23% direct equity interest in the Company, a 3.11% indirect equity interest in the Company through China Hua Neng Group Hong Kong Limited ("Huaneng Hong Kong", a wholly-owned subsidiary of Huaneng Group) and a 0.49% indirect equity interest in the Company through China Huaneng Finance Corporation Limited ("Huaneng Finance", a controlling subsidiary of Huaneng Group). Therefore, Huaneng Group is a connected person to the Company and transactions between the Company and the subsidiaries and/or associates of Huaneng Group constitute connected transactions of the Company under the Listing Rules. The purposes of the Company to enter into such continuing connected transactions with those connected persons were to meet the operational needs of the Company and to get the most favourable terms and conditions from the market from the Company's perspective. The relevant information regarding the continuing connected transactions was set out in the announcement dated 23 April 2014 and the circular dated 12 May 2014, the announcement dated 26 November 2015 and the circular dated 22 December 2015 published by the Company, particulars of which are summarized as follows:

(i) Huaneng Group Framework Agreement entered into between the Company and Huaneng Group on 25 November 2015 for a term commencing on 1 January 2016 and expiring on 31 December 2016. Pursuant to the Framework Agreement, the Company would conduct the following transactions with Huaneng Group and its subsidiaries and associates on an ongoing basis:

- Purchase of ancillary equipment and parts relevant to the production operation for the infrastructure construction work for power plants, at terms and the prices to be negotiated at arm's length terms, taking into account the then prevailing market conditions; but in any event at the terms and prices no less favourable than those offered to the Company by independent third parties for the same or similar type of ancillary equipment and parts. In addition, the payment of the consideration will be settled in cash in arrears, or in accordance with the payment terms agreed by the relevant parties in the contracts to be entered into pursuant to the Framework Agreement.

  For the year ended 31 December 2016, the annual cap of the purchase of ancillary equipment and parts was RMB2.6 billion (inclusive of value-added tax ("VAT")). The actual transaction amount for the year ended 31 December 2016 was RMB533 million (inclusive of VAT) and RMB483 million (exclusive of VAT).

- Purchase of coal and transportation services for power generation, at prices and charges calculated by reference to RMB/ton and the actual weight of carriage, with arm's length terms taking into account the then market conditions, and in any event the coal price and the terms of the purchase of coal transportation service shall be no less favourable than those offered by independent third parties to the Company for the same or similar type of coal supply or transportation services. The payment of the consideration will be settled in cash in arrears, or in accordance with the payment terms agreed by the relevant parties in the contracts to be entered into pursuant to the Framework Agreement.

  For the year ended 31 December 2016, the annual cap of the purchase of coal and transportation services was RMB26.2 billion (inclusive of VAT). The actual transaction amount for the year ended 31 December 2016 was RMB20.046 billion (inclusive of VAT) or RMB17.213 billion (exclusive of VAT).

- Leasing of facilities, land and office spaces (mainly power transmission and transformation assets, vessels, power plants land and office spaces) for operational needs, at terms and prices to be negotiated at arm's length terms, taking into account the then prevailing market conditions; but in any event at the leasing terms and prices no less favourable than those offered to the Company by independent third parties for the leasing of the same or similar type of facilities, land and office spaces. In addition, the payment of the consideration will be settled in cash in arrears, or in accordance with the payment terms agreed by the relevant parties in the contracts to be entered into pursuant to the Framework Agreement.

  For the year ended 31 December 2016, the annual cap of the leasing of facilities, land and office spaces was RMB400 million. The actual transaction amount for the year ended 31 December 2016 was RMB291 million.

- Purchase of technical services, engineering contracting services and other services for the Company's operation and production needs, at terms and prices to be negotiated at arm's length terms, taking into account the then prevailing market conditions; but in any event at the terms and prices no less favourable than those offered to the Company by independent third parties for the same or similar type of technical services and engineering contracting services. In addition, the payment of the consideration will be settled in cash in arrears, or in accordance with the payment terms agreed by the relevant parties in the contracts to be entered into pursuant to the Framework Agreement.

  For the year ended 31 December 2016, the annual cap of the purchase of technical services, engineering contracting services and other services was RMB1.7 billion (inclusive of VAT). The actual transaction amount for the year ended 31 December 2016 was RMB1.149 billion (inclusive of VAT) or RMB1.055 billion (exclusive of VAT).

- Provision of entrusted sale services by Huaneng Group and its subsidiaries and associates for the Company and its subsidiaries (involving mainly the use of power generation quota of Huaneng Group and its subsidiaries and associates by the Company and its subsidiaries for substituted power generation), at the terms and prices to be negotiated at arm's length terms, taking into account the then prevailing market conditions; but in any event at the terms and prices no less favorable than those offered by the Company to independent third parties for the same or similar type of services. The payment of the consideration will be settled in cash in arrears, or in accordance with the payment terms agreed by the relevant parties in the contracts to be entered into pursuant to the Framework Agreement.

  For the year ended 31 December 2016, the annual cap of the provision of entrusted sale services was RMB900 million (inclusive of VAT). The actual transaction amount for the year ended 31 December 2016 was RMB1 million (inclusive of VAT).

- Provision of entrusted sale services by the Company and its subsidiaries for Huaneng Group and its subsidiaries and associates (involving mainly the use of power generation quota of the Company and its subsidiaries by Huaneng Group and its subsidiaries and associates for substituted power generation) at the terms and prices to be negotiated at arm's length terms, taking into account the then prevailing market conditions; but in any event at the terms and prices no less favorable than those offered by the Company to independent third parties for the same or similar type of services. The payment of the consideration will be settled in cash in arrears, or in accordance with the payment terms agreed by the relevant parties in the contracts to be entered into pursuant to the Framework Agreement.

  For the year ended 31 December 2016, the annual cap of the provision of entrusted sale services was RMB400 million (inclusive of VAT). The actual transaction amount for the year ended 31 December 2016 was RMB207 million (inclusive of VAT) or RMB196 million (exclusive of VAT).

- Sales of products (i.e. sales of coal), at coal prices and charges calculated by reference to RMB/ton and the actual weight of carriage, with arm's length terms taking into account the then market conditions, and in any event the terms of the coal price and other related products shall be no less favourable than those offered by independent third parties to the Company for the same or similar type of coal supply or other related products. The payment of the consideration will be settled in cash in arrears, or in accordance with the payment terms agreed by the relevant parties pursuant to the agreement.

For the year ended 31 December 2016, the annual cap of the sales of products was RMB1.5 billion. The actual transaction amount for the year ended 31 December 2016 was RMB187 million (inclusive of VAT) or RMB183 million (exclusive of VAT).

(ii) Huaneng Finance Framework Agreement entered into between the Company and Huaneng Finance on 22 April 2014 for a term of three years commencing on 1 January 2015 and expiring on 31 December 2017. Huaneng Group and the Company hold 51% and 20% equity interests in Huaneng Finance, respectively. Huaneng Finance is a connected person of the Company.

Pursuant to the Huaneng Finance Framework Agreement, the Company would from time to time place deposits with Huaneng Finance at rates which would be no less favourable than those offered by independent third parties for provision of similar services to the Company in China. As no security over the assets of the Company is granted in respect of the note discounting services and loan advancement services provided by Huaneng Finance, such transactions are exempt from reporting, announcement and independent shareholders' approval requirements under Rule 14A.90 of the Listing Rules.

For the period from 1 January 2016 to 31 December 2016, the outstanding balances of the deposits to be placed with Huaneng Finance on a daily basis would not exceed RMB8 billion. For the year ended 31 December 2016, the maximum balance of deposits placed with Huaneng Finance on a daily basis was RMB7.951 billion.

2. Continuing Connected Transactions with Temasek and its subsidiaries and associates

Upon the completion of the acquisition of SinoSing Power Pte. Ltd. by the Company, TPGS Green Energy Pte. Ltd. became an indirect non-wholly owned subsidiary of the Company, of which 75% is owned by Tuas Power Ltd., an indirect wholly-owned subsidiary of the Company, and the remaining 25% is owned by Gas Supply Pte. Ltd., which is a wholly-owned subsidiary of Temasek Holdings (Private) Limited ("Temasek").

Temasek therefore became a substantial shareholder of a subsidiary of the Company and a connected person of the Company, and the on-going transactions between certain subsidiaries of the Company and the associates of Temasek ("Continuing Connected Transactions with Associates of Temasek") became continuing connected transaction of the Company under the Listing Rules.

The Company considers that Temasek meets the criteria for a passive investor under Rule 14A.100 of the Listing Rules. As such, any connected transactions or continuing connected transactions of a revenue nature in the ordinary and usual course of our business and on normal commercial terms with an associate of Temasek, pursuant to Rule 14A.99 of the Listing Rules, will be exempt from reporting, annual review, announcement and independent shareholders' approval requirement under the Listing Rules. This exemption will be applicable to, amongst other things, the types of Continuing Connected Transactions with Associates of Temasek.

If the exemption is no longer applicable in relation to the Continuing Connected Transactions with Associates of Temasek, the Company will comply with the applicable reporting, annual review, announcement and independent shareholders' approval requirements.

Connected Transactions

1. *Connected Transaction Regarding Financial Sales Leaseback with Tiancheng Leasing Company*

The following wholly owned subsidiaries and controlling subsidiaries signed the following financial leasing contracts with Huaneng Tiancheng Financial Leasing Co., Ltd. ("Tiancheng Leasing Company"); the financing transactions expanded the Company's financing channels, which satisfy the Company's needs for using equipment assets for normal operation, and meanwhile meet the Company's capital requirements, thereby effectively mitigating the pressure on the Company's liquidity. Huaneng Group is the controlling shareholder of Tiancheng Leasing Company, and thus an associate of this Company. Under the Listing Rules, all transactions referred to in the following financial leasing contracts are connected transactions of the Company.

(i) On 25 November 2015, Huaneng Yunnan Diandong Energy Limited Liability Company ("Diandong Energy"), a wholly owned subsidiary of the Company, signed a financial leasing contract with Tiancheng Leasing Company ("Diandong Energy Financial Leasing Contract").

According to the Diandong Energy Financial Leasing Contract, Diandong Energy shall sell some equipment assets in the form of boiler, steam turbine to Tiancheng Leasing Company by way of sales leaseback and the Diandong Energy shall lease back the same from Tiancheng Leasing Company for financing purpose; when the lease expires, Diandong Energy shall repurchase such assets under the contract at the price of RMB1. The financing amount was RMB1.1 billion with a lease period of 5 years.

(ii) On 25 November 2015, Yunnan Diandong Yuwang Energy Limited Company ("Diandong Yuwang"), a wholly owned subsidiary of the Company, signed a financial leasing contract with Tiancheng Leasing Company ("Diandong Yuwang Financial Leasing Contract").

According to Diandong Yuwang Financial Leasing Contract, Diandong Yuwang shall sell some equipment assets in the form of boiler, steam turbine, machine condenser, induced draft fan by way of sales leaseback to Tiancheng Leasing Company Company and Diandong Yuwang shall lease back the same from Tiancheng Leasing Company for financing purpose; when the lease expires, Diandong Yuwang shall repurchase such assets under the contract at the price of RMB1. The financing amount was RMB1.5 billion with a lease period of 5 years.

(iii) On 25 November 2015, Huaneng (Fujian) Harbour Limited Company ("Luoyuan Bay Harbour"), a controlling subsidiary of the Company, signed a financial leasing contract with Tiancheng Leasing Company ("Luoyuan Bay Harbour Financial Leasing Contract").

According to Luoyuan Bay Habour Financial Leasing Contract, Luoyuan Bay Harbour shall sell some equipment assets in form by way of sales leaseback to Tiancheng Leasing Company, and it shall lease back the same from Tiancheng Leasing Company for financing purpose; when the lease expires, Luoyuan Bay Harbour shall repurchase such assets under the contract at the price of RMB1. The financing amount was RMB270 million with a lease period of 5 years.

(iv) On 25 November 2015, Huaneng Pingliang Power Generation Limited Company ("Pingliang Power"), a controlling subsidiary of the Company, signed a financial leasing contract with Tiancheng Leasing Company ("Pingliang Power Financial Leasing Contract").

According to Pingliang Power Financial Leasing Contract, Pingliang Power shall sell some equipment assets in the form of boiler, steam turbine, generator by way of sales leaseback to Tiancheng Leasing Company, and it shall lease back the same from Tiancheng Leasing Company for financing purpose; when the lease expires, Pingliang Power Plant shall repurchase such assets under the contract at the price of RMB1. The financing amount was RMB700 million with a lease period of 5 years.

For details on the above transactions, please refer to the Company's announcements dated 21 October 2015 and 26 November 2015, as well as the circular dated 21 December 2015.

2. Connected Transaction Regarding Contribution to Capital Increase of Hainan Nuclear

On 22 March 2016, the Company signed a capital increase agreement with Huaneng Nuclear Power Development Company Ltd. ("Huaneng Nuclear"), China National Nuclear Power Co., Ltd. ("China National Nuclear") and Hainan Nuclear Power Limited Liability Company ("Hainan Nuclear") ("Capital Increase Agreement"). The Company directly holds 30% equity interests in Hainan Nuclear, while China National Nuclear shall hold 51% equity interests of Hainan Nuclear and Huaneng Nuclear (a wholly owned subsidiary of Huaneng Group) holds 19% equity interests in Hainan Nuclear. Under the Listing Rules, this capital increase was a connected transaction of the Company.

Pursuant to the capital increase agreement, the shareholders of Hainan Nuclear shall contribute the new capital in cash in proportion to their original shareholding. The Company subscribed for in aggregate RMB123,696,000 of part new capital of Hainan Nuclear; China National Nuclear subscribed for RMB210,283,200 and Huaneng Nuclear subscribed for RMB78,340,800. Upon completion of this capital increase, Hainan Nuclear's investing parties and their shareholding percentages were respectively as follows: the Company (30%), China National Nuclear (51%) and Huaneng Nuclear (19%). The consideration for such capital increase was satisfied in cash with the Company's owned funds.

This capital increase satisfies the capital requirements for project construction, increase total capital, and further enhancing financing ability so as to satisfy its annual capital requirements for project construction of Hainan Nuclear; it is expected that the capital increase will bring stable growth in investment return to the Company in future.

For details on the transaction, please refer to the Company's announcement dated 23 March 2016.

3. *Connected Transaction Regarding Contribution to Capital Increase of Shidaowan Nuclear*

On 21 June 2016, the Company signed a capital increase agreement with Huaneng Group, HIPDC, State Nuclear Power Technology Company ("SNPTC") and Huaneng Shidaowan Nuclear Power Development Co., Ltd. ("Shidaowan Nuclear") ("Capital Increase Agreement"). The Company shall directly hold 22.5% shares of Shidaowan Nuclear, while Huaneng Group shall hold 30% shares of Shidaowan Nuclear. Under the Listing Rules, this capital increase is a connected transaction of the Company.

Pursuant to the capital increase agreement, the shareholders of Shidaowan Nuclear shall contribute the new capital in cash in proportion to their original shareholding. The Company shall subscribe an aggregate RMB135,000,000 of the new capital of Shidaowan Nuclear; Huaneng Group shall subscribe RMB180,000,000; HIPDC shall subscribe RMB135,000,000; SNPTC shall subscribe RMB150,000,000. Upon completion of this capital increase, Shidaowan Nuclear's investing parties and their shareholding percentages were as follows respectively: the Company (22.5%), Huaneng Group (30%), HIPDC (22.5%), and SNPTC (25%). The consideration for such capital increase was satisfied in cash with the Company's owned funds.

This capital increase satisfies the capital requirements for project construction of Shidaowan Nuclear's, increase Shidaowan Nuclear's total capital, so as to meet its annual capital requirements for project construction.

For details on the transaction, please refer to the Company's announcement dated 22 June 2016.

4. *Connected Transaction Regarding Acquisition of Equity Interest in Shandong Power Interests, Jilin Power Interests, Heilongjiang Power Interests and Zhongyuan Gas Interests*

On 14 October 2016, the Company signed a transfer agreement and profit forecast compensation agreement with Huaneng Group. Under the Listing Rules, the transactions contemplated under the transfer agreement and the profit forecast compensation agreement constituted connected transactions of the Company.

Pursuant to the transfer agreement, the Company shall pay RMB15,113,825,800 to Huaneng Group to purchase: (i) 80% equity interest in the registered capital of Huaneng Shandong Power Limited ("Shandong Power Interests"); (ii) 100% equity interest in the registered capital of Huaneng Jilin Power Limited ("Huaneng Jilin Interests"); (iii) 100% equity interest in the registered capital of Huaneng Heilongjiang Power Limited ("Heilongjiang Power Interests"); and (iv) 90% equity interest in the registered capital of Huaneng Henan Zhongyuan Gas Power Generation Co., Ltd. ("Zhongyuan Gas Interests"). The consideration for such acquisition would be satisfied in cash with the Company's owned funds.

Pursuant to the profit forecast compensation agreement, Huaneng Group shall, upon issuance of specific audit report each year as prescribed under the agreement, determine the difference between current closing cumulative actual net profit amount and current closing cumulative forecast net profit amount for the compensation period of certain subsidiaries under Shandong Power regarding the specific audit report, and compensate the Company in cash.

This transaction was conducive to the Company to further expand the scale, increase market share, and enhance competitive, rendering the Company to enter into the market in Jilin and Heilongjiang for the first time.

For details on the transaction, please refer to the Company's announcement dated 14 October 2016 and the circular dated 15 November 2016.

In accordance with the requirements of Rule 14.55 & 14A.71 of the Listing Rules of Hong Kong, the Independent Directors of the Company confirmed that the continuing connected transactions above to which the Company was a party:

(i) had been entered into by the Company and/or any of its subsidiaries in the ordinary and usual course of its business;

(ii) had been entered into on normal commercial terms or better; and

(iii) had been entered into according to the agreements governing them on terms that are fair and reasonable and in the interests of the shareholders of the Company as a whole.

Further, the Company has engaged its external auditor to report on the Company's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 (Revised) "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. In accordance with Rule 14A.71 of the Listing Rules, the Board of the Company confirmed that the external auditor of the Company had made a confirmation statement on the issues mentioned in Rule 14A.56 of the Listing Rules. The external auditor has issued an unqualified letter containing their findings and conclusions in respect of the continuing connected transactions set out in item 1 above. A copy of the auditor's letter has been provided by the Company to the Hong Kong Stock Exchange.

Several related party transactions as disclosed in Note 36 to the financial statements prepared in accordance with the IFRS fall under the definition of "continuing connected transaction" in Chapter 14A of the Listing Rules. The Company has complied with the disclosure requirements regarding connected transactions in accordance with Chapter 14A of the Listing Rules.

BUSINESS COMPETITION WITH CONTROLLING SHAREHOLDERS

The ultimate controlling shareholder of the Company, Huaneng Group, is also engaged in the power industry in China. HIPDC, the direct controlling shareholder of the Company, is also engaged in the power industry in China. The Company and Huaneng Group (ultimate controlling shareholder) have power plants located in certain same regions. Huaneng Group and the Company have already entrusted mutually to manage certain of their power plants, and Huaneng Group was also entrusted to manage certain coal assets of the Company.

On 17 September 2010, the Company received an undertaking from Huaneng Group regarding further avoidance of business competition. On the premises of continuing the undertaking previously provided, Huaneng Group further undertook that: (1) it shall treat the Company as the only platform for integrating the conventional energy business of Huaneng Group; (2) with respect to the conventional energy business assets of Huaneng Group located in Shandong Province, Huaneng group undertakes that it will take approximately 5 years to improve the profitability of such assets and when the terms become appropriate, it will inject those assets into the Company. The Company has a right of first refusal to acquire from Huaneng Group the newly developed, acquired or invested projects which are engaged in the conventional energy business of Huaneng Group located in Shandong Province; (3) with respect to the other non-listed conventional energy business assets of Huaneng Group located in other provincial administrative regions, Huaneng Group undertook that it will take approximately 5 years, and upon such assets meeting the conditions for listing, to inject such assets into the Company, with a view to supporting the Company's continuous and stable development; and (4) Huaneng Group will continue to perform each of its undertakings to support the development of its subordinated listed companies.

On 28 June 2014, with a view to executing the contract and satisfying situation as well as the requirements stated in Guideline No. 4 for the Supervision of Listed Companies – Commitments and Fulfillment of Commitments of the Actual Controllers, Shareholders, Affiliates, and Acquirers of Listed Companies as well as the Listed Companies, Huaneng Group will perfect the aforesaid avoidance of business competition by further undertaking that: (1) it shall treat the Company as the only platform for integrating the conventional energy business of Huaneng Group; (2) with respect to the conventional energy business assets of Huaneng Group located in Shandong Province, Huaneng Group undertakes that by the end of 2016, it will improve the profitability of such assets and when the terms become appropriate, it will inject those assets into the Company. Appropriate terms include clear ownership of assets and shares, no decrease in earnings per share of the Company after injection, no unlawful events of significance or events against regulations, appreciation of state-own assets, right of pre-emption of shareholders. The Company has a right of first refusal to acquire from Huaneng Group the newly developed, acquired or invested projects which are engaged in the conventional energy business of Huaneng Group located in Shandong Province; (3) with respect to the other non-listed conventional energy business assets of Huaneng Group located in other provincial administrative regions, Huaneng Group undertook that by the end of 2016, upon such assets meeting the conditions for listing, the Group will inject such assets into the Company, with a view to supporting the Company's continuous and stable development. Appropriate terms include clear ownership of assets and shares, no decrease in earnings per share of the Company after injection, no unlawful events of significance or events against regulations, appreciation of state-own assets, right of pre-emption of shareholders; and (4) Huaneng Group will continue to perform each of its undertakings to support the development of its subordinated listed companies. The period of such undertakings is between 28 June 2014 and 31 December 2016.

Huaneng Group had performed the relevant undertaking as mentioned above at time as specified.

Currently, the Company has 15 directors and six of them have positions in Huaneng Group and/or HIPDC. According to the articles of the Company, in case a conflict of interest arises, the relevant directors shall abstain from voting in the relevant resolutions. Therefore, the operation of the Company is independent from Huaneng Group and HIPDC and the operation of the Company is conducted for its own benefit.

PURCHASE, SALE OR REDEMPTION OF SHARES OF THE COMPANY

The Company and its subsidiaries did not sell, purchase or redeem any shares or other securities of the Company in 2016.

DIRECTORS OF THE COMPANY

The directors of the Company during the year were as follows:

Name of Director	Position	Date of appointment
Cao Peixi	Chairman	Appointed on 18 September 2014
Guo Junming	Vice Chairman	Appointed on 18 September 2014
Liu Guoyue	Director	Appointed on 18 September 2014
Fan Xiaxia	Director	Appointed on 18 September 2014
Li Shiqi	Director	Appointed on 18 September 2014
Huang Jian	Director	Appointed on 18 September 2014
Mi Dabin	Director	Appointed on 18 September 2014
Guo Hongbo	Director	Appointed on 18 September 2014
Zhu Yousheng	Director	Appointed on 25 June 2015
Li Song	Director	Appointed on 18 September 2014
Li Zhensheng	Independent Director	Appointed on 18 September 2014
Yue Heng	Independent Director	Appointed on 18 September 2014
Geng Jianxin	Independent Director	Appointed on 25 June 2015
Xia Qing	Independent Director	Appointed on 25 June 2015
Xu Mengzhou	Independent Director	Appointed on 23 June 2016
Resigned Directors		
Zhang Shouwen	Independent Director	Appointed on 18 September 2014 Resigned on 23 June 2016

MODEL CODE FOR SECURITIES TRANSACTIONS BY DIRECTORS AND SUPERVISORS

On 31 March 2009, the Company's Board considered and approved the Amended Management Guidelines Regarding the Holding of the Company's Shares by the Directors, Supervisors and Senior Management of Huaneng Power International, Inc. The standard of such guidelines is no less exacting than those set out in the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Listing Rules. Enquiry has been made with all Directors and Supervisors and all of them confirmed that they have complied with the code throughout 2016.

DIRECTORS', CHIEF EXECUTIVES' AND SUPERVISORS' RIGHT TO PURCHASE SHARES

For the year ended 31 December 2016, none of the Directors, Chief Executives, Supervisors of the Company or their respective associates had any interests in the shares of the Company or any associated corporations (within the meaning of the Securities and Futures Ordinance (the "SFO"), Cap. 517 of the laws of Hong Kong) which are (a) required to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO; or (b) required to be recorded in the register kept by the Company pursuant to Section 352 of the SFO; and (c) required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers.

For the year ended 31 December 2016, none of the Directors, Chief Executives, Supervisors, senior management of the Company or their spouses and children under the age of 18 was given the right to acquire any shares or debentures of the Company or any associated corporations (within the meaning of the SFO).

INDEPENDENT DIRECTORS' CONFIRMATION OF INDEPENDENCE

Each of the independent directors of the Company, namely Mr. Li Zhensheng, Mr. Yue Heng, Mr. Geng Jianxin, Mr. Xia Qing and Mr. Xu Mengzhou, has signed a confirmation letter by independent non-executive directors for 2016 on 20 March 2017 to confirm his compliance with the relevant requirements regarding independence under the Listing Rules and the Company considers them to be independent.

EMOLUMENTS OF DIRECTORS AND SUPERVISORS

Details of the emoluments of the emoluments of Directors and Supervisors of the Company are set out in Note 38 to the financial statements prepared under the IFRS.

THE FIVE HIGHEST PAID EMPLOYEES

Details of the five highest paid employees of the Company are set out in Note 38 to the financial statements prepared under the IFRS.

PUBLIC FLOAT

As at the date of this announcement, the Company has maintained the prescribed public float under the Listing Rules and as agreed with the Hong Kong Stock Exchange, based on the information that is publicly available to the Company and within the knowledge of the directors.

STRUCTURE OF SHARE CAPITAL

As at 31 December 2016, the entire issued share capital of the Company amounted to 15,200,383,440 shares, of which 10,500,000,000 shares were domestic shares, representing 69.08% of the total issued share capital, and 4,700,383,440 shares were foreign shares, representing 30.92% of the total issued share capital of the Company. In respect of foreign shares, China Huaneng Group Corporation ("Huaneng Group") held 472,000,000 shares through its wholly owned subsidiary, China Hua Neng Group Hong Kong Limited, representing 3.11% of the total issued capital of the Company. In respect of domestic shares, Huaneng International Power Development Corporation ("HIPDC") owned a total of 5,066,662,118 shares, representing 33.33% of the total issued share capital of the Company, while Huaneng Group held 1,555,124,549 shares, representing 10.23% of the total issued share capital of the Company, and held 74,139,853 shares through its controlling subsidiary, China Huaneng Finance Corporation Limited, representing 0.49% of the total issued share capital of the Company. Other domestic shareholders held a total of 3,804,073,480 shares, representing 25.03% of the total issued share capital.

MAJOR SHAREHOLDING STRUCTURE OF THE COMPANY

The following table sets out the shareholdings of the top ten shareholders of the Company as at 31 December 2016:

Name of shareholder	**Number of Shares held at year end**	**Percentage of Shareholding** *(%)*
Huaneng International Power Development Corporation	5,066,662,118	33.33
HKSCC Nominees Limited	3,935,332,060	25.89
China Huaneng Group	1,555,124,549	10.23
Hebei Construction & Investment Group Co., Ltd.	603,000,000	3.97
China Hua Neng Group Hong Kong Limited	472,000,000	3.11
Jiangsu Provincial Investment & Management Limited Liability Company	416,500,000	2.74
Liaoning Energy Investment (Group) Limited Liability Company	388,619,936	2.56
China Securities Finance Corporation Limited	373,260,261	2.46
Fujian Investment & Development Group Co., Ltd.	365,818,238	2.41
Dalian Construction Investment Group Co., Ltd.	301,150,000	1.98

MATERIAL INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES OF THE COMPANY

As at 31 December 2016, the interests or short positions of persons who were entitled to exercise or control the exercise of 5% or more of the voting power at any of the Company's general meetings (excluding the Directors, Supervisors and chief executive) in the shares and underlying shares of equity derivatives of the Company as recorded in the register required to be kept under Section 336 of the SFO were as follows:

Name of shareholder	Class of shares	Number of shares held (share)	Capacity	Approximate percentage of shareholding in the Company's total issued share capital	Approximate percentage of shareholding in the Company's total issued domestic shares	Approximate Percentage of shareholding in the Company's total issued H Shares
Huaneng International Power Development Corporation (Note 2)	Domestic shares	5,066,662,118 (L)	Beneficial owner	33.33% (L)	48.25% (L)	–
China Huaneng Group (Note 3)	Domestic shares	1,629,264,402 (L)	Beneficial owner	10.72% (L)	15.52% (L)	–
China Huaneng Group (Note 4)	H shares	472,000,000 (L)	Beneficial owner	3.11% (L)	–	10.04% (L)
Hebei Provincial Construction Investment Company	Domestic shares	603,000,000 (L)	Beneficial owner	3.97% (L)	5.74% (L)	–
Blackrock, Inc (Note 5)	H shares	382,892,866 (L)	Interest in controlled entity	2.51% (L)	–	8.14% (L)
		2,054,000 (S)	Interest in controlled entity	0.01% (S)	–	0.04% (S)
JPMorgan Chase $ Co. (Note 6)	H shares	155,016,140 (L)	Beneficiary owner	1.01% (L)	–	3.29% (L)
		19,389,462 (S)	Beneficiary owner	0.12% (S)	–	0.41% (S)
		205,682,000 (L)	Investment manager	1.35% (L)	–	4.37% (L)
		11,160 (L)	Trustee	0.00007% (L)	–	0.0002% (L)
		111,813,865 (P)	Custodian	0.73% (L)	–	2.38% (L)

Notes:

(1) The letter "L" denotes a long position. The letter "S" denotes a short position. The letter "P" denotes interest in a lending pool.

(2) As of the Latest Practicable Date, Huaneng Group holds 75% direct interests and an additional 25% indirect interests in HIPDC.

(3) Of the 1,629,264,402 domestic shares, Huaneng Group held 74,139,853 domestic shares through its controlling subsidiary, Huaneng Finance.

(4) Huaneng Group held 472,000,000 H shares of the Company through its wholly owned subsidiary, China Hua Neng Group Hong Kong Limited.

(5) Long position of 3,979,120 shares and short position of 658,000 shares were held through cash settled derivatives (on exchange).

(6) Long position of 861,720 shares and short position of 2,659,000 shares were held through physically settled derivatives (on exchange). Short position of 2,546,000 shares was held through cash settled derivatives (on exchange). Long position of 7,900,000 shares and short position of 8,342,478 shares were held through physically settled derivatives (off exchange). Long position of 12,459,984 shares and short position of 5,661,984 shares were held through cash settled derivatives (off exchange).

Save as stated above, as at 31 December 2016, in the register required to be kept under Section 336 of the SFO, no other persons were recorded to hold any interests or short positions in the shares or underlying shares of the equity derivatives of the Company.

DIRECTORS' AND SUPERVISORS' INTEREST IN CONTRACTS AND SERVICE CONTRACTS

Save for the service contracts mentioned below, as at the end of 2016, the directors and supervisors of the Company did not have any material interests in any contracts entered into by the Company.

No director and supervisor has entered into any service contract which is not terminable by the Company within one year without payment of compensation (other than statutory compensation).

Each and every Director and Supervisor of the Company had entered into a service contract with the Company for a term of three years commencing from the signing of the contract.

REMUNERATION POLICY

The Company unceasingly improves its remuneration and distribution system and, in accordance with the overall development strategy of the Company, has formulated a set of remuneration management rules. Employees' salaries are determined by reference to the job positions they hold and calculated based on their job performance. Giving consideration to both efficiency and fairness, the Company creates a methodic and effective incentive mechanism by linking the employees' remuneration with their personal performance and the business performance of the Company as well. The remuneration of the Directors, Supervisors and senior management of the Company mainly consists of the following:

(1) Salaries and allowances

The basic salary is mainly set by an evaluation of the job position and a factor analysis, and with reference to the salary level of the relevant position in the labor market. It accounts for about 35% of the total remuneration.

(2) Discretionary bonus

Discretionary bonus is based on the operating results of the Company, the performance of the Directors, Supervisors and senior management. It accounts for about 50% of the total remuneration.

(3) Payments on pension, etc.

Contributions for various pension schemes such as social insurances, corporate annuity and housing fund established by the Company for the Directors, Supervisors and senior management accounts for about 15% of the total remuneration.

According to the resolution at the general meeting, the Company pays each independent Director a subsidy amounted to RMB60,000 (after tax) each year. The Company also reimburses the independent Directors for the expenses they incur in attending board meetings and general meetings and other reasonable expenses they incur while fulfilling their obligations under the Company Law and the Company's Articles of Association (including travelling expenses and administrative expenses). Besides these, the Company does not give the independent Directors any other benefit.

STAFF HOUSING

The Company made allocation to the housing fund for the employees of the Company and its subsidiaries in accordance with the relevant PRC regulations.

STAFF WELFARE QUARTERS

According to the relevant PRC regulations, the Company has not provided welfare quarters to its staff.

STAFF MEDICAL INSURANCE SCHEME

According to the requirements as prescribed by the relevant local governments, the Company and its subsidiaries have joined a medical insurance scheme for its staff, and have taken measures for its implementation according to planning.

RETIREMENT SCHEMES

The Company and its subsidiaries have implemented a series of specified retirement contribution schemes based on the local conditions and policies of the places where the Company and its subsidiaries have operations.

Pursuant to the specified retirement contribution schemes, the Company and its subsidiaries have paid contributions according to the contracted terms and obligations set out in the publicly administered retirement insurance plans. The Company has no other obligations to pay further contributions after paying the prescribed contributions. The contributions payable from time to time will be regarded as expenses for the period and capital construction expenditure during the year they are made and accounted for as labor cost.

GENERAL MEETINGS

During the Reporting Period, the Company convened one annual general meeting and two extraordinary general meetings.

1. The Company's 2015 Annual General Meeting was held on 23 June 2016. The resolutions passed at the meeting were published in China Securities Journal and Shanghai Securities News on 24 June 2016.

2. The Company's 2016 First Extraordinary General Meeting was held on 12 January 2016. The resolutions passed at the meeting were published in China Securities Journal and Shanghai Securities News on 13 January 2016.

3. The Company's 2016 Second Extraordinary General Meeting was held on 30 November 2016. The resolutions passed at the meeting were published in China Securities Journal and Shanghai Securities News on 1 December 2016.

DISCLOSURE OF MAJOR EVENTS

1. Due to work requirement, Mr. Zhang Shouwen, independent non-executive director of the Company, submitted his resignation report to the Company to resign from the positions of independent director and member of specialized committees. At the recommendation of shareholders, the Board meeting and the general meeting were held on 22 March 2016 and 23 June 2016 respectively, at which the resolution regarding the change of Independent Directors of the Company was considered, and Mr. Xu Mengzhou was elected as Independent Director of the Eighth Session of the Board. At the same time, Mr. Zhang Shouwen officially resigned from his respective positions.

2. Due to age, Mr. Wang Zhaobin and Ms. Zhang Ling, supervisors of the Company, submitted their resignation reports to the Company to resign from the position of supervisor. At the recommendation of employees, Ms. Zhang Xiaojun and Mr. Zhu Daqing were elected as supervisors of the eighth session of the Supervisory Committee on 14 April 2016.

3. On 14 October 2016, the Company signed the Agreement for the Transfer of Equity Interests in Certain Companies with Huaneng Group and Huaneng Power International Inc. (the "Transfer Agreement") and Profit Forecast Compensation Agreement made between Huaneng Group and Huaneng Power International Inc. with Huaneng Group in Beijing. Pursuant to the Transfer Agreement, the Company shall accept the transfer of 80% equity interest of Huaneng Shandong Power Limited, 100% equity interest of Huaneng Jilin Power Limited, 100% equity interest of Huaneng Heilongjiang Power Limited and 90% equity interest of Huaneng Henan Zhongyuan Gas Power Generation Co., Ltd. from Huaneng Group for the consideration of RMB15,113,825,800. This transaction was considered and approved at the 21st meeting of the Eighth Session of the Board held on 14 October 2016, and was considered and approved at the 2016 Second Extraordinary General Meeting held on 30 November 2016. According to the terms of the agreements, the Company settled 50% of the consideration for such transaction to Huaneng Group on 9 January 2017.

4. With the completion of H shares additional issue in November 2015, the marketized reform of state grid power market, and in accordance with the national laws and regulations, the Company has modified and improved the business scope, shareholding structure and registered capital stated in the Articles of Association.

OTHER DISCLOSURE

An analysis of the Company's performance using key financial performance indicators and a discussion on the principal risks and uncertainties facing by the Company are set out in the section headed "Management's Discussion and Analysis" in this annual report. Particulars on the significant events affecting the Company during the year can be found in the section headed "Major Corporate Events in 2016" in this annual report. In addition, discussions on the Company's environmental policies and performance, relationship with its major stakeholders, permitted indemnity provisions provided by the Company to its Directors and compliance with the relevant laws and regulations which have a significant impact on the Company are included in the sections headed "Management's Discussion and Analysis", "Corporate Governance Report" and "Social Responsibility Report" in this annual report. These discussions form part of this Report of the Board of Directors.

REQUIREMENTS UNDER THE ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORTING GUIDELINES

In 2016, in order to fully implement the requirements under the Environmental, Social and Governance Reporting Guidelines of the Hong Kong Stock Exchange, the Company made considerable organization and reasonable arrangement with much attention paid thereto, which in turn enabled the Company to complete preparation and disclosure of the ESG Report in due time and accordingly improved its corporate image in capital market. The ESG Report of the Company for 2016 will be published on the websites of the Company and the Hong Kong Stock Exchange, respectively.

CODE OF CORPORATE GOVERNANCE PRACTICES

During the year, save as otherwise disclosed below, the Company has complied with the Corporate Governance Code as set out in Appendix 14 of the Listing Rules. The annual report of the Company will contain a corporate governance report prepared in accordance with the requirements under the Listing Rules.

DESIGNATED DEPOSIT

As at 31 December 2016, the Company and its subsidiaries did not have any designated deposit with any financial institutions within the PRC nor any overdue fixed deposit which could not be recovered.

DONATION

During the year, the Company made a donation of RMB6.68 million.

LEGAL PROCEEDINGS

In April 2015, a construction contractor of a subsidiary of the Company brought an arbitration application against the subsidiary due to its dispute on construction settlement, through which, the contractor required the subsidiary to indemnify an amount of approximately RMB83.46 million as construction payment and relevant interests incurred. As at 31 December 2016, it is difficult to estimate reasonably the financial effect arising from this outstanding arbitration since it is still pending for final judgment, therefore no provision has been provided for in respect thereof.

Save as disclosed above, as at 31 December 2016, the Company and its subsidiaries were not involved in any material litigation or arbitration and no material litigation or claim was pending or threatened or made against the Company and its subsidiaries.

CHANGES OF INFORMATION OF DIRECTORS AND SUPERVISORS DURING THE REPORTING PERIOD

1. Mr. Yue Heng, the Independent Non-executive Directors of the Company, ceased to serve as independent director of China Meheco Co., Ltd.

2. Mr. Xu Mengzhou, the Independent Non-executive Directors of the Company, took his new position in ENN Ecological Holdings Co., Ltd.

3. Mr. Guo Hongbo, the Non-executive Director of the Company, was newly appointed as director of Shenyang Jinshan Energy Co., Ltd. and vice chairman of Liaoning Haitong New Energy And Low-Carbon Industry Equity Investment Fund Co., Ltd.

4. Mr. Zhu Yousheng, the Non-executive Director of the Company, resigned as the general manager of Jiangsu Guoxin Yangzhou Power Co., Ltd.

ANNUAL GENERAL MEETING AND CLOSURE OF REGISTER

As the Company has not yet confirmed the date for convening the 2016 annual general meeting, or the record date(s) and the period(s) for closure of register for determining eligibility to attend and vote at the 2016 annual general meeting and for determining the entitlement to the final dividend, the Company will upon confirmation thereof announce such details in the notice of the 2016 annual general meeting. Such notice is expected to be issued to the shareholders in April 2017.

AUDITORS

As approved at the 2015 Annual General Meeting of the Company, KPMG and KPMG Huazhen LLP were appointed as the Company's international and PRC auditors respectively for the year 2016.

The Board has resolved to continue to appoint KPMG Huazhen LLP as the domestic auditors and U.S. 20F annual report auditors of the Company and KPMG as the Company's Hong Kong auditors for 2017, with the proposal of the Audit Committee, where such proposal is subject to the approval by the Shareholders at the 2016 annual general meeting.

By Order of the Board
Cao Peixi
Chairman

Beijing, the PRC
21 March 2017

REPORT OF THE SUPERVISORY COMMITTEE

To all shareholders:

In 2016, the Supervisory Committee of the Company (the "Supervisory Committee") fully performed the functions of supervision by effectively safeguarding the interests of the Company and shareholders' rights in strict accordance with the Company Law, the Securities Law, the Articles of Association of the Company and other relevant laws and regulations. All members of the Supervisory Committee presented at Board meetings and attended general meetings, acted honestly and in good faith, and diligently fulfil their duties and responsibilities conferred by laws and regulations in strict compliance with laws applicable to the places where the Company is listed as well as the Articles of Association of the Company. We hereby report the major work during the reporting period as follows:

I. Overall Evaluation on the Company's Management Behaviour and Performance in 2016

The power demand of China experienced a slight increase in 2016, while the growth of power generation experienced a slight decrease as compared to previous year. The board of directors of the Company adhered to the implementation of the strategy highlighting "quality improvement and efficiency enhancement, improvement of competitiveness and overall stringent governance", and led the senior management in implementing the "five major issues". In detail, it made vigorous efforts in operation and management, which enabled it to smoothly commence work in respect of the 13th Five-year Plan with the profitability and various operating indicators better than other market players. Under effective compliance, the board of directors of the Company has carefully executed resolutions of the general meetings with earnest performance, without any behavior which may harm the interests of the Company and its shareholders. The approval procedure for any board resolution is in compliance with applicable laws and regulations such as the Company Law and the Articles of Association, and the subject matter involved in the resolutions is proposed for the requirements of management and development. The operating team has carefully implemented each board resolution and conducted transactions based on its various systems. There is no behavior breaking relevant provisions. The Company insists on corporate governance by laws which enables the Company to steadily improve its governance level, obtaining a highly recognition from securities markets and regulatory authorities.

II. Particulars of Work Performed by the Supervisory Committee during the Reporting Period

1. Particulars on convention of the meetings of the Supervisory Committee

In accordance with the applicable laws and regulations, the Articles of Association of the Company and the practical needs of the Company's development, the Supervisory Committee of the Company convened four meetings during the year. At the meetings, the Supervisory Committee reviewed and examined the 2016 working report of the Supervisory Committee, financial reports, regular reports, profit distribution plans, the proposal on provision for impairment of the Company's major assets, self-assessment reports on internal control by the Board and social responsibility reports, thereby effectively performing the duties of supervision and examination. These meetings were convened in strict compliance with the relevant requirements of the Company Law and the Articles of Association of the Company. Agenda and resolutions of these meetings have been disclosed and announced timely in accordance with relevant provisions regarding information disclosure.

2. Training for the members of the Supervisory Committee

All the Supervisors of the Company place great emphasis on study of the relevant knowledge, so as to get an understanding of the most updated development of the laws and regulations and relevant policies of the place where the Company is listed in a timely basis. The Supervisors proactively attended the special trainings and follow-up trainings for directors and supervisors organized by the SSE and the relevant regulators. In 2016, the new supervisors of the Company have attended the aforesaid trainings, and further enhanced their capability to perform their duty and improve their practice through study. All Supervisors have acted with integrity, self-discipline and dedication, making positive contribution to the constant improvement of our corporate governance.

III. Particulars of Discharging Duties of Supervision and Issuing Independent Opinions

1. Legality of the Company's operations

Through various approaches including presenting at Board meetings, attending general meetings, the Chairman office meetings and the President office meetings and keeping itself abreast of the particulars of the Company's production and operations on site and in real time, the Supervisory Committee performed effective supervision and examination on the procedures for convening general meetings and board meetings and the resolutions thereof, the implementation of resolutions of general meetings by the Board and the senior management of the Company, the performance of duties by Directors and the senior management of the Company and the implementation of internal control system of the Company, and expressed its opinions and views timely according to applicable laws as well as the Articles of Association of the Company.

The Supervisory Committee is of the view that the Board and the senior management of the Company has been capable of establishing a model and conducting regulated operation in strict compliance with the Articles of Association of the Company and applicable laws of the jurisdictions in which the Company's shares are listed, and have performed dutifully, diligently, lawfully and in good faith. The Company has made outstanding achievements in safe production, operating results and quality development, and in establishing itself as an international listed power company. During the reporting period, the Supervisory Committee has not identified any behavior in breach of any applicable laws or the Articles of Association of the Company or any issue that has caused damages to the interests of the Company.

2. Examining the financial information and regular reports of the Company

The Supervisory Committee has reviewed all the regular financial reports in regular meetings in 2015, and carefully audited the final financial reports of the Company for 2015, the profit distribution plan of the Company for 2015, the annual report of the Company for 2015 and the auditor's reports for 2015 issued by the domestic and international auditors respectively at the annual meeting held on 22 March 2016.

The Supervisory Committee is of the view that the Company has acted in strict compliance with the financial system, and the regular financial reports for 2015 have accurately reflected the state of affairs and operating results of the Company during the reporting period. The Supervisory Committee agreed to the final financial reports for 2015, the auditor's report on the Company's financial statements for 2015 issued by the auditors and the profit distribution plan of the Company for 2015.

3. Examining the use of funds raised by the Company

In 2016, the Supervisory Committee attached great importance to the implementation process and results of the Board's resolution regarding the fund-raising activities, and attended the meeting to review the Board's resolution regarding the relevant fund-raising activities. On 3 September 2016, the Board of the Company considered and approved the Proposal Relating to the Non-public Offering of H Shares and Relevant Matters, pursuant to which, the Company proposed to make a non-public offering of up to 940,000,000 H shares in Hong Kong. The Supervisory Committee believes that the Board has exercised adequate procedure to make decision on this proposal and the subject matter meets the Company's development needs.

The Company's most recent fund-raising activity was reported as follows: as approved and authorized by the shareholders at the general meeting, the Company completed the non-public issuance of a total of 780,000,000 new H Shares on 12 November 2015 with a total proceeds of HK$5.71 billion, upon which the total share capital of the Company increased to 15,200,000,000 shares. The Supervisory Committee is of the view that the Company has strictly complied with relevant regulations applicable to the places where the Company is listed, relevant requirements as prescribed by the "Management Rules on Fund Raising by Companies Listed in the Shanghai Stock Exchange" and the "Management Rules on Fund Raising by Huaneng Power International, Inc." for the application of funds raised. The actual use of funds has been in accordance with the commitment and there has been no change to the project funds.

4. Checking on particulars of major acquisitions, disposal of assets and connected transactions

During the reporting period, the Supervisory Committee considered and passed six proposals regarding the connected transactions, namely the "Proposal Relating to Capital Increase to Hainan Nuclear, the Proposal Relating to Capital Increase to Shidaowan Nuclear, the Proposal Relating to Acquiring Interests in Shandong Power, Jilin Power, Heilongjiang Power and Zhongyuan CCGT, the Proposal Relating to Daily Connected Transactions with Huaneng Group in 2017, the Proposal Relating to Daily Connected Transactions with Huaneng Finance from 2017 to 2019; the Proposal Relating to Daily Connected Transactions with Tiancheng Leasing from 2017 to 2019".

The Supervisory Committee is of the view that the Company implemented a strict system and decision-making process to carry out work involved in the aforesaid proposals, which ensured the fairness and reasonableness of the acquisition and disposal of the Company's assets and the considerations paid for relevant connected transactions. No insider trading, or action which is against the interests of shareholders or leads to loss of the Company's assets or damage to its interests, was identified.

5. Checking on particulars of the Company's information disclosure

During the reporting period, the Supervisory Committee carefully examined the procedures for and the contents of information disclosure made by the Company by attending the Chairman office meetings, the President office meetings and other daily operation and management meetings. The Supervisory Committee placed great emphasis on and presented the annual meetings of the Board for 2016 and 2017 and supervised the review process related to the annual reports of the Company. In addition, the Supervisory Committee convened meetings at which its members reviewed the Company's annual reports and listened to the reports on work related to information disclosure.

The Supervisory Committee is of the view that the Company's control over, and procedures on, the information disclosure was complete and effective. The procedures of information disclosure strictly complied with the "Administrative Measures for Information Disclosure" and the "Measures on Investor Relations Management", and met the regulatory requirements of the Company's listing places.

6. Reviewing the Board's self-assessment report on internal control

The Supervisory Committee attended all the Board meetings in 2016 and 2017 to conscientiously listen to relevant reports on the Company's internal control and convened supervisor meetings to review the Board's self-assessment report on internal control.

The Supervisory Committee is of the view that, during the reporting period, the Board assessed the relevant internal control on financial reports in accordance with the requirements as stipulated by the "Fundamental Regulatory Guidelines on Internal Control by Enterprises", thus guaranteeing the truthfulness, accuracy and completeness of relevant information in the financial reports and effectively safeguarding the risk against any material error. The Company's internal control system was sound and implemented effectively. The Supervisory Committee agreed to the "2016 Self-assessment Report on Internal Control of the Board" prepared by the Board.

In 2017, the Supervisory Committee will experience stable change in terms of office, and the new supervisory committee will continue to earnestly perform such responsibilities as endowed by the general meetings, take the shareholders' interests as the supreme obligation, stick to such development strategies emphasising steady progress, assist the Board to keep a close eye on completion of performance related tasks, focus on implementation based on intensified knowledge, identified targets, actual conditions and major problems. Through rendering honest and earnest service, the Committee endeavors to promote standardization of corporate governance, achieve a more stable operation and ensure further reinforcement of the strengths of the Company.

Supervisory Committee
Huaneng Power International Inc

Beijing, the PRC
21 March 2017

PROFILES OF DIRECTORS, SUPERVISORS & SENIOR MANAGEMENT

PROFILES OF DIRECTORS AND SUPERVISORS

Directors

CAO Peixi, aged 61, is the Chairman of the Company and the President of Huaneng Group. He was the Chairman of HIPDC and Huaneng Renewables Corporation Limited. He graduated from Shandong University, majoring in electrical engineering. He is a postgraduate with master's degree in engineering awarded by the Party School of the Central Committee, and is a researcher-grade senior engineer.

GUO Junming, aged 51, is the Vice Chairman of the Company, the Chief Accountant of Huaneng Group and a Director of HIPDC. He was the Chief Accountant of Huaneng Group and the Chairman of the Supervisory Committee of the Company. He graduated from Shanxi Finance and Economic Institute, majoring in business finance and accounting, and is a university graduate. He is a senior accountant.

LIU Guoyue, aged 53, is a Director and the President of the Company, the Vice President of Huaneng Group, an Executive Director of Huaneng International Power Fuel Limited Liability Company, the Chairman of Shanghai Times Shipping Limited Company, a Director of SinoSing Power Pte. Ltd., and the chairman of Tuas Power Ltd., Tuas Power Supply Pte Ltd. and Tuas Power Utilities Pte Ltd.. He graduated from North China Electric Power University, majoring in thermal engineering. He holds a Doctor's degree in engineering. He is a senior engineer.

FAN Xiaxia, aged 54, is a Director and the Vice President of the Company, and also Vice President of Huaneng Group. He graduated from the Economic Management School of Tsinghua University with an EMBA degree. He is a senior engineer.

LI Shiqi, aged 60, is a Director of the Company and a Director of HIPDC. He was the President of HIPDC, the Director of the Business Development Department of Huaneng Group and the Chairman of Huaneng Carbon Assets Management Company Limited. Mr. Li graduated from Renmin University of China, majoring in finance, and is a college graduate. He is a senior accountant.

HUANG Jian, aged 54, is a Director of the Company, an assistant to the President of Huaneng Group, a Director of Huaneng Capital Services Co., Ltd. and the Chairman of the Supervisory Committee of Huaneng Renewables Corporation Limited. Mr. Huang graduated from the Department of Accounting of Institute of Fiscal Science of the Ministry of Finance with a postgraduate degree of master in economics. He is a senior accountant.

MI Dabin, aged 48, is a Director of the Company, the Vice President of Hebei Construction & Investment Group Co., Ltd., the Chairman (acting on behalf of the General Manager) of Hebei Construction & Energy Investment Co., Ltd. and the Chairman of Hebei Xingtai Power Generation Limited (河北興泰發電有限責任公司*) He was the Chief Engineer, Vice President and President of Qinhuangdao Power Generation Co., Ltd., the President of Qinhuangdao Thermal Power Generation Co., Ltd., an assistant to the President and the Head of Production and Operation Department of Hebei Construction & Investment Group Co., Ltd., the President of Qinhuangdao Power Generation Co., Ltd. and Qinhuangdao Thermal Power Generation Co., Ltd.. He graduated from North China Electric Power University, majoring in power engineering, and holds a master's degree. He is a senior engineer.

GUO Hongbo, aged 48, is a Director of the Company, the Chairman of Liaoning Energy Investment (Group) Limited Liability Company, the director of Shenyang Jinshan Energy Limited (沈陽金山能源股份有限公司*), and the vice chairman of Liaoning Haitong New Energy Low-Carbon Industrial Equity Investment Fund Limited (遼寧海通新能源低碳產業股權投資基金有限公司*). He was the assistant to the president, vice president, executive vice president, a director, the president and vice chairman of Liaoning Energy Investment (Group) Limited Liability Company. Mr. Guo graduated from Jilin University with a master's degree in administrative management, and holds an MBA degree from Macau University of Science and Technology. He is a professor-grade senior engineer.

ZHU Yousheng, aged 51, is a Director of the Company and Vice President of Jiangsu Province Investment Management Limited Liability Company. He was the project manager of Jiangsu Province Investment Management Limited Liability Company, Vice President of Xutang Power Limited Liability Company, the Vice President and the President of the Production Safety Department and President of Jiangsu Province Investment Management Limited Liability Company and the vice general manager of Jiangsu Province Investment Management Limited (江蘇省投資管理有限責任公司*). He graduated from Nanjing University of Aeronautics and Astronautics specializing in power engineering, and is a master degree postgraduate, researcher-grade senior engineer.

LI Song, aged 59, is a Director of the Company, the Vice President of Fujian Investment and Development Group Co., Ltd., Vice Chairman of CNOOC Fujian Natural Gas Co., Ltd., Vice Chairman of CNOOC Fujian Gas Power Generation Co., Ltd. and CNOOC Fujian Zhangzhou Natural Gas Company Limited and a Vice President of Fujian Zhonghai Emergency Maintenance Co., Ltd. (福建中海應急搶維修有限責任公司*) She graduated from Xiamen Jimei Finance and Commerce College majoring in finance, Open College of Party School of the Central Committee majoring in economic management, and holds a bachelor's degree from Party School of the Central Committee. She is an accountant.

LI Zhensheng, aged 72, is an Independent Director of the Company and TGOOD Electric Co., Ltd. He was the Head of Shanxi Electric Power and Industrial Bureau, the Chief of Rural Power Department of State Power Corporation, the Chief Economist and Consultant of State Grid Corporation. Mr. Li graduated from Hebei University of Technology with a bachelor's degree. He is also a professor-grade senior engineer.

YUE Heng, aged 41, is an Independent Director of the Company, an Associate Professor of Singapore Management University. He is the winner of the first session of China National Funds for Distinguished Young Scientists, the winner of New Century Excellent Talents of the Ministry of Education 2012, the leading accounting talent of Ministry of Finance, the Councilor of Accounting Society of China and the Deputy Editor-in-Chief of CJAS magazine of Accounting Society of China. He was the Associate Professor, Professor, Dean and Doctorate Mentor of Accounting Department of Guanghua Management School of Peking University. He graduated from Tulane University in the United States with a doctor's degree in accounting.

GENG Jianxin, aged 61, is an Independent Director of the Company, a Professor and Doctorate Mentor of Renmin University of China, an Independent Director of Shenzhen Qixin Construction Co., Ltd. (深圳奇信建設股份有限公司*) and Triangle Tyre Co., Ltd. (三角輪胎股份有限公司*). He was an assistant accountant of the Geophysical Exploration Company of the Ministry of Metallurgical Industry and associate professor of Hebei University of Economics and Business. He graduated from the Renmin University of China specializing in accounting and holds a doctor's degree.

XIA Qing, aged 59, an Independent Director of the Company, a professor and chairman of the Academic Degrees Committee of the Electrical Engineering Department of Tsinghua University, an Independent Director of Tellhow Sci-Tech Co. Ltd., and the Independent Director of Shanghai Zhixin Electricity and Gas Limited (上海置信電氣股份有限公司*). He was an Independent Director of Datang International Power Generation Co., Ltd. and Yunnan Wenshan Electric Power Co., Ltd. He graduated from Tsinghua University specializing in electric power system and automation and holds a doctor's degree.

XU Mengzhou, aged 66, a professor of Renmin University of China (RUC), an Independent Director of Shandong Hualu-Hengsheng Chemical Co., Ltd. (山東華魯恒升化工股份有限公司) and ENN Ecological Holdings Co. Ltd., (新奧生態控股股份有限公司). He served as a professor of RUC Law School and School of International Studies of Renmin University of China. He graduated from the RUC, with a doctor's degree in Economic Laws.

Supervisors

YE Xiangdong, aged 49, is the Chairman of the Supervisory Committee of the Company, the Vice President of Huaneng Group, a Director of HIPDC, the Executive Director of Huaneng Coal Mining Corporation Company (華能煤業有限公司) and the Chairman of Xi'an Thermal Power Research Institute Co., Ltd. He was the Executive Director and President of Huaneng Hulunbeier Energy Development Company Ltd. and the Chief Engineer of Huaneng Group. He graduated from Chongqing University, majoring in thermal energy, and holds a master's degree in Engineering. He is a senior engineer.

MU Xuan, aged 41, is the Vice Chairman of the Supervisory Committee of the Company and the Vice President of Dalian Construction Investment Group Co., Ltd. He was the director, President of Dalian Natural Gas High-pressure Pipelines Limited (大連天然氣高壓管道有限公司*), and the supervisor of Liaoning Hongyan River Nuclear Limited (遼寧紅沿河核電有限公司*) and, the Assistant to the President of Dalian Construction Investment Group Co., Ltd. He graduated from Dongbei University of Finance and Economics, majoring in Technical Economy and Management, and holds a master's degree.

ZHANG Mengjiao, aged 53, is a Supervisor of the Company and the Manager of the Finance Department of HIPDC. She was the Deputy Manager of the Finance Department of the Company. She graduated from Xiamen University, majoring in accounting. She is a master's degree postgraduate in economics and is a senior accountant.

GU Jianguo, aged 50, is a Supervisor of the Company, the Chairman of Nantong Investment & Management Limited Company and the Vice President of Nantong State owned Assets Investment Holdings Co., Ltd. Mr. Gu was the Chief of Nantong Investment Management Centre, and a Director and the President of Nantong Investment & Management Limited Company. He graduated from Shanghai Jiao Tong University with a master's degree. He is an economist.

ZHANG Xiaojun, aged 50, is a Supervisor and the Vice Chairman of Labour Union of the Company. She was Deputy Manager of the Administration Department of the Company. She graduated from the Central Party School of the Communist Party of China, majoring in economic management, and holds a bachelor's degree. She is an accountant.

ZHU Daqing, aged 44, is a Supervisor and the Manager of Auditing Department of the Company. He was Deputy Manager of Finance Department of the Company. He graduated from the Central University of Finance and Economics, and holds a master's degree in finance & accounting, and a bachelor's degree in management. He is a senior accountant.

Biographies of Senior Management

LIU Guoyue, aged 53, is a Director and the President of the Company, the Vice President of Huaneng Group, the Executive Director of Huaneng International Power Fuel Limited Liability Company, the Chairman of Shanghai Times Shipping Limited Company, a Director of SinoSing Power Pte Ltd., and the Chairman of Tuas Power Ltd., Tuas Power Supply Pte Ltd. and Tuas Power Utilities Pte Ltd.. He graduated from North China Electric Power University, majoring in Thermal Engineering. He is a postgraduate with a doctor's degree in engineering. He is a senior engineer.

FAN Xiaxia, aged 54, is a Director and the Vice President of the Company, and also Vice President of Huaneng Group. He graduated from the Economic Management School of Tsinghua University with an EMBA degree. He is a senior engineer.

GU Biquan, aged 59, is the Vice President and General Counsel of the Company. He was the Vice President and Secretary to the Board of the Company. He graduated from Beijing Radio and Television University, majoring in Electronics, and is a college graduate. He is an engineer.

ZHOU Hui, aged 53, is the Vice President of the Company. She was the Vice President and Chief Accountant of the Company. She graduated from Renmin University of China, majoring in Financial Accounting, and is a postgraduate with a master's degree in Economics. She is a senior accountant.

ZHAO Ping, aged 54, is the Vice President of the Company. He was the Chief Engineer of the Company. He graduated from Tsinghua University, majoring in thermal engineering, is a postgraduate with a master's degree in science. He is a researcher-grade senior engineer.

DU Daming, aged 50, was the Vice President and the Secretary to the Board of the Company during the Reporting Period. He was the Vice President and General Counsel of the Company. He graduated from North China Electric Power University, majoring in electric system and automation, is a postgraduate with a master's degree in science. He is a senior engineer.

WU Senrong, aged 55, is currently the Head of the Discipline Inspection Group of the Company. He was the Head of the Discipline Inspection Group and Vice President of the Company. He graduated from the Economic Management School of Tsinghua University with an EMBA degree. He is a researcher-grade senior engineer.

SONG Zhiyi, aged 56, is the Vice President of the Company. He was the Head of Construction Department of Huaneng Group. He graduated from the Guanghua Management Institute of Peking University, with an MBA degree. He is a senior engineer.

LI Jianmin, aged 55, is the Vice President of the Company. He was the Deputy Chief Economist of the Company. He graduated from North China Electricity College, majoring in power plant and electricity system, with a bachelor's degree in science. He is a researcher grade senior engineer.

LIU Ranxing, aged 54, is the Vice President of the Company. He was the President of Huaneng Energy & Communications Holdings Co., Ltd. He graduated from Harbin Institute of Technology, majoring in management engineering, with a master's degree in science. He is a researcher-grade senior engineer.

HUANG Lixin, aged 50, is the Chief accountant of the Company. He was the Manager of the Finance Department of the Company, and the Head of the Finance Department of Huaneng Group. He graduated from the Economic Management School of Tsinghua University with an EMBA degree. He is a senior accountant.

HE Yong, aged 58, is the Chief Engineer of the Company. He was the Deputy Chief Engineer of the Company. He graduated from Wuhan University, majoring in corporate management, is a postgraduate with a master's degree in management. He is a researcher-grade senior engineer.

CORPORATE INFORMATION

Legal Address of the Company	Huaneng Building 6 Fuxingmennei Street Xicheng District Beijing The People's Republic of China
Company Secretary	Du Daming Huaneng Building 6 Fuxingmennei Street Xicheng District Beijing The People's Republic of China
Authorized Representatives	Liu Guoyue Fan Xiaxia
Hong Kong Share Registrar	Hong Kong Registrars Limited Shops 1712-1716 17th Floor, Hopewell Centre 183 Queen's Road East Hong Kong
Depository	The Bank of New York Investor Relations P.O. Box 11258 Church Street Station New York NY 10286-1258 USA

LEGAL ADVISERS TO THE COMPANY

As to Hong Kong law	Herbert Smith Freehills 23rd Floor, Gloucester Tower 15 Queen's Road Central Central Hong Kong
As to PRC law	Haiwen & Partners 20th Floor, Fortune Finance Center No.5 Dong San Huan Central Road Chaoyang District Beijing The People's Republic of China
As to US law	Skadden, Arps, Slate, Meagher & Flom 42/F, Edinburgh Tower The Landmark 15 Queen's Road Central Central Hong Kong

AUDITORS OF THE COMPANY

Domestic Auditors and U.S. 20F Annual Report Auditors	KPMG Huazhen LLP 8/F., East 2 Office Tower, Oriental Plaza 1 East Chang An Avenue, Beijing, PRC Postcode: 100738
Hong Kong Auditors	KPMG 8/F Prince's Building 10 Charter Road Central, Hong Kong

LISTING INFORMATION

H Shares:	The Stock Exchange of Hong Kong Limited Stock Code: 902
ADSs:	The New York Stock Exchange, Inc. Ticker Symbol: HNP
A Shares:	Shanghai Stock Exchange Stock Code: 600011

PUBLICATIONS

The Company's interim and annual reports (A share version and H share version) was published in August 2016 and will be published in April 2017 respectively. As required by the United States securities laws, the Company will file an annual report in Form 20-F with the Securities and Exchange Commission of the U.S. before 30 April 2017. As the Company's A Shares have already been issued and listed, the Company shall, in compliance of the relevant regulations of the China Securities Regulatory Commission and the Shanghai Stock Exchange, prepare quarterly reports. Copies of the interim and annual reports as well as the Form 20-F, once filed, will be available at:

Beijing:	Huaneng Power International, Inc. Huaneng Building 6 Fuxingmennei Street Xicheng District Beijing The People's Republic of China Tel: (8610)-6322 6999 Fax: (8610)-6322 6888 Website: http://www.hpi.com.cn
Hong Kong:	Wonderful Sky Financial Group Limited Unit 3102-05, 31/F., Office Tower, Convention Plaza, 1 Harbour Road, Wanchai, Hong Kong Tel: (852) 2851 1038 Fax: (852) 2815 1352

GLOSSARY

Equivalent Availability Factor (EAF):	Percentage on duration of usable hours on generating units in period hour, i.e. $$EAF = \frac{\text{Available Hours (AH)} - \text{Equivalent Unit Derated Hours (EUNDH)}}{\text{Period Hour (PH)}} \times 100\%$$
Gross Capacity Factor (GCF):	$$GCF = \frac{\text{Gross Actual Generation (GAAG)}}{\text{Period Hour (PH)} \times \text{Gross Maximum Capacity (GMC)}} \times 100\%$$
Weighted Average Coal Consumption Rate for Power Sold:	The standard of measurement on average consumption of coal for the production of every one kWh of electricity from a coal-fired generating unit. Unit: gram/kWh or g/kWh.
Weighted Average Coal Consumption Rate for Power Generated:	The standard of measurement on average consumption of coal for the generation of every one kWh of electricity from a coal-fired generating unit. Unit: gram/kWh or g/kWh.
Weighted Average House Consumption:	The rate of electricity consumption during power production versus power generating unit: %.
Utilization Hour:	The operation hour coefficient converted from actual gross power generation of generating units to maximum gross capacity (or fixed capacity).
Capacity Rate:	Ratio between average capacity and maximum capacity which indicates the difference in capacity. The larger the ratio, the more balanced the power production, and the higher the utilization of facilities.
Power Generation:	Electricity generated by power plants (generating units) during the Reporting Period, or "power generation". It refers to the consumed generated electricity produced by generating units with power energy being processed and transferred, or the product of actual consumed electricity generated by generating units and actual operation hours of generating units.
Electricity Sold:	Electricity for consumption or production sold by power producers to customers or power-producing counterparts.

GW: Unit of power generation, = 10^9W, gigawatt
MW: = 10^6W, megawatt
kW: = 10^3W, kilowatt
kWh: Unit of power, kilowatt hour

KPMG

To the shareholders of Huaneng Power International, Inc.
(Incorporated in the People's Republic of China with limited liability)

OPINION

We have audited the consolidated financial statements of Huaneng Power International, Inc. (the "Company") and its subsidiaries (the "Group") set out on pages 107 to 229, which comprise the consolidated statement of financial position as at 31 December 2016, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2016 and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board ("IASB") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing ("ISAs"). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the Group in accordance with International Ethics Standards Board for Accountants Code of Ethics for Professional Accountants ("the IESBA Code") together with the ethical requirements that are relevant to our audit of the consolidated financial statements in the People's Republic of China and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

KEY AUDIT MATTERS *(Cont'd)*

Impairment of non-current assets

Refer to notes 7, 11, 12, 13, 15 and 16 to the consolidated financial statements and the accounting policies in note 2(j).

The key audit matter	How the matter was addressed in our audit
As at 31 December 2016, the Group's non-current assets principally comprised property, plant and equipment, goodwill, power generation licenses, land use rights and mining rights. Impairment losses for non-current assets for the year ended 31 December 2016 are significant in the context of the Group's consolidated financial statements. Management assessed whether there was any impairment of the carrying values of goodwill, power generation licenses with indefinite useful lives and other non-current assets as at 31 December 2016 using value-in-use ("VIU") calculations for each smallest identifiable group of assets that generate independent cash flows (a cash-generating unit). Preparing the VIU calculations requires management to exercise significant judgement, particularly in relation to estimating future sales volumes and the related revenue growth rates, future on-grid tariffs, future capital expenditure and future fuel prices as well as in the estimation of the discount rates applied. We identified impairment of non-current assets as a key audit matter because the carrying values of these assets are material to the consolidated financial statements and also because of the significant management judgement and estimation required in assessing potential impairment which could be subject to error or potential management bias.	Our audit procedures to assess potential impairment of non-current assets included the following: • assessing management's identification of cash-generating units ("CGUs") and the allocation of assets to each CGU with reference to our understanding of the Group's business and the requirements of the prevailing accounting standards; • assessing management's VIU calculation for each CGU by comparing the assumptions adopted by management with our understanding of the Group's business and the industry in which the Group operates, in particular, for the assumptions relating to future sales volumes and the related revenue growth rates, future on-grid tariffs, future capital expenditure, future fuel prices, future other operating costs and the discount rates applied; • challenging management's rationale for adopting cash flow projections over a period greater than five years; • engaging our internal valuation specialists to assess whether the discount rates applied in the VIU calculations were within the range adopted by other companies in the same industry; • performing sensitivity analyses on the discount rates applied and other key assumptions adopted by management to assess what changes thereto, either individually or collectively, would result in a different conclusion being reached and assessing whether there were any indicators of management bias in the selection of key assumptions; • comparing the actual results for the current year with management's estimates in their VIU calculations for the previous year in order to assess the historical accuracy of the management's forecasting process

KEY AUDIT MATTERS *(Cont'd)*

Recognition of deferred tax assets

Refer to note 31 to the consolidated financial statements and the accounting policies in note 2(s)(iii).

The key audit matter	How the matter was addressed in our audit
As at 31 December 2016, the Group had recognised significant deferred tax assets in respect of the future benefit of deductible temporary differences and accumulated tax losses which management considered would probably be utilised or recovered in the future through the generation of future taxable profits by the relevant group entities or by set-off against deferred tax liabilities. In addition, a significant amount of deferred tax assets had not been recognised at the reporting date due to the uncertainty of the relevant group entities being able to generate future taxable profits against which the tax losses may be utilised before they expire. The recognition of deferred tax assets relies on the exercise of significant judgement by management in respect of assessing the sufficiency of future taxable profits and the probability of such future taxable profit being generated and future reversals of existing taxable temporary differences. We identified the recognition of deferred tax assets as a key audit matter because of its significance to the consolidated financial statements and because of the significant management judgement and estimation required in the forecasting future taxable profits which could be subject to error or potential management bias.	Our audit procedures to assess the recognition of deferred tax assets included the following: • assessing and challenging the assumptions and judgements exercised by management in respect of the forecasts of future taxable profits by comparing the assumptions adopted by management with our understanding of the Group's business and the industry in which the Group operates, in particular, for the assumptions relating to future sales volumes, future on-grid tariffs, future fuel prices and future other operating costs; • considering the historical accuracy of forecasts of future taxable profits made by management by comparing the actual taxable profits for the current year with management's estimates in the forecasts made in the previous year and assessing whether there were any indicators of management bias in the selection of key assumptions; • assessing whether the Group's disclosures in the consolidated financial statements of the application of judgement in estimating recognised and unrecognised deferred tax asset balances appropriately reflect the Group's deferred tax position with reference to the requirements of the prevailing accounting standards.

INFORMATION OTHER THAN THE CONSOLIDATED FINANCIAL STATEMENTS AND AUDITOR'S REPORT THEREON

The directors are responsible for the other information. The other information comprises all the information included in the annual report, other than the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

RESPONSIBILITIES OF THE DIRECTORS FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRSs issued by the IASB and the disclosure requirements of the Hong Kong Companies Ordinance and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The directors are assisted by the Audit Committee in discharging their responsibilities for overseeing the Group's financial reporting process.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. This report is made solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS *(Cont'd)*

As part of an audit in accordance with ISAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and, where applicable, related safeguards.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS *(Cont'd)*

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Ho Ying Man Simon.

KPMG
Certified Public Accountants

8th Floor, Prince's Building
10 Chater Road
Central, Hong Kong

21 March 2017

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2016

(Prepared in accordance with International Financial Reporting Standards)

(Amounts expressed in thousands of RMB, except per share data)

	Note	For the year ended 31 December	
		2016	2015
Operating revenue	5	**113,814,236**	128,904,873
Tax and levies on operations		**(1,177,818)**	(1,157,760)
Operating expenses			
Fuel	6	**(56,617,542)**	(59,242,367)
Maintenance		**(4,343,349)**	(4,556,361)
Depreciation		**(14,815,620)**	(14,411,632)
Labor		**(8,043,406)**	(7,751,551)
Service fees on transmission and transformer facilities of HIPDC		**(138,038)**	(140,771)
Purchase of electricity		**(3,066,415)**	(3,581,517)
Others	6	**(7,234,308)**	(8,919,988)
Total operating expenses		**(94,258,678)**	(98,604,187)
Profit from operations		**18,377,740**	29,142,926
Interest income		**147,063**	160,723
Financial expenses, net			
Interest expense	6	**(6,817,526)**	(7,945,734)
Exchange (loss)/gain and bank charges, net		**(250,076)**	(24,336)
Total financial expenses, net		**(7,067,602)**	(7,970,070)
Share of profits less losses of associates and joint ventures	8	**1,298,889**	1,525,975
Loss on fair value changes of financial assets/liabilities		**(12,986)**	(16,742)
Other investment income	6	**1,070,034**	115,238
Profit before income tax expense	6	**13,813,138**	22,958,050
Income tax expense	33	**(3,465,151)**	(5,698,943)
Net profit		**10,347,987**	17,259,107

The notes on pages 117 to 229 are an integral part of these financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2016

(Prepared in accordance with International Financial Reporting Standards)

(Amounts expressed in thousands of RMB, except per share data)

	Note	For the year ended 31 December 2016	2015
Other comprehensive income, net of tax			
Items that may be reclassified subsequently to profit or loss:			
Fair value changes of available-for-sale financial asset		**(148,041)**	558,261
Gain on disposal of available-for-sale financial asset reclassified to profit or loss		**(741,648)**	–
Share of other comprehensive (loss)/income of investees accounted for under the equity method		**(180,572)**	678,793
Effective portion of cash flow hedges		**1,015,103**	51,922
Translation differences of the financial statements of foreign operations		**540,442**	(133,116)
Other comprehensive income, net of tax		**485,284**	1,155,860
Total comprehensive income		**10,833,271**	18,414,967
Net profit attributable to:			
– Equity holders of the Company		**8,520,427**	13,651,933
– Non-controlling interests		**1,827,560**	3,607,174
		10,347,987	17,259,107
Total comprehensive income attributable to:			
– Equity holders of the Company		**9,005,227**	14,807,889
– Non-controlling interests		**1,828,044**	3,607,078
		10,833,271	18,414,967
Earnings per share attributable to the equity holders of the Company *(expressed in RMB per share)*			
– Basic and diluted	34	**0.56**	0.94

The notes on pages 117 to 229 are an integral part of these financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2016

(Prepared in accordance with International Financial Reporting Standards)

(Amounts expressed in thousands of RMB)

	Note	As at 31 December 2016	2015
ASSETS			
Non-current assets			
Property, plant and equipment	7	**223,061,809**	219,673,070
Investments in associates and joint ventures	8	**19,632,113**	19,745,192
Available-for-sale financial assets	10	**3,406,032**	5,077,863
Land use rights	11	**8,456,347**	8,313,766
Power generation licenses	12	**3,849,199**	3,679,175
Mining rights	13	**1,646,271**	1,646,271
Deferred income tax assets	31	**1,263,957**	1,064,391
Derivative financial assets	14	**99,721**	45,044
Goodwill	15	**12,135,729**	11,677,182
Other non-current assets	16	**4,321,945**	4,378,997
Total non-current assets		**277,873,123**	275,300,951
Current assets			
Inventories	17	**6,879,143**	5,422,732
Other receivables and assets	18	**5,533,770**	4,087,989
Accounts receivable	19	**16,393,471**	16,377,401
Derivative financial assets	14	**278,602**	139,468
Bank balances and cash	35	**7,881,630**	7,537,813
Total current assets		**36,966,616**	33,565,403
Total assets		**314,839,739**	308,866,354

The notes on pages 117 to 229 are an integral part of these financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2016

(Prepared in accordance with International Financial Reporting Standards)

(Amounts expressed in thousands of RMB)

	Note	As at 31 December 2016	2015
EQUITY AND LIABILITIES			
Capital and reserves attributable to equity holders of the Company			
Share capital	21	**15,200,383**	15,200,383
Capital surplus		**24,760,331**	24,815,489
Surplus reserves	22	**8,140,030**	8,140,030
Currency translation differences		**(787,881)**	(1,327,839)
Retained earnings		**38,690,132**	37,313,885
		86,002,995	84,141,948
Non-controlling interests		**16,183,742**	17,551,741
Total equity		**102,186,737**	101,693,689
Non-current liabilities			
Long-term loans	24	**64,990,361**	66,028,023
Long-term bonds	25	**12,182,971**	11,261,322
Deferred income tax liabilities	31	**2,262,752**	2,494,143
Derivative financial liabilities	14	**201,169**	430,089
Other non-current liabilities	26	**2,819,498**	3,122,455
Total non-current liabilities		**82,456,751**	83,336,032

The notes on pages 117 to 229 are an integral part of these financial statements.

(Amounts expressed in thousands of RMB)

	Note	As at 31 December 2016	2015
EQUITY AND LIABILITIES *(Continued)*			
Current liabilities			
Accounts payable and other liabilities	27	**28,325,227**	26,185,764
Taxes payable	28	**1,089,105**	2,071,471
Dividends payable		**1,575,180**	788,895
Salary and welfare payables		**421,390**	313,284
Derivative financial liabilities	14	**133,569**	874,852
Short-term bonds	29	**27,311,103**	19,347,706
Short-term loans	30	**57,668,874**	49,883,489
Current portion of long-term loans	24	**9,560,885**	12,351,205
Current portion of long-term bonds	25	**3,294,736**	11,480,661
Current portion of other non-current liabilities	26	**816,182**	539,306
Total current liabilities		**130,196,251**	123,836,633
Total liabilities		**212,653,002**	207,172,665
Total equity and liabilities		**314,839,739**	308,866,354

These financial statements were approved for issue by the Board of Directors on 21 March 2017 and were signed on its behalf.

Liu Guoyue
Director

Fan Xiaxia
Director

The notes on pages 117 to 229 are an integral part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2016

(Prepared in accordance with International Financial Reporting Standards)

(Amounts expressed in thousands of RMB)

	Attributable to equity holders of the Company											
		Capital surplus										
	Share capital	Share premium	Hedging reserve	Available-for-sale financial assets revaluation reserve	Other capital reserve	Subtotal	Surplus reserves	Currency translation differences	Retained earnings	Total	Non-controlling interests	Total equity
Balance as at 1 January 2015	14,420,383	18,322,575	(1,091,109)	1,279,119	1,111,614	19,622,199	7,196,349	(1,194,819)	30,085,379	70,129,491	14,653,215	84,782,706
Profit for the year ended 31 December 2015	–	–	–	–	–	–	–	–	13,651,933	13,651,933	3,607,174	17,259,107
Other comprehensive income/(loss):												
Fair value changes of available-for-sale financial asset – gross	–	–	–	744,348	–	744,348	–	–	–	744,348	–	744,348
Fair value changes of available-for-sale financial asset – tax	–	–	–	(186,087)	–	(186,087)	–	–	–	(186,087)	–	(186,087)
Shares of other comprehensive income of investees accounted for under the equity method – gross	–	–	–	904,007	–	904,007	–	–	–	904,007	–	904,007
Shares of other comprehensive income of investees accounted for under the equity method – tax	–	–	–	(225,214)	–	(225,214)	–	–	–	(225,214)	–	(225,214)
Changes in fair value of effective portion of cash flow hedges – gross	–	–	(962,683)	–	–	(962,683)	–	–	–	(962,683)	–	(962,683)
Changes in fair value of effective portion of cash flow hedges – tax	–	–	166,135	–	–	166,135	–	–	–	166,135	–	166,135
Cash flow hedges recorded in shareholders' equity reclassified to inventories – gross	–	–	1,003,778	–	–	1,003,778	–	–	–	1,003,778	–	1,003,778
Cash flow hedges recorded in shareholders' equity reclassified to inventories – tax	–	–	(170,642)	–	–	(170,642)	–	–	–	(170,642)	–	(170,642)
Cash flow hedges recorded in shareholders' equity reclassified to exchange gain and bank charges, net – gross	–	–	(137,859)	–	–	(137,859)	–	–	–	(137,859)	–	(137,859)
Cash flow hedges recorded in shareholders' equity reclassified to exchange gain and bank charges, net – tax	–	–	23,436	–	–	23,436	–	–	–	23,436	–	23,436
Cash flow hedges recorded in shareholders' equity reclassified to interest expense – gross	–	–	161,124	–	–	161,124	–	–	–	161,124	–	161,124
Cash flow hedges recorded in shareholders' equity reclassified to interest expense – tax	–	–	(31,367)	–	–	(31,367)	–	–	–	(31,367)	–	(31,367)
Currency translation differences	–	–	–	–	–	–	–	(133,020)	–	(133,020)	(96)	(133,116)
Total comprehensive income/(loss) for the year ended 31 December 2015	–	–	51,922	1,237,054	–	1,288,976	–	(133,020)	13,651,933	14,807,889	3,607,078	18,414,967
Dividends relating to 2014	–	–	–	–	–	–	–	–	(5,479,746)	(5,479,746)	(3,285,330)	(8,765,076)
Issuance of new H shares, net of issuance expenses	780,000	3,904,314	–	–	–	3,904,314	–	–	–	4,684,314	–	4,684,314
Capital injection from non-controlling interests of subsidiaries	–	–	–	–	–	–	–	–	–	–	623,107	623,107
Transfer to surplus reserve	–	–	–	–	–	–	943,681	–	(943,681)	–	–	–
Business combination	–	–	–	–	–	–	–	–	–	–	1,934,865	1,934,865
Others	–	–	–	–	–	–	–	–	–	–	18,806	18,806
Balance as at 31 December 2015	15,200,383	22,226,889	(1,039,187)	2,516,173	1,111,614	24,815,489	8,140,030	(1,327,839)	37,313,885	84,141,948	17,551,741	101,693,689

The notes on pages 117 to 229 are an integral part of these financial statements.

(Amounts expressed in thousands of RMB)

	Attributable to equity holders of the Company											
		Capital surplus										
	Share capital	Share premium	Hedging reserve	Available-for-sale financial assets revaluation reserve	Other capital reserve	Subtotal	Surplus reserves	Currency translation differences	Retained earnings	Total	Non-controlling interests	Total equity
Balance as at 1 January 2016	15,200,383	22,226,889	(1,039,187)	2,516,173	1,111,614	24,815,489	8,140,030	(1,327,839)	37,313,885	84,141,948	17,551,741	101,693,689
Profit for the year ended 31 December 2016	-	-	-	-	-	-	-	-	8,520,427	8,520,427	1,827,560	10,347,987
Other comprehensive income/(loss):												
Fair value changes of available-for-sale financial asset – gross	-	-	-	(197,529)	-	(197,529)	-	-	-	(197,529)	-	(197,529)
Gain on disposal of available-for-sale financial asset reclassified to profit or loss – gross	-	-	-	(988,865)	-	(988,865)	-	-	-	(988,865)	-	(988,865)
Fair value changes of and gain on disposal of available-for-sale financial asset – tax	-	-	-	296,705	-	296,705	-	-	-	296,705	-	296,705
Shares of other comprehensive income of investees–accounted for under the equity method – gross	-	-	-	(242,217)	-	(242,217)	-	-	-	(242,217)	-	(242,217)
Shares of other comprehensive income of investees–accounted for under the equity method – tax	-	-	-	61,645	-	61,645	-	-	-	61,645	-	61,645
Changes in fair value of effective portion of cash flow hedges – gross	-	-	574,455	-	-	574,455	-	-	-	574,455	-	574,455
Changes in fair value of effective portion of cash flow hedges – tax	-	-	(95,407)	-	-	(95,407)	-	-	-	(95,407)	-	(95,407)
Cash flow hedges recorded in shareholders' equity reclassified to inventories – gross	-	-	603,527	-	-	603,527	-	-	-	603,527	-	603,527
Cash flow hedges recorded in shareholders' equity reclassified to inventories – tax	-	-	(102,600)	-	-	(102,600)	-	-	-	(102,600)	-	(102,600)
Cash flow hedges recorded in shareholders' equity reclassified to exchange gain and bank charges, net – gross	-	-	(55,838)	-	-	(55,838)	-	-	-	(55,838)	-	(55,838)
Cash flow hedges recorded in shareholders' equity reclassified to exchange gain and bank charges, net – tax	-	-	9,492	-	-	9,492	-	-	-	9,492	-	9,492
Cash flow hedges recorded in shareholders' equity reclassified to – interest expense – gross	-	-	101,889	-	-	101,889	-	-	-	101,889	-	101,889
Cash flow hedges recorded in shareholders' equity reclassified to – interest expense – tax	-	-	(20,415)	-	-	(20,415)	-	-	-	(20,415)	-	(20,415)
Currency translation differences	-	-	-	-	-	-	-	539,958	-	539,958	484	540,442
Total comprehensive income/(loss) for the year ended 31 December 2016	-	-	1,015,103	(1,070,261)	-	(55,158)	-	539,958	8,520,427	9,005,227	1,828,044	10,833,271
Dividends relating to 2015 (Note 23)	-	-	-	-	-	-	-	-	(7,144,180)	(7,144,180)	(3,481,663)	(10,625,843)
Capital injection from non-controlling interests of subsidiaries	-	-	-	-	-	-	-	-	-	-	285,620	285,620
Balance as at 31 December 2016	15,200,383	22,226,889	(24,084)	1,445,912	1,111,614	24,760,331	8,140,030	(787,881)	38,690,132	86,002,995	16,183,742	102,186,737

The notes on pages 117 to 229 are an integral part of these financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2016

(Prepared in accordance with International Financial Reporting Standards)

(Amounts expressed in thousands of RMB)

	For the year ended 31 December	
	2016	2015
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit before income tax expense	**13,813,138**	22,958,050
Adjustments to reconcile profit before income tax expense to net cash provided by operating activities:		
Depreciation	**14,815,620**	14,411,632
Provision for impairment loss on property, plant and equipment	**1,063,735**	1,047,641
Provision for impairment loss on investment in an associate	**–**	178,131
Provision for impairment loss on goodwill	**–**	1,105,649
Provision for impairment loss on mining rights	**–**	760,296
Provision for impairment on land use rights	**51,981**	–
Amortization of land use rights	**225,707**	213,206
Amortization of other non-current assets	**121,388**	92,775
Amortization of employee housing subsidies	**866**	940
Recognition/(reversal) of provision for doubtful accounts	**89,498**	(3,392)
(Reversal)/recognition of provision for inventory obsolescence	**(256)**	1,828
Loss on fair value changes of financial assets/liabilities	**12,986**	16,742
Other investment income	**(1,070,034)**	(115,238)
Net loss on disposals of non-current assets	**590,049**	438,321
Unrealized exchange loss, net	**195,055**	166,148
Share of profits less losses of associates and joint ventures	**(1,298,889)**	(1,525,975)
Interest income	**(147,063)**	(160,723)
Interest expense	**6,817,526**	7,945,734
Others	**(213,089)**	(89,332)
Changes in working capital:		
Inventories	**(1,270,582)**	2,106,821
Other receivables and assets	**(20,810)**	72,925
Accounts receivable	**(838,272)**	(175,429)
Restricted cash	**(11,566)**	499,899
Accounts payable and other liabilities	**1,811,681**	(2,932,761)
Taxes payable	**1,279,505**	1,366,209
Salary and welfare payables	**100,353**	75,803
Interest received	**84,806**	102,813
Income tax expense paid	**(4,692,509)**	(6,196,005)
Net cash provided by operating activities	**31,510,824**	42,362,708

The notes on pages 117 to 229 are an integral part of these financial statements.

(Amounts expressed in thousands of RMB)

	Note	For the year ended 31 December 2016	2015
CASH FLOWS FROM INVESTING ACTIVITIES			
Payment for the purchase of property, plant and equipment		**(20,144,903)**	(24,191,285)
Proceeds from disposal of property, plant and equipment		**144,346**	109,013
Prepayments of land use rights		**(89,430)**	(136,045)
Payment for the purchase of other non-current assets		**(50,653)**	(6,981)
Cash dividends received		**1,057,642**	937,189
Payment for investment in associates and joint ventures		**(276,118)**	(889,780)
Cash consideration paid for acquisition of subsidiaries, net of cash acquired	40	**157,421**	(8,887,882)
Cash received from disposal of available-for-sale financial assets		**1,474,301**	–
Others		**77,748**	50,759
Net cash used in investing activities		**(17,649,646)**	(33,015,012)

The notes on pages 117 to 229 are an integral part of these financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2016

(Prepared in accordance with International Financial Reporting Standards)

(Amounts expressed in thousands of RMB)

	Note	For the year ended 31 December 2016	2015
CASH FLOWS FROM FINANCING ACTIVITIES			
Issuance of short-term bonds		**32,982,340**	18,980,000
Repayments of short-term bonds		**(25,000,000)**	(18,000,000)
Proceeds from short-term loans		**85,689,874**	67,298,044
Repayments of short-term loans		**(77,904,489)**	(62,600,955)
Proceeds from long-term loans		**15,978,023**	9,943,689
Repayments of long-term loans		**(20,702,421)**	(12,799,719)
Issuance of long-term bonds		**4,200,000**	–
Repayments of long-term bonds		**(11,500,000)**	(5,000,000)
Interest paid		**(7,344,781)**	(8,677,316)
Net proceeds from the issuance of new H shares		**–**	4,684,314
Net capital injection from non-controlling interests of subsidiaries		**285,620**	623,107
Dividends paid to shareholders of the Company		**(7,206,220)**	(5,535,655)
Dividends paid to non-controlling interests of subsidiaries		**(2,695,378)**	(2,954,194)
Proceeds from sales leaseback classified as finance lease		**–**	100,000
Others		**(384,418)**	(201,974)
Net cash used in financing activities		**(13,601,850)**	(14,140,659)
Effect of exchange rate fluctuations on cash held		**72,923**	32,846
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS		**332,251**	(4,760,117)
Cash and cash equivalents as at beginning of the year		**7,478,250**	12,238,367
CASH AND CASH EQUIVALENTS AS AT END OF THE YEAR	35	**7,810,501**	7,478,250

The notes on pages 117 to 229 are an integral part of these financial statements.

1 COMPANY ORGANIZATION AND PRINCIPAL ACTIVITIES

Huaneng Power International, Inc. (the "Company") was incorporated in the People's Republic of China (the "PRC") as a Sino-foreign joint stock limited company on 30 June 1994. The registered address of the Company is Huaneng Building, 6 Fuxingmennei Street, Xicheng District, Beijing, the PRC. The Company and its subsidiaries are principally engaged in the generation and sale of electric power to the respective regional or provincial grid companies in the PRC and in the Republic of Singapore ("Singapore"). The Company conducts its business in Singapore through SinoSing Power Pte Ltd. ("SinoSing Power") and its subsidiaries.

The directors consider Huaneng International Power Development Corporation ("HIPDC") and China Huaneng Group ("Huaneng Group") as the parent company and ultimate parent company of the Company, respectively. Both HIPDC and Huaneng Group are incorporated in the PRC. HIPDC does not produce financial statements available for public use.

2 PRINCIPAL ACCOUNTING POLICIES

The principal accounting policies adopted in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

(a) Basis of preparation

These financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board (the "IASB") and the disclosure requirements of the Hong Kong Companies Ordinance. These financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited. These financial statements have been prepared under the historical cost convention, as modified by the revaluation of available-for-sale financial assets and derivative financial assets and liabilities.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Company and its subsidiaries' accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in Note 4.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(a) Basis of preparation *(Cont'd)*

As at and for the year ended 31 December 2016, a portion of the Company and its subsidiaries' funding requirements for capital expenditures were satisfied by short-term financing. Consequently, as at 31 December 2016, the Company and its subsidiaries have net current liabilities of approximately RMB93.2 billion. Taking into consideration of the expected operating cash flows of the Company and its subsidiaries and the undrawn available banking facilities of approximately RMB262.8 billion as at 31 December 2016, the Company and its subsidiaries are expected to refinance certain of its short-term loans and bonds and also to consider alternative sources of financing, where applicable and when needed. Therefore, the directors of the Company are of the opinion that the Company and its subsidiaries will be able to meet its liabilities as and when they fall due within the next twelve months and accordingly, these consolidated financial statements are prepared on a going concern basis.

The IASB has issued a new standard and a number of amendments to IFRSs that are first effective for the current accounting period of the Company and its subsidiaries. None of these new standard or developments have had a material effect on how the Company and its subsidiaries' results and financial position for the current or prior periods have been prepared or presented. The Company and its subsidiaries have not applied any new standard or interpretation that is not yet effective for current accounting period.

(b) Consolidation

The consolidated financial statements include the financial statements of the Company and all of its subsidiaries.

Subsidiaries are investees over which the Company and its subsidiaries have the power to exercise control. The Company and its subsidiaries control an entity when it is exposed, or have rights to variable returns from their involvement with the entity and have the ability to affect those returns through their power over the entity. In assessing whether the Company and its subsidiaries have power, only substantive rights (held by the Company and its subsidiaries and other parties) are considered.

Subsidiaries are consolidated from the date when control is transferred to the Company and its subsidiaries. They are de-consolidated from the date when control ceases. Intra-group balances, transactions and cash flows, and any unrealised income and expenses arising from intra-group transactions, are eliminated in full in preparing the consolidated financial statements. Unrealised gains arising from transactions with equity accounted investees are eliminated against the investment to the extent of the Company and its subsidiaries' interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment. The portion of the shareholders' equity of the subsidiaries, which is not attributable directly or indirectly to the parent company, is separately presented as non-controlling interests in the shareholders' equity in the consolidated financial statements.

When there is any inconsistency on the accounting policies or financial period adopted between subsidiaries and the Company, the financial statements of subsidiaries are adjusted according to the accounting policies or financial period adopted by the Company.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(b) Consolidation *(Cont'd)*

(i) Business combinations

The acquisition method is used to account for the business combinations of the Company and its subsidiaries (including business combinations under common controls). The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Company and its subsidiaries. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the Company and its subsidiaries recognize any non-controlling interests in the acquiree either at fair value or at the non-controlling interest's proportionate share of the recognized amounts of acquiree's identifiable net assets. The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill (Note 2(i)). If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognized in profit or loss.

(ii) Changes in ownership interests in subsidiaries without change of control

Transactions with non-controlling interests that do not result in loss of control are accounted for as equity transactions – that is, as transactions with the equity owners in their capacity as owners. The difference between fair value of any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

(iii) Associates and joint ventures

Associates are investees over which the Company and its subsidiaries have significant influence on the financial and operating decisions. A joint venture is an arrangement whereby the Company and its subsidiaries and other parties contractually agree to share control of the arrangement, and have rights to the net assets of the arrangement.

Investments in associates and joint ventures are initially recognized at cost and are subsequently measured using the equity method of accounting, unless it is classified as held for sale (or included in a disposal group that is classified as held for sale). The excess of the initial investment cost over the proportionate share of the fair value of identifiable net assets of investee acquired is included in the initial investment cost (Note 2(i)). Any shortfall of the initial investment cost to the proportionate share of the fair value of identifiable net assets of investee acquired is recognized in current period profit or loss and long-term investment cost is adjusted accordingly.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(b) Consolidation *(Cont'd)*

(iii) Associates and joint ventures *(Cont'd)*

When applying equity method, the Company and its subsidiaries adjust net profit or loss of the investees, including the fair value adjustments on the net identifiable assets of the associates and joint ventures and the adjustments to align with the accounting policies of the Company and the Company's financial reporting periods. Current period investment income is then recognized based on the proportionate share of the Company and its subsidiaries in the investees' net profit or loss. Net losses of investees are recognized to the extent of the carrying value of long-term equity investments and any other constituting long-term equity investments in investees that in substance form part of the investments in the investees. The Company and its subsidiaries continue to recognize investment losses and provision if they bear additional obligations which meet the recognition criteria.

The Company and its subsidiaries adjust the carrying amount of the investment and directly recognize into related other comprehensive income based on their proportionate share on the movements of the investees' other comprehensive income except net profit or loss, given there is no change in shareholding ratio.

When the investees appropriate profit or declare dividends, the carrying value of long-term equity investments are reduced correspondingly by the proportionate share of the distribution.

The Company and its subsidiaries determine at each reporting date whether there is any objective evidence that the investment in the associate or the joint venture is impaired. If this is the case, the Company and its subsidiaries calculate the amount of impairment as the difference between the recoverable amount of the associate or the joint venture and its carrying value and recognize the amount in the consolidated statement of comprehensive income.

Profits or losses resulting from transactions between the Company and its subsidiaries and the associates and joint ventures are recognized in the Company and its subsidiaries' financial statements only to the extent of the unrelated third party investor's interests in the associates and joint ventures. Loss from transactions between the Company and its subsidiaries and the associates and joint ventures is fully recognized and not eliminated when there is evidence for asset impairment.

If an investment in an associate becomes an investment in a joint venture or vice versa, retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method.

Gains and losses arising from dilution of investments in associates and joint ventures are recognized in the consolidated statement of comprehensive income.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(b) Consolidation *(Cont'd)*

(iii) Associates and joint ventures *(Cont'd)*

In the Company's statement of financial position, investments in associates and joint ventures are stated at cost less provision for impairment losses (Note 2(j)) unless classified as held for sale (or included in a disposal group that is classified as held for sale). Investment income from investments in associates and joint ventures is accounted for by the Company based on dividends received and receivable.

In all other cases, when the Company and its subsidiaries cease to have significant influence over an associate or joint control over a joint venture, it is accounted for as a disposal of the entire interest in that investee, with a resulting gain or loss being recognized in profit or loss. Any interest retained in that former investee at the date when significant influence or joint control is lost is recognized at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (Note 2(k)).

(c) Separate financial statements of the Company

Investments in subsidiaries are accounted for at cost less impairment unless classified as held for sale (or included in a disposal group that is classified as held for sale). Cost also includes direct attributable costs of investment. Investment income is recognized when the subsidiaries declare dividend.

(d) Segment reporting

The Company and its subsidiaries determine the operating segment based on the internal organization structure, management requirement and internal reporting system for purposes of presenting reportable segment information.

An operating segment represents a component of the Company and its subsidiaries that meets all the conditions below: (i) the component earns revenue and incurs expenses in its daily operating activities; (ii) chief operating decision maker of the Company and its subsidiaries regularly reviews the operating results of the component in order to make decisions on allocating resources and assessing performance; (iii) the financial position, operating results, cash flows and other related financial information of the component are available. When the two or more operating segments exhibit similar economic characteristics and meet certain conditions, the Company and its subsidiaries combine them as one reportable segment.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(e) Foreign currency translation

(i) Functional and presentation currency

Items included in the financial statements of each of the Company and its subsidiaries are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The consolidated financial statements are presented in Renminbi ("RMB"), which is the Company's functional and presentation currency.

(ii) Transactions and balances

Foreign currency transactions are translated into the functional currency using the spot exchange rate on the transaction dates. As at the end of reporting period, foreign currency monetary items are translated into functional currency at the spot exchange rate as at the end of reporting period. Exchange differences are directly expensed in current period profit or loss unless they arises from foreign currency loans borrowed for purchasing or construction of qualifying assets which is eligible for capitalization or they arise from monetary items that qualify as hedging instruments in cash flow hedges which are recorded in other comprehensive income to the extent that the hedge is effective.

(iii) Foreign subsidiaries

The operating results and financial position of the foreign subsidiaries are translated into presentation currency as follows:

Asset and liability items in each statement of financial position of foreign operations are translated at the closing rates at the end of reporting period; equity items excluding retained earnings are translated at the spot exchange rates at the date of the transactions. Income and expense items in the statement of comprehensive income of the foreign operations are translated at average exchange rates approximating the rate on transaction dates. All resulting translation differences are recognized in other comprehensive income.

The cash flows denominated in foreign currencies and cash flows of overseas subsidiaries are translated at average exchange rates approximating the rates at the dates when cash flows incurred. The effect of the foreign currency translation on the cash and cash equivalents is presented in the statement of cash flows separately.

On the disposal of a foreign operation (that is, a disposal of the Company and its subsidiaries' entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, a disposal involving loss of joint control over a joint ventures that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), all of the exchange differences accumulated in equity in respect of that operation attributable to the equity holders of the Company are reclassified to profit or loss.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(e) Foreign currency translation *(Cont'd)*

(iii) Foreign subsidiaries *(Cont'd)*

In the case of a partial disposal that does not result in the Company and its subsidiaries losing control over a subsidiary that includes a foreign operation, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognized in profit or loss. For all other partial disposals (that is, reductions in the Company and its subsidiaries' ownership interest in associates or joint venture that includes a foreign operation that do not result in the Company and its subsidiaries losing significant influence or joint control), the proportionate share of the accumulated exchange difference is reclassified to profit or loss.

(f) Property, plant and equipment

Property, plant and equipment consists of dam, port facilities, buildings, electric utility plant in service, transportation facilities, others and construction-in-progress ("CIP"). Property, plant and equipment acquired or constructed are initially recognized at cost and carried at the net value of cost less accumulated depreciation and accumulated impairment loss, unless classified as held for sale (or included in a disposal group that is classified as held for sale).

Cost of CIP comprises construction expenditures, other expenditures necessary for the purpose of preparing the CIP for its intended use, those borrowing costs incurred before the assets are ready for intended use that are eligible for capitalization. CIP is not depreciated until such time as the relevant asset is completed and ready for its intended use.

Subsequent costs about property, plant and equipment are included in the asset's carrying amount only when it is probable that future economic benefits associated with the item will flow to the Company and its subsidiaries and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. Other subsequent expenditures not qualified for capitalization are charged in the current period profit or loss when they are incurred.

Depreciation of property, plant and equipment is provided based on book value of the asset less estimated residual value over the estimated useful life using straight-line method. For those impaired property, plant and equipment, depreciation is provided based on book value after deducting impairment provision over the estimated useful life of the asset. The estimated useful lives are as follows:

	Estimated useful lives
Dam	8 – 50 years
Port facilities	20 – 40 years
Buildings	8 – 30 years
Electric utility plant in service	5 – 30 years
Transportation facilities	8 – 27 years
Others	5 – 14 years

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(f) Property, plant and equipment *(Cont'd)*

Where parts of an item of property, plant and equipment have different useful lives, the cost of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. At the end of each year, the Company and its subsidiaries review the estimated useful lives, residual values and the depreciation method of the property, plant and equipment and make adjustment when necessary.

Property, plant and equipment is derecognized when it is disposed of, or is not expected to bring economic benefit through use or disposal. The amount of disposal income arising from sale, transfer, disposal or write-off of the property, plant and equipment less book value and related tax expenses is recorded in 'operating expenses – others' in the statement of comprehensive income.

The carrying amount of property, plant and equipment is written down immediately to its recoverable amount when its carrying amount is greater than its recoverable amount (Note 2(j)).

(g) Power generation license

The Company and its subsidiaries acquired the power generation license as part of the business combination with Tuas Power Ltd. ("Tuas Power"). The power generation license is initially recognized at fair value at the acquisition date. The license has an indefinite useful life and is not amortized. The assessment that the license has an indefinite useful life is based on the expected renewal of power generation license without significant restriction and cost, together with the consideration on related future cash flows generated and the expectation of continuous operations. It is tested annually for impairment and carried at cost less accumulated impairment loss. Useful life of the power generation license is reviewed by the Company and its subsidiaries each financial period to determine whether events and circumstances continue to support the indefinite useful life assessment.

(h) Mining rights

Mining rights are stated at cost less accumulated amortization and impairment losses (Note 2(j)) and are amortized based on the units of production method utilizing only recoverable coal reserves as the depletion base, unless the mining rights are classified as held for sale (or included in a disposal group that is classified as held for sale).

(i) Goodwill

Goodwill arising from the acquisitions of subsidiaries, associates and joint ventures represents the excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the Company and its subsidiaries' share of the net fair value of the net identifiable assets, liabilities and contingent liabilities of the acquiree at the date of acquisition.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(i) Goodwill *(Cont'd)*

Goodwill is stated at cost less accumulated impairment losses. Goodwill arising on a business combination is allocated to each cash-generating unit, or groups of cash generating units, that is expected to benefit from the synergies of the combination and is tested annually for impairment (Note 2(j)).

On disposal of a cash generating unit during the year, any attributable amount of purchased goodwill is included in the calculation of the profit or loss on disposal.

(j) Impairment of non-financial assets

The carrying amounts of property, plant and equipment, mining rights, intangible assets with definite useful lives, land use rights and long-term equity investments not accounted for as financial assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Goodwill and indefinite-lived intangible assets are tested for impairment annually regardless of whether there are indications of impairment or more frequently if events or changes in circumstances indicate a potential impairment. An impairment loss is recognized if the carrying amount of an asset or cash-generating unit ("CGU") exceeds its recoverable amount.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less cost to sell. For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or CGUs.

Subject to an operating segment ceiling test, CGUs to which goodwill has been allocated are aggregated so that the level at which impairment testing is performed reflects the lowest level at which goodwill is monitored for internal reporting purposes.

Goodwill acquired in a business combination is allocated to groups of CGUs that are expected to benefit from the synergies of the combination.

Impairment losses are recognized in profit or loss. Impairment losses recognized in respect of CGUs are allocated first to reduce the carrying amount of any goodwill allocated to the CGU (group of CGUs), and then to reduce the carrying amounts of the other assets in the CGU (group of CGUs) on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs of disposal (if measurable) or value in use (if determinable).

An impairment loss in respect of goodwill is not reversed. Except for goodwill, all impaired non-financial assets are subject to review for possible reversal of impairment at each reporting date. A reversal of an impairment loss is limited to the asset's carrying amount that would have been determined had no impairment loss been recognized in prior year. Reversals of impairment losses are credited to profit or loss in the year in which the reversals are recognized.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(k) Financial assets

Financial assets are classified in the following categories at initial recognition: at fair value through profit or loss, loans and receivables and available-for-sale. The classification depends on the intention and ability of the Company and its subsidiaries to hold the financial assets.

(i) Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading and designated upon initial recognition as at fair value through profit or loss. A financial asset is classified in this category if acquired principally for the purpose of selling in the short term. Derivatives are classified as held for trading unless they are designated as hedges. Assets in this category are classified as current assets if expected to be settled within 12 months; otherwise, they are classified as non-current.

(ii) Loans and receivables

Loans and receivables refer to the non-derivative financial assets for which there is no quotation in the active market with fixed or determinable amount. They are included in current assets, except for maturities greater than 12 months after the end of reporting period which are classified as non-current assets. Loans and receivables are primarily included in as 'accounts receivable', 'other receivables and assets', 'loans to subsidiaries' and 'other non-current assets' in the statement of financial position.

(iii) Available-for-sale financial assets

Available-for-sale financial assets are non-derivative financial assets that are either designated in this category or not classified in any of the other categories. They are included in current assets when management intends to dispose of the available-for-sale financial assets within 12 months of the end of reporting period.

(iv) Recognition and measurement

Regular purchases and sales of financial assets are recognized at fair value initially on trade-date – the date on which the Company and its subsidiaries commit to purchase or sell the asset. Transaction costs relating to financial assets at fair value through profit or loss are directly expensed in the profit or loss as incurred. Transaction costs for other financial assets are included in the carrying amount of the asset at initial recognition. Financial assets are derecognized when the rights to receive cash flows from the financial assets have expired or have been transferred and all risks and rewards related to the ownership of the financial assets have been transferred to the transferee.

Financial assets at fair value through profit or loss and available-for-sale are subsequently measured at fair value. When an active market exists for a financial instrument, fair value is determined based on quoted prices in the active market. When no active market exists, fair value is determined by using valuation techniques. When applying valuation techniques, the Company and its subsidiaries maximize the use of relevant observable inputs and minimize the use of unobservable inputs.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(k) Financial assets *(Cont'd)*

(iv) Recognition and measurement *(Cont'd)*

Changes in the fair value of financial assets at fair value through profit or loss are recorded in 'gain/(loss) on fair value changes of financial assets/liabilities'.

Investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are measured at cost. Loans and receivables are carried at amortized cost using the effective interest method.

Except for impairment loss and translation differences on monetary financial assets, changes in the fair value of available-for-sale financial assets are recognized in other comprehensive income. When these financial assets are derecognized, the accumulated fair value adjustments recognized in equity are included in the statement of comprehensive income as 'other investment income'. Dividends on available-for-sale financial assets are recorded in 'other investment income' when the right of the Company and its subsidiaries to receive payments is established.

(v) Impairment of financial assets

Except for financial assets at fair value through profit or loss, the Company and its subsidiaries perform assessment on the book value of financial assets at the end of reporting period. Provision for impairment is made when there is objective evidence showing that a financial asset is impaired.

For investments in subsidiaries, associates and joint ventures, the impairment loss is measured by comparing the recoverable amount of the investment with its carrying amount. The impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount.

In the case of equity investments classified as available for sale, a significant or prolonged decline in the fair value of the investment below its cost is evidence that the assets are impaired. If any such evidence exists for available-for-sale financial assets, the cumulative loss, measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognized in profit or loss, is removed from equity and recognized in profit or loss. Impairment losses recognized in the profit or loss on equity instruments are not reversed through the profit or loss.

When financial assets carried at amortized cost are impaired, the carrying amount of the financial assets is reduced to the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The impaired amount is recognized as assets impairment loss in the current period. If there is objective evidence that the value of the financial assets has recovered as a result of objective changes in circumstances occurring after the impairment loss was originally recognized, the originally recognized impairment loss is reversed through profit or loss. For the impairment test of receivables, please refer to Note 2(l).

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(k) Financial assets *(Cont'd)*

(vi) Derivative financial instruments and hedging activities

Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently remeasured at their fair value. Gain or loss arising from subsequent change in the fair value of derivative financial instruments is recognized in profit or loss except for the effective portions of gain or loss on the derivative financial instruments designated as cash flow hedges which are recognized directly in other comprehensive income. Cash flow hedge represents a hedge against the exposure to variability in cash flows, which such cash flow is originated from a particular risk associated with highly probable forecast transactions and variable rate borrowings and which could affect the statement of comprehensive income.

The hedged items of cash flow hedge are the designated items with respect to the risks associated with future cash flow change resulting from variability in cash flows of a recognized asset or liability or a highly probable forecast transaction or the foreign currency risk of a committed future transaction. Hedging instruments are designated derivative for cash flow hedge whose cash flows are expected to offset changes in the cash flows of a hedged item.

The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedge item is more than 12 months.

The Company and its subsidiaries document their assessments, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in cash flows of hedged items. The Company and its subsidiaries apply ratio analysis method to evaluate the ongoing effectiveness of the cash flow hedge.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges are recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in the statement of comprehensive income within 'gain/(loss) on fair value changes of financial assets/liabilities'.

Amounts accumulated in equity are reclassified to the profit or loss in the periods when the hedged item affects profit or loss. The gain or loss relating to the effective portion of interest rate swaps hedging variable rate borrowings is recognized in the statement of comprehensive income within 'interest expense'. The gain or loss relating to the effective portion of exchange forward hedging foreign currency denominated payables is recognized in the statement of comprehensive income within 'exchange gain/(loss) and bank charges, net'. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset, the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the asset. In the case where the Company and its subsidiaries expect all or a portion of net loss previously recognized directly in other comprehensive income will not be recovered in future financial periods, the irrecoverable portion will be reclassified into profit or loss.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(k) Financial assets *(Cont'd)*

(vi) Derivative financial instruments and hedging activities *(Cont'd)*

When a hedging instrument expires or is sold, terminated or exercised or when a hedge no longer meets the criteria for hedge accounting, the Company and its subsidiaries will discontinue hedge accounting. Any cumulative gain or loss existing in equity at that time remains in equity and is subsequently recognized when the forecast transaction is ultimately recognized in the profit or loss. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the statement of comprehensive income within 'gain/(loss) on fair value changes of financial assets/liabilities'.

(l) Loans and receivables

Loans and receivables, which primarily include accounts receivable, other receivables, loan to subsidiaries and other non-current assets, are recognized initially at fair value. Loans and receivables are subsequently measured at amortized cost less provision for doubtful debts using the effective interest method.

The Company and its subsidiaries establish an allowance for impairment that represents its estimate of incurred losses in respect of receivables. The main components of this allowance are a specific loss component that relates to individually significant exposures, and a collective loss component established for groups of similar assets in respect of losses that have been incurred but not yet identified. The collective loss allowance is determined based on historical data of payment statistics for similar financial assets.

When there is objective evidence that the Company and its subsidiaries will not be able to collect all amounts due according to the original terms of the receivables, impairment test is performed and related provision for doubtful accounts is made based on the shortfall between carrying amounts and respective present value of estimated future cash flows. The carrying amounts of the receivables are reduced through the use of allowance accounts, and the amount of the provision is recognized in the statement of comprehensive income within 'operating expenses – others'. When a receivable is uncollectible, it is written off against the allowance account for the receivable. Subsequent recoveries of amounts previously written off are credited against 'operating expenses – others' in the statement of comprehensive income.

(m) Inventories

Inventories include fuel for power generation, materials for repairs and maintenance and spare parts, and are stated at lower of cost and net realizable values.

Inventories are initially recorded at cost and are charged to fuel costs or repairs and maintenance, respectively when used, or capitalized to property, plant and equipment when installed, as appropriate, using weighted average cost basis. Cost of inventories includes costs of purchase and transportation costs.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(m) Inventories *(Cont'd)*

When the forecast transaction that is hedged results in the recognition of the inventory, the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the inventory.

Provision for inventory obsolescence is determined by the excess of cost over net realizable value. Net realizable values are determined based on the estimated selling price less estimated conversion costs during power generation, selling expenses and related taxes in the ordinary course of business.

(n) Related parties

Parties are considered to be related if one party has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operating decisions. Parties are also considered to be related if they are subject to common control or jointly control of the same third party; one party is controlled or jointly controlled by a third party and the other party is an associate or a joint venture of the same third party.

(o) Cash and cash equivalents

Cash and cash equivalents listed in the statement of cash flows represents cash in hand, call deposits held with banks and other financial institutions, and other short-term (3 months or less), highly-liquid investments that are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value. Bank overdrafts that are repayable on demand and form an integral part of the cash management are also included as a component of cash and cash equivalents for the purpose of the consolidated statement of cash flow.

(p) Borrowings

Borrowings are recognized initially at fair value less transaction costs and subsequently measured at amortized cost using the effective interest method. Borrowings are classified as current liabilities unless the Company and its subsidiaries have an unconditional right to defer settlement of the liability for at least 12 months after the end of reporting period.

(q) Borrowing costs

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets. The capitalization of borrowing costs as part of the cost of a qualifying asset commences when expenditure for the asset is being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use or sale are in progress. Capitalization of borrowing costs is suspended or ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are interrupted or complete.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(q) Borrowing costs *(Cont'd)*

The amount of specific borrowing costs capitalized is net of the investment income on any temporary investment of the funds pending expenditure on the asset.

All other borrowing costs are recognized in profit or loss in the period in which they are incurred.

(r) Payables

Payables primarily include accounts payable and other liabilities, and are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method.

(s) Taxation

(i) Value-added tax ("VAT")

The domestic power, heat and coal sales of the Company and its subsidiaries are subject to VAT. VAT payable is determined by applying 17% (or 13% on heat) on the taxable revenue after offsetting deductible input VAT of the period.

The applicable tax rate of VAT in respect of the lease of tangible movable properties, transportation industry and other modern services industry are 17%, 11% and 6%, respectively.

According to the relevant regulations of Ministry of Finance of PRC and State Administration of Taxation, the transformation from Business Tax to VAT launched nation-wide from 1 May 2016 and all business tax taxpayers in the construction industry, real estate industry, financial industry, living services were included. The applicable tax rate of VAT in respect of sectors including construction services, lease of immovables, sale of immovables and transfer of land use rights is 11%, and in respect of financial and living services is 6%.

(ii) Goods and service tax ("GST")

The power sales of the subsidiaries in Singapore are subject to goods and service tax of the country where they operate. GST payable is determined by applying 7% on the taxable revenue after offsetting deductible GST of the period.

(iii) Current and deferred income tax

The income tax expense for the period comprises current and deferred income tax. Income tax expense is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(s) Taxation *(Cont'd)*

(iii) Current and deferred income tax *(Cont'd)*

Deferred income tax assets and liabilities are recognized based on the differences between tax bases of assets and liabilities and respective book values (temporary differences). For deductible tax losses or tax credit that can be brought forward in accordance with tax law requirements for deduction of taxable income in subsequent years, it is considered as temporary differences and related deferred income tax assets are recognized. No deferred income tax liability is recognized for temporary difference arising from initial recognition of goodwill. For those temporary differences arising from initial recognition of an asset or liability in a non-business combination transaction that affects neither accounting profit nor taxable profit (or deductible loss) at the time of the transaction, no deferred income tax asset and liability is recognized. The temporary differences relating to investments in subsidiaries to the extent that, in the case of taxable differences, the Company and its subsidiaries control the timing of the reversal and it is probable that the differences will not reverse in the foreseeable future, or in the case of deductible differences, unless it is probable that they will reverse in the future.

The Company and its subsidiaries recognize deferred income tax assets to the extent that it is probable that taxable profit will be available to offset the deductible temporary difference, deductible tax loss and tax credit.

At the end of reporting period, deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or liability is settled.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profits will be available.

Deferred income tax assets and deferred income tax liabilities are offset when meeting all the conditions below:

(1) The Company and its subsidiaries have the legal enforceable right to offset current income tax assets and current income tax liabilities;

(2) Deferred income tax assets and deferred income tax liabilities are related to the income tax levied by the same tax authority of the Company and its subsidiaries.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(t) Employee benefits

Employee benefits include all expenditures relating to the employees for their services. The Company and its subsidiaries recognize employee benefits as liabilities during the accounting period when employees render services and allocate to related cost of assets and expenses based on different beneficiaries.

In connection with pension obligations, the Company and its subsidiaries operate various defined contribution plans in accordance with the local conditions and practices in the countries and provinces in which they operate. A defined contribution plan is a pension plan under which the Company and its subsidiaries pay fixed contributions into a separate publicly administered pension insurance plan on mandatory and voluntary bases. The Company and its subsidiaries have no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. The contributions are recognized as employee benefit when incurred. Prepaid contributions are recognized as assets to the extent that a cash refund or a reduction in the future payment is available.

(u) Government grants

Government grants are recognized when the Company and its subsidiaries fulfill the conditions attached to them and they are probable to be received. When government grants are received in the form of monetary assets, they are measured at the amount received or receivable. When the grant is in the form of non-monetary assets, it is measured at fair value. When fair value cannot be measured reliably, nominal amount is assigned.

Asset-related government grant is recognized as deferred income and is amortized evenly in profit or loss over the useful lives of related assets.

Income-related government grant that is used to compensate subsequent related expenses or losses of the Company and its subsidiaries are recognized as deferred income and recorded in the profit or loss when related expenses or losses incurred. When the grant is used to compensate expenses or losses that were already incurred, they are directly recognized in current period profit or loss.

(v) Revenue and income recognition

Revenue and income are recognized based the following methods:

Revenue and income are recognized when it is probable that the economic benefits associated with the transaction will flow to the Company and its subsidiaries and the amount of the revenue and income can be measured reliably.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(v) Revenue and income recognition *(Cont'd)*

(i) Electricity sales revenue

Electricity sales revenue represents the fair value of the consideration received or receivable for electricity sold in the ordinary course of the activities of the Company and its subsidiaries (net of VAT or GST). Revenue is earned and recognized upon transmission of electricity to the customers or the power grid controlled and owned by the respective regional or provincial grid companies.

(ii) Coal sales revenue

Coal sales revenue represents the fair value of the consideration received or receivable for the sale of the coal in the ordinary course of the activities of the Company and its subsidiaries. Coal sales revenue is recognized when the coal is delivered to the customers and there is no unfulfilled obligation that could affect the customer's acceptance of the coal.

(iii) Service revenue

Service revenue refers to amounts received from service of port loading, conveying and transportation. The Company and its subsidiaries recognize revenue when the relevant service is provided.

(iv) Dividend income

Dividend income from unlisted investments is recognized when the shareholder's right to receive payment is established. Dividend income from listed investments is recognized when the share price of the investment goes ex-dividend.

(v) Interest income

Interest income from deposits is recognized on a time proportion basis using effective interest method. Interest income from the finance lease is recognized on a basis that reflects a constant periodic rate of return on the net investment in the finance lease.

(w) Leases

Leases where all the risks and rewards incidental to ownership of the assets are in substance transferred to the lessees are classified as finance leases. All other leases are operating leases.

(i) Operating leases (lessee)

Operating lease expenses are capitalized or expensed on a straight-line basis over the lease term.

The cost of acquiring land held under an operating lease is amortized on a straight-line basis over the period of the lease term.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(w) Leases *(Cont'd)*

(ii) Finance lease

The Company and its subsidiaries recognize the aggregate of the minimum lease receipts and the initial direct costs on the lease inception date as the receivable. The difference between the aggregate of the minimum lease receipts and the initial direct costs and sum of their respective present values is recognized as unrealized finance income. The Company and its subsidiaries adopt the effective interest method to allocate such unrealized finance income over the lease term. At the end of reporting period, the Company and its subsidiaries present the net amount of finance lease receivable after deducting any unrealized finance income in non-current assets and current assets, respectively.

Please refer to Note 2(k)(v) for impairment test on finance lease receivables.

Where the Company and its subsidiaries acquire the use of assets under finance leases, the amounts representing the fair value of the leased asset, or, if lower, the present value of the minimum lease payments, of such assets are included in fixed assets and the corresponding liabilities, net of finance charges, are recorded as obligations under finance leases. Depreciation is provided at rates which write off the cost or valuation of the assets over the term of the relevant lease or, where it is likely the Company and its subsidiaries will obtain ownership of the asset, the life of the asset, as set out in Note 2(f). Impairment losses are accounted for in accordance with the accounting policy as set out in Note 2(j). Finance charges implicit in the lease payments are charged to profit or loss over the period of the leases so as to produce an approximately constant periodic rate of charge on the remaining balance of the obligations for each accounting period. Contingent rentals are charged to profit or loss in the accounting period in which they are incurred.

(x) Purchase of electricity

The overseas subsidiary of the Company recognizes electricity purchase cost when it purchases the electricity and transmits to its customers.

(y) Financial guarantee contracts

The Company issues financial guarantee contracts that transfer significant insurance risk. Financial guarantee contracts are those contracts that require the issuer to make specified payments to reimburse the holders for losses they incur because specified debtors fail to make payments when due in accordance with the original or modified terms of debt instruments. Where the Company issues a financial guarantee, the fair value of the guarantee is initially recognized as deferred income within accounts payable and other liabilities. The fair value of financial guarantees issued at the time of issuance is determined by reference to fees charged in an arm's length transaction for similar services, when such information is obtainable, or is otherwise estimated by reference to interest rate differentials, by comparing the actual rates charged by lenders when the guarantee is made available with the estimated rates that lenders would have charged, had the guarantees not been available, where reliable estimates of such information can be made. Where consideration is received or receivable for the issuance of the guarantee, the consideration is recognized in accordance with the Company's policies applicable to that category of asset. Where no such consideration is received or receivable, an immediate expense is recognized in profit or loss on initial recognition of any deferred income. The amount of the guarantee initially recognized as deferred income is amortized in profit or loss over the term of the guarantee as income from financial guarantees issued.

2 PRINCIPAL ACCOUNTING POLICIES *(Cont'd)*

(z) Dividend distribution

Dividend distribution to the shareholders of the Company and its subsidiaries is recognized as a liability in the period when the dividend is approved in the shareholders' meeting.

(aa) Contingencies

Contingent liabilities are not recognized in the financial statements. They are disclosed unless the possibility of an outflow of resources embodying economic benefits is remote. Contingent assets are not recognized in the financial statements but disclosed when an inflow of economic benefit is probable.

(ab) Standards and amendments to published standards that are not yet effective but relevant to the Company and its subsidiaries

The following are standards or amendments to existing standards that have been published and are mandatory for the accounting periods beginning on or after 1 January 2017, but the Company and its subsidiaries have not early adopted:

- Amendments to IAS 7, '*Disclosure initiative*', which will be effective for accounting periods beginning on or after 1 January 2017.
- Amendments to IAS 12, '*Income taxes – Recognition of deferred tax assets for unrealised losses*', which will be effective for accounting periods beginning on or after 1 January 2017.
- IFRIC 22, '*Foreign currency transactions and advance consideration*', which will be effective for accounting periods beginning on or after 1 January 2018.
- IFRS 15, '*Revenue from contracts with customers*', which will be effective for accounting periods beginning on or after 1 January 2018.
- IFRS 9, '*Financial instrument (2014)*', which will be effective for accounting periods beginning on or after 1 January 2018.
- IFRS 16, '*Leases*', which will be effective for accounting periods beginning on or after 1 January 2019.

The Company and its subsidiaries are in the process of making an assessment of what the impact of these amendments and new standards is expected to be in the period of initial application. So far it has concluded that the adoption of the standards or amendments effective for accounting periods beginning on or after 1 January 2017 is unlikely to have a significant impact on the Company and its subsidiaries' results of operations and financial position. As the Company and its subsidiaries have not completed its assessment, further impacts may be identified in due course and will be taken into consideration when determining whether to adopt any of these new requirements before their effective date and which transitional approach to take, when there are alternative approaches allowed under the new standards.

3 FINANCIAL AND CAPITAL RISKS MANAGEMENT

(a) Financial risk management

Risk management, including the management on the financial risks, is carried out under the instructions of the Strategic Committee of Board of Directors and the Risk Management Team. The Company works out general principles for overall management as well as management policies covering specific areas. In considering the importance of risks, the Company identifies and evaluates risks at head office and individual power plant level, and requires analysis and proper communication of the information collected periodically.

SinoSing Power and its subsidiaries are subject to financial risks that are different from the entities operating within the PRC. They have a series of controls in place to maintain the cost of risks occurring and the cost of managing the risks at an acceptable level. Management continually monitors the risk management process to ensure that an appropriate balance between risk and control is achieved. SinoSing Power and its subsidiaries have their written policies and financial authorization limits in place which are reviewed periodically. These financial authorization limits seek to mitigate and eliminate operational risks by setting approval thresholds required for entering into contractual obligations and investments.

(i) Market risk

(1) Foreign exchange risk

Foreign exchange risk of the entities operating within the PRC primarily arises from loans denominated in foreign currencies of the Company and its subsidiaries. SinoSing Power and its subsidiaries are exposed to foreign exchange risk on accounts payable and other payables that are denominated primarily in US$, a currency other than Singapore dollar ("S$"), their functional currency. Please refer to Note 24 and 27 for details. The Company and its subsidiaries manage exchange risk through closely monitoring interest and exchange market.

As at 31 December 2016, if RMB had weakened/strengthened by 5% (2015: 5%) against US$ and 3% (2015: 3%) against EUR ("€") with all other variables constant, the Company and its subsidiaries would further recognize exchange loss/gain amounted RMB142 million (2015: RMB144 million) and RMB9 million (2015: RMB10 million), respectively. The ranges of such sensitivity disclosed above were based on the observation on the historical trend of related exchange rates during the previous year under analysis.

As at 31 December 2016, if S$ had weakened/strengthened by 10% (2015: 10%) against US$ with all other variables constant, the Company and its subsidiaries would further recognize exchange loss/gain amounted RMB10 million (2015: RMB2 million). The ranges of such sensitivity disclosed above were based on the management's experience and forecast.

SinoSing Power and its subsidiaries also are exposed to foreign exchange risk on fuel purchases that are denominated primarily in US$. They substantially hedge their estimated foreign currency exposure in respect of forecast fuel purchases over the following three months using primarily foreign currency contracts.

3 FINANCIAL AND CAPITAL RISKS MANAGEMENT *(Cont'd)*

(a) Financial risk management *(Cont'd)*

(i) Market risk *(Cont'd)*

(2) Price risk

The available-for-sale financial assets of the Company and its subsidiaries are exposed to equity security price risk.

Detailed information relating to the available-for-sale financial assets is disclosed in Note 10. The Company has a supervisor in the supervisory committee of the most significant investment in available-for-sale financial assets (China Yangtze Power Co., Ltd. ("Yangtze Power")) and may exercise protective rights. The Company also closely monitors the pricing trends in the open market in determining its long-term strategic stakeholding decisions.

The Company and its subsidiaries are exposed to fuel price risk on fuel purchases. In particular, SinoSing Power and its subsidiaries use fuel oil swap to hedge against such a risk and designate them as cash flow hedges. Please refer to Note 14 for details.

(3) Cash flow interest rate risk

The interest rate risk of the Company and its subsidiaries primarily arises from long-term loans. Loans borrowed at variable rates expose the Company and its subsidiaries to cash flow interest rate risk. The exposures of these risks are disclosed in Note 24 to the financial statements. The Company and its subsidiaries have entered into interest rate swap agreements with banks to hedge against a portion of cash flow interest rate risk.

As at 31 December 2016, if interest rates on RMB-denominated borrowings had been 50 basis points higher/lower with all other variables held constant, interest expense for the year would have been RMB520 million (2015: RMB410 million) higher/lower. If interest rates on US$-denominated borrowings had been 50 basis points higher/lower with all other variables held constant, interest expense for the year would have been RMB7 million (2015: RMB8 million) higher/lower. If interest rates on S$-denominated borrowings had been 100 basis points higher/lower with all other variables held constant, interest expense for the year would have been RMB59 million (2015: RMB60 million) higher/lower. The ranges of such sensitivity disclosed above were based on the observation on the historical trend of related interest rates during the previous year under analysis.

The Company has entered into a floating-to-fixed interest rate swap agreement to hedge against cash flow interest rate risk of a loan. According to the interest rate swap agreement, the Company agrees with the counterparty to settle the difference between fixed contract rates and floating-rate interest amounts calculated by reference to the agreed notional amounts quarterly until 2019. Tuas Power Generation Pte Ltd. ("TPG") also entered into a number of floating-to-fixed interest rate swap agreements to hedge against cash flow interest rate risk of a loan. According to the interest rate swap agreements, TPG agrees with the counterparty to settle the difference between fixed contract rates and floating-rate interest amounts calculated by reference to the agreed notional amount semi-annually until 2020. Please refer to Note 14 for details.

3 FINANCIAL AND CAPITAL RISKS MANAGEMENT *(Cont'd)*

(a) Financial risk management *(Cont'd)*

(ii) Credit risk

Credit risk arises from bank deposits, accounts receivable, other receivables and other non-current assets. The maximum exposures of other non-current assets, other receivables, accounts receivable and bank deposits are disclosed in Note 16, 18, 19 and 35 to the financial statements, respectively.

Bank deposits are placed with reputable banks and financial institutions. In addition, a significant portion is deposited with a non-bank financial institution which is a related party of the Company. The Company has a director on the Board of this non-bank financial institution and exercises influence. Corresponding maximum exposures of these bank deposits are disclosed in Note 36(a)(i) to the financial statements.

Most of the power plants of the Company and its subsidiaries operating within the PRC sell electricity generated to their sole customers, the power grid companies of their respective provinces or regions where the power plants operate. These power plants communicate with their individual grid companies periodically and believe that adequate provision for doubtful accounts have been made in the financial statements.

Singapore subsidiaries derive revenue mainly from sale of electricity to the National Electricity Market of Singapore operated by Energy Market Company Pte Ltd., which does not have high credit risk. Singapore subsidiaries also derive revenue mainly from retailing electricity to consumers with monthly consumption of more than 2,000kWh. These customers engage in a wide spectrum of manufacturing and commercial activities in a variety of industries. Singapore subsidiaries hold cash deposits of RMB175.86 million (2015: RMB172.51 million) and guarantees from creditworthy financial institutions as a security from these customers.

(iii) Liquidity risk

Liquidity risk management is to primarily ensure the ability of the Company and its subsidiaries to meet its liabilities as and when they are fall due. The liquidity reserve comprises the undrawn borrowing facility and cash and cash equivalents available as at each month end in meeting its liabilities.

The Company and its subsidiaries maintain flexibility in funding by cash generated by their operating activities and availability of committed credit facilities.

Financial liabilities due within 12 months are presented as current liabilities in the statement of financial position. The cash flows of derivative financial liabilities and repayment schedules of the long-term loans and long-term bonds are disclosed in Note 14, 24 and 25, respectively.

(Amounts expressed in thousands of RMB unless otherwise stated)

3 FINANCIAL AND CAPITAL RISKS MANAGEMENT *(Cont'd)*

(b) Fair value estimation

(i) Fair value measurements

The table below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

- Level 1- Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2- Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
- Level 3- Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

The following table presents the assets and liabilities that are measured at fair value at 31 December 2016.

	Level 1	Level 2	Level 3	Total
Assets				
Financial assets at fair value through profit or loss – Trading derivatives (Note 14)	–	5,881	–	5,881
Derivatives used for hedging (Note 14)	–	372,442	–	372,442
Available-for-sale financial assets – Equity securities (Note 10)	1,820,713	–	–	1,820,713
Total assets	1,820,713	378,323	–	2,199,036
Liabilities				
Financial liabilities at fair value through profit or loss – Trading derivatives (Note 14)	–	619	–	619
Derivatives used for hedging (Note 14)	–	334,119	–	334,119
Total liabilities	–	334,738	–	334,738

(Amounts expressed in thousands of RMB unless otherwise stated)

3 FINANCIAL AND CAPITAL RISKS MANAGEMENT *(Cont'd)*

(b) Fair value estimation *(Cont'd)*

(i) Fair value measurements *(Cont'd)*

The following table presents the assets and liabilities that are measured at fair value at 31 December 2015.

	Level 1	Level 2	Level 3	Total
Assets				
Financial assets at fair value through profit or loss – Trading derivatives (Note 14)	–	40,843	–	40,843
Derivatives used for hedging (Note 14)	–	143,669	–	143,669
Available-for-sale financial assets – Equity securities (Note 10)	3,492,510	–	–	3,492,510
Total assets	3,492,510	184,512	–	3,677,022
Liabilities				
Financial liabilities at fair value through profit or loss – Trading derivatives (Note 14)	–	23,391	–	23,391
Derivatives used for hedging (Note 14)	–	1,281,550	–	1,281,550
Total liabilities	–	1,304,941	–	1,304,941

3 FINANCIAL AND CAPITAL RISKS MANAGEMENT *(Cont'd)*

(b) Fair value estimation *(Cont'd)*

(i) Fair value measurements *(Cont'd)*

The fair value of financial instruments traded in active markets is based on quoted market prices at the end of reporting period. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Company and its subsidiaries is the current bid price. These instruments are included in level 1. As at 31 December 2016 and 2015, instrument included in level 1 are equity investments in Yangtze Power and Bank of Jiangsu Co., Ltd. ("Bank of Jiangsu") classified as available for sale.

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. These valuation techniques maximize the use of relevant observable inputs and minimize the use of unobservable inputs. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

Specific valuation techniques used to value financial instruments include:

- The forward exchange contracts and fuel oil swaps are both valued using quoted market prices or dealer quotes for similar instruments.

- The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows based on observable yield curves.

Instruments included in level 2 comprise forward exchange contracts, fuel oil swaps and interest rate swaps.

During the year ended 31 December 2016, there are no transfers of financial instruments between level 1 and level 2, or transfers into or out of level 3.

3 FINANCIAL AND CAPITAL RISKS MANAGEMENT *(Cont'd)*

(b) Fair value estimation *(Cont'd)*

(ii) Fair value disclosures

The carrying value less provision for doubtful accounts of accounts receivable, other receivables and assets, accounts payable and other liabilities, short-term bonds and short-term loans approximated their fair values. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Company and its subsidiaries for similar financial instruments.

The estimated fair value of long-term loans and long-term bonds (both including current maturities) was approximately RMB74.48 billion and RMB15.71 billion as at 31 December 2016 (2015: RMB78.31 billion and RMB23.15 billion), respectively. The aggregate book value of these liabilities was approximately RMB74.55 billion and RMB15.48 billion as at 31 December 2016 (2015: RMB78.38 billion and RMB22.74 billion), respectively.

(c) Capital risk management

The objectives of the Company and its subsidiaries when managing capital are to safeguard the ability of the Company and its subsidiaries in continuing as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Company and its subsidiaries monitor capital by using debt ratio analysis. This ratio is calculated as total liabilities (sum of current liabilities and non-current liabilities) divided by total assets as shown in the consolidated statement of financial position. During 2016, the strategy of the Company and its subsidiaries remained unchanged from 2015. The debt ratio of the Company and its subsidiaries as at 31 December 2016 was 67.54% (2015: 67.08%).

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Company and its subsidiaries make estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS *(Cont'd)*

(a) Accounting estimates on impairment of goodwill and power generation license

The Company and its subsidiaries perform test annually whether goodwill and power generation license have suffered any impairment in accordance with the accounting policies stated in Note 2(i) and 2(g), respectively. The recoverable amounts of CGU or CGUs to which goodwill and the power generation license have been allocated are determined based on value-in-use calculations. These calculations require the use of estimates (Note 12 and 15). It is reasonably possible, based on existing knowledge, that outcomes within the next financial period that are different from assumptions could require a material adjustment to the carrying amounts of goodwill and power generation license.

For goodwill allocated to CGUs in the PRC, changes of assumptions in tariff and fuel price could have affected the results of goodwill impairment assessment. As at 31 December 2016, if tariff had decreased by 1% or 5% from management's estimates with other variables constant with the expectations, the Company and its subsidiaries would have to recognize impairment against goodwill by approximately RMB176 million and RMB1,043 million, respectively. If fuel price had increased by 1% or 5% from the management's estimates with other variables constant with the expectations, the Company and its subsidiaries would have to recognize impairment against goodwill by RMB37 million and RMB899 million, respectively.

For the sensitivity analysis of power generation license and goodwill of Tuas Power, please refer to Note 12 and 15.

(b) Useful life of power generation license

As at year end, management of the Company and its subsidiaries assessed that the estimated useful life for its power generation license is indefinite. This assessment is based on the expected renewal of power generation license without significant restriction and cost, together with the consideration on related future cash flows generated and the expectation of continuous operations. Based on existing knowledge, outcomes within the next financial period that are different from assumptions could require a change to the carrying amount of power generation license.

(c) Useful lives of property, plant and equipment

Management of the Company and its subsidiaries determines the estimated useful lives of property, plant and equipment and respective depreciation. The accounting estimate is based on the expected wears and tears incurred during power generation. Wears and tears can be significantly different following renovation each time. When the useful lives differ from the original estimated useful lives, management will adjust the estimated useful lives accordingly. It is possible that the estimates made based on existing experience are different to the actual outcomes within the next financial period and could cause a material adjustment to the depreciation and carrying amount of property, plant and equipment.

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS *(Cont'd)*

(d) Estimated impairment of other non-current assets

The Company and its subsidiaries test whether property, plant and equipment, land use rights and mining rights suffered from impairment whenever an impairment indication exists. In accordance with Note 2(j), an impairment loss is recognized for the amount by which the carrying amount of the asset exceeds its recoverable amount. It is reasonably possible, based on existing knowledge, that outcomes within the next financial period that are different from assumptions could require a material adjustment to the carrying amount of property, plant and equipment, land use rights and mining rights.

Changes of assumptions in tariff and fuel price will affect the result of property, plant and equipment, land use rights and mining rights impairment assessment. For power plants assets that are subject to impairment testing, as at 31 December 2016, if tariff had decreased by 1% or 5% from management's estimates with other variables constant with the expectations, the Company and its subsidiaries would have to further recognize impairment against property, plant and equipment and land use rights by approximately RMB92 million and RMB779 million, respectively. If fuel price had increased by 1% or 5% from the management's estimates with other variables constant with the expectations, the impairment against property, plant and equipment, land use rights and mining rights of the Company and its subsidiaries would decrease totaling by approximately RMB8 million and RMB38 million, respectively.

(e) Approval of construction of new power plants

The receiving of the ultimate approvals from National Development and Reform Commission ("NDRC") on certain power plant construction projects of the Company and its subsidiaries is a critical estimate and judgment of the directors. Such estimates and judgments are based on initial approval documents received as well as their understanding of the projects. Based on historical experience, the directors believe that the Company and its subsidiaries will receive final approvals from NDRC on the related power plant projects. Deviation from the estimate and judgment could result in significant adjustment to the carrying amount of property, plant and equipment.

(f) Deferred tax assets

The Company and its subsidiaries recognized the deferred tax assets to the extent that it is probable that future taxable profit will be available against which the asset can be utilized, using tax rates that are expected to be applied in the period when the asset is recovered. The management assesses the deferred tax assets based on the expected amount and timing of future taxable profit, the enacted tax laws and applicable tax rates. It is reasonably possible, based on existing knowledge, the outcomes within the next financial period that are different from assumptions could require a material adjustment to the carrying amount of deferred tax assets.

(Amounts expressed in thousands of RMB unless otherwise stated)

5 REVENUE AND SEGMENT INFORMATION

Revenues recognized during the year are as follows:

	For the year ended 31 December	
	2016	2015
Sales of power and heat	**112,794,536**	127,849,408
Port service	**237,347**	211,685
Transportation service	**105,505**	104,721
Others	**676,848**	739,059
Total	**113,814,236**	128,904,873

Directors and certain senior management of the Company perform the function as the chief operating decision maker (collectively referred to as the "senior management"). The senior management reviews the internal reporting of the Company and its subsidiaries in order to assess performance and allocate resources. The Company has determined the operating segments based on these reports. The reportable segments of the Company are the PRC power segment, Singapore segment and all other segments (mainly including port and transportation operations). No operating segments have been aggregated to form a reportable segment.

Senior management assesses the performance of the operating segments based on a measure of profit before income tax expense under China Accounting Standard for Business Enterprises ("PRC GAAP") excluding dividend income received from available-for-sale financial assets, gains on disposal of available-for-sale financial asset and operating results of the centrally managed and resource allocation functions of headquarters ("Segment results"). Other information provided, except as noted below, to the senior management of the Company is measured under PRC GAAP.

Segment assets exclude prepaid income tax, deferred income tax assets, available-for-sale financial assets and assets related to the centrally managed and resource allocation functions of headquarters that are not attributable to any operating segment ("corporate assets"). Segment liabilities exclude current income tax liabilities, deferred income tax liabilities and liabilities related to the centrally managed and resource allocation functions of headquarters that are not attributable to any operating segment ("corporate liabilities"). These are part of the reconciliation to total assets and liabilities of consolidated statement of financial position.

(Amounts expressed in thousands of RMB unless otherwise stated)

5 REVENUE AND SEGMENT INFORMATION *(Cont'd)*

All sales among the operating segments have been eliminated as internal transactions when preparing consolidated financial statements.

(Under PRC GAAP)

	PRC power segment	Singapore segment	All other segments	Total
For the year ended 31 December 2016				
Total revenue	**104,746,690**	**8,758,822**	**634,965**	**114,140,477**
Inter-segment revenue	**–**	**–**	**(326,241)**	**(326,241)**
Revenue from external customers	**104,746,690**	**8,758,822**	**308,724**	**113,814,236**
Segment results	**14,215,671**	**(282,703)**	**(35,371)**	**13,897,597**
Interest income	**76,768**	**69,672**	**623**	**147,063**
Interest expense	**(6,067,194)**	**(481,263)**	**(137,825)**	**(6,686,282)**
Impairment (loss)/reversal	**(1,197,382)**	**899**	**(8,475)**	**(1,204,958)**
Depreciation and amortization	**(13,786,933)**	**(778,426)**	**(203,493)**	**(14,768,852)**
Net loss on disposal of non-current assets	**(577,322)**	**(172)**	**(14,303)**	**(591,797)**
Share of profits less losses of associates and joint ventures	**1,104,614**	**–**	**76,477**	**1,181,091**
Income tax expense	**(3,681,737)**	**44,135**	**57,489**	**(3,580,113)**
For the year ended 31 December 2015				
Total revenue	118,418,506	10,143,793	588,266	129,150,565
Inter-segment revenue	–	–	(245,692)	(245,692)
Revenue from external customers	118,418,506	10,143,793	342,574	128,904,873
Segment results	24,073,432	(313,253)	(281,457)	23,478,722
Interest income	93,324	66,898	501	160,723
Interest expense	(7,181,116)	(452,034)	(163,325)	(7,796,475)
Impairment (loss)/reversal	(2,913,766)	1,744	(178,131)	(3,090,153)
Depreciation and amortization	(13,244,965)	(772,003)	(245,936)	(14,262,904)
Net (loss)/gain on disposal of non-current assets	(427,286)	22,450	(1)	(404,837)
Share of profits less losses of associates and joint ventures	1,421,072	–	24,915	1,445,987
Income tax expense	(6,104,619)	254,772	14,397	(5,835,450)

(Amounts expressed in thousands of RMB unless otherwise stated)

5 REVENUE AND SEGMENT INFORMATION *(Cont'd)*

(Under PRC GAAP)

	PRC power segment	Singapore segment	All other segments	Total
31 December 2016				
Segment assets	**262,832,643**	**28,141,718**	**11,611,683**	**302,586,044**
Including:				
Additions to non-current assets (excluding financial assets and deferred income tax assets)	**19,962,461**	**230,974**	**854,484**	**21,047,919**
Investments in associates	**13,254,236**	**–**	**2,868,139**	**16,122,375**
Investments in joint ventures	**1,197,665**	**–**	**785,610**	**1,983,275**
Segment liabilities	**(186,489,967)**	**(14,027,606)**	**(5,620,515)**	**(206,138,088)**
31 December 2015				
Segment assets	253,376,399	27,487,701	10,703,373	291,567,473
Including:				
Additions to non-current assets (excluding financial assets and deferred income tax assets)	22,421,000	160,282	642,949	23,224,231
Investments in associates	13,026,027	–	2,806,231	15,832,258
Investments in joint ventures	1,569,614	–	785,004	2,354,618
Segment liabilities	(176,406,566)	(14,876,229)	(5,097,402)	(196,380,197)

A reconciliation of segment result to profit before income tax expense is provided as follows:

	For the year ended 31 December	
	2016	2015
Segment results (PRC GAAP)	**13,897,597**	23,478,722
Reconciling items:		
Loss related to the headquarter	**(699,053)**	(327,262)
Investment income from China Huaneng Finance Co., Ltd. ("Huaneng Finance")	**132,018**	135,971
Dividend income of available-for-sale financial assets	**103,037**	97,696
Gains on disposal of available-for-sale financial asset	**932,738**	–
Impact of other IFRS adjustments*	**(553,199)**	(427,077)
Profit before income tax expense per IFRS consolidated statement of comprehensive income	**13,813,138**	22,958,050

(Amounts expressed in thousands of RMB unless otherwise stated)

5 REVENUE AND SEGMENT INFORMATION *(Cont'd)*

Reportable segments' assets are reconciled to total assets as follows:

	As at 31 December	
	2016	2015
Total segment assets (PRC GAAP)	**302,586,044**	291,567,473
Reconciling items:		
Investment in Huaneng Finance	**1,314,603**	1,329,753
Deferred income tax assets	**1,558,670**	1,305,548
Prepaid income tax	**141,423**	2,393
Available-for-sale financial assets	**3,456,032**	5,127,863
Corporate assets	**360,854**	396,693
Impact of other IFRS adjustments*	**5,422,113**	9,136,631
Total assets per IFRS consolidated statement of financial position	**314,839,739**	308,866,354

Reportable segments' liabilities are reconciled to total liabilities as follows:

	As at 31 December	
	2016	2015
Total segment liabilities (PRC GAAP)	**(206,138,088)**	(196,380,197)
Reconciling items:		
Current income tax liabilities	**(440,791)**	(1,054,246)
Deferred income tax liabilities	**(1,355,099)**	(1,417,972)
Corporate liabilities	**(4,717,617)**	(4,937,450)
Impact of other IFRS adjustments*	**(1,407)**	(3,382,800)
Total liabilities per IFRS consolidated statement of financial position	**(212,653,002)**	(207,172,665)

(Amounts expressed in thousands of RMB unless otherwise stated)

5 REVENUE AND SEGMENT INFORMATION *(Cont'd)*

Other material items:

	Reportable segment total	Headquarters	Investment income from Huaneng Finance	Impact of other IFRS adjustments*	Total
For the year ended 31 December 2016					
Interest expense	**(6,686,282)**	**(131,244)**	**–**	**–**	**(6,817,526)**
Depreciation and amortization	**(14,768,852)**	**(48,934)**	**–**	**(344,929)**	**(15,162,715)**
Impairment loss	**(1,204,958)**	**–**	**–**	**–**	**(1,204,958)**
Share of profits less losses of associates and joint ventures	**1,181,091**	**–**	**132,018**	**(14,220)**	**1,298,889**
Net loss on disposal of non-current assets	**(591,797)**	**(14)**	**–**	**1,762**	**(590,049)**
Income tax expense	**(3,580,113)**	**–**	**–**	**114,962**	**(3,465,151)**
For the year ended 31 December 2015					
Interest expense	(7,796,475)	(149,259)	–	–	(7,945,734)
Depreciation and amortization	(14,262,904)	(60,236)	–	(394,473)	(14,717,613)
Impairment loss	(3,090,153)	–	–	–	(3,090,153)
Share of profits less losses of associates and joint ventures	1,445,987	–	135,971	(55,983)	1,525,975
Net loss on disposal of non-current assets	(404,837)	(6)	–	(33,478)	(438,321)
Income tax expense	(5,835,450)	–	–	136,507	(5,698,943)

* Other GAAP adjustments above primarily represented the classification adjustments and other adjustments. Other than the classification adjustments, the differences will be gradually eliminated following subsequent depreciation and amortization of related assets or the extinguishment of liabilities.

Geographical information (Under IFRS):

(i) External revenue generated from the following countries:

	For the year ended 31 December	
	2016	2015
PRC	**105,055,414**	118,761,080
Singapore	**8,758,822**	10,143,793
Total	**113,814,236**	128,904,873

(Amounts expressed in thousands of RMB unless otherwise stated)

5 REVENUE AND SEGMENT INFORMATION *(Cont'd)*

(ii) Non-current assets (excluding financial assets and deferred income tax assets) are located in the following countries:

	As at 31 December	
	2016	2015
PRC	**249,155,921**	245,620,977
Singapore	**23,369,766**	22,874,396
Total	**272,525,687**	268,495,373

The information on sales to major customers of the Company and its subsidiaries at amount equal to or more than 10% of external revenue is as follows:

	For the year ended 31 December			
	2016		2015	
	Amount	**Proportion**	Amount	Proportion
State Grid Jiangsu Electric Power Company	**13,495,734**	**12%**	14,835,745	12%
State Grid Shandong Electric Power Company	**12,649,224**	**11%**	14,855,655	12%

(Amounts expressed in thousands of RMB unless otherwise stated)

6 PROFIT BEFORE INCOME TAX EXPENSE

Profit before income tax expense was determined after charging/(crediting) the following:

	For the year ended 31 December	
	2016	2015
Total interest expense on borrowing	**7,267,490**	8,716,074
Less: amounts capitalized in property, plant and equipment	**449,964**	770,340
Interest expenses charged in consolidated statement of comprehensive income	**6,817,526**	7,945,734
Auditors' remuneration	**43,610**	41,640
Operating leases charge	**331,496**	313,723
Fuel	**56,617,542**	59,242,367
Depreciation of property, plant and equipment	**14,815,620**	14,411,632
Amortization of land use rights	**225,707**	213,206
Amortization of other non-current assets	**121,388**	92,775
Impairment loss of property, plant and equipment (Note 7)	**1,063,735**	1,047,641
Impairment loss of land use rights (Note 11)	**51,981**	–
Impairment loss of investment in an associate (Note 8)	**–**	178,131
Impairment loss of mining rights	**–**	760,296
Impairment loss of goodwill	**–**	1,105,649
Recognition/(reversal) of provision for doubtful accounts	**89,498**	(3,392)
(Reversal)/recognition of provision for inventory obsolescence	**(256)**	1,828
Net loss on disposals of non-current assets	**590,049**	438,321
Government grants	**(396,467)**	(696,735)
Gain on a bargain purchase (Note 40)	**(129,921)**	–
Included in other investment income		
– Gains on disposal of available-for-sale financial asset (Note 10)	**(932,738)**	–
– Dividends on available-for-sale financial assets	**(103,037)**	(97,696)

Other operating expenses consist of impairment loss of property, plant and equipment, land use rights, goodwill, mining rights and investment in an associate, environmental protection expenses, substituted power arrangement expenses, insurance, gain on a bargain purchase, government grants and other miscellaneous expenses.

(Amounts expressed in thousands of RMB unless otherwise stated)

7 PROPERTY, PLANT AND EQUIPMENT

	Dam	Port facilities	Buildings	Electric utility plant in service	Transportation facilities	Others	CIP	Total
As at 1 January 2015								
Cost	836,194	5,127,923	6,711,769	276,801,979	893,417	5,480,587	20,000,109	315,851,978
Accumulated depreciation	(48,046)	(549,438)	(2,099,073)	(115,023,072)	(304,926)	(3,003,834)	–	(121,028,389)
Accumulated impairment loss	(80,910)	(568,637)	(62,554)	(5,279,829)	–	(73,295)	(379,307)	(6,444,532)
Net book value	707,238	4,009,848	4,550,142	156,499,078	588,491	2,403,458	19,620,802	188,379,057
Year ended 31 December 2015								
Beginning of the year	707,238	4,009,848	4,550,142	156,499,078	588,491	2,403,458	19,620,802	188,379,057
Reclassification	–	–	94,127	(23,353)	70,432	(141,206)	–	–
Business combination	330,578	–	502,852	19,822,767	13	285,819	5,519,969	26,461,998
Additions	–	–	17	133,482	–	141,991	21,574,660	21,850,150
Transfer from CIP	573,234	47,480	832,961	21,654,923	–	125,889	(23,234,487)	–
Disposals/write-off	–	–	(859)	(802,652)	508	7,575	–	(795,428)
Transfer from a subsidiary to a joint venture	–	(522,289)	(16,097)	–	–	(81,462)	–	(619,848)
Depreciation charge	(24,498)	(111,245)	(234,073)	(13,618,136)	(50,380)	(403,120)	–	(14,441,452)
Impairment charge	(152,714)	–	(302)	(526,191)	–	(557)	(367,877)	(1,047,641)
Currency translation differences	–	–	–	(133,733)	–	22,847	(2,880)	(113,766)
End of the year	1,433,838	3,423,794	5,728,768	183,006,185	609,064	2,361,234	23,110,187	219,673,070
As at 31 December 2015								
Cost	1,856,144	3,860,009	8,306,471	327,827,738	980,290	5,809,400	23,851,697	372,491,749
Accumulated depreciation	(153,325)	(436,215)	(2,508,772)	(138,852,591)	(371,226)	(3,366,838)	–	(145,688,967)
Accumulated impairment loss	(268,981)	–	(68,931)	(5,968,962)	–	(81,328)	(741,510)	(7,129,712)
Net book value	1,433,838	3,423,794	5,728,768	183,006,185	609,064	2,361,234	23,110,187	219,673,070
Year ended 31 December 2016								
Beginning of the year	**1,433,838**	**3,423,794**	**5,728,768**	**183,006,185**	**609,064**	**2,361,234**	**23,110,187**	**219,673,070**
Reclassification	**–**	**1,771**	**(492,558)**	**495,841**	**759**	**(5,813)**	**–**	**–**
Business combination (Note 40)	**–**	**–**	**8,098**	**303,854**	**–**	**2,977**	**4,576**	**319,505**
Additions	**–**	**1,770**	**127**	**418,812**	**–**	**122,519**	**18,839,102**	**19,382,330**
Transfer from CIP	**20,170**	**246,712**	**1,319,019**	**12,576,736**	**20,033**	**296,648**	**(14,479,318)**	**–**
Disposals/write-off	**–**	**–**	**(68,945)**	**(495,251)**	**(26,477)**	**(27,055)**	**(193,357)**	**(811,085)**
Depreciation charge	**(32,987)**	**(113,810)**	**(255,882)**	**(14,004,881)**	**(48,720)**	**(387,884)**	**–**	**(14,844,164)**
Impairment charge	**(41,423)**	**–**	**(2,303)**	**(1,005,367)**	**–**	**(6,399)**	**(8,243)**	**(1,063,735)**
Currency translation differences	**–**	**–**	**–**	**404,948**	**–**	**782**	**158**	**405,888**
End of the year	**1,379,598**	**3,560,237**	**6,236,324**	**181,700,877**	**554,659**	**2,357,009**	**27,273,105**	**223,061,809**
As at 31 December 2016								
Cost	**1,876,314**	**4,116,914**	**9,056,858**	**341,195,395**	**875,630**	**6,041,783**	**28,022,858**	**391,185,752**
Accumulated depreciation	**(186,312)**	**(556,677)**	**(2,749,300)**	**(152,408,524)**	**(320,971)**	**(3,596,546)**	**–**	**(159,818,330)**
Accumulated impairment loss	**(310,404)**	**–**	**(71,234)**	**(7,085,994)**	**–**	**(88,228)**	**(749,753)**	**(8,305,613)**
Net book value	**1,379,598**	**3,560,237**	**6,236,324**	**181,700,877**	**554,659**	**2,357,009**	**27,273,105**	**223,061,809**

7 PROPERTY, PLANT AND EQUIPMENT *(Cont'd)*

Interest capitalization

Interest expense of approximately RMB450 million (2015: RMB770 million) arising on borrowings for the construction of property, plant and equipment was capitalized during the year and was included in 'Additions' in property, plant and equipment. The weighted average capitalization rate was approximately 4.52% (2015: 5.31%) per annum.

Impairment

In 2016, impairment losses for certain property, plant and equipment and land use rights of approximately RMB1,064 million and RMB52 million have been recognized, respectively. Factors leading to the impairment of operating projects primarily included lower utilization hours and tariff of two coal-fired power plants as a result of over supply of electricity in two provinces, as well as low utilization hours of a hydropower plant as a result of low level of water inflow. Discount rates of 8.06%, 8.97% and 8.12% were adopted in the value in use model in the determination of the recoverable amounts for the two coal-fired power plants and the hydropower plant respectively.

In 2015, impairment losses for certain property, plant and equipment of approximately RMB1,048 million have been recognized. Factors leading to the impairment of operating projects primarily included lower utilization hours and tariff of two coal-fired power plants as a result of over supply of electricity in two provinces, as well as low utilization hours of a hydropower plant as a result of low level of water inflow to the main dam. Discount rates of 7.86%, 8.81% and 7.60% were adopted in the value in use model in the determination of the recoverable amounts for the two coal-fired power plants and the hydropower plant respectively. Besides, as a result of the low demand of coal-fired power in local market, management estimated the possibility of further development of a coal-fired power project was remote, therefore the project under construction with a carrying value of RMB368 million was fully impaired in 2015.

Property, plant and equipment held under finance leases

As at 31 December 2016, certain property, plant and equipment with original cost of RMB2,075 million (2015: RMB1,912 million) were held under finance leases, which mainly included power generation assets, ships and pipeline assets.

Security

As at 31 December 2016, certain property, plant and equipment were secured to a bank as collateral against a long-term loan (Note 24).

Buildings without ownership certificate

At 31 December 2016, the Company and its subsidiaries were in the process of applying for the ownership certificate for certain buildings (buildings for power generation process were included in electric utility plant in service) with an aggregate net book value of RMB7,871 million (2015: RMB8,314 million). The management are of the opinion that the Company and its subsidiaries are entitled to lawfully and validly occupy and use of the above mentioned buildings.

(Amounts expressed in thousands of RMB unless otherwise stated)

8 INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

	2016	2015
Beginning of the year	**19,745,192**	17,626,910
Capital injections in associates and joint ventures	**276,118**	889,780
Business combination	**–**	136,244
Share of net profit less loss	**1,298,889**	1,525,975
Share of other comprehensive (loss)/income	**(180,572)**	678,793
Dividends	**(1,507,514)**	(934,379)
Impairment charge	**–**	(178,131)
End of the year	**19,632,113**	19,745,192

As at 31 December 2016, investments in associates and joint ventures of the Company and its subsidiaries are unlisted except for Shenzhen Energy Corporation Limited ("SECL") which is listed on the Shenzhen Stock Exchange. The following list contains only the particulars of material associates and joint ventures:

(Amounts expressed in thousands of RMB unless otherwise stated)

8 INVESTMENTS IN ASSOCIATES AND JOINT VENTURES *(Cont'd)*

Name	Country of incorporation	Registered capital	Business nature and scope of operation	Percentage of equity interest held Direct	Percentage of equity interest held Indirect [1]
Associates:					
SECL*	PRC	RMB2,642,994,398	Energy and investment in related industries	25.02%	–
Hebei Hanfeng Power Generation Limited Liability Company ("Hanfeng Power")	PRC	RMB1,975,000,000	Power generation	40%	–
Huaneng Finance	PRC	RMB5,000,000,000	Provision for financial service including fund deposit services, lending, finance lease arrangements, notes discounting and entrusted loans and investment arrangement within Huaneng Group	20%	–
Huaneng Sichuan Hydropower Co., Ltd. ("Sichuan Hydropower")	PRC	RMB1,469,800,000	Development, investment, construction, operation and management of hydropower	49%	–
China Huaneng Group Fuel Co., Ltd. ("Huaneng Group Fuel Company") **	PRC	RMB3,000,000,000	Wholesale of coal, import and export of coal	50%	–
Hainan Nuclear Power Limited Liability Company ("Hainan Nuclear")	PRC	RMB2,059,334,000	Construction and operation of nuclear power plants; production and sales of electricity and related products	30%	–
Joint ventures:					
Shanghai Time Shipping Co., Ltd. ("Shanghai Time Shipping")	PRC	RMB1,200,000,000	International and domestic sea transportation	50%	–
Jiangsu Nantong Power Generation Co., Ltd. ("Jiangsu Nantong Power")	PRC	RMB1,596,000,000	Operation and Management of power generation plants and transportation related projects	–	35%

1 The indirect percentage of equity interest held represents the effective ownership interest of the Company and its subsidiaries.

* As at 31 December 2016, the fair value of the Company's shares in SECL was RMB6,813 million (2015: RMB9,729 million).

** In accordance with the articles of the association of the investee, the Company could only exercise significant influence on the investee and therefore accounts for the investment under the equity method.

All the above associates and joint ventures are accounted for under the equity method in the consolidated financial statements.

(Amounts expressed in thousands of RMB unless otherwise stated)

8 INVESTMENTS IN ASSOCIATES AND JOINT VENTURES *(Cont'd)*

Summarized financial information of the material associates, adjusted for any differences in accounting policies and acquisition adjustments, and reconciliation to the carrying amounts in the consolidated financial statements, are disclosed below:

	Sichuan Hydropower		SECL		Huaneng Finance		Hanfeng Power		Huaneng Group Fuel Company		Hainan Nuclear	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Gross amounts of the associates'												
Current assets	1,245,157	1,207,407	14,021,440	16,556,930	13,919,342	15,612,635	806,432	663,263	4,642,797	5,236,751	2,608,909	1,744,274
Non-current assets	14,676,021	14,734,831	46,584,060	39,075,400	18,055,386	16,012,855	2,616,639	3,016,665	4,269,520	4,468,686	23,939,921	21,281,843
Current liabilities	(2,410,462)	(2,894,554)	(16,564,310)	(15,009,530)	(25,344,346)	(24,881,159)	(1,045,876)	(1,158,424)	(1,939,210)	(2,594,360)	(3,330,581)	(907,693)
Non-current liabilities	(8,901,599)	(8,349,972)	(19,395,060)	(16,130,880)	(57,368)	(95,567)	(37,103)	(35,968)	(3,432,326)	(3,679,055)	(18,356,288)	(17,609,808)
Equity	4,609,117	4,697,712	24,646,130	24,491,920	6,573,014	6,648,764	2,340,092	2,485,536	3,540,781	3,432,022	4,861,961	4,508,616
-Equity attributable to shareholders	3,449,824	3,573,323	21,610,140	21,679,710	6,573,014	6,648,764	2,340,092	2,485,536	3,378,952	3,287,867	4,861,961	4,508,616
-Non-controlling interests	1,159,293	1,124,389	3,035,990	2,812,210	-	-	-	-	161,829	144,155	-	-
Revenue	2,053,327	2,379,072	11,427,830	11,361,320	1,093,637	1,182,782	2,192,445	2,272,013	14,356,915	14,985,952	1,897,190	31,588
Profit from continuing operations attributable to shareholders	173,220	308,603	1,362,028	1,865,095	660,089	679,857	290,470	431,337	102,363	65,887	18,618	11,696
Other comprehensive (loss)/income attributable to shareholders	-	-	(638,680)	2,765,600	(125,840)	(80,871)	-	-	8,723	6,306	-	-
Total comprehensive income attributable to shareholders	173,220	308,603	723,348	4,630,695	534,249	598,986	290,470	431,337	111,086	72,193	18,618	11,696
Dividend received from the associates	145,392	189,499	198,348	132,232	122,000	138,000	174,366	115,954	10,000	-	-	-
Reconciled to the interests in the associates												
Gross amounts of net assets attributable to shareholders of the associate	3,449,824	3,573,323	21,610,140	21,679,710	6,573,014	6,648,764	2,340,092	2,485,536	3,378,952	3,287,867	4,861,961	4,508,616
The Company's effective interest	49%	49%	25.02%	25.02%	20%	20%	40%	40%	50%	50%	30%	30%
The Company's share of net assets attributable to shareholders of the associate	1,690,414	1,750,928	5,405,776	5,423,179	1,314,603	1,329,753	936,037	994,214	1,689,476	1,643,934	1,458,588	1,352,585
Impact of adjustments	207,586	207,586	1,161,810	1,161,810	-	-	293,082	293,082	16,521	16,521	14,076	14,076
Carrying amount in the consolidated financial statements	1,898,000	1,958,514	6,567,586	6,584,989	1,314,603	1,329,753	1,229,119	1,287,296	1,705,997	1,660,455	1,472,664	1,366,661

(Amounts expressed in thousands of RMB unless otherwise stated)

8 INVESTMENTS IN ASSOCIATES AND JOINT VENTURES *(Cont'd)*

Summarized financial information of material joint ventures adjusted for any differences in accounting policies and acquisition adjustment, and reconciliation to the carrying amount in the consolidated financial statements, are disclosed below:

	Shanghai Time Shipping		Jiangsu Nantong Power	
	2016	2015	**2016**	2015
Gross amounts of joint ventures'				
Current assets	**883,120**	889,689	**815,359**	629,933
Non-current assets	**5,335,409**	5,675,480	**6,075,100**	6,587,197
Current liabilities	**(3,177,881)**	(3,506,971)	**(2,600,258)**	(1,583,902)
Non-current liabilities	**(1,506,076)**	(1,524,838)	**(1,931,219)**	(2,494,000)
Equity	**1,534,572**	1,533,360	**2,358,982**	3,139,228
Included in the above assets and liabilities:				
Cash and cash equivalents	**203,018**	197,894	**96,501**	144,001
Current financial liabilities (excluding trade and other payables and provisions)	**(2,681,857)**	(3,027,511)	**(2,270,601)**	(954,448)
Non-current financial liabilities (excluding trade and other payables and provisions)	**(1,506,075)**	(1,524,837)	**(1,931,219)**	(2,494,000)
Revenue	**3,561,091**	3,071,262	**3,354,545**	3,583,167
Profit from continuing operations	**1,212**	1,646	**608,660**	897,066
Total comprehensive income	**1,212**	1,646	**608,660**	897,066
Dividend declared by the joint ventures	**–**	225,000	**694,453**	–
Dividend received in cash from the joint ventures	**275,000**	–	**–**	–
Included in the above profit:				
Depreciation and amortization	**340,826**	339,204	**393,221**	390,262
Interest income	**985**	812	**2,313**	3,436
Interest expense	**149,748**	172,382	**128,224**	199,769
Income tax expense	**500**	561	**194,915**	261,023
Reconciled to the interest in the joint venture:				
Gross amounts of net assets	**1,534,572**	1,533,360	**2,358,982**	3,139,228
The Company and its subsidiaries' effective interest	**50%**	50%	**50%**	50%
The Company and its subsidiaries' share of net assets	**767,286**	766,680	**1,179,491**	1,569,614
Impact of adjustments	**18,324**	18,324	**–**	–
Carrying amount in the consolidated financial statements	**785,610**	785,004	**1,179,491**	1,569,614

(Amounts expressed in thousands of RMB unless otherwise stated)

8 INVESTMENTS IN ASSOCIATES AND JOINT VENTURES *(Cont'd)*

Aggregate information of associates and a joint venture that are not individually material:

	2016	2015
Aggregate carrying amount of individually immaterial associates and joint ventures in the consolidated financial statements	**3,479,043**	3,202,906
Aggregate amounts of the Company and its subsidiaries' share of those associates and joint ventures		
Profit from continuing operations	**263,392**	113,891
Total comprehensive income	**263,392**	113,891

As at 31 December 2016, the Company's share of losses of an associate and a joint venture exceeded its interest in the associate and the joint venture and the unrecognized further losses amounted to RMB163 million (2015: RMB76 million).

9 INVESTMENTS IN SUBSIDIARIES

As at 31 December 2016, the investments in subsidiaries of the Company and its subsidiaries, all of which are unlisted, are as follows:

(i) Subsidiaries acquired through establishment or investment

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held: Interest	Voting
Huaneng International Power Fuel Limited Liability Company	PRC	held directly	RMB 200,000,000	Wholesale of coal	100%	100%
Huaneng Shanghai Shidongkou Power Generation Limited Liability Company ("Shidongkou Power Company") (i)	PRC	held directly	RMB 1,179,000,000	Power generation	50%	100%
Huaneng Nantong Power Generation Limited Liability Company	PRC	held directly	RMB 798,000,000	Power generation	70%	70%
Huaneng Yingkou Power Generation Limited Liability Company	PRC	held directly	RMB 844,030,000	Production and sales of electricity and heat sale of coal ash and lime	100%	100%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(i) Subsidiaries acquired through establishment or investment *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Voting
Huaneng Hunan Xiangqi Hydropower Co., Ltd.	PRC	held directly	RMB 328,000,000	Construction, operation and management of hydropower and related projects	100%	100%
Huaneng Zuoquan Coal-fired Power Generation Limited Liability Company	PRC	held directly	RMB 960,000,000	Construction, operation and management of power plants and related projects	80%	80%
Huaneng Kangbao Wind Power Utilization Limited Liability Company	PRC	held directly	RMB 370,000,000	Construction, operation and management of wind power and related projects; solar power generation	100%	100%
Huaneng Jiuquan Wind Power Generation Co., Ltd.	PRC	held directly	RMB 2,600,000,000	Construction, operation and management of wind power generation and related projects	100%	100%
Huaneng Jiuquan II Wind Power Generation Co., Ltd.	PRC	held directly	RMB 10,000,000	Construction, operation and management of wind power generation and related projects	100%	100%
Huaneng Wafangdian Wind Power Generation Co., Ltd.	PRC	held directly	RMB 50,000,000	Construction, operation and management of wind power generation and related projects	100%	100%
Huaneng Changtu Wind Power Generation Co., Ltd.	PRC	held directly	RMB 50,000,000	Construction, operation and management of wind power generation and related projects	100%	100%
Huaneng Rudong Wind Power Generation Co., Ltd.	PRC	held directly	RMB 90,380,000	Construction and management of wind power generation projects	90%	90%
Huaneng Guangdong Haimen Port Limited Liability Company	PRC	held directly	RMB 321,400,000	Loading warehousing and conveying services, providing facilities services	100%	100%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(i) Subsidiaries acquired through establishment or investment *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Percentage of equity interest held Voting
Huaneng Taicang Port Limited Liability Company	PRC	held directly	RMB 555,800,000	Port development and construction, coal mixture, machinery leasing and repair	85%	85%
Huaneng Taicang Power Co., Ltd.	PRC	held directly	RMB 804,146,700	Power generation	75%	75%
Huaneng Huaiyin II Power Limited Company	PRC	held directly	RMB 930,870,000	Power generation	63.64%	63.64%
Huaneng Xindian Power Co., Ltd.	PRC	held directly	RMB 465,600,000	Power generation	95%	95%
Huaneng Shanghai Combined Cycle Power Limited Liability Company	PRC	held directly	RMB 699,700,000	Power generation	70%	70%
Huaneng Yumen Wind Power Generation Co., Ltd.	PRC	held directly	RMB 719,170,000	Construction, operation and management of wind power generation and related projects	100%	100%
Huaneng Qingdao Co-generation Limited Liability Company	PRC	held directly	RMB 214,879,000	Construction, operation and management of cogeneration power plants and related projects	100%	100%
Huaneng Tongxiang Combined Cycle Cogeneration Co., Ltd.	PRC	held directly	RMB 300,000,000	Production and sales of electricity and heat; investment in related industries	95%	95%
Huaneng Eastern Yunnan Energy Mine Construction Co. Ltd.	PRC	held indirectly	RMB 10,000,000	Constructing and operating of mine and related construction projects	100%	100%
Huaneng Nanjing Combined Cycle Cogeneration Co., Ltd.	PRC	held directly	RMB 582,000,000	Power generation	60%	60%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(i) Subsidiaries acquired through establishment or investment *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Voting
Huaneng Shantou Haimen Power Limited Liability Company	PRC	held directly	RMB 1,508,000,000	Construction, operation and management of power plants and related projects	80%	80%
Huaneng Chongqing Liangjiang Power Generation Limited Liability Company	PRC	held directly	RMB 726,600,000	Construction, operation and management of natural gas power plants and related projects	90%	90%
Chongqing Huaqing Energy Co., Ltd.	PRC	held indirectly	RMB 44,420,000	Thermal energy, cold energy installation of instrumentation, promotion service for energy saving technology	60%	60%
Huaneng Fuyuan Wind Power Generation Co., Ltd.	PRC	held directly	RMB 157,290,000	Wind Power Project investment and management	100%	100%
Huaneng Panxian Wind Power Generation Co., Ltd.	PRC	held directly	RMB 86,500,000	Construction and management of wind power plants and related projects	100%	100%
Huaneng Jiangxi Clean Energy Limited Liability Company	PRC	held directly	RMB 5,000,000	Power generation and supply Development, management and construction of clean energy project	100%	100%
Huaneng Suzhou Combined Cycle Co-generation Co., Ltd.	PRC	held directly	RMB 160,000,000	Construction and management of natural gas power plant and related projects	100%	100%
Huaneng Hunan Subaoding Wind Power Generation Co., Ltd.	PRC	held directly	RMB 6,000,000	Construction and operation of wind power plants and related projects	100%	100%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(i) Subsidiaries acquired through establishment or investment *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Voting
Huaneng Suixian Jieshan Wind Power Generation Co., Ltd.	PRC	held directly	RMB 96,500,000	Construction and operation of wind power plants and related projects	100%	100%
Huaneng Taiyuan Dongshan Combined Cycle Co-generation Co., Ltd.	PRC	held directly	RMB 10,000,000	Construction and operation of power plants; thermal heating services	100%	100%
Jiangsu Huayi Energy Co., Ltd.	PRC	held directly	RMB 5,000,000	Development of new energy; distribution of coal and coal products	100%	100%
Huaneng Xuzhou Tongshan Wind Power Co., Ltd.	PRC	held directly	RMB 169,000,000	Wind power generation	70%	70%
Huaneng Nanjing Co-generation Co., Ltd	PRC	held directly	RMB 300,000,000	Construction and operation of power plants; thermal heating services	70%	70%
Huaneng Hunan Guidong Wind Power Generation Co., Ltd.	PRC	held directly	RMB 2,000,000	Construction and operation of wind power plants and related projects	100%	100%
Huaneng Nanjing Luhe Wind Power Generation Co., Ltd.	PRC	held directly	RMB 5,000,000	Research and development of wind power technology, construction and operation of wind power plants	100%	100%
Huaneng Luoyuan Power Limited Liability Company	PRC	held directly	RMB 1,000,000,000	Construction and operation of power plants and related projects	100%	100%
Huaneng Lingang (Tianjin) Gas Co-generation Co., Ltd.	PRC	held directly	RMB 180,000,000	Power generation, installation and maintenance of power equipment	100%	100%
Huaneng Lingang (Tianjin) Heat Co-generation Co., Ltd.	PRC	held indirectly	RMB 5,000,000	Thermal energy, cold energy Plumbing pipe installation	66%	66%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(i) Subsidiaries acquired through establishment or investment *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Voting
Huaneng Anhui Huaining Wind Power Generation Co., Ltd.	PRC	held directly	RMB 80,000,000	Construction and operation of wind power plants and related projects	100%	100%
Huaneng Mianchi Co-generation Limited Liability Company	PRC	held directly	RMB 570,000,000	Construction and operation of coal-fired plants and related projects	60%	60%
Huaneng Yingkou Xianrendao Co-generation Co., Ltd.	PRC	held directly	RMB 277,690,000	Construction and operation of cogeneration power plants and related projects	100%	100%
Huaneng Nanjing Xingang Comprehensive. Energy Co., Ltd.	PRC	held directly	RMB 10,000,000	Construction and operation of heat supply network and related projects	65%	65%
Huaneng Changxing Photovoltaic Power Limited Liability Company	PRC	held directly	RMB 16,000,000	Construction and operation of distributed photovoltaic power generation and related projects	100%	100%
Huaneng Rudong Baxianjiao Offshore Wind Power Generation Co., Ltd.	PRC	held directly	RMB 610,000,000	Infrastructure construction of wind power plants	70%	70%
Huaneng Shanxi City of Science & Technology Comprehensive Energy Co., Ltd.	PRC	held directly	RMB 100,000,000	Power generation and supply	100%	100%
Huaneng Guilin Gas distributed energy Co., Ltd.	PRC	held directly	RMB 267,450,000	Construction and operation of power plants and related projects	80%	80%
Huaneng (Dalian) Co-generation Co., Ltd.	PRC	held directly	RMB 12,500,000	Construction and operation of cogeneration power plants and related projects	100%	100%
Huaneng Zhongxiang Wind Power Generation Co., Ltd.	PRC	held directly	RMB 10,000,000	Construction and operation of wind power plants and related projects	100%	100%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(i) Subsidiaries acquired through establishment or investment *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Percentage of equity interest held Voting
Huaneng Guanyun Co-generation Co., Ltd.	PRC	held directly	RMB 15,000,000	Construction and operation of cogeneration power plants and related projects	100%	100%
Huaneng International Power Hongkong Limited Company	Hong Kong	held directly	100,000 Shares	Construction and operation of power supply, coal project and related investment and financing businesses	100%	100%
TPG	Singapore	held indirectly	S$ 1,183,000,001	Power generation and related by products, derivatives; developing power supply resources, operating electricity and power sales	100%	100%
TP Utilities Pte Ltd.	Singapore	held indirectly	S$ 255,500,001	Provision of utility services	100%	100%
Huaneng Shanxi Taihang Power Generation Limited Liability Company	PRC	held directly	RMB 1,086,440,000	Pre service related to power generation	60%	60%
Huaneng Mianchi Clean Energy Limited Liability Company	PRC	held directly	RMB 10,000,000	Power generation, new energy development and utilization	100%	100%
Huaneng Zhuolu Clean Energy Limited Liability Company	PRC	held directly	RMB 10,000,000	Construction, operation and management of power plants and related projects	100%	100%
Huaneng Tongwei Wind Power Limited Liability Company	PRC	held directly	RMB 248,000,000	Construction, operation and management of power plants and related projects	100%	100%
Huaneng Yizheng Power Generation Limited Liability Company	PRC	held directly	RMB 200,000,000	Wind power station design, construction, management and maintenance	100%	100%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(i) Subsidiaries acquired through establishment or investment *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Percentage of equity interest held Voting
Huaneng Yancheng Dafeng New Energy Power Generation Limited Liability Company	PRC	held directly	RMB 5,000,000	Construction, operation and management of wind power, photovoltaic power plant	100%	100%
Huaneng Shanyin Power Generation Limited Liability Company	PRC	held directly	RMB 1,573,000,000	Construction, operation and management of power plants and related projects	51%	51%
Huaneng Jiangsu Energy Sales Limited Liability Company	PRC	held directly	RMB 200,000,000	Electric energy, heat energy distribution network, and water supply services; heating pipe network construction and operation	100%	100%
Huaneng Liaoning Energy Sales Limited Liability Company	PRC	held directly	RMB 200,000,000	Electric energy, thermal energy and circulating hot water sales	100%	100%
Huaneng Guangdong Energy Sales Limited Liability Company	PRC	held directly	RMB 200,000,000	Power supply, energy transmission and substation project contracting	100%	100%
Huaneng Suizhou Power Generation Limited Liability Company	PRC	held directly	RMB 50,000,000	Construction, operation and management of power plants production and sales of electricity and heat	100%	100%
Huaneng Changle Photovoltaic Power Limited Liability Company	PRC	held directly	RMB 10,000,000	Construction, operation and management of photovoltaic power plants and related projects	100%	100%
Huaneng Longyan Wind Power Generation Limited Liability Company	PRC	held directly	RMB 10,000,000	Construction, operation and management of wind power plants and related projects	100%	100%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(i) Subsidiaries acquired through establishment or investment *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Voting
Huaneng Yunnan Malong Wind Power Generation Limited Liability Company	PRC	held directly	RMB 10,000,000	Construction, operation and management of wind power plants and related projects	100%	100%
Huaneng Dandong Photovoltaic Power Limited Liability Company	PRC	held directly	RMB 15,000,000	Construction, operation and management of photovoltaic power plants and related projects	100%	100%
Huaneng Dongguan Combined Cycle Co-generation Limited Liability Company	PRC	held directly	RMB 10,000,000	Construction, operation and management of power plants and related projects production of electricity, heat production and sales	100%	100%
Huaneng Yangxi Photovoltaic Power Limited Liability Company	PRC	held directly	RMB 62,500,000	Photovoltaic electric power production and sales	80%	80%
Huaneng Chongqing Fengjie Wind Power Generation Limited Liability Company*	PRC	held directly	RMB 10,000,000	Construction, operation and management of wind power, generation and related projects	100%	100%
Huaneng Changxing Hongqiao Photovoltaic Power Limited Liability Company*	PRC	held directly	RMB 10,000,000	Construction, operation and management of Photovoltaic Power	100%	100%
Huaneng Jingxing Photovoltaic Power Limited Liability Company*	PRC	held directly	RMB 100,000	Investment, construction, and management of photovoltaic power plants	100%	100%
Huaneng Wulatehouqi Clean Energy Limited Liability Company*	PRC	held directly	RMB 100,000	Construction, operation and management of power plants and related projects	100%	100%
Huaneng Shanxi Energy Sales Limited Liability Company*	PRC	held directly	RMB 200,000,000	Power supply and sales supply of heat, cold and water	100%	100%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(i) Subsidiaries acquired through establishment or investment *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Voting
Huaneng Chongqing Energy Sales Limited Liability Company*	PRC	held directly	RMB 210,000,000	Operation of natural gas, Electric energy and thermal energy sales	100%	100%
Huaneng Hunan Energy Sales Limited Liability Company*	PRC	held directly	RMB 210,000,000	Electric energy and thermal energy sales	100%	100%
Huaneng Jiangxi Energy Sales Limited Liability Company*	PRC	held directly	RMB 210,000,000	Construction, operation and management of heating and power supply facilities	100%	100%
Huaneng Hebei Energy Sales Limited Liability Company*	PRC	held directly	RMB 210,000,000	Construction, installation, maintenance and overhaul of heating and power supply facilities	100%	100%
Huaneng Henan Energy Sales Limited Liability Company*	PRC	held directly	RMB 210,000,000	Sales of power, heating and gas	100%	100%
Huaneng Handan Heating Limited Liability Company*	PRC	held directly	RMB 100,000,000	Construction, operation and maintenance of heat source and pipe network	100%	100%
Huaneng (Huzhou Development Zone) Photovoltaic Power Limited Liability Company*	PRC	held directly	RMB 10,000,000	Photovoltaic Power, power supply and sales	100%	100%
Huaneng (Fujian) Energy Sales Limited Liability Company*	PRC	held directly	RMB 210,000,000	Sales of power, heating and gas	100%	100%
Huaneng Hubei Energy Sales Limited Liability Company*	PRC	held directly	RMB 210,000,000	Sales of power, heating and gas	100%	100%
Huaneng (Sanming) Clean Energy Limited Liability Company*	PRC	held directly	RMB 500,000	Construction, operation and management of wind power, photovoltaic power station and related projects	100%	100%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(i) Subsidiaries acquired through establishment or investment *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held: Interest	Percentage of equity interest held: Voting
Huaneng Yueyang Xingang Photovoltaic Power Limited Liability Company*	PRC	held directly	RMB 16,000,000	Construction, operation and management of electric power project, development and utilization of clean energy	60%	60%
Huaneng Shanghai Energy Sales Limited Liability Company*	PRC	held directly	RMB 210,000,000	Power supply, and technology service, consulting, transfer in energy conservation and environment protection field	100%	100%
Huaneng Yushe Photovoltaic Power Limited Liability Company*	PRC	held directly	RMB 10,000,000	Production and supply of electricity power	100%	100%
Huaneng Anhui Energy Sales Limited Liability Company*	PRC	held directly	RMB 210,000,000	Sales of power, heating and gas	100%	100%
Huaneng (Shanghai) Power Maintenance Limited Liability Company*	PRC	held directly	RMB 200,000,000	Construction and repair of electric power facilities	100%	100%

* These companies were newly established in 2016.

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(ii) Subsidiaries acquired from business combinations under common control

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Percentage of equity interest held Voting
Huaneng (Suzhou Industrial Park) Power Generation Co., Ltd.	PRC	held directly	RMB 632,840,000	Power generation	75%	75%
Huaneng Qinbei Power Co., Ltd.	PRC	held directly	RMB 1,540,000,000	Power generation	60%	60%
Huaneng Yushe Power Generation Co., Ltd.	PRC	held directly	RMB 615,760,000	Power generation	60%	60%
Huaneng Hunan Yueyang Power Generation Limited Liability Company	PRC	held directly	RMB 1,935,000,000	Power generation	55%	55%
Huaneng Chongqing Luohuang Power Generation Limited Liability Company ("Luohuang Power")	PRC	held directly	RMB 1,748,310,000	Power generation	60%	60%
Huaneng Pingliang Power Generation Co., Ltd.	PRC	held directly	RMB 924,050,000	Power generation	65%	65%
Huaneng Nanjing Jinling Power Co., Ltd. ("Jinling Power")	PRC	held directly	RMB 1,513,136,000	Power generation	60%	60%
Huaneng Qidong Wind Power Generation Co., Ltd.	PRC	held directly	RMB 391,738,500	Development of wind power project, production and sales of electricity	65%	65%
Tianjin Huaneng Yangliuqing Co-generation Limited Liability Company ("Yangliuqing Cogeneration")	PRC	held directly	RMB 1,537,130,909	Power generation, heat supply, facilities installation, maintenance and related services	55%	55%
Huaneng Beijing Co-generation Limited Liability Company ("Beijing Cogeneration") (ii)	PRC	held directly	RMB 3,702,090,000	Construction and operation of power plants and related construction projects	41%	66%
Huaneng Wuhan Power Generation Co., Ltd. ("Wuhan Power")	PRC	held directly	RMB 1,445,754,800	Power generation comprehensive utilization of fly ash	75%	75%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(ii) Subsidiaries acquired from business combinations under common control *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Voting
Huaneng Anyuan Power Generation Co., Ltd. ("Anyuan Power")	PRC	held directly	RMB 1,175,117,300	Construction and operation of power plants and related construction projects	100%	100%
Huaneng Hualiangting Hydropower Co., Ltd. ("Hualiangting Hydropower")	PRC	held directly	RMB 50,000,000	Generation and transfer of power supply, water supply (irrigation)	100%	100%
Huaneng Chaohu Power Generation Co., Ltd. ("Chaohu Power") (iii)	PRC	held directly	RMB 800,000,000	Construction and operation of power plants and related construction projects	60%	70%
Huaneng Jingmen Thermal Power Co., Ltd. ("Jingmen Thermal Power")	PRC	held directly	RMB 780,000,000	General business projects: thermal power, power development, power services	100%	100%
Enshi Qingjiang Dalongtan Hydropwer Development Co., Ltd. ("Dalongtan Hydropower")	PRC	held directly	RMB 76,000,000	Hydropower development, production and management of electric power urban water supply	97%	97%
Huaneng Suzhou Thermal Power Co., Ltd. ("Suzhou Thermal Power") (iv)	PRC	held directly	RMB 240,000,000	Power generation, steam production; mechanical and electrical equipment, pipeline installation, maintenance services; hot water, fly ash sales	53.45%	100%
Huaneng Hainan Power Inc. ("Hainan Power") (v)	PRC	held directly	RMB 1,326,419,587	Construction power plants, new energy development, power plant engineering and equipment maintenance services	91.80%	91.80%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(ii) Subsidiaries acquired from business combinations under common control *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Voting
Huaneng Ruijin Power Generation Co., Ltd. ("Ruijin Power Generation")	PRC	held directly	RMB 536,923,299	Construction and operation of power plants and related construction projects	100%	100%
Huaneng Yingcheng Thermal Power Co., Ltd. ("Yingcheng Thermal Power")	PRC	held directly	RMB 650,000,000	Construction and operation of power plants and related construction projects	100%	100%

The subsidiaries above and the Company are all controlled by Huaneng Group before and after the acquisitions.

(iii) Subsidiaries acquired from business combinations not under common control

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Voting
Huaneng Weihai Power Limited Liability Company ("Weihai Power")	PRC	held directly	RMB 1,822,176,621	Power generation	60%	60%
Huaneng Huaiyin Power Limited Company	PRC	held directly	RMB 265,000,000	Power generation	100%	100%
Huade County Daditaihong Wind Power Utilization Limited Liability Company	PRC	held directly	RMB 196,400,000	Wind power development and utilization	100%	100%
Huaneng Zhanhua Co-generation Limited Liability Company	PRC	held directly	RMB 190,000,000	Production and sales of electricity and steam	100%	100%
Shandong Hualu Sea Transportation Limited Company	PRC	held directly	RMB 100,000,000	Cargo transportation along domestic coastal areas	53%	53%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(iii) Subsidiaries acquired from business combinations not under common control *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Voting
Huaneng Qingdao Port Limited Company	PRC	held directly	RMB 219,845,000	Loading and conveying warehousing (excluding dangerous goods), conveying, supply of water carriage materials	51%	51%
Huaneng (Fujian) Harbour Limited Company	PRC	held directly	RMB 652,200,000	Port management, cargo loading, water transport material supply	51%	51%
Fujian Yingda Property Development Limited Company	PRC	held indirectly	RMB 50,000,000	Real estate development leasing, real estate agency services, warehousing, loading and conveying	51%	100%
Fujian Xinhuanyuan Industrial Limited Company	PRC	held indirectly	RMB 93,200,000	Mineral water production and sale	51%	100%
Huaneng Yunnan Diandong Energy Limited Liability Company ("Diandong Energy")	PRC	held directly	RMB 3,769,140,000	Power generation and coal exploitation	100%	100%
Yunnan Diandong Yuwang Energy Limited Company ("Diandong Yuwang")	PRC	held directly	RMB 1,700,740,000	Power generation and coal exploitation	100%	100%
Huaneng Suzihe Hydropower Development Limited Company	PRC	held directly	RMB 50,000,000	Hydropower, aquaculture, agriculture irrigation	100%	100%
Enshi City Mawei Valley Hydropower Development Co., Ltd.	PRC	held directly	RMB 101,080,000	Hydro-resource development, hydropower, aquaculture	100%	100%
Kaifeng Xinli Power Generation Co., Ltd.	PRC	held indirectly	RMB 146,920,000	Power generation	60%	100%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(iii) Subsidiaries acquired from business combinations not under common control *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Percentage of equity interest held Voting
Huaneng Luoyang Co-generation Limited Liability Company	PRC	held directly	RMB 600,000,000	Production and sales of electricity and heat to the electricity and heat networks sales of ancillary products of electricity and heat generation	80%	80%
Huaneng Jinling Combined Cycle Cogeneration Co., Ltd. ("Jinling CCGT") (vi)	PRC	held directly	RMB 356,350,000	Power generation	51%	72%
Huaneng Zhumadian Wind Power Generation Co., Ltd.	PRC	held directly	RMB 30,000,000	Wind power generation	90%	90%
SinoSing Power	Singapore	held directly	US$ 1,476,420,585	Investment holding	100%	100%
Tuas Power	Singapore	held indirectly	S$ 1,433,550,000	Electricity and gas supply and investment holding	100%	100%
Tuas Power Supply Pte Ltd.	Singapore	held indirectly	S$ 500,000	Power sales	100%	100%
TP Asset Management Pte Ltd.	Singapore	held indirectly	S$2	Render of environment engineering services	100%	100%
TPGS Green Energy Pte Ltd.	Singapore	held indirectly	S$ 1,000,000	Provision of utility services	75%	75%
New Earth Pte Ltd.	Singapore	held indirectly	S$ 10,111,841	Consultancy in waste recycling	100%	100%
New Earth Singapore Pte Ltd.	Singapore	held indirectly	S$ 17,816,050	Industrial waste management and recycling	100%	100%
Xuzhou Tongshan District Xiehe Wind Power Generation Limited Liability Company. ("Tongshan Xiehe Wind Power Generation") (Note 40)	PRC	held indirectly	RMB 3,000,000	Wind power generation	100%	100%

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(iii) Subsidiaries acquired from business combinations not under common control *(Cont'd)*

Name of subsidiary	Country of incorporation	Type of interest held	Registered capital	Business nature and scope of operations	Percentage of equity interest held Interest	Percentage of equity interest held Voting
Luoyang Yangguang Co-generation Limited Liability Company ("Yangguang Cogeneration") (Note 40)	PRC	held indirectly	RMB 250,000,000	Production and supply of electric and heating power	100%	100%

Note:

(i) According to its article of association, the other shareholder who holds the remaining equity interests of Shidongkou Power Company entrusts the Company to exercise all its voting rights in relation to the operation and financial policies of Shidongkou Power Company. Accordingly, the Company has control over Shidongkou Power Company.

(ii) Pursuant to an agreement entered into between the Company and another shareholder, the Company is entrusted to vote the 25% voting rights held by the other shareholder as long as the Company remains as the largest shareholder of Beijing Cogeneration. Thus, the Company has majority voting rights required by the article of association to control the operation and financial policies of Beijing Cogeneration. Accordingly, the Company has control over Beijing Cogeneration.

(iii) According to the voting in concert agreement entered into between the Company and one shareholder with 10% equity interests in Chaohu Power, the shareholder agreed to vote the same in respect of significant financial and operating decisions made by the Company. As a result, the Company has control over Chaohu Power.

(iv) According to the voting in concert agreement entered into between the Company and the other two shareholders in Suzhou Thermal Power, the shareholders agreed to vote the same in respect of significant financial and operating decisions made by the Company. As a result, the Company has control over Suzhou Thermal Power.

(v) Pursuant to the board resolution of Hainan Power on 28 July 2016, Huaneng Wenchang Wind Power Generation Co., Ltd. ("Wenchang Power"), a fully held subsidiary of Hainan Power, was dissolved in November 2016. At the date of dissolution, the net asset of Wenchang Power was RMB1 million.

(vi) According to the voting in concert agreement entered into between the Company and one shareholder with 21% equity interests in Jinling CCGT, the shareholder agreed to vote the same in respect of significant financial and operating decisions made by the Company under the circumstances that its legitimate entitlements are guaranteed. As a result, the Company has control over Jinling CCGT.

(Amounts expressed in thousands of RMB unless otherwise stated)

9 INVESTMENTS IN SUBSIDIARIES *(Cont'd)*

(iii) Subsidiaries acquired from business combinations not under common control *(Cont'd)*

Note: *(Cont'd)*

(vii) In 2016, the Company accounted for the investment in Shanxi Xiaoyi Economic Development Zone Huaneng Energy Service Co. Ltd. ("Shanxi Xiaoyi Energy") as a joint venture. On 15 February 2017, the Company entered into an agreement with other shareholder with 49% equity interests in Shanxi Xiaoyi Energy who agreed to vote the same in respect of significant financial and operating decisions made by the Company. As a result, the Company has control over Shanxi Xiaoyi Energy since February 2017.

For the information of material non-controlling interests ("NCI"), please refer to Note 41.

10 AVAILABLE-FOR-SALE FINANCIAL ASSETS

Available-for-sale financial assets include the following:

	As at 31 December	
	2016	2015
Listed security (Fair value measurement)		
Yangtze Power	**1,820,255**	3,492,510
Bank of Jiangsu	**458**	–
Subtotal	**1,820,713**	3,492,510
Unlisted securities (Cost measurement)		
10% of Shanxi Xishan Jinxing Energy Co., Ltd.	**531,274**	531,274
9.09% of Ganlong Double-track Railway Co., Ltd.	**1,000,000**	1,000,000
Others	**54,045**	54,079
Subtotal	**1,585,319**	1,585,353
Total	**3,406,032**	5,077,863

There were no impairment provisions provided on available-for-sale financial assets in 2016 and 2015.

In 2016, the Company disposed 113.78 million shares of Yangtze Power with cash consideration of RMB1.474 billion received and recognized investment income of RMB933 million. Other comprehensive income of RMB742 million was reclassified to profit or loss.

(Amounts expressed in thousands of RMB unless otherwise stated)

11 LAND USE RIGHTS

The movements in the carrying amount of land use rights during the years are as follows:

	2016	2015
Beginning of the year		
Cost	**10,059,872**	6,482,189
Accumulated amortization	**(1,530,972)**	(1,309,076)
Accumulated impairment losses	**(215,134)**	(219,269)
Net book value	**8,313,766**	4,953,844
Movement:		
Business combination (Note 40)	**61,027**	2,996,440
Addition	**364,280**	600,693
Amortization charge for the year	**(242,400)**	(227,078)
Impairment charge for the year (Note 7)	**(51,981)**	–
Disposals and transfer out	**(1,969)**	(6,036)
Currency translation differences	**13,624**	(4,097)
End of the year	**8,456,347**	8,313,766
Cost	**10,525,537**	10,059,872
Accumulated amortization	**(1,792,367)**	(1,530,972)
Accumulated impairment losses	**(276,823)**	(215,134)
Net book value	**8,456,347**	8,313,766

All the lands located in the PRC and Singapore are leased from respective governments according to corresponding regulations applied across the countries. The Company and its subsidiaries will renew the leases according to the operation requirements of the Company and its subsidiaries and the related regulations of respective countries.

Land use rights without ownership certificate

As at 31 December 2016, the Company and its subsidiaries were in the process of applying for the ownership certificate for certain land use right with an aggregate net book value of RMB792 million (2015: RMB960 million). The management are of the opinion that the Company and its subsidiaries are entitled to the lawful and valid occupation and use of the above mentioned land.

(Amounts expressed in thousands of RMB unless otherwise stated)

12 POWER GENERATION LICENSE

The movements in the carrying amount of power generation license during the years are as follows:

	2016	2015
Beginning of the year	3,679,175	3,720,959
Movement:		
Currency translation differences	170,024	(41,784)
End of the year	3,849,199	3,679,175

The Company and its subsidiaries acquired the power generation license in connection with the acquisition of Tuas Power. The power generation license was initially recognized at fair value at the acquisition date. Tuas Power operates power plants in Singapore pursuant to the license granted by the Energy Market Authority for a period of 30 years from 2003 until 2032. The license was extended to 2044 during 2011 with minimal costs and is subject to further renewal. The Company and its subsidiaries expect that the applicable rules and regulations surrounding the renewal can be complied with based on the current market framework. The Company and its subsidiaries assessed the useful life of the power generation license at 31 December 2016 as indefinite and therefore the license is not amortized.

Impairment test of power generation license

Power generation license belongs to and has been assigned to Tuas Power, a CGU. The recoverable amount of the CGU is determined based on value-in-use calculation. Management prepared the impairment model based on budget approved by the Board and various factors, such as inflation, power demand and other factors as well as the terminal value.

Key assumptions used for value-in-use calculation:

Management has assessed that one of the most sensitive key assumptions is the discount rate which was arrived at based on weighted average cost of capital. The discount rate applied in determining the recoverable amounts of the CGU was 7.54% (31 December 2015: 7.62%). An absolute increase in the discount rate of 0.5% (31 December 2015: 0.5%) would result in approximately RMB1,899 million (31 December 2015: RMB1,704 million) decrease in the recoverable amount of the CGU.

Other key assumptions include projection of its business performance based on estimation of gross margin from electricity sold, volume of electricity sold and other operating expenses, which are largely based on a combination of past performance of the CGU, its expectation of market developments and consistency with forecasts included in industry reports. On average, the growth rates of 3.0% was used in consideration of future expansion plans and new development projects as part of the long-term strategy. Cash flows beyond the terminal year was extrapolated using a growth rate of 2%.

Based on the assessments, no impairment was provided for the power generation license.

(Amounts expressed in thousands of RMB unless otherwise stated)

13 MINING RIGHTS

The movements in the carrying amount of mining rights during the years are as follow:

	2016	2015
Beginning of the year		
Cost	2,406,567	1,922,655
Accumulated impairment losses	(760,296)	–
Net book value	1,646,271	1,922,655
Movement:		
Addition	–	483,912
Impairment charge for the year	–	(760,296)
End of the year	1,646,271	1,646,271
Cost	2,406,567	2,406,567
Accumulated impairment losses	(760,296)	(760,296)
Net book value	1,646,271	1,646,271

(Amounts expressed in thousands of RMB unless otherwise stated)

14 DERIVATIVE FINANCIAL INSTRUMENTS

Details of derivative financial instruments are as follows:

	As at 31 December	
	2016	2015
Derivative financial assets		
– Hedging instruments for cash flow hedge (fuel swap contracts)	**264,535**	1
– Hedging instruments for cash flow hedge (exchange forward contracts)	**107,907**	140,977
– Hedging instruments for cash flow hedge (interest rate swap contracts)	**–**	2,691
– Financial instruments at fair value through profit or loss (fuel swap contracts)	**5,881**	39,894
– Financial instruments at fair value through profit or loss (exchange forward contracts)	**–**	949
Total	**378,323**	184,512
Less: non-current portion		
– Hedging instruments for cash flow hedge (fuel swap contracts)	**71,341**	–
– Hedging instruments for cash flow hedge (exchange forward contracts)	**28,380**	42,353
– Hedging instruments for cash flow hedge (interest rate swap contracts)	**–**	2,691
Total non-current portion	**99,721**	45,044
Current portion	**278,602**	139,468
Derivative financial liabilities		
– Hedging instruments for cash flow hedge (fuel swap contracts)	**164,464**	1,157,677
– Hedging instruments for cash flow hedge (exchange forward contracts)	**454**	2,297
– Hedging instruments for cash flow hedge (interest rate swap contracts)	**169,201**	121,576
– Financial instruments at fair value through profit or loss (fuel swap contracts)	**619**	23,047
– Financial instruments at fair value through profit or loss (exchange forward contracts)	**–**	344
Total	**334,738**	1,304,941
Less: non-current portion		
– Hedging instruments for cash flow hedge (fuel swap contracts)	**31,673**	307,573
– Hedging instruments for cash flow hedge (exchange forward contracts)	**295**	940
– Hedging instruments for cash flow hedge (interest rate swap contracts)	**169,201**	121,576
Total non-current portion	**201,169**	430,089
Current portion	**133,569**	874,852

For the years ended 31 December 2015 and 2016, no material ineffective portion was recognized in the profit or loss arising from cash flow hedges.

14 DERIVATIVE FINANCIAL INSTRUMENTS *(Cont'd)*

The Company uses an interest rate swap contract to hedge its interest rate risk against one of its variable rate loans. The notional principal amount of the outstanding interest rate swap contract at 31 December 2016 was US$208 million (RMB equivalents of RMB1,443 million) (2015: US$240 million (RMB equivalents of RMB1,558 million)). Through this arrangement, the Company pays an annual fixed interest of 4.40% while the original annual floating interest expense (6-month LIBOR+1%) attached in the loan is offset by the receivable leg of the interest rate swap. Such a swap is settled on a quarterly basis from September 2009 to September 2019.

TPG uses exchange forward contracts to hedge its foreign exchange risk arising from highly probable forecast purchase transactions. It also uses fuel oil swap contracts to hedge its fuel price risk arising from highly probable forecast purchases of fuel purchases.

TPG also uses various interest rate swap contracts to hedge floating semi-annual interest payments on borrowings with maturity dates up to 2020. The notional principal amount of these outstanding interest rate swap contracts at 31 December 2016 was S$1,359 million (RMB equivalents of RMB6,522 million) (2015: S$1,400 million (RMB equivalents of RMB6,422 million)). Through these arrangements, TPG swaps original floating interest (6-month SOR) to annual fixed interest determined by individual swap contracts. Such swap contracts are settled semi-annually from September 2011 to March 2020. As at 31 December 2016, these interest rate swap contracts are carried on the consolidated statements of financial position as financial liability of RMB99 million (2015: financial asset of RMB2.69 million and financial liability of RMB41.12 million).

(Amounts expressed in thousands of RMB unless otherwise stated)

14 DERIVATIVE FINANCIAL INSTRUMENTS *(Cont'd)*

The analysis of contractual cash inflows/(outflows) of major derivative financial instruments are as follows:

		Cash flows			
	Carrying amounts	Contractual cash flows	Within 1 year	Between 1 and 5 years	After 5 years
As at 31 December 2016					
Derivative financial assets					
Fuel derivatives used for hedging (net settlement)	264,535	264,535	193,194	71,341	–
Forward exchange contracts used for hedging					
– inflows		2,118,946	1,488,071	630,875	–
– outflows		(2,009,205)	(1,407,606)	(601,599)	–
	107,907	109,741	80,465	29,276	–
Fuel derivatives that do not qualify as hedges (net settlement)	5,881	5,881	5,881	–	–
Derivative financial liabilities					
Fuel derivatives used for hedging (net settlement)	164,464	(164,464)	(132,792)	(31,672)	–
Forward exchange contracts used for hedging					
– inflows		527,939	475,881	52,058	–
– outflows		(528,454)	(476,104)	(52,350)	–
	454	(515)	(223)	(292)	–
Net-settled interest rate swaps used for hedging – net cash inflows/(outflows)	169,201	(228,905)	(113,563)	(115,342)	–
Fuel derivatives that do not qualify as hedges (net settlement)	619	(619)	(619)	–	–

(Amounts expressed in thousands of RMB unless otherwise stated)

14 DERIVATIVE FINANCIAL INSTRUMENTS *(Cont'd)*

	Carrying amounts	Cash flows: Contractual cash flows	Cash flows: Within 1 year	Cash flows: Between 1 and 5 years	Cash flows: After 5 years
As at 31 December 2015					
Derivative financial assets					
Fuel derivatives used for hedging (net settlement)	1	1	1	–	–
Forward exchange contracts used for hedging					
– inflows		2,223,114	1,604,161	618,953	–
– outflows		(2,093,389)	(1,510,919)	(582,470)	–
	140,977	129,725	93,242	36,483	–
Net-settled interest rate swaps used for hedging – net cash inflows/(outflows)	2,691	(16,121)	(7,241)	(8,880)	–
Fuel derivatives that do not qualify as hedges (net settlement)	39,894	39,894	39,894	–	–
Foreign exchange contracts that do not qualify as hedges (net settlement)	949	691	691	–	–
Derivative financial liabilities					
Fuel derivatives used for hedging (net settlement)	1,157,677	(1,157,677)	(850,104)	(307,573)	–
Forward exchange contracts used for hedging					
– inflows		539,730	429,306	110,424	–
– outflows		(544,985)	(432,193)	(112,792)	–
	2,297	(5,255)	(2,887)	(2,368)	–
Net-settled interest rate swaps used for hedging – net cash inflows/(outflows)	121,576	(190,867)	(84,753)	(106,114)	–
Fuel derivatives that do not qualify as hedges (net settlement)	23,047	(23,047)	(23,047)	–	–
Foreign exchange contracts that do not qualify as hedges (net settlement)	344	(413)	(413)	–	–

(Amounts expressed in thousands of RMB unless otherwise stated)

15 GOODWILL

The movements of goodwill during the years are as follows:

	2016	2015
Beginning of the year		
Cost	14,919,930	13,865,890
Accumulated impairment losses	(3,242,748)	(2,140,335)
Net book value	11,677,182	11,725,555
Movement:		
Business combination	–	1,169,966
Impairment charge for the year	–	(1,105,649)
Currency translation differences	458,547	(112,690)
End of the year	12,135,729	11,677,182
Cost	15,391,642	14,919,930
Accumulated impairment losses	(3,255,913)	(3,242,748)
Net book value	12,135,729	11,677,182

Impairment tests for goodwill

Goodwill is allocated to the CGUs of the Company and its subsidiaries.

The carrying amounts of major goodwill allocated to individual CGUs are as follows:

	2016	2015
PRC Power segment:		
Hainan Power	506,336	506,336
Wuhan Power	518,484	518,484
Yueyang Power Company	100,907	100,907
Beijing Cogeneration	95,088	95,088
Yangliuqing Cogeneration	151,459	151,459
Singapore segment:		
Tuas Power	10,381,131	9,922,584

The recoverable amount of a CGU is determined based on value-in-use calculations. For domestic CGUs, these calculations use cash flow projections based on management's financial budgets covering periods of no more than five years. The Company expects cash flows beyond such periods will be similar to that of the respective final forecast years on existing production capacity.

(Amounts expressed in thousands of RMB unless otherwise stated)

15 GOODWILL *(Cont'd)*

Impairment tests for goodwill *(Cont'd)*

For the goodwill allocated to Tuas Power, management has based their assessment of recoverable amount on value-in-use calculations. Management prepared the impairment model based on budget approved and various factors, such as inflation, power demand and other factors as well as the terminal value. On average, the growth rates of 3.0% was used in consideration of future expansion plans and new development projects as part of the long-term strategy. Cash flows beyond the terminal year was extrapolated using a growth rate of 2.0%.

Discount rates used for value-in-use calculations:

PRC Power segment	7.60%~11.32%
Singapore segment	7.54%

Key assumptions used for value-in-use calculations:

Key assumptions applied in the impairment tests include the expected tariff rates, demands of electricity in specific regions where these power plants are located and fuel cost. Management determined these key assumptions based on past performance and its expectations on market development. The discount rates used reflect specific risks relating to individual CGUs. Management believes that any reasonably possible change in any of these key assumptions on which recoverable amounts of individual CGUs are based may cause carrying amounts of individual CGUs to exceed their recoverable amounts. Please refer to Note 4 and 12 for details of respective sensitivity analysis on domestic and oversea CGU impairment testing.

In 2016, the increase of goodwill in respect of Tuas Power was due to currency translation differences.

In 2015, due to continuous operating loss of the power plant assets as a result of oversupply of local power market and intense competition which led to lower utilization hours and tariff, and the effect of deteriorating coal market price on the coal assets under construction, the goodwill arising from the acquisition of Diandong Energy was fully impaired based on the impairment testing result. The above mentioned goodwill impairment provided in 2015 amounted to approximately RMB1,106 million in total. For Singapore segment, the decrease of goodwill in respect of Tuas Power was due to currency translation differences.

(Amounts expressed in thousands of RMB unless otherwise stated)

16 OTHER NON-CURRENT ASSETS

Details of other non-current assets are as follows:

	As at 31 December	
	2016	2015
Intangible assets*	**411,308**	451,176
Deferred employee housing subsidies	**3,041**	3,907
Prepayments for switchhouse and metering station	**8,877**	9,257
Prepaid connection fees	**108,365**	111,513
Prepaid territorial water use right**	**777,994**	763,905
Finance lease receivables	**563,099**	552,401
VAT recoverable	**1,651,891**	1,618,894
Others	**797,370**	867,944
Total	**4,321,945**	4,378,997

* The intangible assets primarily consist of software, patented technologies and etc. In 2016, there is no impairment provided for the intangible assets (2015: RMB nil).

** The prepaid territorial water use right are amortized over the contractual period of 50 years. As at 31 December 2016, there was no territorial water use right secured to a bank as collateral (31 December 2015: territorial water use right with net book value amounting to RMB78.38 million was secured to a bank as collateral against a long-term loan of RMB18 million).

17 INVENTORIES

Inventories comprised:

	As at 31 December	
	2016	2015
Fuel (coal and oil) for power generation	**5,391,068**	3,997,910
Material and supplies	**1,655,357**	1,587,211
	7,046,425	5,585,121
Less: provision for inventory obsolescence	**167,282**	162,389
Total	**6,879,143**	5,422,732

Movements of provision for inventory obsolescence during the years are analyzed as follows:

	2016	2015
Beginning of the year	**(162,389)**	(163,458)
Provision	**(1,134)**	(2,867)
Reversal	**1,390**	1,039
Currency translation differences	**(5,149)**	2,897
End of the year	**(167,282)**	(162,389)

(Amounts expressed in thousands of RMB unless otherwise stated)

18 OTHER RECEIVABLES AND ASSETS

Other receivables and assets comprised the following:

	As at 31 December	
	2016	2015
Prepayments for inventories	**252,389**	143,446
Prepayments for pre-construction cost	**885,051**	735,975
Prepaid income tax	**141,423**	2,393
Prepayments for capacity quota	**303,399**	303,399
Others	**121,810**	102,854
Total prepayments	**1,704,072**	1,288,067
Staff advances	**11,939**	15,692
Dividends receivable	**861,408**	305,000
Financial lease receivables	**21,247**	19,419
Interest receivables	**112**	175
Others	**874,998**	728,781
Subtotal other receivables	**1,769,704**	1,069,067
Less: provision for doubtful accounts	**28,961**	27,957
Total other receivables, net	**1,740,743**	1,041,110
VAT recoverable	**2,008,955**	1,678,812
Designated loan to a joint venture	**80,000**	80,000
Gross total	**5,562,731**	4,115,946
Net total	**5,533,770**	4,087,989

Please refer to Note 36 for details of other receivables and assets due from the related parties.

The gross amounts of other receivables are denominated in the following currencies:

	As at 31 December	
	2016	2015
RMB	**1,635,051**	1,005,399
S$ (RMB equivalent)	**95,816**	60,596
US$ (RMB equivalent)	**38,837**	3,072
Total	**1,769,704**	1,069,067

(Amounts expressed in thousands of RMB unless otherwise stated)

18 OTHER RECEIVABLES AND ASSETS *(Cont'd)*

Movements of provision for doubtful accounts during the years are analyzed as follows:

	2016	2015
Beginning of the year	**(27,957)**	(29,644)
Provision	**(1,011)**	(9)
Reversal/write-off	**7**	1,696
End of the year	**(28,961)**	(27,957)

As at 31 December 2016, there was no indication of impairment relating to other receivables which were not past due and no material provision was made (2015: nil).

As at 31 December 2016, other receivables of RMB113 million (2015: RMB168 million) were past due but not impaired. These amounts mainly represent funds deposited in a government agency and are fully recoverable. The ageing analysis of these other receivables was as follows:

	As at 31 December	
	2016	2015
Within 1 year	**42,103**	98,649
Between 1 to 2 years	**2,683**	1,259
Between 2 to 3 years	**847**	780
Over 3 years	**67,476**	66,968
Total	**113,109**	167,656

As at 31 December 2016, other receivables of RMB36 million which were past due (2015: RMB35 million) were impaired and a provision of RMB29 million (2015: RMB28 million) has been provided against the receivables. The individually impaired receivables have been long outstanding without any repayment agreements in place or possibility of renegotiation. It was assessed that a substantial portion of the receivables is not expected to be recovered. The ageing of these other receivables was as follows:

	As at 31 December	
	2016	2015
Within 1 year	**752**	1,566
Between 1 to 2 years	**912**	93
Between 2 to 3 years	**285**	3
Over 3 years	**34,263**	33,792
Total	**36,212**	35,454

(Amounts expressed in thousands of RMB unless otherwise stated)

19 ACCOUNTS RECEIVABLE

Accounts receivable comprised the following:

	As at 31 December	
	2016	2015
Accounts receivable	**14,050,096**	14,401,665
Notes receivable	**2,432,264**	1,977,790
	16,482,360	16,379,455
Less: provision for doubtful accounts	**88,889**	2,054
Total	**16,393,471**	16,377,401

The gross amounts of account receivables are denominated in the following currencies:

	As at 31 December	
	2016	2015
RMB	**15,586,989**	15,639,091
S$ (RMB equivalent)	**876,956**	735,300
US$ (RMB equivalent)	**18,415**	5,064
Total	**16,482,360**	16,379,455

The Company and its subsidiaries usually grant about one month's credit period to local power grid customers from the end of the month in which the sales are made, except for SinoSing Power which provides credit period that ranges from 5 to 60 days from the dates of billings. Certain accounts receivables of Singapore subsidiaries are backed by bankers' guarantees and/or deposits from customers. It is not practicable to determine the fair value of the collaterals that correspond to these accounts receivable.

As at 31 December 2016, no accounts receivable was secured to banks as collateral against loans (2015: nil).

For the collateral of notes receivable, please refer to Note 27 for details.

Movements of provision for doubtful accounts during the years are analyzed as follows:

	2016	2015
Beginning of the year	**(2,054)**	(11,809)
Provision	**(88,818)**	(60)
Reversal	**397**	1,833
Write-off	**1,682**	–
Transfer from a subsidiary to a joint venture	**–**	8,126
Currency translation differences	**(96)**	(144)
End of the year	**(88,889)**	(2,054)

(Amounts expressed in thousands of RMB unless otherwise stated)

19 ACCOUNTS RECEIVABLE *(Cont'd)*

As at 31 December 2016, the Company and its subsidiaries recognised provisions for accounts receivable assessed on an individual basis, which mainly consists of receivables due from local customers for sales of electricity. The provisions were provided based on operating results of the local customers and collectability of the receivables.

(a) Ageing analysis of accounts receivable was as follows:

	As at 31 December	
	2016	2015
Within 1 year	**16,152,038**	16,129,748
Between 1 to 2 years	**279,694**	225,253
Between 2 to 3 years	**29,123**	1,915
Over 3 years	**21,505**	22,539
Total	**16,482,360**	16,379,455

As at 31 December 2016, the maturity period of the notes receivable ranged from 1 to 12 months (2015: from 1 to 12 months).

(b) Ageing analysis of accounts receivable and notes receivable that are neither individually nor collectively considered to be impaired are as follows:

	As at 31 December	
	2016	2015
Neither past due nor impaired	**16,063,215**	15,948,981
Less than 1 year past due	**248,597**	338,545
Between 1 to 2 years past due	**63,094**	88,565
Between 2 to 3 years past due	**17,944**	1,151
Over 3 years past due	**621**	159
Total	**16,393,471**	16,377,401

Receivables that were past due but not impaired relate to a number of independent customers that have a good track record with the Company and its subsidiaries. Based on past experience, management believes that no impairment allowance is necessary in respect of these balances as there has not been a significant change in credit quality and the balances are still considered fully recoverable.

(Amounts expressed in thousands of RMB unless otherwise stated)

20 COMPANY'S STATEMENT OF CHANGES IN EQUITY

		Capital surplus							
	Share capital	Share premium	Hedging reserve	Available-for-sale financial asset revaluation reserve	Other capital reserve	Subtotal	Surplus reserves	Retained earnings	Total equity
Balance as at 1 January 2015	14,420,383	18,335,085	(74,370)	1,218,235	1,093,892	20,572,842	7,196,349	21,257,392	63,446,966
Profit for the year ended 31 December 2015	–	–	–	–	–	–	–	12,415,335	12,415,335
Other comprehensive income/(loss):									
Fair value changes of available-for-sale financial asset – gross	–	–	–	744,348	–	744,348	–	–	744,348
Fair value changes of available-for-sale financial asset – tax	–	–	–	(186,087)	–	(186,087)	–	–	(186,087)
Changes in fair value of effective portion of cash flow hedges – gross	–	–	(30,988)	–	–	(30,988)	–	–	(30,988)
Changes in fair value of effective portion of cash flow hedges – tax	–	–	7,747	–	–	7,747	–	–	7,747
Cash flow hedges recorded in shareholders' equity reclassified to interest expenses – gross	–	–	49,695	–	–	49,695	–	–	49,695
Cash flow hedges recorded in shareholders' equity reclassified to interest expenses – tax	–	–	(12,424)	–	–	(12,424)	–	–	(12,424)
Total comprehensive income for the year ended 31 December 2015	–	–	14,030	558,261	–	572,291	–	12,415,335	12,987,626
Issuance of new H shares, net of issuance expenses	780,000	3,904,314	–	–	–	3,904,314	–	–	4,684,314
Transfer to surplus reserve	–	–	–	–	–	–	943,681	(943,681)	–
Dividends relating to 2014	–	–	–	–	–	–	–	(5,479,746)	(5,479,746)
Balance as at 31 December 2015	15,200,383	22,239,399	(60,340)	1,776,496	1,093,892	25,049,447	8,140,030	27,249,300	75,639,160

(Amounts expressed in thousands of RMB unless otherwise stated)

20 COMPANY'S STATEMENT OF CHANGES IN EQUITY *(Cont'd)*

		Capital surplus							
	Share capital	Share premium	Hedging reserve	Available-for-sale financial asset revaluation reserve	Other capital reserve	Subtotal	Surplus reserves	Retained earnings	Total equity
Balance as at 1 January 2016	15,200,383	22,239,399	(60,340)	1,776,496	1,093,892	25,049,447	8,140,030	27,249,300	75,639,160
Profit for the year ended 31 December 2016	–	–	–	–	–	–	–	12,243,552	12,243,552
Other comprehensive income/(loss):									
Fair value changes of available-for-sale financial asset – gross	–	–	–	(197,953)	–	(197,953)	–	–	(197,953)
Gain on disposal of available-for-sale financial asset reclassified to profit or loss – gross	–	–	–	(988,865)	–	(988,865)	–	–	(988,865)
Fair value changes of and gain on disposal of available-for-sale financial asset – tax	–	–	–	296,705	–	296,705	–	–	296,705
Changes in fair value of effective portion of cash flow hedges – gross	–	–	(28,123)	–	–	(28,123)	–	–	(28,123)
Changes in fair value of effective portion of cash flow hedges – tax	–	–	7,031	–	–	7,031	–	–	7,031
Cash flow hedges recorded in shareholders' equity reclassified to interest expenses – gross	–	–	38,676	–	–	38,676	–	–	38,676
Cash flow hedges recorded in shareholders' equity reclassified to interest expenses – tax	–	–	(9,669)	–	–	(9,669)	–	–	(9,669)
Total comprehensive income for the year ended 31 December 2016	–	–	7,915	(890,113)	–	(882,198)	–	12,243,552	11,361,354
Dividends relating to 2015 (Note 23)	–	–	–	–	–	–	–	(7,144,180)	(7,144,180)
Balance as at 31 December 2016	15,200,383	22,239,399	(52,425)	886,383	1,093,892	24,167,249	8,140,030	32,348,672	79,856,334

(Amounts expressed in thousands of RMB unless otherwise stated)

21 SHARE CAPITAL

	2016 Number of shares	2016 Share capital RMB'000	2015 Number of shares	2015 Share capital RMB'000
As at 1 January				
A shares	**10,500,000,000**	**10,500,000**	10,500,000,000	10,500,000
Overseas listed foreign shares	**4,700,383,440**	**4,700,383**	3,920,383,440	3,920,383
Subtotal	**15,200,383,440**	**15,200,383**	14,420,383,440	14,420,383
Issuance of new H shares	**–**	**–**	780,000,000	780,000
As at 31 December				
A shares	**10,500,000,000**	**10,500,000**	10,500,000,000	10,500,000
Overseas listed foreign shares	**4,700,383,440**	**4,700,383**	4,700,383,440	4,700,383
Total	**15,200,383,440**	**15,200,383**	15,200,383,440	15,200,383

22 SURPLUS RESERVES

	As at 1 January 2016 and 31 December 2016
Surplus reserves	8,140,030

According to the Company Law of the PRC, the Company's articles of association and board resolutions, the Company appropriates 10% of each year's net profit under PRC GAAP to the statutory surplus reserve. The Company has the option to cease provision for such reserve when it reaches 50% of the registered share capital. Upon the approval from relevant authorities, this reserve can be used to make up any losses incurred or to increase share capital. Except for offsetting against losses, this reserve cannot fall below 25% of the registered share after being used to increase share capital.

As the statutory surplus reserve reaches 50% of the registered share capital in 2016, the Company made no provision this year.

Appropriation of discretionary surplus reserve is proposed by the Board of Directors, and approved by the general meeting of shareholders. This reserve can be used to make up any losses incurred in prior years or to increase the share capital after obtaining relevant approvals. For the years ended 31 December 2016 and 2015, no provision was made to the discretionary surplus reserve.

(Amounts expressed in thousands of RMB unless otherwise stated)

22 SURPLUS RESERVES *(Cont'd)*

According to the articles of association, in distributing the Company's profits after tax for the relevant accounting year, the lower of amounts determined in accordance with PRC GAAP and IFRS shall be adopted. As at 31 December 2016, in accordance with PRC GAAP and IFRS, the balance of retained earnings for the Company and its subsidiaries amounted to approximately RMB39.212 billion and RMB38.690 billion, respectively; and the balance of retained earnings for the Company amounted RMB35.416 billion and RMB32.349 billion, respectively.

23 DIVIDENDS

On 21 March 2017, the Board of Directors proposed a cash dividend of RMB0.29 per share, totaling approximately RMB4,408 million. This proposal is subject to the approval of the shareholders at the annual general meeting.

On 23 June 2016, upon the approval from the annual general meeting of the shareholders, the Company declared 2015 final dividend of RMB0.47 (2014: RMB0.38) per ordinary share, totaling approximately RMB7,144 million (2014: RMB5,480 million).

24 LONG-TERM LOANS

Long-term loans comprised the following:

	As at 31 December	
	2016	2015
Loans from Huaneng Group and its subsidiaries (a)	**3,818,807**	2,696,225
Bank loans and other loans (b)	**70,732,439**	75,683,003
	74,551,246	78,379,228
Less: Current portion of long-term loans	**9,560,885**	12,351,205
Total	**64,990,361**	66,028,023

(Amounts expressed in thousands of RMB unless otherwise stated)

24 LONG-TERM LOANS *(Cont'd)*

(a) Loans from Huaneng Group and its subsidiaries

Details of loans from Huaneng Group and its subsidiaries are as follows:

	As at 31 December 2016				
	Original currency '000	RMB equivalent	Less: Current portion	Non-current portion	Annual interest rate
Loans from Huaneng Group					
Unsecured					
RMB	665,015	665,015	640,485	24,530	4.75%
Loans from HIPDC					
Unsecured					
RMB	210	210	–	210	4.75%
Loans from Huaneng Finance					
Unsecured					
RMB	286,000	286,000	60,000	226,000	4.41%-4.75%
Loans from Huaneng Tiancheng Financial Leasing Co., Ltd. ("Tiancheng Financial Leasing") (Note)					
Unsecured					
RMB	2,867,582	2,867,582	154,737	2,712,845	4.42%
Total		3,818,807	855,222	2,963,585	

	As at 31 December 2015				
	Original currency '000	RMB equivalent	Less: Current portion	Non-current portion	Annual interest rate
Loans from Huaneng Group					
Unsecured					
RMB	665,015	665,015	665,015	–	4.28%-5.54%
Loans from HIPDC					
Unsecured					
RMB	1,700,210	1,700,210	1,700,210	–	4.28%-5.30%
Loans from Huaneng Finance					
Unsecured					
RMB	331,000	331,000	72,000	259,000	4.41%-5.84%
Total		2,696,225	2,437,225	259,000	

(Amounts expressed in thousands of RMB unless otherwise stated)

24 LONG-TERM LOANS *(Cont'd)*

(a) Loans from Huaneng Group and its subsidiaries *(Cont'd)*

Note: In 2016, certain subsidiaries of the Company enforced the sales and leaseback agreements with Tiancheng Financial Leasing. According to the agreements, these subsidiaries have an option to buy back the equipment at a nominal price (RMB1) when the lease term expires in 2021. The substance of the transaction was to obtain financing secured by relevant assets within the leasing period. As at 31 December 2016, the power generation equipment mentioned above has a total carrying amount of RMB2.999 billion while the long-term borrowings from Tiancheng Financial Leasing is RMB2.868 billion.

(b) Bank loans and other loans

Details of bank loans and other loans are as follows:

	As at 31 December 2016				
	Original currency '000	RMB equivalent	Less: Current portion	Non-current portion	Annual interest rate
Secured					
RMB	9,065,810	9,065,810	1,259,230	7,806,580	4.41%-4.90%
Unsecured					
RMB	45,991,511	45,991,511	6,786,253	39,205,258	2.65%-5.65%
US$	409,760	2,842,505	388,925	2,453,580	1.92%
S$	2,580,522	12,385,213	196,410	12,188,803	2.76%/4.25%
€	39,187	286,329	68,271	218,058	2.00%/2.15%
JPY	2,702,533	161,071	6,574	154,497	0.75%
Total		70,732,439	8,705,663	62,026,776	

	As at 31 December 2015				
	Original currency '000	RMB equivalent	Less: Current portion	Non-current portion	Annual interest rate
Secured					
RMB	9,642,630	9,642,630	1,128,620	8,514,010	4.41%-6.15%
Unsecured					
RMB	50,102,146	50,102,146	7,975,901	42,126,245	2.90%-6.55%
US$	472,800	3,070,174	388,925	2,681,249	1.38%
S$	2,696,925	12,372,141	348,296	12,023,845	1.98%/4.25%
€	48,530	344,331	66,294	278,037	2.00%/2.15%
JPY	2,812,263	151,581	5,944	145,637	0.75%
Total		75,683,003	9,913,980	65,769,023	

(Amounts expressed in thousands of RMB unless otherwise stated)

24 LONG-TERM LOANS *(Cont'd)*

(b) Bank loans and other loans *(Cont'd)*

As at 31 December 2016, there was no long-term loan secured by territorial water use right (31 December 2015: a long-term loan of RMB18 million was secured by territorial water use right with net book value amounting RMB78.38 million).

As at 31 December 2016, long-term loans of RMB2,902 million (31 December 2015: RMB67 million) were secured by certain property, plant and equipment with net book value amounting to approximately RMB3,105 million (31 December 2015: RMB150 million).

As at 31 December 2016, long-term loans of approximately RMB9,032 million were secured by future electricity revenue (31 December 2015: RMB9,558 million).

The maturity of long-term loans is as follows:

	Loans from Huaneng Group and its subsidiaries As at 31 December		Bank loans and other loans As at 31 December	
	2016	2015	**2016**	2015
1 year or less	**855,222**	2,437,225	**8,705,663**	9,913,980
More than 1 year but no more than 2 years	**715,400**	62,000	**11,420,746**	12,028,176
More than 2 years but no more than 3 years	**953,082**	68,000	**11,081,242**	9,134,791
More than 3 years but no more than 4 years	**928,082**	2,000	**7,769,955**	9,219,121
More than 4 years but no more than 5 years	**232,021**	2,000	**7,618,953**	6,404,924
More than 5 years	**135,000**	125,000	**24,135,880**	28,982,011
	3,818,807	2,696,225	**70,732,439**	75,683,003
Less: amount due within 1 year included under current liabilities	**855,222**	2,437,225	**8,705,663**	9,913,980
Total	**2,963,585**	259,000	**62,026,776**	65,769,023

The interest payment schedule of long-term loans in the future years are summarized as follows:

	As at 31 December	
	2016	2015
1 year or less	**2,987,045**	3,354,579
More than 1 year but not more than 2 years	**2,577,363**	2,784,037
More than 2 years but not more than 5 years	**4,912,222**	5,784,420
More than 5 years	**3,133,578**	4,325,853
Total	**13,610,208**	16,248,889

25 LONG-TERM BONDS

The Company issued bonds with maturity of 5 years, 7 years and 10 years in December 2007 with face values of RMB1 billion, RMB1.7 billion and RMB3.3 billion bearing annual interest rates of 5.67%, 5.75% and 5.90%, respectively. The total actual proceeds received by the Company were approximately RMB5.885 billion. These bonds are denominated in RMB and issued at par. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rates of those bonds are 6.13%, 6.10% and 6.17%, respectively. Interest paid per annum during the tenure of the bonds is RMB57 million, RMB98 million and RMB195 million, respectively. The bond with original maturity of 5 years had matured in December 2012 and the Company repaid the principal of RMB1 billion. The bond with original maturity of 7 years had matured in December 2014 and the Company repaid the principal of RMB1.7 billion. As at 31 December 2016, interest payables for the unmatured bonds amounted to approximately RMB3.73 million (31 December 2015: RMB3.72 million).

The Company also issued bonds with maturity of 10 years in May 2008 with a face value of RMB4 billion bearing an annual interest rate of 5.20%. The actual proceeds received by the Company were approximately RMB3.933 billion. These bonds are denominated in RMB and issued at par. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rate of bond is 5.42%. Interest paid per annum during the tenure of the bonds is RMB208 million. As at 31 December 2016, interest payable for these bonds amounted to approximately RMB135.06 million (31 December 2015: RMB134.69 million).

In November 2011, the Company issued non-public debt financing instrument with maturity of 5 years with face value of RMB5 billion bearing annual interest rate of 5.74%. The actual proceeds received by the Company were approximately RMB4.985 billion. This bond is denominated in RMB and issued at par. Interest is payable annually while principal will be paid when the bond falls due. The annual effective interest rate of this bond is 6.04%. Interest paid per annum during the tenure of the bond is RMB287 million. The bond had matured in November 2016 and the Company repaid the principal of RMB5 billion.

The Company issued overseas listed bonds with maturity of 3 years in February 2013 with a face value of RMB1.5 billion bearing an annual interest rate of 3.85%. The proceeds received by the Company were approximately RMB1.495 billion. These bonds are denominated in RMB and issued at par. Interest is payable semi-annually while principal will be paid when the bonds fall due. The annual effective interest rate of the bonds is 3.96%. Interest paid per annum during the tenure of the bonds is RMB58 million. The bond had matured in February 2016 and the Company repaid the principal of RMB1.5 billion.

The Company issued non-public debt financing instrument with maturity of 3 years in June 2013 with a face value of RMB5 billion bearing an annual interest rate of 4.82%. The proceeds received by the Company were approximately RMB4.985 billion. The bonds are denominated in RMB and issued at par. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rate of the bonds is 5.12%. Interest paid per annum during the tenure of the bonds is RMB241 million. The bond had matured in June 2016 and the Company repaid the principal of RMB5 billion.

The Company issued medium-term notes with maturity of 5 years in July 2014 with a face value of RMB4 billion bearing an annual interest rate of 5.30%. The actual proceeds received by the Company were approximately RMB3.988 billion. These notes are denominated in RMB and issued at par. Interest is payable annually while principal will be paid when the notes fall due. The annual effective interest rate of these notes is 5.37%. Interest paid per annum during the tenure of the notes is RMB212 million. As at 31 December 2016, interest payable for the bonds amounted to approximately RMB99.32 million (31 December 2015: RMB99.05 million).

(Amounts expressed in thousands of RMB unless otherwise stated)

25 LONG-TERM BONDS *(Cont'd)*

The Company issued corporate bonds with maturity of 5 years and 10 years in June 2016 with face values of RMB3 billion and RMB1.2 billion bearing annual interest rates of 3.48% and 3.98%, respectively. The total actual proceeds received by the Company were approximately RMB4.2 billion. These bonds are denominated in RMB and issued at par. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rates of those bonds are 3.48% and 3.98%, respectively. Interest paid per annum during the tenure of the bonds is RMB104.40 million and RMB47.76 million, respectively. As at 31 December 2016, interest payable for the bonds amounted to approximately RMB57.78 million and RMB26.43 million, respectively.

Please refer to Note 36(c) for details of long-term bonds of the Company guaranteed by HIPDC and government-related banks.

26 OTHER NON-CURRENT LIABILITIES

	As at 31 December	
	2016	2015
Finance lease payables (a)	**1,088,846**	1,422,572
Government grants		
– Environmental subsidies (b)	**1,122,406**	1,093,483
– Other government grants	**174,216**	164,394
Others	**1,250,212**	981,312
Subtotal	**3,635,680**	3,661,761
Current portion of finance lease payables	**(568,645)**	(519,306)
Current portion of other non-current liabilities	**(247,537)**	(20,000)
Subtotal	**(816,182)**	(539,306)
Total	**2,819,498**	3,122,455

(a) The Company and its subsidiaries had obligation under finance leases as follows:

	As at 31 December	
	2016	2015
Within 1 year	**605,806**	574,415
After 1 year but within 2 years	**266,792**	596,160
After 2 years but within 3 years	**82,470**	240,793
After 3 years	**181,345**	136,386
	1,136,413	1,547,754
Less: total future interest expense	**47,567**	125,182
Total	**1,088,846**	1,422,572

(Amounts expressed in thousands of RMB unless otherwise stated)

26 OTHER NON-CURRENT LIABILITIES *(Cont'd)*

(b) This primarily represented subsidies for the construction of desulphurization equipment and other environmental protection projects.

(c) In 2016, the asset-related government grants which were credited to the statement of comprehensive income amounted to RMB102.21 million (2015: RMB98.88 million).

27 ACCOUNTS PAYABLE AND OTHER LIABILITIES

Accounts payable and other liabilities comprised:

	As at 31 December	
	2016	2015
Accounts and notes payable	**12,059,004**	9,403,088
Amounts received in advance	**365,887**	472,886
Payables to contractors for construction	**10,832,444**	11,425,575
Retention payables to contractors	**1,445,383**	1,200,724
Accrued interests	**676,462**	874,333
Accrued pollutants discharge fees	**82,917**	94,691
Accrued water-resources fees	**28,227**	18,847
Accrued service fee of intermediaries	**29,330**	51,340
Security deposits	**138,876**	104,949
Provisions	**21,758**	15,001
Others	**2,644,939**	2,524,330
Total	**28,325,227**	26,185,764

Please refer to Note 36(a)(iv) for details of accounts payable and other liabilities due to the related parties.

As at 31 December 2016, there was no notes payable secured by notes receivable (2015: notes payable of RMB14 million was secured by notes receivable with net book value amounted to RMB14 million).

The carrying amounts of financial liabilities (excluding amounts received in advance) included in accounts payable and other liabilities are denominated in the following currencies:

	As at 31 December	
	2016	2015
RMB	**26,801,242**	24,773,457
S$ (RMB equivalent)	**669,797**	517,192
US$ (RMB equivalent)	**479,179**	392,953
JPY (RMB equivalent)	**6,917**	29,264
EUR (RMB equivalent)	**2,205**	12
Total	**27,959,340**	25,712,878

(Amounts expressed in thousands of RMB unless otherwise stated)

27 ACCOUNTS PAYABLE AND OTHER LIABILITIES *(Cont'd)*

The ageing analysis of accounts and notes payable was as follows:

	As at 31 December	
	2016	2015
Within 1 year	**11,902,522**	9,280,736
Between 1 to 2 years	**100,092**	78,682
Over 2 years	**56,390**	43,670
Total	**12,059,004**	9,403,088

28 TAXES PAYABLE

Taxes payable comprises:

	As at 31 December	
	2016	2015
VAT payable	**439,304**	663,243
Income tax payable	**440,791**	1,054,246
Others	**209,010**	353,982
Total	**1,089,105**	2,071,471

29 SHORT-TERM BONDS

The Company issued unsecured short-term bonds with face values of RMB5 billion and RMB3 billion bearing annual interest rates of 4.44% and 3.17% in April 2015 and August 2015. Such bonds are denominated in RMB, issued at par and mature in 366 days. The annual effective interest rates of these bonds are 4.86% and 3.58%. The bonds had matured and were fully repaid in April 2016 and August 2016 respectively.

The Company issued unsecured super short-term bonds with face values of RMB2 billion, RMB2 billion, RMB2 billion and RMB5 billion bearing annual interest rates of 3.11%, 3.10%, 3.38% and 3.05%, in June 2015, June 2015, June 2015 and July 2015, respectively. Such bonds are denominated in RMB, issued at face value and mature in 270 days from the issuance dates. The annual effective interest rates of these bonds are 3.42%, 3.41%, 3.69% and 3.36%, respectively. These bonds were fully repaid in March 2016, March 2016, March 2016 and April 2016 respectively.

The Company issued unsecured short-term bonds with face values of RMB3 billion and RMB3 billion bearing annual interest rates of 2.50% and 2.60% in August 2016 and October 2016. Such bonds are denominated in RMB, issued at par and mature in 365 days. The annual effective interest rates of these bonds are 2.91% and 3.01%. As at 31 December 2016, interest payables for the bonds amounted to approximately RMB30.62 million and RMB16.03 million, respectively.

(Amounts expressed in thousands of RMB unless otherwise stated)

29 SHORT-TERM BONDS *(Cont'd)*

The Company issued unsecured super short-term bonds with face values of RMB2 billion, RMB2 billion, RMB2 billion, RMB4 billion, RMB3 billion, RMB3 billion, RMB4 billion, RMB2 billion, RMB3 billion and RMB2 billion bearing annual interest rates of 2.59%, 2.48%, 2.48%, 2.42%, 2.62%, 2.73%, 2.50%, 2.79%, 2.98% and 3.45% in March 2016, March 2016, March 2016, April 2016, April 2016, May 2016, July 2016, November 2016, November 2016 and December 2016, respectively. Such bonds are denominated in RMB, issued at face value and mature in 270 days, 270 days, 270 days, 270 days, 270 days, 270 days, 270 days, 270 days, 180 days and 270 days from the issuance dates respectively. The annual effective interest rates of these bonds are 2.90%, 2.79%, 2.79%, 2.73%, 2.93%, 3.04%, 2.81%, 3.10%, 3.19% and 3.78% respectively. The three bonds issued in March were fully repaid in November 2016, December 2016 and December 2016 respectively. As at 31 December 2016, interest payables for the outstanding bonds amounted to approximately RMB70.28 million, RMB54.70 million, RMB49.14 million, RMB46.85 million, RMB7.95 million, RMB11.02 million and RMB5.10 million, respectively.

30 SHORT-TERM LOANS

Short-term loans are as follows:

	As at 31 December 2016			As at 31 December 2015		
	Original currency '000	**RMB equivalent**	**Annual interest rate**	Original currency '000	RMB equivalent	Annual interest rate
Secured						
RMB	**125,534**	**125,534**	**2.77%-3.80%**	307,149	307,149	3.19%-4.30%
Unsecured						
RMB	**57,543,340**	**57,543,340**	**3.57%-4.35%**	49,576,340	49,576,340	3.83%-5.60%
Total		**57,668,874**			49,883,489	

As at 31 December 2016, short-term loans of RMB126 million (31 December 2015: RMB307 million) represented the notes receivable that were discounted with recourse. As these notes receivable had not yet matured, the proceeds received were recorded as short-term loans.

As at 31 December 2016, a short-term loan borrowed from Xi'an Thermal Power Research Institute Co., Ltd ("Xi'an Thermal") amounted to RMB100 million (31 December 2015: nil) with annual interest rate of 3.92%.

As at 31 December 2016, short-term loans borrowed from Huaneng Finance amounted to RMB3,355 million (31 December 2015: RMB2,375.5 million) with annual interest rate ranged from 3.92% to 4.13% (31 December 2015: from 3.92% to 5.32%).

(Amounts expressed in thousands of RMB unless otherwise stated)

31 DEFERRED INCOME TAX ASSETS AND LIABILITIES

The deferred income tax assets and liabilities are as follows:

	As at 31 December	
	2016	2015
Deferred income tax assets before offsetting	**2,432,552**	2,389,857
Offset amount	**(1,168,595)**	(1,325,466)
Deferred income tax assets after offsetting	**1,263,957**	1,064,391
Deferred income tax liabilities before offsetting	**(3,431,347)**	(3,819,609)
Offset amount	**1,168,595**	1,325,466
Deferred income tax liabilities after offsetting	**(2,262,752)**	(2,494,143)
	(998,795)	(1,429,752)

The gross movement on the deferred income tax accounts is as follows:

	2016	2015
Beginning of the year	**(1,429,752)**	(926,481)
Business combination (Note 40)	**(58,929)**	(1,007,147)
Credited to profit or loss (Note 33)	**440,817**	687,206
Charged to other comprehensive income	**87,775**	(198,525)
Currency translation differences	**(38,706)**	15,195
End of the year	**(998,795)**	(1,429,752)

(Amounts expressed in thousands of RMB unless otherwise stated)

31 DEFERRED INCOME TAX ASSETS AND LIABILITIES *(Cont'd)*

The movements in deferred income tax assets and liabilities during the year, without taking into consideration the offsetting of balances within the same tax jurisdictions, are as follows:

Deferred income tax assets:

	Hedging reserve	Amortization of land use rights	Provision for impairment loss	Depreciation	Accrued expenses	VAT refunds on purchases of domestically manufactured equipment	Unused tax losses	Others	Total
As at 1 January 2015	214,528	14,343	206,432	638,830	75,711	256,086	82,319	455,079	1,943,328
Business combination	–	452	98,498	918	–	–	–	25,507	125,375
(Charged)/credited to profit or loss	–	(378)	94,537	(67,315)	(34,773)	(25,644)	153,954	213,629	334,010
Charged to other comprehensive income	(12,438)	–	–	–	–	–	–	–	(12,438)
Currency translation differences	(2,214)	–	(49)	(54)	–	–	(289)	2,188	(418)
As at 31 December 2015	199,876	14,417	399,418	572,379	40,938	230,442	235,984	696,403	2,389,857
Business combination (Note 40)	–	–	66,560	6,840	–	–	–	–	73,400
(Charged)/credited to profit or loss	–	(502)	140,969	(41,015)	1,185	(25,433)	(5,128)	71,610	141,686
Charged to other comprehensive income	(182,400)	–	–	–	–	–	–	–	(182,400)
Currency translation differences	–	–	207	–	–	–	132	9,670	10,009
As at 31 December 2016	17,476	13,915	607,154	538,204	42,123	205,009	230,988	777,683	2,432,552

(Amounts expressed in thousands of RMB unless otherwise stated)

31 DEFERRED INCOME TAX ASSETS AND LIABILITIES *(Cont'd)*

Deferred income tax liabilities:

	Hedging reserve	Fair value gains	Amortization of land use rights	Depreciation	Power generation license	Mining rights	Territorial water use right	Others	Total
As at 1 January 2015	–	(459,155)	(400,523)	(909,109)	(632,563)	(270,667)	(75,970)	(121,822)	(2,869,809)
Business combination	–	–	(528,361)	(603,508)	–	–	–	(653)	(1,132,522)
Credited to profit or loss	–	–	24,257	212,855	–	113,452	1,769	863	353,196
Charged to other comprehensive loss	–	(186,087)	–	–	–	–	–	–	(186,087)
Currency translation differences	–	–	454	8,056	7,103	–	–	–	15,613
As at 31 December 2015	–	(645,242)	(904,173)	(1,291,706)	(625,460)	(157,215)	(74,201)	(121,612)	(3,819,609)
Business combination (Note 40)	–	–	(10,423)	–	–	–	–	(121,906)	(132,329)
Credited to profit or loss	–	–	24,948	169,088	–	27,832	1,769	75,494	299,131
(Charged)/credited to other comprehensive loss	(26,530)	296,705	–	–	–	–	–	–	270,175
Currency translation differences	8,131	–	(1,507)	(26,436)	(28,903)	–	–	–	(48,715)
As at 31 December 2016	(18,399)	(348,537)	(891,155)	(1,149,054)	(654,363)	(129,383)	(72,432)	(168,024)	(3,431,347)

As at 31 December 2016 and 2015, taxable temporary differences relating to interest in equity method investees amounted to RMB3.39 billion and RMB3.78billion, respectively. No deferred tax liabilities were recognized as at 31 December 2016 and 2015 as dividends from investments in associates and joint ventures are exempted from the PRC income tax and the Company has no plan to dispose any of these investees in the foreseeable future.

As at 31 December 2016 and 2015, taxable temporary differences relating to the undistributed profit of a wholly-owned foreign subsidiary amounted to RMB3.54 billion and RMB3.78 billion, respectively. No deferred tax liabilities were recognized in respect of the tax that would be payable on the distribution of these retained profit as at 31 December 2016 and 2015 as the Company controls the dividend policy of the subsidiary, and it has been determined that it is probable that the profits will not be distributed in the foreseeable future.

In accordance with the accounting policy set out in Note 2(s), the Company and its subsidiaries did not recognize deferred income tax assets in respect of certain deductible temporary differences and accumulated tax losses that can be carried forward against future taxable income as follow:

	As at 31 December	
	2016	2015
Deductible temporary differences	**2,957,316**	2,940,730
Unused tax losses	**6,669,820**	6,990,624
Total	**9,627,136**	9,931,354

(Amounts expressed in thousands of RMB unless otherwise stated)

31 DEFERRED INCOME TAX ASSETS AND LIABILITIES *(Cont'd)*

The expiry dates of the tax losses of the Company and its subsidiaries for which no deferred income tax assets were recognized are summarized as follows:

	As at 31 December	
	2016	2015
Year of expiry		
2016	**–**	1,504,577
2017	**1,841,365**	1,900,325
2018	**1,122,070**	1,181,030
2019	**1,195,811**	1,284,264
2020	**1,061,468**	1,120,428
2021	**1,449,106**	–
Total	**6,669,820**	6,990,624

32 ADDITIONAL FINANCIAL INFORMATION TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2016, the net current liabilities of the Company and its subsidiaries amounted to approximately RMB93,230 million (2015: RMB90,271 million). On the same date, total assets less current liabilities were approximately RMB184,643 million (2015: RMB185,030 million).

33 INCOME TAX EXPENSE

	For the year ended 31 December	
	2016	2015
Current income tax expense	**3,905,968**	6,386,149
Deferred income tax (Note 31)	**(440,817)**	(687,206)
Total	**3,465,151**	5,698,943

No Hong Kong profits tax has been provided as there were no estimated assessable profits in Hong Kong for the year (2015: nil).

(Amounts expressed in thousands of RMB unless otherwise stated)

33 INCOME TAX EXPENSE *(Cont'd)*

The reconciliation of the effective income tax rate from the notional income tax rate is as follows:

	For the year ended 31 December	
	2016	2015
Notional tax on profit before income tax expense, calculated at the applicable income tax rates in the countries concerned	**25.16%**	25.11%
Effect of tax losses not recognized	**1.58%**	(0.12%)
Effect of deductible temporary differences not recognized	**(0.20%)**	(0.16%)
Effect of non-taxable income	**(2.89%)**	(1.77%)
Effect of non-deductible expenses	**1.09%**	1.37%
Others	**0.35%**	0.39%
Effective tax rate	**25.09%**	24.82%

The Company and its PRC branches and subsidiaries are subject to income tax at 25%, except for certain PRC branches and subsidiaries that are tax exempted or taxed at preferential tax rates, as determined in accordance with the relevant PRC income tax rules and regulations for the years ended 31 December 2016 and 2015.

Pursuant to Guo Shui Han [2009] No. 33, starting from 1 January 2008, the Company and its PRC branches calculate and pay income tax on a consolidated basis according to relevant tax laws and regulations. The original regulation specifying locations for power plants and branches of the Company to make enterprise income tax payments was abolished. The income tax of subsidiaries remains to be calculated individually based on their individual operating results.

The income tax rate applicable to Singapore subsidiaries is 17% (2015: 17%).

34 EARNINGS PER SHARE

The basic earnings per share is calculated by dividing the consolidated net profit attributable to the equity holders of the Company by the weighted average number of the Company's outstanding ordinary shares during the year:

	2016	2015
Consolidated net profit attributable to equity holders of the Company	**8,520,427**	13,651,933
Weighted average number of the Company's outstanding ordinary shares ('000)*	**15,200,383**	14,485,383
Basic and diluted earnings per share (RMB)	**0.56**	0.94

(Amounts expressed in thousands of RMB unless otherwise stated)

34 EARNINGS PER SHARE *(Cont'd)*

* Weighted average number of ordinary shares:

	2016 '000	2015 '000
Issued ordinary shares at 1 January	15,200,383	14,420,383
Effect of share issue	–	65,000
Weighted average number of ordinary shares at 31 December	15,200,383	14,485,383

There was no dilutive effect on earnings per share since the Company had no dilutive potential ordinary shares for the years ended 31 December 2016 and 2015.

35 NOTES TO CONSOLIDATED STATEMENT OF CASH FLOWS

Bank balances and cash comprised the following:

	As at 31 December	
	2016	2015
Total bank balances and cash	7,881,630	7,537,813
Less: Restricted cash	71,129	59,563
Cash and cash equivalents as at year end	7,810,501	7,478,250

The bank balances and cash of the Company and its subsidiaries are denominated in the following currencies:

	As at 31 December	
	2016	2015
RMB	6,691,911	5,847,363
S$ (RMB equivalent)	869,591	1,130,356
US$ (RMB equivalent)	319,944	559,761
JPY (RMB equivalent)	184	205
HK$ (RMB equivalent)	–	128
Total	7,881,630	7,537,813

There is no material non-cash investing and financing transactions for the years ended 31 December 2016 and 2015.

36 RELATED PARTY BALANCES AND TRANSACTIONS

The related parties of the Company and its subsidiaries that had transactions with the Company and its subsidiaries are as follows:

Names of related parties	**Nature of relationship**
Huaneng Group	Ultimate parent company
HIPDC	Parent company
Huaneng Energy & Communications Holdings Co., Ltd. and its subsidiaries	Subsidiaries of Huaneng Group
Huaneng Property Co., Ltd. and its subsidiaries	Subsidiaries of Huaneng Group
Xi'an Thermal and its subsidiaries	Subsidiaries of Huaneng Group
Huaneng Group Technology Innovation Center	A subsidiary of Huaneng Group
Gansu Huating Coal and Power Co., Ltd.	A subsidiary of Huaneng Group
Alltrust Insurance Co., Ltd.	A subsidiary of Huaneng Group
North United Power Co., Ltd. and its subsidiaries	Subsidiaries of Huaneng Group
Huaneng Group Clean Energy Technology Research Institute Co., Ltd.	A subsidiary of Huaneng Group
Huaneng Renewables Corporation Limited	A subsidiary of Huaneng Group
Huaneng Shandong Power Limited and its subsidiaries	Subsidiaries of Huaneng Group
Huaneng Carbon Assets Management Company Limited	A subsidiary of Huaneng Group
Huaneng Huajialing Wind Power Co., Ltd.	A subsidiary of Huaneng Group
Huaneng Group Hong Kong Limited Company	A subsidiary of Huaneng Group
Great Wall Securities Co., Ltd. ("Great Wall Securities")	A subsidiary of Huaneng Group
Changping Huaneng Training Center	A subsidiary of Huaneng Group
Huangeng Hainan Industry Co.,Ltd.	A subsidiary of Huaneng Group
Huaneng Gansu Energy Development Company Ltd.	A subsidiary of Huaneng Group
Huaneng Lancangjiang Hydropower Co., Ltd.	A subsidiary of Huaneng Group
Huaneng Henan Zhongyuan Gas Power Generation Co., Ltd.	A subsidiary of Huaneng Group
Rizhao Power Company	An associate of the Company and also a subsidiary of Huaneng Group
Huaneng Group Fuel Company	An associate of the Company and also a subsidiary of Huaneng Group
Tiancheng Financial Leasing	An associate of the Company and also a subsidiary of Huaneng Group
Shidaowan Nuclear Power Co., Ltd.	An associate of the Company and also a subsidiary of Huaneng Group
Xiapu Nuclear Power Co., Ltd.	An associate of the Company and also a subsidiary of Huaneng Group
Huaneng Finance	An associate of the Company and also a subsidiary of Huaneng Group
Hainan Nuclear Power Co., Ltd.	An associate of the Company
Huaneng (Tianjing) Coal Gasification Power Generation Co., Ltd.	An associate of the Company and also a subsidiary of Huaneng Group
Chongqing Huaneng Lime Company Limited	An associate of a subsidiary
Shanghai Time Shipping	A joint venture of the Company

(Amounts expressed in thousands of RMB unless otherwise stated)

36 RELATED PARTY BALANCES AND TRANSACTIONS *(Cont'd)*

Names of related parties	Nature of relationship
Jiangsu Nantong Power	A joint venture of the Company
Huaneng Yingkou Port Limited Liability Company	A joint venture of the Company
Subsidiaries of Jiangsu Province Guoxin Asset Management Group Limited Company ("Jiangsu Guoxin")**	Other related party
Other government-related enterprises***	Related parties of the Company

* Transactions with subsidiaries of Huaneng Group which also are associates of the Company and its subsidiaries are presented as transactions with subsidiaries of Huaneng Group for note 36(a) and 36(b).

** Before 10 March 2015, the former director of the Company, Mr. Xu Zujian also serves as the Vice President of Jiangsu Guoxin. On 10 March 2015, Mr. Xu Zujian resigned from the position of the non-executive director. Meanwhile, Jiangsu Guoxin holds 30%, 30%, 26.36%, 30% and 21% equity interest of Huaneng Nanjing Combined Cycle Co-generation Co., Ltd., Huaneng Nantong Power Generation Limited Liability Company, Huaneng Huaiyin II Power Limited Company, Jinling Power and Jinling CCGT respectively.

*** Huaneng Group is a state-owned enterprise. In accordance with the revised IAS 24, "Related Party Disclosures", government-related enterprises, other than entities under Huaneng Group, which the PRC government has control, joint control or significant influence over are also considered as related parties of the Company and its subsidiaries ("other government-related enterprises").

The majority of the business activities of the Company and its subsidiaries are conducted with other government-related enterprises. For the purpose of the related party balances and transactions disclosure, the Company and its subsidiaries have established procedures to determine, to the extent possible, the identification of the ownership structure of its customers and suppliers as to whether they are government-related enterprises. However, many government-related enterprises have a multi-layered corporate structure and the ownership structures change over time as a result of transfers and privatization programs. Nevertheless, management believes that all material related party balances and transactions have been adequately disclosed.

In addition to the related party information shown elsewhere in these financial statements, the following is a summary of significant related party transactions entered into in the ordinary course of business between the Company and its subsidiaries and their related parties during the year and significant balances arising from related party transactions as at year end.

(Amounts expressed in thousands of RMB unless otherwise stated)

36 RELATED PARTY BALANCES AND TRANSACTIONS *(Cont'd)*

(a) Related party balances

(i) Cash deposits in related parties

	As at 31 December	
	2016	2015
Deposits in Huaneng Finance		
– Savings deposit	**5,155,000**	4,599,922
Deposits in Great Wall Securities		
– Savings deposit	**2**	–
Total	**5,155,002**	4,599,922

For the year ended 31 December 2016, the annual interest rates for these savings deposits placed with Huaneng Finance and Great Wall Securities ranged from 0.35% to 1.35% (2015: from 0.35% to 1.35%).

(ii) As described in Note 24 and 30, certain loans of the Company and its subsidiaries were borrowed from Huaneng Group, HIPDC, Huaneng Finance, Xi'an Thermal and Tiancheng Financial Leasing.

(iii) Except for those disclosed in Note 36(a)(ii), the balances with Huaneng Group, HIPDC, subsidiaries, associates, joint ventures and other related parties are unsecured, non-interest bearing and the majority of receivable/repayable is within one year. As at and for the years ended 31 December 2016 and 2015, no provision is made on receivable balances from these parties.

Accounts receivable, other receivables and assets comprised the following balances due from related parties:

	As at 31 December	
	2016	2015
Due from Huaneng Group	**708**	1,700
Due from joint ventures	**806,112**	421,884
Due from subsidiaries of Huaneng Group	**319,224**	61,876
Due from other related parties	**–**	26,745
Total	**1,126,044**	512,205

(Amounts expressed in thousands of RMB unless otherwise stated)

36 RELATED PARTY BALANCES AND TRANSACTIONS *(Cont'd)*

(a) Related party balances *(Cont'd)*

(iv) Accounts payable and other liabilities comprised the following balances due to related parties:

	As at 31 December	
	2016	2015
Due to Huaneng Group	**12,232**	25,819
Due to HIPDC	**14,183**	89,589
Due to associates	**263,154**	9,652
Due to a joint venture	**325,590**	308,308
Due to subsidiaries of Huaneng Group	**4,145,595**	2,451,528
Total	**4,760,754**	2,884,896

(v) As at 31 December 2016, included in long-term loans (including current portion) and short-term loans are loans payable to other government-related enterprises amounting to RMB130 billion (2015: RMB126 billion).

The balances with government-related enterprises also included substantially all the accounts receivable due from domestic power plants of government-related power grid companies, the bank deposits placed with government-related financial institutions as well as accounts payables and other payables arising from the purchases of coal and property, plant and equipment construction and related labor service provided by other government-related enterprises. Except for bank deposits, these balances are unsecured and the majority of receivable/repayable is within one year.

(vi) As at 31 December 2016, prepayment for construction materials to subsidiaries of Huaneng Group amounted to RMB67 million (2015: RMB23 million).

(Amounts expressed in thousands of RMB unless otherwise stated)

36 RELATED PARTY BALANCES AND TRANSACTIONS *(Cont'd)*

(b) Related party transactions

(i) Procurement of goods and receiving services

	For the year ended 31 December	
	2016	2015
Huaneng Group		
Technical services and engineering contracting services	**–**	50
Other purchases	**451**	–
Subsidiaries of Huaneng Group		
Purchase of coal and transportation services	**17,212,984**	16,575,700
Technical services and engineering contracting services	**1,055,251**	769,176
Purchase of equipment	**483,058**	302,387
Purchase of power generation quota	**195,528**	287,779
Other purchases	**6,472**	7,073
A joint venture of the Company		
Purchase of coal and transportation services	**2,150,844**	1,816,954
An associate of the Company		
Other purchases	**43,808**	44,591

(ii) Sales of goods and providing services

	For the year ended 31 December	
	2016	2015
Subsidiaries of Huaneng Group		
Sales of power generation quota	**1,165**	135,085
Other sales	**189,914**	40,780
Service provided	**31,135**	50,627
Joint ventures of the Company		
Service provided	**59,049**	133,332
Sales of goods	**9,490**	23,003
Other related party		
Provision of entrusted power generation	**–**	33,129

(Amounts expressed in thousands of RMB unless otherwise stated)

36 RELATED PARTY BALANCES AND TRANSACTIONS *(Cont'd)*

(b) Related party transactions *(Cont'd)*

(iii) Other related party transactions

		For the year ended 31 December	
		2016	2015
(1)	**Rental charge on leasehold**		
	HIPDC	**157,264**	161,941
	Subsidiaries of Huaneng Group	**128,932**	130,591
(2)	**Rental income from leasehold**		
	A joint venture of the Company	**7,750**	10,759
	Subsidiaries of Huaneng Group	**5,724**	9,115
(3)	**Drawdown of loans**		
	Subsidiaries of Huaneng Group	**4,035,000**	2,660,500
	HIPDC	**210**	–
(4)	**Interest expense on loans**		
	Huaneng Group	**30,514**	32,573
	HIPDC	**13,136**	114,687
	Subsidiaries of Huaneng Group	**217,098**	158,695
(5)	**Interest income on loans**		
	A joint venture of the Company	**3,488**	4,572
(6)	**Capital injection from a subsidiary of Huaneng Group**		
	A subsidiary of Huaneng Group	**–**	286,312
(7)	**Capital injection**		
	A subsidiary of Huaneng Group	**157,500**	683,550
	An associate of the Company	**100,418**	206,230
	A joint venture of the Company	**18,200**	–
(8)	**Pre-construction cost paid by**		
	A subsidiary of Huaneng Group	**765**	12,254
(9)	**Finance lease payments received from**		
	A subsidiary of Huaneng Group	**2,960,000**	100,000
(10)	**Entrusted management fee**		
	Huaneng Group	**24,950**	24,950
(11)	**Trusteeship management income**		
	Huaneng Group	**1,700**	1,700

(Amounts expressed in thousands of RMB unless otherwise stated)

36 RELATED PARTY BALANCES AND TRANSACTIONS *(Cont'd)*

(c) Guarantees

	As at 31 December	
	2016	2015
(i) Long-term loans guaranteed by		
– Huaneng Group	**565,992**	713,994
– HIPDC	**2,142,000**	2,228,000
(ii) Long-term bonds guaranteed by		
– HIPDC	**4,000,000**	4,000,000
– Government-related banks	**3,300,000**	3,300,000

Transactions with government-related enterprises

For the years ended 31 December 2016 and 2015, the Company and its domestic subsidiaries sold substantially all their products to local government-related power grid companies. Please refer to Note 5 for details of sales information to major power grid companies.

For the years ended 31 December 2016 and 2015, other collectively-significant transactions with government-related enterprises also include a large portion of fuel purchases, property, plant and equipment construction and related labor employed.

(d) Pre-tax benefits and social insurance of key management personnel

	For the year ended 31 December	
	2016	2015
Salaries	**8,225**	9,064
Pension	**1,521**	1,470
Total	**9,746**	10,534

(Amounts expressed in thousands of RMB unless otherwise stated)

36 RELATED PARTY BALANCES AND TRANSACTIONS *(Cont'd)*

(e) Related party commitments

Related party commitments which were contracted but not recognized in the consolidated statement of financial position as at the end of reporting period are as follows:

(i) Capital commitments

	As at 31 December	
	2016	2015
Subsidiaries of Huaneng Group	**439,571**	405,208

(ii) Fuel purchase and transportation commitments

	As at 31 December	
	2016	2015
Subsidiaries of Huaneng Group	**963,306**	1,343,875
A joint venture of the Company	**291,032**	200,440
Total	**1,254,338**	1,544,315

(iii) Operating lease commitments

	As at 31 December	
	2016	2015
Subsidiaries of Huaneng Group	**286,340**	145,950
HIPDC	**65,554**	73,202
Total	**351,894**	219,152

37 LABOR COST

Other than the salaries and staff welfare, the labor cost of the Company and its subsidiaries mainly comprises the following:

All PRC employees of the Company and its subsidiaries are entitled to a monthly pension upon their retirements. The PRC government is responsible for the pension liability to these employees on retirement. The Company and its subsidiaries are required to make contributions to the publicly administered retirement plan for their PRC employees at a specified rate, currently set at 14% to 22% (2015: 14% to 22%) of the basic salary of the PRC employees. The retirement plan contributions paid by the Company and its subsidiaries for the year ended 31 December 2016 were approximately RMB873 million (2015: RMB789 million), including approximately RMB832 million (2015: RMB748 million) charged to profit or loss.

In addition, the Company and its subsidiaries have also implemented a supplementary defined contribution retirement scheme for PRC employees. Under this scheme, the employees are required to make a specified contribution based on the number of years of service with the Company and its subsidiaries, and the Company and its subsidiaries are required to make a contribution equal to two to four times the employees' contributions. The employees will receive the total contributions upon their retirement. For the year ended 31 December 2016, the contributions to supplementary defined contribution retirement scheme paid by the Company and its subsidiaries amounted to approximately RMB244 million (2015: RMB223 million), including approximately RMB233 million (2015: RMB212 million) charged to profit or loss.

SinoSing Power and its subsidiaries in Singapore appropriate a specified rate, currently set at 6.5% to 16% (2015: 6.5% to 16%) of the basic salary to central provident funds in accordance with the local government regulations. The contributions made by SinoSing Power and its subsidiaries for the year ended 31 December 2016 amounted to approximately RMB18.47 million (2015: RMB15.76 million), all of which were charged to profit or loss.

The Company and its subsidiaries have no further obligation for post-retirement benefits beyond the annual contributions made above.

In addition, the Company and its subsidiaries also make contributions of housing funds and social insurance to the social security institutions at specified rates of the basic salary and no more than the upper limit. The housing funds and social insurance contributions paid by the Company and its subsidiaries amounted to approximately RMB604 million (2015: RMB579 million) and RMB699 million (2015: RMB658 million) for the year ended 31 December 2016 including approximately RMB572 million (2015: RMB546 million) and RMB664 million (2015: RMB619 million) were charged to profit or loss, respectively.

(Amounts expressed in thousands of RMB unless otherwise stated)

38 DIRECTORS', SUPERVISORS' AND SENIOR MANAGEMENT'S EMOLUMENTS

(a) Pre-tax benefits and social insurance of directors and supervisors

The remuneration of every director and supervisor of the Company for the year ended 31 December 2016 is set out below:

	Fees	Basic salaries	Performance salaries	Pension	Total
Name of director					
Mr. Cao Peixi	–	–	–	–	–
Mr. Guo Junming	–	–	–	–	–
Mr. Liu Guoyue	–	–	–	–	–
Mr. Li Shiqi	–	–	–	–	–
Mr. Huang Jian	–	–	–	–	–
Mr. Fan Xiaxia	–	327	396	122	845
Mr. Mi Dabin	48	–	–	–	48
Mr. Guo Hongbo	–	–	–	–	–
Mr. Zhu Yousheng	48	–	–	–	48
Ms. Li Song	48	–	–	–	48
Mr. Li Zhensheng	74	–	–	–	74
Mr. Zhang Shouwen[1]	37	–	–	–	37
Mr. Yue Heng	74	–	–	–	74
Mr. Geng Jianxin	74	–	–	–	74
Mr. Xia Qing	74	–	–	–	74
Mr. Xu Mengzhou[2]	37	–	–	–	37
Sub-total	514	327	396	122	1,359
Name of supervisor					
Mr. Ye Xiangdong	–	–	–	–	–
Mr. Mu Xuan	48	–	–	–	48
Ms. Zhang Mengjiao	–	–	–	–	–
Mr. Gu Jianguo	48	–	–	–	48
Mr. Wang Zhaobin[3]	–	51	–	–	51
Ms. Zhang Ling[3]	–	69	–	–	69
Ms. Zhang Xiaojun[4]	–	92	314	89	495
Mr. Zhu Daqing[4]	–	90	313	88	491
Sub-total	96	302	627	177	1,202
Total	610	629	1,023	299	2,561

(Amounts expressed in thousands of RMB unless otherwise stated)

38 DIRECTORS', SUPERVISORS' AND SENIOR MANAGEMENT'S EMOLUMENTS *(Cont'd)*

(a) Pre-tax benefits and social insurance of directors and supervisors *(Cont'd)*

The remuneration of every director and supervisor of the Company for the year ended 31 December 2015 is set out below:

	Fees	Basic salaries	Performance salaries	Pension	Total
Name of director					
Mr. Cao Peixi	–	–	–	–	–
Mr. Guo Junming	–	–	–	–	–
Mr. Liu Guoyue	–	143	663	123	929
Mr. Li Shiqi	–	–	–	–	–
Mr. Huang Jian	–	–	–	–	–
Mr. Fan Xiaxia	–	356	494	131	981
Mr. Mi Dabin	65	–	–	–	65
Mr. Guo Hongbo	12	–	–	–	12
Mr. Zhu Yousheng	24	–	–	–	24
Mr. Xu Zujian	24	–	–	–	24
Ms. Li Song	65	–	–	–	65
Mr. Li Zhensheng	74	–	–	–	74
Mr. Qi Yudong	6	–	–	–	6
Mr. Zhang Shouwen	74	–	–	–	74
Mr. Yue Heng	100	–	–	–	100
Ms. Zhang Lizi	30	–	–	–	30
Mr. Geng Jianxin	37	–	–	–	37
Mr. Xia Qing	37	–	–	–	37
Sub-total	548	499	1,157	254	2,458
Name of supervisor					
Mr. Ye Xiangdong	–	–	–	–	–
Mr. Mu Xuan	65	–	–	–	65
Ms. Zhang Mengjiao	–	–	–	–	–
Mr. Gu Jianguo	49	–	–	–	49
Mr. Wang Zhaobin	–	298	385	103	786
Ms. Zhang Ling	–	133	263	53	449
Sub-total	114	431	648	156	1,349
Total	662	930	1,805	410	3,807

1 Resigned on 23 June 2016.

2 Appointed on 23 June 2016.

3 Resigned on 14 April 2016.

4 Appointed on 14 April 2016.

(Amounts expressed in thousands of RMB unless otherwise stated)

38 DIRECTORS', SUPERVISORS' AND SENIOR MANAGEMENT'S EMOLUMENTS *(Cont'd)*

(a) Pre-tax benefits and social insurance of directors and supervisors *(Cont'd)*

During the year, no option was granted to the directors or the supervisors (2015: nil).

During the year, no emolument was paid to the directors or the supervisors (including the five highest paid employees) as an inducement to join or upon joining the Company or as compensation for loss of office (2015: nil).

No director or supervisor had waived or agreed to waive any emoluments during the years 2016 and 2015.

(b) Five highest paid individuals

The five individuals whose emoluments were the highest in the Company and its subsidiaries for the year include one director (2015: two directors) whose emoluments are reflected in the analysis presented above. The emoluments payable to the remaining four (2015: three) individuals during the year (within the range of nil to RMB0.79 million) are as follows:

	As at 31 December	
	2016	2015
Basic salaries	**1,213**	910
Performance salaries	**1,440**	1,260
Pension	**502**	365
	3,155	2,535

39 COMMITMENTS

(a) Capital commitments

Capital commitments mainly relate to the construction of new power projects, certain ancillary facilities and renovation projects for existing power plants. Details of such commitments are as follows:

	As at 31 December	
	2016	2015
Contracted but not provided	**18,603,559**	20,388,412

(Amounts expressed in thousands of RMB unless otherwise stated)

39 COMMITMENTS *(Cont'd)*

(b) Operating lease commitments

The Company and its subsidiaries have various operating lease arrangements for land and buildings. Some of the leases contain renewal options and most of the leases contain escalation clauses. Lease terms do not contain restrictions on the Company and its subsidiaries' activities concerning dividends, additional debts or further leasing.

Total future minimum lease payments under non-cancelable operating leases are as follows:

	As at 31 December	
	2016	2015
Land and buildings		
– not later than 1 year	**181,441**	193,772
– later than 1 year and not later than 2 years	**144,088**	65,652
– later than 2 year and not later than 5 years	**133,984**	85,793
– later than 5 years	**970,896**	949,978
Total	**1,430,409**	1,295,195

In addition, in accordance with a 30-year operating lease agreement signed by Huaneng Dezhou Power Plant ("Dezhou Power Plant") and Shandong Land Bureau for the land occupied by Dezhou Power Plant Phases I and II in June 1994, annual rental amounted to approximately RMB30 million effective from June 1994 and is subject to revision at the end of the fifth year from the contract date. Thereafter, the annual rental is subject to revision once every three years. The increment for each rental revision is restricted to no more than 30% of the previous annual rental amount. For the years ended 31 December 2016 and 2015, the annual rentals was approximately RMB34 million.

(Amounts expressed in thousands of RMB unless otherwise stated)

39 COMMITMENTS *(Cont'd)*

(c) Fuel purchase commitments

The Company and its subsidiaries have entered into various long-term fuel supply agreements with various suppliers in securing fuel supply for various periods. All the agreements require minimum, maximum or forecasted volume purchases and subject to certain termination provisions. Related purchase commitments are as follows:

		As at 31 December 2016	
	Periods	**Purchase quantities**	**Estimated unit costs (RMB)**
A government-related enterprise	**2017-2039**	**2.8 million m^3/day***	**2.31/m^3**
A government-related enterprise	**2017-2023**	**541 million m^3/year***	**2.16/m^3**
	2017-2023	**450 million m^3/year***	**2.16/m^3**
Other suppliers	**2017-2022**	**248BBtu**/day**	**approximately 63,000/BBtu**
	2023	**247.5~256.6BBtu**/day**	**approximately 63,000/BBtu**
	2024-2028	**49.9-59.0BBtu**/day**	**approximately 70,000/BBtu**

		As at 31 December 2015	
	Periods	Purchase quantities	Estimated unit costs (RMB)
A government-related enterprise	2016-2039	2.8 million m^3/day	2.13/m^3
A government-related enterprise	2016-2023	541 million m^3/year	1.91/m^3
	2016-2023	450 million m^3/year	1.91/m^3
Other suppliers	2016	244.5BBtu**/day	approximately 40,000/BBtu
	2017-2022	248BBtu**/day	approximately 40,000/BBtu
	2023	247.5BBtu**/day	approximately 40,000/BBtu
	2024-2028	49.9BBtu**/day	approximately 55,000/BBtu

* The quantities represent maximum volume, others represent minimum or forecasted volume if not specified.

** BBtu: Billion British Thermal Unit.

(Amounts expressed in thousands of RMB unless otherwise stated)

40 BUSINESS COMBINATIONS

(a) Acquisition not under common control during the year ended 31 December 2016

	From acquisition date to 31 December 2016 acquirees'		
	Revenue	**Net loss**	**Net cash in/(out)**
Tongshan Xiehe Wind Power Generation (i)	**–**	**–**	**17,177**
Yangguang Cogeneration (ii)	**33,275**	**(55,809)**	**(109,014)**

(i) In July 2016, the Company acquired 100% equity interests of Tongshan Xiehe Wind Power Generation from Xiehe Wind Power Investment Co., Ltd. for cash consideration of RMB3 million. The acquisition date was the date when the Company obtained control over Tongshan Xiehe Wind Power Generation. The acquisition cost equaled to the fair value of the identifiable net assets acquired, and therefore no goodwill was recognised.

Tongshan Xiehe Wind Power Generation was established on 3 March 2015 in Xuzhou, Jiangsu Province, and is mainly engaged in wind power generation, wind power research and related technical consulting services. On the acquisition date, the entity is under construction. From the acquisition date to 31 December 2016, Tongshan Xiehe Wind Power Generation had not commenced operation.

(ii) In July 2016, the Company acquired 100% equity interests of Yangguang Cogeneration from Luoyang Shuiye Asset Investment Management Co., Ltd. for cash consideration of RMB7.89 million. The acquisition date was the date when the Company obtained control over Yangguang Cogeneration. The acquisition cost was less than the fair value of the identifiable net assets acquired, while the difference was credit to profit or loss.

Yangguang Cogeneration was established on 6 April 2004 in Luoyang, Henan Province, and is mainly engaged in production and supply of electric and heating power.

(Amounts expressed in thousands of RMB unless otherwise stated)

40 BUSINESS COMBINATIONS *(Cont'd)*

(b) Acquisition consideration and goodwill

	Tongshan Xiehe Wind Power	Yangguang Cogeneration
Fair value of total identifiable net assets	3,000	137,811
Difference between the acquisition cost and the fair value of the identifiable net assets acquired (Note 6)	–	(129,921)
Cash consideration	3,000	7,890
Less: Cash and cash equivalents of acquirees	667	167,644
Cash consideration paid/(received) for acquisition of subsidiaries, net of cash acquired	2,333	(159,754)

(c) The assets and liabilities arising from the acquisitions of above entities are as follows:

	Tongshan Xiehe Wind Power Generation Fair Value	Tongshan Xiehe Wind Power Generation Carrying Amount	Yangguang Cogeneration Fair Value	Yangguang Cogeneration Carrying Amount
Bank balances and cash	667	667	167,644	167,644
Account receivables	–	–	100,882	100,882
Inventories	–	–	14,669	14,669
Other current assets	–	–	5,353	5,353
Property, plant and equipment	2,333	2,333	317,172	344,533
Land use rights	–	–	61,027	19,336
Other non-current assets	–	–	61	61
Account payable and other liabilities	–	–	53,994	53,994
Tax payables	–	–	35,092	35,092
Current portion of other non-current liabilities	–	–	256,923	256,923
Deferred income tax liabilities	–	–	58,929	55,346
Other non-current liabilities	–	–	124,059	124,059
Total identifiable net assets	3,000	3,000	137,811	127,064

(Amounts expressed in thousands of RMB unless otherwise stated)

41 NON-CONTROLLING INTERESTS

The following table summarizes the information relating to each of the Company and subsidiaries that have material non controlling interests ("NCI"):

	Qinbei Power Company	Beijing Cogeneration	Luohuang Power Company	Weihai Power Company	Jinling Power Company	Yueyang Power Company	Shidongkou Power Company	Yangliuqing Cogeneration	Other individually immaterial subsidiaries	Total
NCI percentage	40%	59%	40%	40%	40%	45%	50%	45%		
31 December 2016										
Non-current assets	11,210,604	5,821,110	3,966,880	4,988,112	5,426,759	4,958,325	3,917,340	2,654,085		
Current assets	1,472,192	1,041,957	864,069	508,493	649,446	826,089	380,641	563,023		
Non-current liabilities	(2,206,586)	(152,911)	(284,064)	(104,952)	(1,773,332)	(1,150,021)	(1,055,640)	(224,373)		
Current liabilities	(6,475,340)	(1,665,750)	(1,601,236)	(2,504,410)	(1,835,090)	(1,828,581)	(1,584,142)	(991,614)		
Net assets	4,000,870	5,044,406	2,945,649	2,887,243	2,467,783	2,805,812	1,658,199	2,001,121		
Carrying amount of NCI	1,614,264	2,928,015	1,157,242	1,154,897	987,135	1,260,591	829,099	899,609	5,352,890	16,183,742
Revenue	5,006,349	4,476,729	2,436,586	3,217,209	3,734,108	2,716,817	1,915,915	1,773,869		
Net profit	457,311	788,899	122,508	507,900	655,568	243,913	297,211	177,447		
Total comprehensive income	457,311	788,899	122,508	507,900	655,568	243,913	297,211	177,447		
Profit allocated to NCI	182,924	465,450	49,003	203,160	262,227	109,761	148,606	79,851	326,578	1,827,560
Other comprehensive income allocated to NCI	-	-	-	-	-	-	-	-	484	484
Cash flow from operating activities	1,400,042	973,352	550,346	1,045,828	1,293,565	568,379	890,615	295,547		
Cash flow from investment activities	(312,604)	(540,151)	(189,599)	(273,117)	(37,274)	(62,622)	(258,892)	(197,600)		
Cash flow from financing activities	(1,247,836)	(344,718)	(319,643)	(786,471)	(1,255,955)	(521,249)	(462,075)	(58,293)		
Net (decrease)/increase in cash and cash equivalents	(160,398)	88,518	41,104	(13,760)	336	(15,492)	169,648	39,616		
Dividends paid to NCI	433,090	687,679	120,000	366,983	308,923	-	273,900	128,857		

(Amounts expressed in thousands of RMB unless otherwise stated)

41 NON-CONTROLLING INTERESTS *(Cont'd)*

	Qinbei Power Company	Beijing Cogeneration	Luohuang Power Company	Weihai Power Company	Jinling Power Company	Yueyang Power Company	Shidongkou Power Company	Yangliuqing Cogeneration	Other individually immaterial subsidiaries	Total
NCI percentage	40%	59%	40%	40%	40%	45%	50%	45%		
31 December 2015										
Non-current assets	11,739,361	5,193,038	4,154,105	4,934,579	5,746,576	5,297,441	3,924,128	2,699,074		
Current assets	1,511,345	1,203,956	943,954	464,234	733,084	752,111	461,184	455,209		
Non-current liabilities	(3,313,836)	(137,657)	(300,428)	(117,412)	(2,310,221)	(1,314,199)	(1,379,640)	(243,675)		
Current liabilities	(5,310,585)	(1,090,231)	(1,674,490)	(1,984,600)	(1,584,917)	(2,173,454)	(1,096,885)	(800,584)		
Net assets	4,626,285	5,169,106	3,123,141	3,296,801	2,584,522	2,561,899	1,908,787	2,110,024		
Carrying amount of NCI	1,864,430	3,036,024	1,228,238	1,318,720	1,033,831	1,150,830	954,394	948,615	6,016,659	17,551,741
Revenue	6,078,743	5,675,930	3,313,706	3,941,344	3,785,240	3,045,746	2,115,996	1,999,749		
Net profit	1,196,791	1,308,936	486,578	1,019,397	857,881	452,894	459,330	319,976		
Total comprehensive income	1,196,791	1,308,936	486,578	1,019,397	857,881	452,894	459,330	319,976		
Profit allocated to NCI	478,716	772,272	194,631	407,759	343,153	203,802	229,665	143,989	833,187	3,607,174
Other comprehensive loss allocated to NCI	-	-	-	-	-	-	-	-	(96)	(96)
Cash flow from operating activities	2,541,580	1,488,085	932,367	1,513,744	1,338,323	1,016,136	834,278	571,512		
Cash flow from investment activities	(33,499)	(574,149)	(151,647)	(235,657)	(103,779)	538,740	(26,301)	(14,100)		
Cash flow from financing activities	(2,328,362)	(880,545)	(758,054)	(1,278,814)	(1,287,469)	(1,571,651)	(853,459)	(580,094)		
Net increase/(decrease) in cash and cash equivalents	179,719	36,511	22,666	(727)	(52,925)	(16,775)	(45,482)	(22,599)		
Dividends paid to NCI	697,436	362,958	220,000	83,320	373,143	135,000	270,000	183,055		

42 PENDING ARBITRATION

In April 2015, a subsidiary's construction contractor filed for an arbitration, demanding a compensation of RMB83.46 million, inclusive of interests from the subsidiary. As the arbitration is ongoing, the amount of settlement cannot be estimated reliably. No provision has been recognized as at 31 December 2016.

43 SUBSEQUENT EVENTS

(a) After the end of the reporting period, the directors proposed a final dividend. Further details are disclosed in Note 23.

(b) On 14 October 2016, the Company entered into equity transfer agreements with Huaneng Group to acquire the 80% interests of Huaneng Shandong Power Limited, 100% interests of Huaneng Jilin Generation Co., Ltd., 100% interests of Huaneng Heilongjiang Generation Co., Ltd. and 90% interests of Huaneng Henan Zhongyuan Gas Power Generation Co., Ltd. from Huaneng Group at a total cash consideration of RMB15.114 billion. In January 2017, according to the agreements, the Company paid 50% of the consideration to Huaneng Group. The Company is still in the process of reviewing the nature and financial impact of these newly acquired entities as of the acquisition date. The aforementioned acquired entities has been included in the Company's consolidated financial statements since January 2017.

(c) The Company issued super short-term bonds with a face value of RMB4 billion bearing annual interest rate of 3.40% in January 2017, such bonds are denominated in RMB and mature in 270 days, with a par value of RMB100.

The Company issued super short-term bonds with a face value of RMB3 billion bearing annual interest rate of 3.67% in February 2017, such bonds are denominated in RMB and mature in 270 days, with a par value of RMB100.

The Company issued super short-term bonds with a face value of RMB3 billion bearing annual interest rate of 3.60% in March 2017, such bonds are denominated in RMB and mature in 180 days, with a par value of RMB100.

(Amounts expressed in thousands of RMB unless otherwise stated)

44 STATEMENT OF FINANCIAL POSITION

	As at 31 December	
	2016	2015
ASSETS		
Non-current assets		
Property, plant and equipment	**56,765,893**	58,657,433
Investments in associates and joint ventures	**14,839,245**	14,581,327
Investments in subsidiaries	**56,546,799**	53,809,236
Loans to subsidiaries	**15,810,480**	14,216,620
Available-for-sale financial assets	**3,393,357**	5,065,612
Land use rights	**1,343,839**	1,383,007
Deferred income tax assets	**256,926**	–
Goodwill	**106,854**	106,854
Other non-current assets	**242,702**	268,116
Total non-current assets	**149,306,095**	148,088,205
Current assets		
Inventories	**2,473,285**	1,637,837
Other receivables and assets	**4,118,627**	3,327,537
Accounts receivable	**4,838,651**	5,240,288
Loans to subsidiaries	**7,632,040**	15,057,190
Bank balances and cash	**2,438,374**	2,273,464
Total current assets	**21,500,977**	27,536,316
Total assets	**170,807,072**	175,624,521
EQUITY AND LIABILITIES		
Capital and reserves attributable to equity holders of the Company		
Share capital	**15,200,383**	15,200,383
Capital surplus	**24,167,249**	25,049,447
Surplus reserves	**8,140,030**	8,140,030
Retained earnings	**32,348,672**	27,249,300
Total equity	**79,856,334**	75,639,160
Non-current liabilities		
Long-term loans	**6,694,726**	10,254,177
Long-term bonds	**12,182,971**	11,261,322
Deferred income tax liabilities	**–**	116,708
Derivative financial liabilities	**69,904**	80,457
Other non-current liabilities	**1,055,083**	940,389
Total non-current liabilities	**20,002,684**	22,653,053

(Amounts expressed in thousands of RMB unless otherwise stated)

44 STATEMENT OF FINANCIAL POSITION *(Cont'd)*

	As at 31 December	
	2016	2015
EQUITY AND LIABILITIES *(Continued)*		
Current liabilities		
Accounts payable and other liabilities	**7,090,702**	6,993,603
Taxes payables	**287,379**	576,202
Salary and welfare payables	**105,224**	89,226
Short-term bonds	**27,311,103**	19,347,706
Short-term loans	**31,430,000**	34,890,000
Current portion of long-term loans	**1,428,910**	3,954,910
Current portion of long-term bonds	**3,294,736**	11,480,661
Total current liabilities	**70,948,054**	77,332,308
Total liabilities	**90,950,738**	99,985,361
Total equity and liabilities	**170,807,072**	175,624,521

These financial statements were approved for issue by the Board of Directors on 21 March 2017 and were signed on its behalf.

Liu Guoyue	**Fan Xiaxia**
Director	*Director*

FINANCIAL STATEMENTS RECONCILIATION BETWEEN PRC GAAP AND IFRS

The financial statements, which are prepared by the Company and its subsidiaries in conformity with the Accounting Standards for Business Enterprises ("PRC GAAP"), differ in certain respects from that of IFRS. Major impact of adjustments for IFRS, on the net consolidated profit and equity attributable to equity holders of the Company, are summarized as follows:

	Consolidated profit attributable to equity holders of the Company		Total equity attributable to equity holders of the Company	
	For the year ended		As at 31 December	
	2016	2015	**2016**	2015
Consolidated net profit/equity attributable to equity holders of the Company under PRC GAAP	**8,814,290**	13,786,050	**81,521,509**	79,408,970
Impact of IFRS adjustments:				
Effect of reversal of the recorded the amounts received in advance of previous years (a)	**23,511**	273,157	**–**	(23,511)
Amortization of the difference in the recognition of housing benefits of previous years (b)	**(866)**	(940)	**(139,389)**	(138,523)
Difference on depreciation related to borrowing costs capitalized in previous years (c)	**(27,016)**	(27,016)	**209,485**	236,501
Differences in accounting treatment on business combinations under common control and depreciation and amortization of assets acquired in business combinations under common control (d)	**(440,722)**	(527,153)	**5,081,106**	5,521,828
Others	**(108,106)**	(145,125)	**(223,732)**	(220,738)
Applicable deferred income tax impact of the GAAP differences above (e)	**114,962**	136,507	**493,236**	378,274
Profit/Equity attributable to non-controlling interests on the adjustments above	**144,374**	156,453	**(939,220)**	(1,020,853)
Profit/Equity attributable to equity holders of the Company under IFRS	**8,520,427**	13,651,933	**86,002,995**	84,141,948

(a) Effect of recording the amounts received in advance of previous years

In accordance with the tariff setting mechanism applicable to certain power plants of the Company in previous years, certain power plants of the Company received payments in advance in the previous years (calculated at 1% of the original cost of fixed assets) as the major repair and maintenance cost of these power plants. Such receipts in advance are recognized as liabilities under IFRS and are recognized in profit or loss when the repairs and maintenance is performed and the liabilities are extinguished. In accordance with PRC GAAP, when preparing the financial statements, revenue is computed based on actual power sold and the tariff currently set by the State, no such amounts are recorded.

(b) Difference in the recognition of housing benefits to the employees of the Company and its subsidiaries in previous years

The Company and its subsidiaries once provided staff quarters to the employees of the Company and its subsidiaries and sold such staff quarters to the employees of the Company and its subsidiaries at preferential prices set by the local housing reform office. Difference between cost of the staff quarters and proceeds from the employees represented the housing losses, and was borne by the Company and its subsidiaries.

Under Previous Accounting Standards and Accounting System ("Previous PRC GAAP"), in accordance with the relevant regulations issued by the Ministry of Finance, such housing losses incurred by the Company and its subsidiaries are fully charged to non-operating expenses in previous years. Under IFRS, such housing losses incurred by the Company and its subsidiaries are recognized on a straight-line basis over the estimated remaining average service lives of the employees.

(c) Effect of depreciation on the capitalization of borrowing costs in previous years

In previous years, under Previous PRC GAAP, the scope of capitalization of borrowing costs was limited to specific borrowings, and thus, borrowing costs arising from general borrowings were not capitalized. In accordance with IFRS, the Company and its subsidiaries capitalized borrowing on general borrowing used for the purpose of obtaining qualifying assets in addition to the capitalization of borrowing costs on specific borrowings. From 1 January 2007 onwards, the Company and its subsidiaries adopted PRC GAAP No. 17 prospectively. The current adjustments represent the related depreciation on capitalized borrowing costs included in the cost of related assets under IFRS in previous years.

(d) Differences in accounting treatment on business combinations under common control and depreciation and amortization under common control

Huaneng Group is the parent company of HIPDC, which in turn is also the ultimate parent of the Company. The Company carried out a series of acquisitions from Huaneng Group and HIPDC in previous years. As the acquired power companies and plants and the Company were under common control of Huaneng Group before and after the acquisitions, such acquisitions are regarded as business combinations under common control.

In accordance with PRC GAAP, under common control business combination, the assets and liabilities acquired in business combinations are measured at the carrying amounts of the acquirees in the consolidated financial statements of the ultimate controlling party on the acquisition date. The difference between carrying amounts of the net assets acquired and the consideration paid is adjusted to equity account of the acquirer. The operating results for all periods presented are retrospectively restated as if the current structure and operations resulting from the acquisition had been in existence since the beginning of the earliest year presented, with financial data of previously separate entities consolidated. The cash consideration paid by the Company is treated as an equity transaction in the year of acquisition.

For the business combination occurred prior to 1 January 2007, in accordance with Previous PRC GAAP, when equity interests acquired is less than 100%, the assets and liabilities of the acquirees are measured at their carrying amounts. The excess of consideration over the proportionate share of the carrying amounts of the net assets acquired was recorded as equity investment difference and amortized on a straight-line basis for not more than 10 years. When acquiring the entire equity, the entire assets and liabilities are accounted for in a method similar to purchase accounting. Goodwill arising from such transactions is amortized over the estimated useful lives on a straight-line basis. On 1 January 2007, in accordance with PRC GAAP, the unamortized equity investment differences and goodwill arising from business combinations under common control were written off against undistributed profits.

Under IFRS, the Company and its subsidiaries adopted the purchase method to account for the acquisitions above. The assets and liabilities acquired in acquisitions were recorded at fair value by the acquirer. The excess of acquisition cost over the proportionate share of fair value of net identifiable assets acquired was recorded as goodwill. Goodwill is not amortized but is tested annually for impairment and carried at cost less accumulated impairment losses. The operating results of the acquirees are consolidated in the operating results of the Company and its subsidiaries from the acquisition dates onwards.

As mentioned above, the differences in accounting treatment under PRC GAAP and IFRS on business combinations under common control affect both equity and profit. Meanwhile, due to different measurement basis of the assets acquired, depreciation and amortization in the period subsequent to the acquisition will be affected which will also affect the equity and profit or loss upon subsequent disposals of such investments. Such differences will be gradually eliminated following subsequent depreciation, amortization and disposal of related assets.

(e) Deferred income tax impact on GAAP differences

This represents related deferred income tax impact on the GAAP differences above where applicable.


華能國際電力股份有限公司
Huaneng Power International, Inc.